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Personal projects, life stories, and happiness: On being true to traits

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Abstract

In three studies (Ns between 125 and 176), happiness in life was the highest for undergraduates whose personal goals and life-story identities were supported by thematically consistent personality traits. In Study 1, happiness was highest among participants who were pursuing highly social goals that were supported by sociable traits. This relation between trait—goal consistency and happiness was partially mediated by perceptions of goal manageability. In Study 2, happiness was highest among participants who had highly social life-story identities that were supported by sociable traits. Study 3 replicated the main results of Studies 1 and 2 and also found a significant relation between the extent to which participants' goals and life-story identities were social in theme.

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1. Introduction

"my advice to you is to start drinking heavily" (Bluto, 1978)

In 1978, John Belushi's character, Bluto, caricatured college debauchery and disregard for academics in National Lampoon's Animal House. Life in Bluto's fraternity revolved around lazy camaraderie with pals, thinking up ways to generate intimate encounters with the opposite sex, and spontaneous fun without regard for academic consequences. Instant gratification, toga parties, drunken antics, and food fights were the goals of happy existence. Highly conscientious bookworms were ridiculed as nerdy dweebs who failed to understand the true purpose of college life. The exaggerated theme in Animal House captures a pervasive social norm that continues to prescribe carefree partying and easy-going sociability as an important part of the undergraduate experience, even at the most academically demanding universities (Cantor, Acker, & Cook-Flannagan, 1992; Prentice & Miller, 1993). The present research investigates how happiness in pursuit of undergraduate social goals depends on undergraduates' personalities. Put simply, we expected that trying to be highly social in the undergraduate social context would be easiest and most rewarding for students who were relatively extraverted, agreeable, and not too conscientious. They would be most constitutionally equipped to adapt and respond to the party-themed social norms and affordances that characterize the undergraduate social ecology.

2. Sociable traits (ST) in the undergraduate social ecology

From the perspective of Five Factor Theory (McCrae & Costa, 1999) personality traits such as Extraversion, Agreeableness, and Conscientiousness are biologically rooted basic tendencies. Although underlying neural or hormonal mechanisms are yet to be fully specified, behavioral genetics research on similarities among twins raised together and in different environments shows an impressive role of heredity in shaping traits (e.g., Riemann, Angleitner, & Strelau, 1997; Tellegen et al., 1988). The cross-cultural similarities and temporal stability of traits (McCrae et al., 2000) are consistent with the view that they are foundational, change-resistant, basic tendencies. In contrast, characteristic adaptations, such as personal goals and identities, are more malleable, cognitively elaborated orientations toward acting and being in the world. The usually modest correlation between basic tendencies and characteristic adaptation themes (Little, Lecci, & Watkinson, 1992; McGregor, 1997; Roberts & Robins, 2000) is consistent with the contention that characteristic adaptations are not wholly shaped by basic tendencies. Accordingly, the partial independence of personal goals and identities from personality traits allows for a test of our main hypothesis, that happiness should be highest for individuals with goals and identities that are supported by thematically consistent traits.

We propose that trait-consistent goals feel intrinsically enjoyable and manageable, and that the manageability feeds forward to further enjoyment and ultimately, to happiness (cf. McGregor & Little, 1998; Sheldon & Houser-Marko, 2001). Imagine a

highly introverted individual committed to an identity and a set of goals related to becoming a 'party animal.' Because introvert neurophysiology is easily overwhelmed by high levels of stimulation (Eysenck, 1971), being a party animal could be particularly challenging and aversive for the introvert. The affect regulation required for party persistence would be depleting and leave fewer resources for goal management (Baumeister, Bratslavsky, Muraven, & Tice, 1998). As a result, the introverted party animal might feel miserably overly aroused, and find party goals difficult to manage. Conversely, the stimulation of party animal goals might bring extraverts up to their optimal level of arousal, and thus feel particularly enjoyable and manageable. Accordingly, past research suggests that fidelity to core personality traits is associated with well-being. Sheldon, Ryan, Rawstorne, and Ilardi (1997) found that having a consistent personality across different social roles was associated with freedom from negative feelings, higher self-esteem, and better health. The present investigation extends this research by focusing on compatibility of one specific constellation of traits with social self-regulation in the undergraduate social ecology.

According to Cantor, Norem, Niedenthal, Langston, and Brower (1987), undergraduate social life is characterized by two superordinate, normative life tasks that involve (a) meeting people, making friends, and establishing relationships (Cantor et al., 1992), and (b) excelling in one's studies and establishing a career (Zirkel & Cantor, 1990). These two salient life tasks exist in a tension. Academic and interpersonal themes are the most frequent amongst undergraduates' freely generated personal goals (Little, 1989) and prioritizing one can mean relative neglect of the other. There are more opportunities to party, socialize, and pursue intimate relationships than ever before, but there is also a press to conscientiously attend to academic commitments.

We focused on social themes in the present study because doing so allowed us to aggregate across three traits that appear particularly relevant as dispositional resources for being sociable in an undergraduate social ecology that can pit socializing against conscientious devotion to schoolwork. In all three studies, we aggregated across Extraversion, Agreeableness, and reverse-scored Conscientiousness to create a Sociable Traits index (ST). Given the myriad factors that predict happiness, each trait resource on its own was not expected to be powerful enough to interact with social themes of characteristic adaptations (i.e., of goal and identities) to predict happiness. However, we expected that the aggregated trait resource would. (For a similar approach to resource aggregation, see Diener & Fujita, 1995.)

Extraversion and Agreeableness have obvious relevance to the undergraduate social life task of meeting new people and forming new relationships. Extraversion items on the Big Five Inventory (John & Srivastava, 1999) refer to being outgoing, sociable, and talkative, and Agreeableness items refer to being cooperative, forgiving,

¹ We conducted a pilot study to check this premise. We asked 39 introductory psychology students the extent to which school/work priorities and social/relational priorities were in conflict in their lives, and the extent to which deciding between the two sets of priorities represented an important dilemma for them. The modal reply on each of the pilot questions was 8 on a 0–10 scale. The two items were correlated at r(39) = .52, p = .001. The mean response on the two-item scale was M = 7.8, suggesting a fairly high degree of normative conflict between school and social priorities.

and kind. Extraverted and agreeable individuals should thus be particularly suited to thrive at goals related to meeting people and making friends.

Conscientiousness is the third trait we expected to have particular relevance to the social life tasks associated with transition to university. Conscientiousness items on the Big Five Inventory include "perseveres until a task is finished," and reverse scored "is easily distracted." Although one can be conscientious about one's social priorities, given the tension between social and academic priorities for undergraduates, high Conscientiousness is a particularly relevant resource for academic goals. More moderate Conscientiousness, on the other hand, is a more relevant resource for seizing opportunities to indulge in social diversions from academic commitments. Thus, given the tension between academic and social life tasks amongst undergraduates, we assumed that highly conscientious participants would presumably be less comfortable than less conscientious individuals throwing caution to the wind, donning the toga, and indulging in the dissipated party norms that suffuse the freshman social scene. Indeed, conscientiousness is positively correlated with abstention from alcohol, drugs, and promiscuity, and with academic achievement (Bogg & Roberts, 2004; Chamorro-Premuzic & Furnham, 2003).

Moderate (as opposed to extremely high) conscientiousness could also be a social resource in transition to university because highly conscientious individuals tend to perseverate on previously learned norms and rules and adjust to new ones relatively slowly (Le Pine, Colquitt, & Erez, 2000). This tendency could undermine social effectiveness in the transition from the relatively earnest trust and loyalty norms that characterize long-term family and home-town relationships, to the relatively superficial affiliation and circulation norms that characterize the uncertain and fluxing first-year undergraduate social scene. Indeed, whereas highly extraverted and agreeable frosh focus their energies on cultivating and tending new relationships, highly conscientious frosh are more likely to expend their social resources loyally tending to their family relationships (Asendorpf, 1998).

In sum, moderate conscientiousness may be a resource for undergraduates' social goals because moderately conscientious individuals may be less preoccupied than highly Conscientious ones with academic achievement, may be more willing to temporarily assimilate to (relatively unhealthy and impulsive) first-year undergraduate social norms, are better able to adapt to shifting norms, and are less tied to their families. We averaged reverse-scored Conscientiousness, with Extraversion and Agreeableness to yield the ST index. It is important to note that our studies were run at American and Canadian universities with exceptionally highly achieving students. Given the link between Conscientiousness and academic achievement (Chamorro-Premuzic & Furnham, 2003), raw Conscientiousness scores in our samples are expected to range between moderate and extremely high.

The assumption that traits are relatively stable "basic tendencies" (McCrae et al., 2000) is an important starting point for the present research. If traits were easily mutable, one could simply shift one's disposition to be compatible with whatever kinds of goals or identities one wanted to pursue. However, if as we expect traits are rooted in endogenous temperaments and resistant to change as proposed by McCrae and Costa (1999), then goals and identities not supported by trait resources should be

more problematic and feel less manageable, which would decrease well-being (McGregor & Little, 1998).

3. Social goals (SG)

In contrast to emphasis on traits people *have*, personal goals focus on what people want to *do* (Cantor, 1990). Personal goals and traits are not necessarily compatible. People who are dispositionally warm and nurturant and people who are cold and aloof may each have social and relational goals, by necessity or choice. For example, an introverted and conscientious individual whose disposition might be well suited to studying could nevertheless find herself in a sorority environment that orients her toward affiliative goals and self-perceptions. In the present research we focus on goals that relate to the normative, undergraduate social life task of meeting people, making new friends, and establishing new relationships. We assess social goals (SG) by having undergraduates list and rate their every day kinds of personal goals on dimensions (e.g., affiliation and fun) related to the undergraduate social life task.

4. Social life stories (SS)

If traits correspond to a *having* conceptualization of personality, and goals correspond to a *doing* perspective, life-story identities could be seen as corresponding to how individuals see themselves as *being* (Little, in press; McAdams, 1996; McGregor, 1997). Life stories are internalized and evolving constructions that confer a sense of "unity and purpose" to individuals' lives (McAdams, 1990, p. 148). They are thematic self-construals that presumably play a role in guiding personal goals (an assumption we investigate in Study 3). Imagine someone whose life-story narrative describes a peak experience from a high school graduation party that involved singing, dancing, and drinking with friends until morning. This person may have elaborated this significant experience into a narrative about the kind of person she is, and the kind of person she wants to be. Moreover, her peak experience narrative might be loosely woven together with other narrative constructions about other significant life episodes, such as a low point that involved lonely isolation, to yield a thematically consistent self-narrative mosaic.

5. Overview

We expected that ST would moderate the relations between SG and happiness, and SS and happiness. We expected highest happiness among participants whose social goals and life stories were supported by personality traits conducive to socializing in the party atmosphere of first year university. To assess this, Study 1 assessed the relation between the $ST \times SG$ interaction and happiness, and Study 2 tested the relation between the $ST \times SS$ interaction and happiness. Study 3 was designed to

replicate the effects of Studies 1 and 2. Regression analyses were conducted according to Aiken and West (1991), with centered variables and simultaneous entry of first order and interaction terms.

6. Study 1

6.1. Participants and procedures

Participants were 82 male and 94 female Canadian introductory psychology students (age M=19). Data were collected from groups of between 20 and 30 participants at a time during what was most participants' first month at university (a time when we expected that both socializing and partying would be particularly salient concerns). Other analyses using the same participants and well-being measures but investigating different predictors and hypotheses were reported elsewhere (McGregor & Little, 1998, Study 2).

6.1.1. Sociable traits

We used the short version of the revised NEO-FFI (Costa & McCrae, 1992) to assess Extraversion, Agreeableness, and reverse-scored Conscientiousness on a scale from 1 (strongly disagree) to 5 (strongly agree). Twelve items assessed each trait. Extraversion items included "I like to have a lot of people around me," Agreeableness items included "Most people I know like me," and a reverse-scored Conscientiousness item included "I am not a very methodical person." The three trait scales had Cronbach α reliabilities of between .81 and .94. As might be expected among our highly achieving participants, raw conscientiousness scores ranged between moderate and extremely high. Only 3% of average conscientiousness scores corresponded to disagreement or strong disagreement that conscientiousness characteristics applied to self. In contrast, 55% corresponded to agreement or strong agreement that conscientiousness characteristics applied to self.

We computed ST by averaging standardized Extraversion, Agreeableness, and reversed Conscientiousness scores. It is important to note that we did not expect the three trait resources to be highly intercorrelated. Rather, we view all three as independent resources that contribute to a link between happiness and the extent to which undergraduates' goals and life-story identities are social in theme. Averaging the three uncorrelated ST traits is comparable to Nunnally and Bernstein's (1984, p. 484) example of teaching, research, and service as three measures contributing to the "emergent construct" of academic merit. The authors state that to capture the full meaning of the academic merit construct it is necessary to include measures from domains that may be uncorrelated or even inversely correlated. Observed variables that contribute to such emergent constructs can be thought of as 'cause' variables because they constitute the construct. In contrast, observed variables that reflect "latent constructs" can be thought of as 'effect' variables because they are effects of the same underlying source construct. (For similar distinctions between emergent and latent constructs, see Bollen & Lennox, 1991; Cohen, Cohen, Teresi, Marchi, & Velez, 1990.)

6.1.2. Sociable goals

We used an adapted version of Little's (1983) Personal Projects Analysis methodology to assess SG. Personal projects refer to specific goals, activities, or concerns that one is engaged in or planning. They are context sensitive characteristic adaptations that reflect situational (Little, 1996) and life tasks (Cantor et al., 1987) constraints and influences. Their thematic tenor should thus not be highly determined by endogenous personality traits. Indeed, although traits and personal project ratings have been significantly correlated in theoretically meaningful ways in past research, the correlations have been modest (Little et al., 1992).

The instructions described personal projects to participants as activities and concerns that people think about, plan for, and sometimes complete. Participants were instructed to take 10 min to write down as many personal projects as they could that they were engaged in or intending to begin over the next month. After generating 10 personal projects, participants rated each on five SG dimensions related to social themes. (They also rated them on dimensions related to enjoyableness and manageability, which will be discussed in the following section on mediational and idiographic analyses.)

The SG rating dimensions, adapted from McGregor and Little (1998), cut across a broad spectrum of social themes relevant to the normative first-year undergraduate social life task. The dimensions were: Communion (the extent to which a project contributes toward a sense of togetherness and harmony with other people or your environment), Affiliation (the extent to which each project is carried out in the presence of other people), Fun (how much fun each project is), Others' Benefit (the extent to which each project is intended to benefit the interests or well-being of others), and Visibility (the extent to which each project is visible to other people). Participants rated each project on each dimension using a scale from 0 (not at all) to 10 (extremely). For each dimension we averaged each participant's 10 project ratings. We then computed each participant's overall SG score by averaging the five dimensional averages. All five of the dimensional means that contributed to the overall SG score had loadings onto a single factor that ranged between .61 (Visibility) and .80 (Communion). The five dimensions had a Cronbach α reliability of .74. It is important to note that the Fun dimension correlated significantly with each of the other more intuitive SG dimensions, and with communion at r = .41. Such intercorrelations attest to the jocund social ecology.

Participant self-ratings of the degree to which their personal projects are social in theme have been found to be highly correlated with ratings provided by judges of the extent to which projects appear to be social (Rapley, 1983). In Personal Projects Analysis research, participant-self-ratings are seen as preferable to ratings by judges because the explicit, written content of projects may not adequately reflect the degree to which projects are socially embedded or motivated. For example, a 'get groceries' project would be coded as a mundane, non-social project by a coder but grocery shopping could conceivably be an important social event if done with friends or in hopes of a chance meeting in the produce section. Given participants' privileged insight into the meanings of their projects we opted for self-ratings of SG (and also of ratings of life-story themes in Study 3). We expected that self-rated SG would be associated with well-being for participants with high ST scores but not for those with low ST scores.

6.1.3. Subjective well-being: Happiness and meaning

Happiness refers to the conventional subjective well-being triad of positive affect, negative affect, and life satisfaction (Andrews & Withey, 1976; Myers, 1992; Veenhoven, 1991). Meaning refers to the sense that the various motivationally tinged, temporally extended, and contextually distributed aspects of the self (e.g., values, goals, identifications, and relationships) feel coherently integrated across time and context (Little, 1993; McGregor & Little, 1998).

The well-being measures and data were the same as those used to test other hypotheses in past research. Orthogonal Happiness and Meaning scores were attained from these data by entering participants' means on 13 diverse well-being measures into a varimax-rotated principal components analysis (McGregor & Little, 1998). The seven measures that were theoretically most related to happiness loaded most highly onto the first principal component and the six that were theoretically most related to meaning loaded most highly onto the second component. As in McGregor and Little (1998) participants' factor scores on the two orthogonal components served as the main dependent variables: Happiness and Meaning. Cronbach α reliability of the 13 well-being scales ranged from .67 to .90. Cronbach α reliability of the average of the seven Happiness scales was .89, and of the six meaning scales was .85.

The seven scales included because of their theoretical relevance to happiness were: (a) The 20-item Centre for Epidemiological Studies Depression index that assesses state depressive symptomatology in non-clinical samples (Radloff, 1977). (b) The 14-item Perceived Stress Scale (Cohen, Kamarck, & Mermelstein, 1983). (c) The five-item positive affect module of the Affect Balance Scale (Bradburn, 1969). (d,e) The positive affect (11 items) and negative affect (7 items) modules of the Subjective Well-Being scale (Diener & Emmons, 1984). (f) The seven-item Domain-Specific Life Satisfaction scale that averages domain-specific satisfaction across specific domains (Palys & Little, 1983). (g) The five-item Satisfaction With Life Scale (Diener, Emmons, Larsen, & Griffin, 1985).

The six scales included because of their relevance to meaning in life (McGregor & Little, 1998) were: (a) The 20-item *Purpose in Life* scale (Crumbaugh & Maholick, 1964). (b–e) Four nine-item *Theory-Based Psychological Well-Being* scales (Ryff & Keyes, 1995) that measure aspects of well-being central to the writings of major humanistic theorists, and that are not reliably associated with typical happiness indicators, namely, *Positive Relations With Others, Autonomy, Purpose in Life*, and *Personal Growth*. (f) The final well-being measure included to tap into meaning in life was a short version of the *Loyola Generativity Scale* (McAdams & de St. Aubin, 1992). We assessed 12 of 20 items from the original scale that had the most face-valid relevance to meaning in life, e.g., "I feel as though my contributions will exist after I die."

In past research, Happiness and Meaning scores were predicted by distinct sets of goal characteristics (McGregor & Little, 1998). Goal manageability (i.e., perceived likelihood of goal success) predicted Happiness but not Meaning, and Goal integrity (i.e., relevance of goals to personal identity and values) predicted Meaning but not Happiness. We included both Happiness and Meaning measures in the present

research to help clarify why being true to one's traits might be associated with well-being. If, as we expect, being true to one's traits feels good because it is associated with perceived manageability then results should be stronger for Happiness.

6.1.4. Mediational and idiographic analyses: enjoyment and manageability

We also included personal project rating dimensions related to goal enjoyment and manageability to further address the question of why trait-consistent goals might be associated with Happiness. We expected that thematic trait-goal consistency would be associated with ratings of goal Enjoyment and Manageability, which would at least partially account for the expected relation between trait-goal consistency and overall Happiness. Each participant rated each of their 10 personal projects on two dimensions related to enjoyment and four related to manageability. The enjoyment dimensions were: Enjoyment (the extent to which it is enjoyable to work on) and Pleasure (the extent to which it is pleasurable, i.e., comfortable, relaxing, self-indulgent, or hedonistic). The Manageability dimensions were: Difficulty (difficult carrying it out), Challenge (challenging), Progress (progress made on it so far), and Control (in control of it).

We averaged participants' average Enjoyment and Pleasure scores that were correlated, r = .68, to yield an overall Goal Enjoyment index. We also averaged participants' average Difficulty (reverse scored), Challenge (reverse scored), Progress, and Control dimensions to yield an overall Goal Manageability score with a Cronbach α reliability of .54.²

We also used participants ratings relating to how enjoyable and manageable each goal felt to calculate within-person correlations between participants' Goal-Level Enjoyment ratings and Goal-Level Manageability ratings on the one hand, and Goal-Level SG ratings on the other hand. We expected that these correlations would be positively correlated with ST. In other words, we expected that participants with highly sociable traits would rate their most social goals as particularly enjoyable and manageable. We *r*–*z* transformed the idiographic Goal-Level Enjoyment and Goal-Level Manageability correlations with Goal-Level SG to normalize their distributions before assessing nomothetic correlations of these idiographic correlations with ST scores.

6.2. Results

Mean Extraversion, Agreeableness, and Conscientiousness scores were M = 3.53, SD = .59; M = 3.72, SD = .50; and M = 3.55, SD = .60, respectively, on the 1 (strongly disagree) to 5 (strongly agree) scale. The mean SG score on the 0 (not at all) to 10 (extremely) scale was M = 4.89, SD = 1.24. The affect scale that loaded most highly (-.85) onto the Happiness principal component was depression. Participants' mean

² These four dimensions tap the Personal Project Analysis theoretical factors of structure (control), efficacy (progress), and stress (difficulty, challenge), which contribute to overall manageability (Little, 1989). A principal components analysis of the four manageability dimensions revealed a two-factor solution with the progress dimension constituting its own factor. We retained all four items in the index, however, so that the emergent manageability construct would include dimensions related to structure, efficacy, and stress.

depression score on the 0 (never or almost never) to 3 (very often) scale was M=.90, SD=.47. Participants' mean life-satisfaction score on the 1 (strongly disagree) to 7 (strongly agree) scale was M=4.59, SD=1.32. The personal growth scale loaded most highly (.74) onto the Meaning component. Participants' mean personal growth score on the 1 (strongly disagree) to 7 (strongly agree) scale was M=5.60, SD=.71. Correlations among ST, SG, Happiness, and the individual traits contributing to ST are included in Table 1.

For the two main analyses we regressed Meaning and Happiness on ST, SG, and the ST × SG interaction. The ST × SG interaction did not predict Meaning, $\beta = -.03$, t(172) < 1, ns. It did significantly predict Happiness, however, $\beta = .16$, t(172) = 2.29, p = .02. As illustrated in Fig. 1, Happiness was highest for participants whose high SG was supported by high ST. There was a significant simple slope for SG when ST was 1 SD above the mean, $\beta = .35$, t(172) = 3.61, p < .0005 but not when it was 1 SD below the mean, $\beta = .02$, t(172) < 1, ns. There was also a significant simple slope for ST when SG was 1 SD above the mean, $\beta = .49$, t(172) = 4.40, p < .0001, but a marginally significant slope when it was 1 SD below the mean, $\beta = .17$, t(172) = 1.86, p = .07. Past research has found that Happiness (but not Meaning) is specifically associated with perceived goal manageability (McGregor & Little, 1998). Thus, the significant result in the present study for Happiness but not for Meaning is consistent with the idea that manageability suffers when goals are not supported by dispositional resources.

Table 1 Correlations among variables and traits in Studies 1–3

	E	A	-C	ST	SG	SS
Study 1						
A	.18					
-C	30^{*}	15				
ST	.57*	.66*	.34*			
SG	.26*	.02	24*	.03		
Happiness	.44*	.22*	19	.30*	.20*	
Study 2						
A	02					
-C	03	21				
ST	.60*	.49*	.49*			
SS	.15	.07	13	.06		
Happiness	.37*	.32*	13	.35*		.10
Study 3						
A	.21					
-C	33*	37*				
ST	.62*	.59*	.21			
SG	.36*	.21	22	.24*		
SS	.32*	.26*	12	.33*	.41*	
Happiness	.44*	.37*	45*	.25*	.27*	.10

Note. E, Extraversion; A, Agreeableness; -C, reverse-scored Conscientiousness; ST, sociable traits; SG, social goals; SS, social life stories.

^{*} *p* < .01.

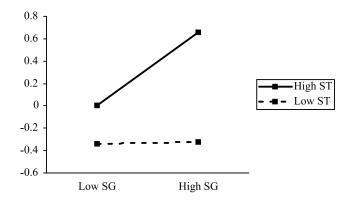


Fig. 1. Happiness as a function of ST (sociable traits) and SG (social goals).

6.2.1. Mediational analyses

There was a significant relation between the ST × SG interaction and overall Goal Enjoyment, $\beta = .20$, t(172) = 3.62, p < .0005. Goal Enjoyment also predicted Happiness, $\beta = .23$, t(174) = 3.10, p < .005. Further, the significant relation between the ST × SG interaction and Happiness dropped from $\beta = .16$, p = .02, to $\beta = .13$, p = .08, when goal Enjoyment was statistically controlled. Thus, Goal Enjoyment qualifies as a partial mediator of the relation between ST × SG and Happiness (according to the Baron & Kenny, 1986, criteria for mediation).

There was also a significant relation between the ST × SG interaction and Goal Manageability, $\beta = .15$, t(172) = 1.99, p < .05. Goal Manageability also predicted Happiness, $\beta = .42$, t(174) = 6.10, p < .0001. Further, the significant relation between the ST × SG interaction and Happiness dropped from $\beta = .16$, p = .02 to $\beta = .11$, p = .11when Goal Manageability was included as a covariate in the regression analysis.³ Thus, goal Manageability also qualifies as a partial mediator of the relation between $ST \times SG$ and Happiness. Importantly, when Happiness is regressed simultaneously on goal Enjoyment and Manageability, only Manageability remains significantly related to Happiness, $\beta = .39$, t(173) = 5.09, p < .0001 but Enjoyment drops to non-significance, $\beta = .05$, t(173) < 1. The important mediating role of Goal Manageability is especially impressive considering the relatively low reliability of the index. The mediating role of Goal Manageability, together with the Happiness-specific results in the main analyses, supports our dispositional resources perspective on why goal-consistent traits are associated with well-being. Sociable-trait resources make pursuit of social goals manageable and enjoyable. Given the centrality of the social life task in transition to university, manageability, and enjoyment of social goals affects general happiness.

6.2.2. Idiographic analyses

Idiographic analyses are consistent with the mediational results. Participants' ST scores were significantly correlated with their r-z transformed within-participant

³ Without the progress dimension (which primarily loaded onto a separate factor than the other three manageability dimensions) the three-item manageability index dropped the interaction β from .16 to .12.

correlations between project-level SG and project-level Enjoyment, r (175)=.21, p < .01 and between project-level SG and project-level Manageability, r (175)=.16, p < .05. These idiographic results demonstrate that the more sociable participants' traits were, the more they experienced their most social goals as particularly enjoyable and manageable.

7. Study 2

Study 2 investigated whether happiness might similarly be associated with fidelity of life-story themes with personality traits. Our guiding assumption is that social life-story themes orient individuals toward social goals. If so, then given the results of Study 1, highly social life-story themes should be associated with Happiness for participants with highly sociable traits.

7.1. Participants and procedures

Data were collected from 90 female and 35 male American undergraduates (age, M=20) as part of a class assignment in second and fourth year psychology courses. Participants received bonus marks toward their final course grade. One participant did not fully complete the materials. At the beginning of the term we gave each participant a booklet of study materials titled "Life Narratives." Participants had 1 month to complete and return the package that contained materials related to several research projects. The complete package took between 3 and 6h to complete. The materials pertinent to the present study included measures of Extraversion, Agreeableness, and Conscientiousness; participants' descriptions of five episodes from McAdams' Life Story Interview protocol (McAdams, Hoffman, Mansfield, & Day, 1996); and well-being measures related to happiness.

7.1.1. Sociable traits

We used the Big Five Inventory (John & Srivastava, 1999) to measure traits of Extraversion, Agreeableness, and reverse-scored Conscientiousness, that, as in Study 1, we standardized and averaged to compute ST. The Cronbach α reliabilities of Agreeableness, Extraversion, and Conscientiousness were .80, .89, and .83. As in Study 1, raw conscientiousness scores ranged between moderate and extremely high. Only 10% of average conscientiousness scores corresponded to disagreement or strong disagreement that conscientiousness characteristics applied to self. In contrast, 60% corresponded to agreement or strong agreement that conscientiousness characteristics applied to self.

7.1.2. Sociable stories

We assessed participants' social life-story themes using an adapted version of the McAdams et al. (1996) life-story episode interview. Participants wrote one-page descriptions of five life-story episodes. The *Adolescence* episode instructions asked participants to describe a single event from their teen years that stood out in their

minds as a particularly significant personal experience. The *Continuity* episode instructions asked participants to describe a significant event from the past 2 years that illustrated something stable and unchanging about their personality. The *Nadir* episode instructions asked participants to write about a specific experience that represented a low point in their life story. The *Morality* episode instructions asked participants to write about an episode in which they faced a moral issue or dilemma. The *Decision* episode instructions asked participants to write about one of the most important decisions that they had made in their lives. For each episode, participants were instructed to write about what happened, when it happened, who was involved, what they were thinking and feeling, why the episode was significant, and how it related to the kind of person they were.

A rater who was unaware of the research hypothesis coded participants' life-story episode accounts for the presence or absence of social themes following the coding scheme developed by McAdams (1980, 1992). The lovelfriendship theme relates to enhancement of erotic love or friendship toward another person who is a relative equal. The dialogue theme relates to reciprocal and non-instrumental communication in which the people involved are tuned to each other in a non-hostile way. The caring/ help theme involves providing care, assistance, nurturance, help, aid, support, or therapy for another in need. The unity/togetherness theme involves feelings of oneness, unity, harmony, synchrony, togetherness, belongingness, allegiance, or solidarity with a larger community of people. Each account was coded for the presence (score +1) or absence (score 0) of each of the social themes. A score of +1 was given only for clear and explicit evidence of the theme's existence in the account. We summed participants' total social theme scores across their five life-story episodes to yield SS scores. Overall SS scores ranged from 0 to 9 (M = 3.86, SD = 1.68). In past research, interrater categorization agreement has averaged above 80% with this method of categorizing communal narrative themes (McAdams et al., 1996).

7.1.3. Happiness

We computed Happiness scores by averaging participants' scores on the five-item Satisfaction with Life scale used in Study 1 (Diener et al., 1985), and a one-item global affect scale with options ranging from 0 (extremely unhappy: utterly depressed, completely down) to 10 (extremely happy: feeling ecstatic, joyous, fantastic!). As in Study 1, we called the composite of life satisfaction and affect, Happiness. The life-satisfaction and affect scales that comprised the Happiness index were correlated, r = .63. Correlations among ST, SS, the individual traits contributing to ST, and Happiness are included in Table 1.

7.2. Results

Mean Extraversion, Agreeableness, and Conscientiousness scores on the 1 (disagree strongly) to 5 (agree strongly) scale were M=3.30, SD=.99; M=3.91, SD=.67; M=3.69, SD=.80, respectively. The mean SS score was M=3.86, SD=1.68 (the love/friendship theme was as prevalent as the other communion themes combined). Mean affect on the 0 (extremely unhappy: utterly depressed,

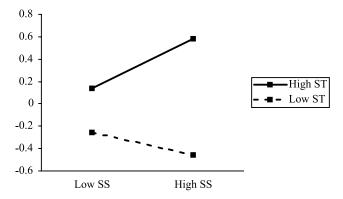


Fig. 2. Happiness as a function of ST (sociable traits) and SS (social life stories).

completely down) to 10 (extremely happy: feeling ecstatic, joyous, fantastic!) scale was M=7.05, SD=1.74. Mean life-satisfaction on the 1 (strongly disagree) to 7 (strongly disagree) scale was M=4.94, SD=1.20. Correlations among ST, SS, Happiness, and the individual traits contributing to ST are included in Table 1.

To assess the main hypothesis that Happiness would be associated with $ST \times SS$ compatibility, we regressed Happiness on ST, SS, and the $ST \times SS$ interaction. Consistent with predictions and the results of Study 1, there was a significant $ST \times SS$ interaction, $\beta = .18$, t(119) = 2.08, p = .04. As illustrated in Fig. 2, Happiness was highest for participants whose highly social life-story identities were supported by sociable traits.

Simple slope analyses revealed a significant relation between ST and Happiness at 1 SD above mean SS, $\beta = .53$, t(119) = 4.19, p < .0001, but not at 1 SD below mean, $\beta = .15$, t(119) = 1.22, ns. There was also a significant relation between SS and Happiness at 1 SD above mean ST, $\beta = .24$, t(119) = 2.10, p = .04, but not at 1 SD below, $\beta = -.14$, t(119) = -1.05, ns.

8. Study 3

We conducted Study 3 to replicate the main results of Studies 1 and 2 and to test for a relation between SG and SS. If narrative identities are "stories that we live by"

⁴ In contrast to Studies 1 and 3 that relied on participants from first year courses, participants in Study 2 were from second and fourth year courses and so there was more age diversity. Age was marginally associated with Happiness, $\beta = -.15$, t(119) = -1.8, p = .07, so we entered age as a covariate in the regression analysis to reduce error variance. (There was no relation between age and Happiness in Studies 1 and 3.)

⁵ Although the main interaction effect with the three-composite ST index was significant, in Study 2 only, results were stronger if Agreeableness alone was used instead of the three-trait composite. In Studies 1 and 3, the three-trait composite outperformed any individual trait or two-trait composite. It is intriguing to speculate whether extraversion and attenuated conscientiousness may have been less important for the sophomore and senior participants in Study 2, who may have been less involved in the party atmosphere of the first-year undergraduate social ecology and more invested in longer-term relationships for which extraversion and attenuated conscientiousness are no longer assets. Once the dilatory affiliation of first year subsides and stable relationships begin to emerge, agreeableness may become the preeminent sociable trait (cf. Jensen-Campbell & Graziano, 2001).

(McAdams, 1993) there should be a relation between the extent to which life stories and personal goals are social in theme.

8.1. Participants and procedures

Participants were 77 female and 59 male American students (age, M=19). They completed the materials (time, $M=55\,\mathrm{min}$) in groups ranging between 2 and 10 in size and received credit for their introductory psychology course in exchange for participation. Nine failed to complete the materials. Data collection occurred during the last month of what was most participants' first year at university. The ST, SG, SS, and Happiness measures were adapted from those in Studies 1 and 2 but were shortened to ensure that the package could be completed in less than an hour.

8.1.1. ST

We used 21 of the items from the Big Five Inventory to assess Agreeableness, Extraversion, and reverse-scored Conscientiousness. To ensure that convergent predictive validity with the results of Study 1 would be unambiguous, the five items on the Big Five Inventory that were redundant with NEO-FFI items (considerate, shy, talkative, cooperative, and disorganized) were excluded. Thus, participants completed seven items assessing Agreeableness, six assessing Extraversion, and eight assessing Conscientiousness. The Cronbach α reliabilities of Agreeableness, Extraversion, and Conscientiousness were .79, .91, .86. As in Studies 1 and 2 Conscientiousness scores ranged between moderate and extremely high. Only 2% of average conscientiousness scores corresponded to disagreement or strong disagreement that conscientiousness-related adjectives applied to self. In contrast, 69% corresponded to agreement or strong agreement that conscientiousness-related adjectives applied to self. As in Studies 1 and 2, we computed ST by averaging participants' standardized Extraversion, Agreeableness, and reversed Conscientiousness scores.

8.1.2. SG

As in Study 1, we used an adapted version of Personal Projects Analysis (Little, 1983) to assess the extent to which participants' personal projects were social in theme. We described personal projects to participants as "activities and concerns ... that we think about, plan for, carry out, and sometimes (though not always) complete." Each participant was given 5 min to generate a list of personal projects, and then each selected the five that "together, best characterize your life at present." Participants rated their five personal projects on the same five SG rating dimensions as in Study 1 (Communion, Affiliation, Fun, Others' Benefit, and Visibility), but this time on a scale from 1 (not at all) to 5 (extremely). As in Study 1, we computed each participant's SG score by averaging their average ratings on the five social goal dimensions. All five of the dimensional means that contributed to the overall SG score had loadings onto a single factor that ranged between .51 (Visibility) and .85 (Others' Benefit). The Cronbach α reliability of the five dimensions was .80.

8.1.3. SS

We shortened the life-story elicitation procedure used in Study 2 to reduce completion time. Participants wrote a few sentences describing the personal significance of the same five life-story episodes as in Study 2. They then self-rated their own stories on others' benefit and communion themes as follows. After completing all the materials in the package participants flipped back to their life-story narratives (that they had written at the beginning of the session) and responded to two questions about each. The two questions were: "To what extent is each event, or its personal significance to you, primarily about your readiness or willingness to care for the physical, material, social, or emotional well-being of others?" and "To what extent is each event, or its personal significance to you, primarily related to the positive value you place on togetherness, harmony, belongingness, or union with others?" Participants answered each question for each event using a scale from 1 (not at all) to 5 (extremely). We averaged participant's average dimensional ratings to yield an SS score for each participant. Average Others Benefit and Communion SS ratings were correlated, r = .52, and Cronbach α reliability of SS, across the 10 ratings that contributed to SS scores (five from each dimension) was .71.

8.1.4. Happiness

We computed Happiness scores by averaging each participant's standardized score on the Satisfaction With Life Scale (same scale used in Studies 1 and 2; Diener et al., 1985) with the positive and negative (reversed) affect modules of the short version of the PANAS (Watson, Clark, & Tellegen, 1988). Participants rated the extent to which they had felt each of the 20 PANAS adjectives over the past few months from 1 (not at all) to 5 (extremely). Cronbach α reliabilities of life satisfaction, positive affect, and negative affect were .89, .89, and .87, respectively. Life satisfaction was correlated with positive and negative affect, r = .52, p < .001 and r = -.45, p < .001. Positive and negative affect were correlated, r = .22, p = .01. The Happiness composite was unifactorial with a Cronbach α reliability of .66.

8.2. Results

Mean Extraversion, Agreeableness, and Conscientiousness scores on the 1 (not at all) to 5 (extremely) scale were M=3.37, SD=.96; M=3.65, SD=.69; and M=3.62, SD=.70, respectively. Mean SG and SS score on the same 1–5 scale were M=3.01, SD=.64 and M=2.99, SD=.78, respectively. Mean negative affect and positive affect scores, on the same 1–5 scale were M=2.47, SD=.74, and M=3.54, SD=.70, respectively. Mean life satisfaction on the 1 (strongly disagree) to 5 (strongly agree) scale was M=3.56, SD=.86.

Correlations among ST, SG, SS, Happiness, and the individual traits contributing to ST are included in Table 1. Of particular note, SG and SS were significantly correlated, r = .41, p < .01, which is consistent with a self-regulatory perspective on life-story identities (i.e., that they guide selection of goals).

For the main analyses, to assess whether the main results in Studies 1 and 2 would replicate, we conducted two regression analyses. In the first, we regressed Happiness

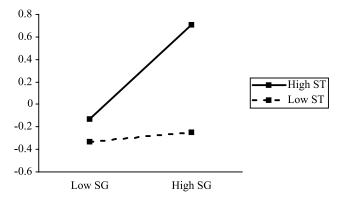


Fig. 3. Happiness as a function of ST (sociable traits) and SG (social goals).

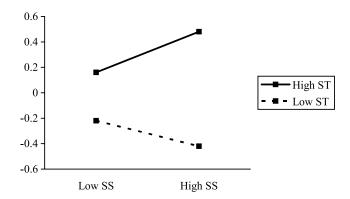


Fig. 4. Happiness as a function of ST (sociable traits) and SS (social life stories).

on ST, SG, and the ST \times SG interaction. In the second, we regressed Happiness on ST, SS, and the ST \times SS interaction. We used directional significance tests for the interaction analyses because they were attempts to replicate the exact pattern of results found in Studies 1 and 2.

As in Study 1, there was a significant ST × SG interaction, $\beta = .22$, t(123) = 2.38, p < .02. As illustrated in Fig. 3, Happiness was highest for participants whose highly SGs were supported by highly STs. There was a significant simple slope for SG when ST was 1 SD above the mean, $\beta = .41$, t(123) = 3.49, p < .0007 but not when it was 1 SD below the mean, $\beta = .04$, t(123) < 1, ns. There was also a significant simple slope for ST when SG was 1 SD above the mean, $\beta = .46$, t(123) = 3.22, p < .002, but not when it was 1 SD below the mean, $\beta = .10$, t(123) = 1.04, ns.

In the second analysis, consistent with the results in Study 2 there was a marginal ST × SS interaction, $\beta = .14$, t(123) = 1.41, p (one-tailed) = .08.⁶ As shown in Fig. 4,

⁶ A meta-analysis combining this marginal interaction effect with that found in Study 2 yielded a significant overall interaction effect, z = 2.46, p = .01, two-tailed, using the method of weighted zs from Mosteller and Bush (1954), as described by Rosenthal (1981).

Happiness was highest for participants whose highly social identities were supported by highly STs. Importantly, there was a significant simple slope for ST when SS was 1 SD above the mean $\beta = .43$, t(123) = 2.70, p = .008, but a marginal one when SS was 1 SD below the mean, $\beta = .18$, t(123) = 1.77, p < .08.

9. Discussion

All three studies support the conclusion that being true to one's traits is associated with happiness, at least in the context of STs, SGs, and SSs relevant to the unique undergraduate social ecology. In Study 1, social trait—goal compatibility was associated with overall Happiness in life. Mediational analyses indicated that overall social trait—goal compatibility predicted goal enjoyment and manageability which in turn significantly predicted overall Happiness. These nomothetic results were supported by comparable idiographic findings. Participants with highly STs had particularly positive within-person correlations between the extent to which their goals were social, and the extent to which they were enjoyable and manageable. In Study 2, thematic compatibility between traits and life stories was associated with Happiness. Study 3 replicated the results of Studies 1 and 2 and also found that social themes in life stories were significantly correlated with social themes in participants' personal goals. The findings are consistent with a self-regulatory view of narrative identities, i.e., that they are "stories we live by" (McAdams, 1993).

Although correlational, and limited to a subset of traits and a particular social ecology relevant to those traits, the present findings suggest that individuals may be well advised to consider their personality traits when deciding what goals to pursue and what kinds of people to be. The present findings suggest that behavioral prescriptions based on normative needs, alone, might ultimately be frustrating for some. The true-to-traits effect is consistent with the analogy that all plants may have normative basic needs for water and light, but whereas cacti flourish when sparsely watered in direct sunlight, ferns flourish when liberally watered in partial shade.

In the three studies, we focused on SGs and life stories because three traits seemed like plausible dispositional resources for facilitating normative undergraduate SGs. In all three studies, the three-trait index interacted significantly with social themes in goals or life-story identities to predict Happiness. Undergraduates were happiest when their SGs and identities were supported by STs. The generality of our conclusions, however, must remain tentative until future research replicates this finding with other traits and themes in other social ecologies. For example, perhaps emotional stability (reversed Neuroticism) is a particularly important resource for goals that entail frequent exposure to trivial threats and frustrations, and perhaps Openness to Experience is a resource for goals that require ongoing exposure to novelty and change. Moreover, SGs in more stable, long-term social ecologies such as marriages and families might benefit from the perseverance of high conscientiousness rather than the relative spontaneity of moderate conscientiousness.

Future research should also investigate the relation between fidelity with one's personality traits and long-term happiness. It is conceivable that the relatively low

happiness in the present research for participants with low trait fidelity may represent short-term discomfort associated with personal growth initiatives undertaken for longer-term benefit. Adopting goals and identities that are not consistent with one's habitual personality dispositions may only be associated with unhappiness during an initial adjustment period. If one were able to persist through the initial awkwardness of dispositionally foreign goals and develop the new skills and resources required for them over time, perhaps trait fidelity would cease to be associated with relative happiness. This question awaits longitudinal investigation.

10. Concluding comments

"that which is proper to each thing is by nature best and most pleasant for each thing" (Aristotle, Nichomachean Ethics)

Philosophers have long speculated about normative pursuits that should be associated with happiness. Aristotle proposed that acting in accordance with one's nature should promote the greatest happiness, and since humans are rational animals, being rational (contemplating truth) should yield the greatest happiness. From the perspective of the present findings, intellectual Aristotle may well have been happiest when being rational and contemplating truth, but other perhaps more sociable individuals may feel happiest when letting truth slide and engaging in more social priorities. The present research suggests that knowing oneself should include knowing what one's personality traits are, and that being true to oneself should perhaps involve construction of goals and identities that are supported by one's personality traits. In Western cultures individuals are expected to find and be themselves. Popular psychology and self-help bookstore shelves brim with books advocating variations on the idea that one should know one's self and be true to one's self. Readers are advised to do their own thing, follow their bliss, discover their own paths, and so on. With often similarly abstract terminology, classic psychological theorists (e.g., Allport, 1955; Erikson, 1968; Fromm, 1941; Jung, 1933; Maslow, 1968; Rogers, 1961) have advocated individuation, becoming, integration, self-acceptance, identity achievement, authenticity, self-actualization, and cultivation of accurate self-knowledge as hallmarks of mental health. As desirable as such exhortations sound, self-discovery can be a bewildering task. It is not clear where to look for a true self and some theorists have even concluded that there is no true self to find (Cushman, 1990; Gergen, 1991). Our results suggest that traits may be an adaptive, true-self foundation for self-construction. We hope the present findings complement the burgeoning research on normative predictors of happiness (e.g., Sheldon & Elliot, 1999) and prove useful for individuals trying to figure out what to do and who to be.

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