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Collegiate purpose orientations and well-being in early and middle adulthood

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ABSTRACT

Two studies evaluated whether different purpose orientations, defined by the content of one's life-goals, would differentially predict personal well-being in the short- and long-term. Four types of purpose orientations (creative, prosocial, financial, and personal recognition) were examined using a sample of 416 (57% male) college undergraduates tested as seniors and again thirteen years after graduation. At senior year, all four purpose orientations were correlated with perceived personal development during college, measured using Higher Education Research Institute surveys. However, at middle adulthood, only the prosocial purpose orientation was predictive of greater generativity, personal growth, and integrity. These studies point to the benefits of having goals focused on helping others rather than helping oneself.
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Emerging adulthood is a period of extensive self-exploration in which individuals are required to form goals and identify their life's purpose (Arnett, 2000). Indeed, finding a purpose in life, defined as having set goals and a direction for one's life, appears to be clearly adaptive for emerging adults (Ryff, 1989b). Therefore, the specific personal values and goals that individuals construct during college and emerging adulthood has been an enduring topic of interest for researchers (e.g., Arnett, 2004; Astin & Nichols, 1964; Astin, Green, Korn, & Schalit, 1986; Salmela-Aro, 2001). In line with this interest, the current studies investigated how emerging adults' purpose orientations, indicated by their goals for life, predict developmental and well-being outcomes in the short- and long-term. Study 1 assessed the short-term benefits of different purpose orientations established during the collegiate years. In Study 2, the long-term benefits of purpose orientations were investigated by following these same individuals into middle adulthood. Furthermore, Study 2 assessed whether purpose orientations demonstrated stability over time from emerging into middle adulthood. These studies sought to address two primary objectives: (1) to distinguish unique types of purpose orientations via assessment of its content during emerging adulthood, and (2) to investigate whether these orientations predict long-term well-being.

Lifespan development, goal-setting, and purpose

Erikson's classic theory (1950, 1968, 1982) of lifespan development describes a series of "crises" encountered during the lifespan. During late adolescence and emerging adulthood, Erikson suggests that individuals face the crisis of identity versus identity confusion. To resolve this crisis, individuals need to decide "who they are." It is in this period that individuals frame occupational goals and reflect on what makes life meaningful. Indeed, Erikson (1968) suggests that resolving this crisis often involves defining one's purpose in life. Importantly, Erikson clearly states that the resolution (or lack thereof) of one crisis directly affects all subsequent "crises." Therefore, finding a purpose for one's life should demonstrate adaptive outcomes both immediately and in the long-term. One such outcome should be the individual's level of generativity. Generativity refers to one's desire to pass on and contribute to future generations (Erikson, 1950). Following Erikson's conceptualized trajectory, an individual who has designated a purpose for his/her life should in turn "solve" the identity crisis, and be more suited to demonstrate generativity. Indeed, studies have supported this timeframe by demonstrating that mid-life adults are most likely to report generative concerns (e.g., McAdams, de St. Aubin, & Logan, 1993). Generativity thus appears to be a relevant outcome for examining the long-term effects of identifying a purpose for one's life.

It is often unclear, though, what is meant by having a "purpose in life." A common thread across definitions is that one's purpose is linked to one's goal-setting. Ryff (1989a,b) proposed that those with a sense of purpose have set goals for life, a sense of direction, and belief that their lives have meaning. Emmons (1999) suggests that "goals

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appear to be prime constituents of the meaning-making process" (p.147). Furthermore, he claims that evaluating one's goals provides a methodologically sound approach toward investigating an individual's meaning-making process. Indeed, Nurmi (1991, 1993, 2001) has proposed that the goals one sets, and how one pursues them, serve to define the self. Finally, Damon, Menon, and Bronk (2003) also defined purpose in life with respect to goal-setting, and emphasize the need to focus on long-term rather than short-term goals.

Therefore, finding a purpose in life is a paramount objective for an emerging adult that involves setting a course for one's life. Not surprisingly then, several studies have evaluated the outcomes of goal-setting among adolescents and emerging adults (e.g., Cross & Markus, 1991; Little, 1993; Salmela-Aro, 1992; Salmela-Aro & Nurmi, 1997). Across these studies, it appears that goal content is linked differentially to well-being. For example, Salmela-Aro and Nurmi (1997) had Finnish college students list their goals using Little's (1983) personal projects questionnaire, and complete measures of initial well-being (life events, depression, and self-esteem). Participants then completed the same well-being measures two years later. Participants' goals were grouped into three categories: self-focused, achievement-focused, and family-focused. Participants with more family-focused goals were more likely to have positive well-being at follow-up, while those with a higher number of reported self-related goals showed lower levels of well-being subsequently. Furthermore, participants with more family- and achievement-focused goals were less likely to report negative life events at follow-up. These findings suggest that being focused on others (i.e., one's family) rather than on oneself may be indicative of greater well-being. Indeed, Cross and Markus (1991) also have reported that having more self-focused goals is linked to decreased life satisfaction across the lifespan, in a sample of American participants. The symmetry between these studies speaks to the generalizability of this result across different samples, and thus suggests that setting "other-focused" goals may be more adaptive than setting "self-focused" goals.

Such research, though promising, often focuses on relatively short-term effects and short-term goals. A natural next step in this line of investigation is to examine long-term outcomes and constellations of related, long-term *life*-goals. One's purpose in life is often indicated by multiple and related goals, rather than a single one. For example, an individual who orients toward a prosocial purpose may be more likely to list several prosocial life-goals (i.e., help others, influence the social structure, serve the community), instead of focusing on a single prosocial goal. This path was followed when developing the purpose orientations measure implemented in the studies described below.

Measuring purpose orientations

Multiple methods have been offered for assessing one's sense of purpose in life (e.g., Bundick et al., 2006; Crumbaugh & Maholick, 1964; Ryff, 1989b). However, most of the strategies utilized thus far have focused solely on measuring the extent to which one feels a sense of purpose in life. Often the actual content of an individual's sense of purpose is neglected in the literature. Recently, Damon and Bronk (2007) underscored the need to evaluate purpose content as well. They suggest that individuals with highly ignoble goals (i.e., dictators, fascists) often feel a clear sense of purpose to their lives. Such individuals would likely exhibit scores on measures of felt purpose equal to those with more positive life purposes, and thus, such measures may mask important individual differences. Furthermore, as mentioned above, research on goal content also clearly indicates the need to assess "what" the nature of one's purpose is, rather than solely "how much," of it an individual possesses, as distinct purpose contents may differentially predict one's well-being.

We developed our purpose orientations measure using the life-goal items developed and refined by the Higher Education Research Institute (HERI) at UCLA. The HERI survey has been given to college students across the nation for several decades and has remained largely constant. A large number of universities thus have extensive historical databases of their institutes' HERI data. Therefore, by deriving the purpose orientations measure from the HERI surveys, the current studies allow researchers across the nation to investigate similar trends within their students. While this means that we could not adapt or alter these items, the benefits to the research community appear to clearly outweigh this cost. Furthermore, a life-goal questionnaire would provide an easier-to-administer assessment approach in comparison to the extensive coding inherent with conceptually related assessments, such as personal projects (Little, 1983), personal strivings (Emmons, 1986), and personal goals (Cross & Markus, 1991).

Scale development

To develop the purpose orientation measures, a factor analysis was performed on the HERI life-goal data from 1748 undergraduate seniors (62% Male; $M_{age} = 22$ years) at a private, mid-sized Catholic university in the Midwestern United States. These seniors were asked to rate the importance of 17 different life-goals on a four-point scale. A principal components exploratory factor analysis on the life-goal items suggested four factors, following the Lautenschlager (1989) parallel analysis criteria, and two items were removed due to their high crossloadings (>.3 on more than one factor). Factor loadings for the solution are provided for the 15 items in Table 1. The first factor was labeled a *prosocial orientation* because it was defined by one's propensity to help others and influence the societal structure. The second factor, a *financial orientation*, was defined by goals of financial well-being and administrative success. The third factor, a *creative orientation*, was defined by artistic goals and a propensity for originality. The fourth factor, a *personal recognition orientation*, was defined by one's desire for recognition and respect from colleagues. Studies 1 and 2 evaluated the short- and long-term benefits of endorsing these four purpose orientations, by analyzing the part of this undergraduate sample that filled out both the senior survey and the middle adulthood survey.

Study 1

Study 1 evaluated the relations between the four purpose orientation scores, and whether they correlated with outcomes

Table 1
Purpose orientations factor loadings following a varimax rotation.

Item	Item factor loadings			
	P	F	C	R
Participating in a community service program	**.78**	.05	.04	.03
Influencing social values	**.74**	−.01	.06	.12
Helping others who are in difficulty	**.73**	.04	−.09	−.02
Helping to promote racial understanding	**.71**	−.03	.16	.04
Developing a meaningful philosophy of life	**.54**	−.14	.22	.00
Becoming involved in programs to clean up the environment	**.48**	.11	.27	.10
Being successful in a business of my own	−.03	**.76**	.19	.06
Having administrative responsibility for the work of others	.10	**.75**	.17	−.12
Being very well off financially	−.18	**.73**	−.07	.24
Creating artistic work (painting, sculpture, decorating, etc.)	.11	.02	**.82**	−.01
Becoming accomplished in one of the performing arts (acting, dancing, etc.)	.08	.02	**.68**	.12
Writing original works (poems, novels, short stories, etc.)	.14	−.10	**.68**	.10
Becoming an authority in my field	.10	.22	.02	**.78**
Obtaining recognition from my colleagues for contributions to my special field	.07	.25	.10	**.76**
Making a theoretical contribution to science	.02	−.08	.09	**.58**
Influencing the political structure	*.46*	*.12*	*.11*	*.37*
Raising a family	*.34*	*.44*	*−.15*	*−.15*

Note. P indicates prosocial factor, F – financial, C – creative, and R – personal recognition. Italicized items were removed due to high crossloadings.

during emerging adulthood. Some positive inter-correlations should be expected, as they measure different facets of an underlying construct (i.e., all measures of purpose). However, they should only be modestly related if they indicate four different orientations. Three outcomes were measured during emerging adulthood: 1) perceived personal development during college relative to freshman year, 2) overall satisfaction with the college experience, and 3) participation in service-learning activities.

Predictions then can be made regarding the relations between purpose orientations and the three outcome measures. All purpose orientations are expected to positively correlate with the first two outcomes. Having a defined purpose orientation should be related to greater perceived personal development, as having a purpose in life is clearly adaptive for psychological well-being. Students also should be more satisfied with their college experience if they leave it with a clear purpose orientation. We also included an index of service-learning in order to examine whether purpose orientations differentially predict particular outcomes. Specifically, only prosocial orientation scores should predict service-learning participation, as such participation directly fulfills the goals of a prosocially-oriented individual, but we do not expect participation to be related to the other three purpose orientations.

Methods

Participants

Senior year data was compiled from 416 undergraduates (57% male; $M_{age} = 22$ years) attending a private, mid-sized Catholic university in the Midwestern United States. This university clearly states a prosocial mission that focuses on helping others. These participants were those undergraduates sampled for scale development who also took part in Study 2 as adults.

Procedure

All questionnaire measures were extracted from the 1994 College Senior Survey, designed by the Higher Education Research Institute (HERI) at UCLA, and administered to college seniors across the United States. Our sample of graduating seniors was asked to complete the survey in order to request commencement tickets, which led to a very high return. Therefore, Study 1 employed data collected by the institution and was not subject to a review board. Participants completed the questionnaire as a paper-and-pencil measure, and returned it to the university in order to receive their tickets. Some participants failed to complete the entire survey and were missing some data. For both studies, participants were deleted from any analyses that included variables for which the participant did not have complete data.

Measures

Purpose orientations scale. Participants rated the personal importance of 17 different life-goal items on a scale from 1 (*Not important*) to 4 (*Essential*), which are presented in Table 1. Reliabilities for the four purpose orientations were as follows: prosocial (six items, $\alpha = .76$), financial (three items, $\alpha = .69$), creative (three items, $\alpha = .56$), personal recognition (three items, $\alpha = .64$). Given that the last three measures only had three item indicators, it is unsurprising that they demonstrated slightly lower reliability.

Perceived personal development during college. Participants rated the extent and direction of change from freshman to senior year on 22 different abilities on a scale from 1 (*Much Weaker*) to 5 (*Much Stronger*). A factor analysis of our data suggested that these items coalesced around three general factors: "leadership," defined by one's ability to work well both cooperatively and independently (six items, $\alpha = .75$), "knowledge," defined by having a general knowledge base and critical thinking skills (seven items, $\alpha = .76$), and "cultural awareness," defined by increased acceptance, tolerance, and knowledge of other cultures (four items, $\alpha = .75$).

Satisfaction with college experience. Participants rated their satisfaction with their overall college experience from 1 (*Dissatisfied*) to 4 (*Very Satisfied*) on a one-item measure from the HERI survey.

Service-learning activities. This university tracked student participation in service-learning. In the current study, service-learning is defined as a student's enrollment in at least one of the service-learning courses taught at the university. These courses include both an educational component (i.e., in-class lectures and discussions) and a volunteer component. We were able to link archived institutional data on service-learning participation to students' responses to the HERI senior survey. This was coded as either a 0 (no participation) or 1 (participated in at least one activity).

Results

Correlations among purpose orientations

Because the purpose orientations point to a common underlying construct (purpose in life), some positive relations between these variables were expected. However, if these orientations are truly distinguishable, then their inter-correlations should be modest. All means and standard deviations for variables in Studies 1 and 2 are provided in Table 2, and all correlations for Study 1 variables are presented in Table 3. Prosocial scores only were correlated with creative scores, $r(408) = .27$, $p < .001$. Personal recognition scores correlated with creative scores, $r(410) = .14$, $p < .01$, and with financial scores, $r(407) = .27$, $p < .001$. These results support both the notion that purpose orientations may be related, and that these are four separate measures.

Relations with outcomes during emerging adulthood

We next assessed whether the four purpose orientations were positively correlated with the three measures of perceived personal development during college; all correlations are again in Table 3. Prosocial scores positively correlated with both knowledge, $r(402) = .13$, $p < .01$, and cultural awareness, $r(405) = .25$, $p < .001$. Financial scores positively correlated with leadership, $r(408) = .33$, $p < .001$. Creative scores positively correlated with cultural awareness, $r(407) = .13$, $p < .01$. Personal recognition scores positively correlated with knowledge, $r(404) = .20$, $p < .001$, and leadership, $r(410) = .15$, $p < .01$. Thus, it appears that all four orientations were associated with

Table 2
Means, standard deviations, and sample sizes for each measure in Studies 1 and 2.

	Study 1		Study 2	
Measure	*M* (*sd*)	*n*	*M* (*sd*)	*n*
Purpose orientations				
Prosocial	15.21 (3.51)	408	15.36 (3.31)	369
Financial	6.62 (2.12)	408	6.43 (1.96)	374
Creative	4.35 (1.68)	411	4.40 (1.70)	374
Personal recognition	6.44 (1.84)	410	6.32 (1.97)	371
Perceived personal development				
Leadership	22.65 (2.89)	412		
Knowledge	29.58 (2.96)	406		
Cultural awareness	15.48 (2.17)	408		
Satisfaction with college	3.46 (0.64)	413		
Generativity			56.67 (8.67)	359
Personal growth			71.26 (8.27)	331
PWB — purpose in life			68.70 (9.93)	331
YP — purpose in life			81.28 (13.82)	297
Integrity			70.35 (7.98)	355

Note. PWB is psychological well-being and YP is youth purpose scale.

Table 3
Study 1 correlations between purpose orientation scores, personal development during college, and overall satisfaction with the college experience.

	P	F	C	PR	L	K	CA	Sat
Prosocial	–	−.04	.27**	.08	.06	.13**	.25*	.12*
Financial		–	.01	.27**	.33**	.07	.06	.04
Creative			–	.14**	.05	.09	.13**	−.04
Personal recognition				–	.15**	.20**	.03	.08
Leadership					–	.50**	.35**	.24**
Knowledge						–	.28**	.22**
Cultural awareness							–	.14**
Satisfaction with college								–

Note. $^{*}p < .05$. $^{**}p < .01$. *ns* for the analyses range from 402 to 412.

perceived personal development during college, albeit modestly in most cases.

We next assessed whether purpose orientation scores were positively associated with college satisfaction. Only prosocial scores were related to satisfaction, $r(408) = .12$, $p < .05$. This result ran counter to our predictions, as we expected all orientations to positively relate to college satisfaction. This point is taken up further in the general discussion.

Given that purpose orientations appear largely adaptive in nature, the final analysis assessed whether these are discriminate constructs. Specifically, only prosocial scores should serve as positive predictors of service-learning participation. A logistic regression analysis was performed with all four purpose orientations as predictors, given the dichotomous nature of service-learning participation. All predictors were entered simultaneously. Only prosocial scores positively predicted service-learning, $B = .21$, $W(1) = 27.35$, $p < .001$. Furthermore, the other three purpose orientations all *negatively* predicted service-learning: financial, $B = -.24$, $W(1) = 12.66$, $p < .001$; creative, $B = -.20$, $W(1) = 5.37$, $p < .05$; personal recognition, $B = -.19$, $W(1) = 6.72$, $p < .05$. These results demonstrate that the purpose orientations differentially predict behavior, as only prosocial scores were positively related to service-learning participation.

Discussion

Study 1 provides initial support for two separate claims. First, the four purpose orientations are distinct constructs that differentially predict outcomes. The orientations were only modestly intercorrelated, and demonstrated different relations with college satisfaction and service-learning participation. Second, being oriented toward a purpose appears to be adaptive for college seniors. Each purpose orientation related positively with measures of perceived personal development during college. Given these results, Study 2 examined whether and which purpose orientations predicted well-being 13 years later, into middle adulthood.

Study 2

Study 2 had two primary goals. First, it sought to address whether purpose orientations during senior year of college were predictive of orientations during middle adulthood. Second, it assessed whether purpose orientations established as emerging adults were predictive of later well-being. Having a prosocial orientation should predict positive outcomes later in life, following the research suggesting the benefits of having other-focused goals (e.g., Cross & Markus, 1991; Salmela-Aro & Nurmi, 1997). To assess the predictive validity of the collegiate purpose orientations, five measures of well-being at middle adulthood were assessed: generativity, personal growth, integrity, and two measures of purpose in life. Generativity was chosen because of its prominence in Erikson's (1950. 1968, 1982) lifespan theory. Personal growth was included because previous research suggests that it positively correlates with purpose in life (Ryff, 1989b; Ryff & Keyes, 1995). Our integrity scale is assumed to assess moral character and identity (Schlenker, 2008; Wowra, 2007), and thus prosocially-oriented individuals should score higher on this measure. Finally, we included two purposes in life measures to assess how our purpose orientations relate to measures of felt purpose. While these two measures are assumed to be conceptually similar, different purpose in life measures may capture somewhat different aspects of purpose (Damon et al., 2003). Accordingly, we chose to include more than one measure of the construct.

Methods

Participants

About 13 years post-graduation, 416 participants (M_{age} = 35 years) from Study 1 agreed to participate in a follow-up assessment without compensation. Attempts were made to contact all graduates from the class of 1994, using contact information available through the university alumni office. However, the alumni office either had no or outdated information for a large number of participants.

Procedure

Participants completed online questionnaires via an electronic invitation sent to them by e-mail. The entire survey took most participants between 60–90 min to complete. Participants completed the survey at their leisure and were allowed to complete it across multiple sessions. All data was encrypted prior to transmission to ensure confidentiality. Once data collection was completed, each participant's middle adulthood survey data was linked with their corresponding senior surveys using personal identification numbers. Thus, senior purpose orientation scores were obtained from the senior data used in Study 1.

Measures

Purpose orientations. Purpose orientations at middle adulthood were assessed using the same items that participants completed for the senior survey. A factor analysis of the middle adulthood data suggested the same four factors, with the same items loading onto each factor. Reliabilities for each orientation were as follows: prosocial ($\alpha = .77$), financial ($\alpha = .59$), creative ($\alpha = .61$), and personal recognition ($\alpha = .70$).

Loyola Generativity Scale. The Loyola Generativity Scale (McAdams & de St. Aubin, 1992) measures whether participants believe that they have achieved generativity, defined as a commitment to guide and assist the next generation (Erikson, 1950). Participants rated items on a 4-point scale with higher scores indicating a greater sense of generativity (20 items; $\alpha = .86$). A sample item from the scale is "I try to pass along the knowledge I have gained through my experiences."

Psychological well-being: Personal growth. 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; $\alpha = .88$). A sample item from the scale is "For me, life has been a continuous process of learning, changing, and growth."

Psychological well-being: Purpose in life. 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; $\alpha = .91$). A sample item from the scale is "I enjoy making plans for the future and working to make them a reality."

Youth Purpose Scale. The Youth Purpose Scale from the Stanford University Center on Adolescence appears to measure two general factors: a sense of having identified and achieved a purpose and a propensity to search for a purpose (Bundick et al., 2006). Our study focused on the first subscale, which includes 15 items rated on a 7-point scale ($\alpha = .94$). Higher scores indicate a greater sense of identified and achieved purpose. A sample item is "I have a purpose in my life that reflects who I am." While this scale was initially designed for adolescents, it has demonstrated predictive validity when assessing adults as well (Bronk, Hill, Lapsley, Talib, & Finch, 2009).

Integrity Scale. The Integrity Scale assesses "one's steadfast commitment to one's ethical principles" (Schlenker, 2008). Participants rated the 18 scale items on a 5-point scale, with higher scores indicating greater commitment ($\alpha = .83$). A sample item from the scale is "Being inflexible and refusing to compromise are good if it means standing up for what is right."

Results

Evaluating the stability of purpose orientations

We first assessed whether purpose orientations identified during the senior year were stable over time. Correlations across time are presented in Table 4. All four orientations demonstrated strong positive correlations between the college years and middle adulthood: prosocial, $r(362) = .50$, $p < .001$; financial/family, $r(366) = .54$, $p < .001$; personal recognition, $r(366) = .50$, $p < .001$; creative, $r(369) = .53$, $p < .001$. All of these correlations would be classified as "large" effects by Cohen's (1988) conventions, which have even been criticized as being too strict (Hemphill, 2003). Therefore, it appears that all four purpose orientations demonstrated strong stability, especially given the 13-year distance in measurement occasions.

From Table 4, it also is worth noting that there were some positive correlations between the different purpose orientations at middle adulthood. This was evidenced at emerging adulthood as well, and one would expect some positive relations if these orientations do indeed tap a broader construct (i.e., purpose). However, these correlations again were modest in magnitude, further supporting our claim that they assess different types of purpose.

Predicting well-being at middle adulthood

Correlations between senior year orientation scores and middle adulthood well-being measures are provided in Table 5. Multiple regression analyses were performed, predicting well-being outcomes in middle adulthood from the four purpose orientations assessed in emerging adulthood. Sex differences were controlled for in all multiple regressions, given past evidence that males and females may differ on measures of psychological well-being (Ryff, 1989b). These analyses were chosen to provide an assessment of not only which orientations predict well-being into middle adulthood, but also some insight into which may best predict well-being. Details of all analyses are provided in Table 6. Prosocial orientation scores were the only positive predictor of generativity, personal growth, purpose in life (as assessed by the Youth Purpose Scale), and integrity. None of the four purpose orientations though were predictive of purpose in life, as assessed at mid-life using the Psychological Well-being scale (Ryff, 1989b; Ryff & Keyes, 1995).

Table 4
Purpose orientation correlations across the two timepoints.

	P1	P2	F1	F2	C1	C2	R1	R2
Prosocial T1	–	.50**	−.04	−.05	.27**	.23**	.08	.03
Prosocial T2		–	−.04	.08	.16**	.36**	.07	.19**
Financial T1			–	.54**	−.01	−.01	.27**	.11*
Financial T2				–	.02	.07	.27**	.38**
Creative T1					–	.53**	.14**	.08
Creative T2						–	.12*	.14**
Personal recognition T1							–	.50**
Personal recognition T2								–

Note. $^*p < .05$. $^{**}p < .01$. *ns* for the analyses range from 362 to 408.

Table 5
Correlations between collegiate purpose orientations and middle adulthood well-being measures.

	Generat.	PWB-PGrow	PWB-Purp.	Y. Purpose	Integr.
Prosocial	.31**	.26**	.09	.20**	.22**
Financial	−.02	.06	.08	−.03	−.08
Creative	.15*	.06	.01	.04	.00
Recognition	.07	.05	.07	.04	−.08

Note. $^*p < .05$. $^{**}p < .01$. *ns* range from 282 to 355.

Discussion

Study 2 evaluated whether purpose orientations during emerging adulthood were related to outcome measures at middle adulthood. Purpose orientations appear to be stable over time, as evidenced by the high positive correlations over two measurement occasions thirteen years apart. Furthermore, it appears that it is most psychologically beneficial to adopt a prosocial orientation. Prosocial scores were the only unique predictors of generativity, personal growth, purpose, and integrity among middle adults, controlling for the other orientations. This follows previous research (Cross & Markus, 1991; Salmela-Aro & Nurmi, 1997) in suggesting the psychological benefits of having prosocial goals.

Table 6
Regression analyses predicting five well-being outcomes in middle adulthood from collegiate purpose orientations.

Variable	*B*	SE β	β
Predicting generativity ($n = 350$)			
Sex (1 − female, 2 − male)	−.80	.93	−.05
Prosocial	.71	.13	.29**
Financial	−.04	.22	−.01
Creative	.32	.28	.06
Personal recognition	.22	.25	.05
Predicting psychological well-being − personal growth ($n = 323$)			
Sex	−2.49	.95	−.15**
Prosocial	.56	.13	.23**
Financial	.38	.22	.10
Creative	−.01	.29	.00
Personal recognition	.11	.25	.03
Predicting psychological well-being − purpose in life ($n = 323$)			
Sex	−2.53	1.16	−.13*
Prosocial	.21	.17	.07
Financial	.46	.28	.10
Creative	.03	.36	.00
Personal recognition	.27	.31	.05
Predicting youth purpose − purpose in life ($n = 291$)			
Sex	−1.77	1.69	−.06
Prosocial	.72	.24	.18**
Financial	−.18	.39	−.03
Creative	.04	.53	.00
Personal recognition	.27	.46	.04
Predicting integrity (n = 346)			
Sex	−.47	.90	−.03
Prosocial	.53	.13	.23**
Financial	−.19	.21	−.05
Creative	−.29	.27	−.06
Personal recognition	−.29	.24	−.07

$^*p < .05$. $^{**}p < .01$.

General discussion

During emerging adulthood, individuals are confronted with the challenge of identifying a purpose and direction for their lives. Finding a purpose can lead to both immediate and long-term developmental benefits. However, researchers often only assess one's sense of purpose, which may obscure important individuals' differences. Indeed, those with both noble and ignoble directions for their lives may feel equally driven and purposeful (Damon & Bronk, 2007). The current studies thus examined whether orienting toward different types of purpose is differentially adaptive for individuals in the short- and long-term.

Study 1 sought not only to identify a typology of undergraduates' purpose orientations, but also to examine whether these differentially predicted outcomes in emerging adulthood. Four different purpose orientations were identified: prosocial, financial, personal recognition, and creative. At senior year of college, scores on all four orientations were positively related to perceived personal development (assessed using measures of leadership, knowledge, and cultural awareness). This result is in line with recent research suggesting that college students with a sense of purpose to their lives report higher levels of self-efficacy (DeWitz, Woolsey, & Walsh, 2009). However, only prosocial scores were positively related to both satisfaction with the college experience, and service-learning participation.

Study 2 then examined whether these purpose orientations predicted well-being at middle adulthood, 13 years after the initial assessment. Our measure of purpose orientations appears to tap fairly stable constructs, as evidenced by the strong correlations between orientation scores as emerging and middle adulthood. Indeed, given the turbulence inherent in emerging adulthood (Arnett, 2000, 2004), it is impressive that these correlations were all "large" effects (Cohen, 1988). Given this stability, we then examined whether collegiate purpose orientations predicted well-being outcomes at middle adulthood. Individuals with higher prosocial orientation scores demonstrated the most adaptive psychological profile. Only prosocial scores were uniquely positively predictive of generativity, personal growth, purpose, and integrity. Consistent with research on goal-setting (Cross & Markus, 1991; Little, 1993; Salmela-Aro, 1992; Salmela-Aro & Nurmi, 1997), having a prosocial orientation was the best predictor of later well-being. This suggests the need to evaluate and enhance educational and institutional practices that promote a prosocial orientation among undergraduates.

Across the two studies, our results suggest that research on purpose in life needs to examine not only "how much" but also "what." Identifying different types of purpose appears to lead to differential profiles of well-being. Such differences may be masked if researchers only examine whether one feels a sense of purpose. These studies provide implications for future research on the construct of purpose, but prior to this discussion, a couple of results warrant further discussion.

First, it was somewhat surprising that only prosocial orientation scores correlated with satisfaction with the college experience. One reason may be the lack of variability in the college satisfaction measure. However, a second reason may result from the climate of the institution from which the current studies sampled. College administrators and professors at this university strongly encourage students to focus on others. Students at the university who endorse a prosocial orientation thus should be more likely to find their college experience rewarding. This follows previous research suggesting that students' satisfaction with college is linked to the ideological match between them and their institution (Nafziger, Holland, & Gottfredson, 1975). Those students whose purpose orientations do not match the institution's goals may not view their experience at the institution as satisfactory. For example, students rarely attend the sampled institution to study in the arts, which may explain why creatively-oriented students did not find this institution satisfying. Further research is needed to investigate the benefits of finding a university whose "purpose orientation" matches that of the student.

Second, similarly, this explanation also accounts for the lower reliabilities evidenced for the creative orientation. In both studies, the means for the creative orientation were near the minimum possible. Therefore, there may not have been enough variability in the responses by participants in the current studies to provide a fair estimate of the reliability of this measure. Indeed, Roberts and Onwuegbuzie (2003) (Onwuegbuzie & Daniel, 2002) suggest that high homogeneity of sample variance can yield lower internal consistency, which leads researchers to inaccurately view their instruments as having poor psychometric properties. Given that these were the initial studies employing the purpose orientations measure, we suggest that future research should examine the psychometric properties of the creative orientation subscale using a more heterogeneous sample. Moreover, future studies should examine whether different creative life-goals are related, or if individuals tend to focus on only one creative area (i.e., writing, performance, visual arts).

Purpose in life and purpose orientations

In addition to investigating the student–university match, several research areas should be investigated in future work on purpose orientations. One intriguing result was the lack of relations between purpose in life and three of the purpose orientations during emerging adulthood: financial, personal recognition, and creative. One reason may be an issue of self-selection in the sample. As mentioned, the sample came from a university that strongly promotes prosocial goals in students. Therefore, students with prosocial goals may be more likely to attend this school, and in turn, students oriented toward other purposes may not find their lives as meaningful after attending. Future research thus should examine the relations between these three orientations and purpose in life assessments in other samples. It also is uncertain why there were no significant relations evidenced between the four orientations and purpose as measured by the Psychological Well-being scales (Ryff, 1989b; Ryff & Keyes, 1995), and it would be informative to see whether this replicates in other samples.

It will also be informative to assess how purpose orientations vary in focus and intensity across the lifespan. Staudinger (1996) points out that individuals invest their time in differing domains (i.e., work, family) across the lifespan. For example, young adults may spend more time in work-related activities while developing a sense of independence. Older adults, however, tend to focus more on health, family, and contemplating their lives. Accordingly, it may be adaptive to orient toward different life purposes at successive periods of the lifespan. Therefore, future research should examine the range of purpose orientations that may be evident at different stages of development, and how these differentially predict adjustment.

Implications

This research supports the utility of the HERI life-goal questionnaire items for examining purpose orientations. Given the widespread use of the items, universities can perform their own studies on purpose orientations with little cost. Results may shed light on specific courses or programs that students would find meaningful as they matriculate their university. Furthermore, this method provides a simpler approach in comparison to assessments that ask participants to freely list their goals and strivings, which require coding these responses. Future research should evaluate whether the factors identified demonstrate predictive utility at different types of institutions.

More broadly, these studies provide some suggestions for college practices. For example, colleges can promote healthy purpose development through providing their students with multiple opportunities to develop prosocial orientations. One mechanism for doing this is

through the promotion of high quality service-learning courses. Indeed, such courses promote prosocial goals and have a positive influence on emerging adult development (e.g., Brandenberger, 1998; Pascarella, Ethington, & Smart, 1988; Pascarella & Terenzini, 2005). For students still in stages of self-exploration, such opportunities may motivate one toward prosocial goal endorsement. In addition, these studies provide evidence that prosocial goals need not be "orthogonal" to other goals. Indeed, prosocial orientation scores were related to other orientation scores in the two studies (creative in Study 1, and personal recognition in Study 2). Following from such relations, we suggest that collegiate officials should teach students that they can endorse prosocial goals without deemphasizing their other life-goals. For example, professors can discuss the moral or ethical issues that students may encounter when following different career paths, as part of imparting the general knowledge necessary.

These results provide implications for future research on purpose. Researchers must take a more nuanced approach toward investigations of purpose, as measures of felt purpose provide only one facet of the construct. Given the developmental importance of the construct (e.g., Erikson, 1950, 1968), our studies clearly speak to the need for more in-depth examinations of purpose and well-being, which should occur in a variety of higher education institutions.

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