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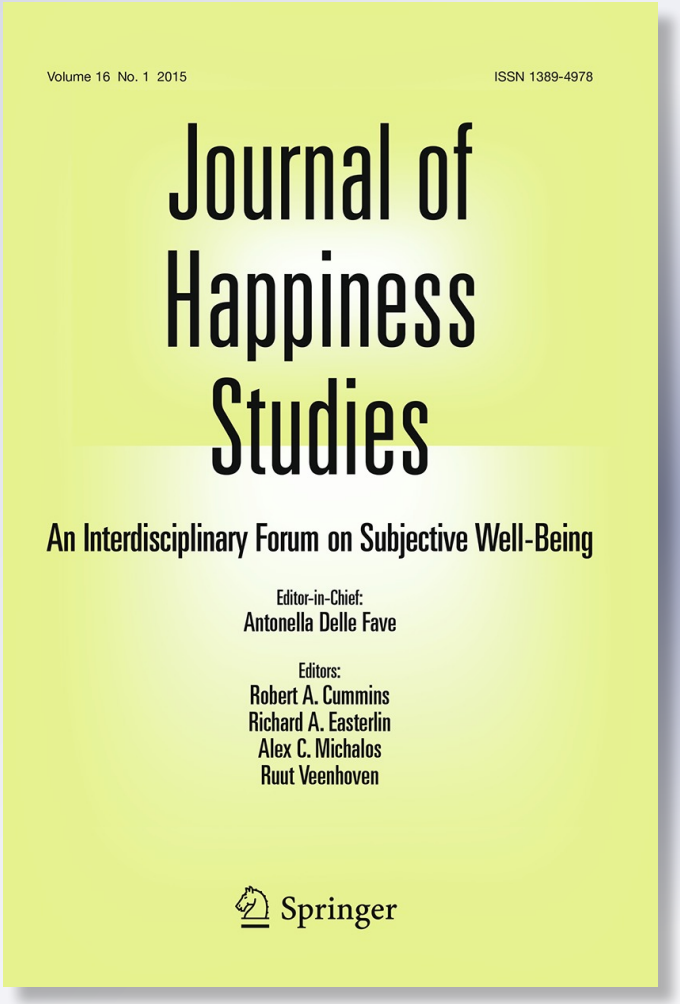

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RESEARCH PAPER

Growth Motivation Toward Two Paths of Eudaimonic Self-Development

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Abstract Growth motivation is studied as a desire for personal growth, framed within a model of eudaimonic growth and self-development (Bauer and McAdams in Dev Psychol 46:761–772, 2010). Five studies examine two facets of growth motivation (reflective and experiential) that aim respectively toward two paths of eudaimonic self-development (maturity/wisdom and well-being/meaningfulness). Studies 1 and 2 demonstrate that participants differentiate concerns for reflective and experiential growth motivation, suggesting that people think about personal growth not merely in global terms. Studies 3–5 demonstrate that reflective growth motivation primarily predicts measures of psychosocial maturity, whereas experiential growth motivation primarily predicts measures of well-being, suggesting that motives for two facets of growth motivation correspond to the relative attainment of two facets of eudaimonic self-development. These relations hold when controlling for global measures of personal growth. Furthermore, reflective and experiential growth motivation simultaneously and independently predict generativity and self-actualization (constructs that incorporate qualities of both wisdom/maturity and happiness/well-being), suggesting that reflective and experiential growth motivation, despite their differentiation, also speak to a global, integrative notion of personal growth. The role of growth motivation within the context of eudaimonia and human development is discussed.

Keywords Growth motivation · Eudaimonia · Maturity · Well-being · Meaning · Self-development

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1 Introduction

Personal growth is a widely desirable quality in life, so the motivation to foster personal growth should have received a great deal of empirical attention by now. Yet a review of motivation research between 1930 and 2005 yields no mention of "growth motivation" as a term (Mayer et al. 2007). A PsycINFO search in April, 2013 of "growth motivation" in the title or abstract yields fewer than two-dozen peer-reviewed articles.

In the present article, we approach growth motivation as a desire to foster personal growth. Our model of growth motivation emerges from a framework of eudaimonic growth, which targets self development and personality development from humanistic, organismic, and eudaimonic perspectives (Bauer 2013; Bauer and McAdams 2010; Bauer and Park 2010). Our model features two facets of growth motivation (reflective and experiential) that steer personality development toward two paths of eudaimonic personality development (psychosocial maturity or wisdom on the one hand and well-being or meaningfulness on the other). Five studies explore how reflective and experiential growth motivations correspond respectively to psychosocial maturity and well-being.

2 Research on Growth Motivation

Much of the research that we categorize as focused on growth motivation takes a humanistic perspective, particularly Maslow's work on growth, self-actualizing, and hierarchy of needs. Maslow (1968) distinguishes growth from safety motivations. Growth motivation aims toward progress, exploration, seeking challenges, learning, and the increasing actualization of one's potentials. In contrast, safety motivation aims toward preservation, conservation, protection, defensiveness, seeking immediate comforts, maintenance, and following traditional or established patterns. Both growth and safety motives are necessary for navigating a life, but growth motives tend to depend on the satisfaction of safety needs. Safety motivation steers oneself toward convincing oneself of one's own worth and esteem, one's sense of belonging among other individuals and groups, one's being safe, and one's having physiological needs met. As these needs become increasingly met, growth motives come more to the fore, steering oneself in the direction of self-actualizing and human flourishing. Of course, safety needs need not be thoroughly satisfied for a growth motivation to arise; they only make it more likely.

Similarly, self-determination theory (Deci and Ryan 2000) posits that growth rests on three psychological needs (autonomy, competence, and relatedness). As these needs become met, the person comes to act more upon internally directed (i.e., self-determined) motivations, rather than motivations that are more extrinsically or externally controlled. One measure of such motives is the Aspirations Index (Kasser and Ryan 1993), a 105-item measure of the degree to which various major-life goals involve humanistic, internally directed motives (e.g., for personally meaningful activities and relationships) versus materialistic, externally directed motives (e.g., for social status and self-image). Humanistic aspirations have ties to adaptation and well-being across the life-span and across cultures (e.g., Kasser et al. 2002; Kasser and Ryan 1993, 1996; Ryan and Deci 2001). Similarly, goals that are pursued for internally motivated purposes have been called "self-concordant goals" (Sheldon et al. 2004; Sheldon and Houser-Marko 2001; Sheldon et al. 2004) or "growth goals" (Bauer and McAdams 2004a, 2010) and also have ties to well-being and psychosocial development over time.

The Personal Growth Initiative Scale (PGIS; Robitschek et al. 2012) is consonant with humanistic growth motivation. PGIS assesses the "active, intentional engagement in the

process of personal growth" (Robitschek 1998, p. 184) and correlates with assertiveness, internal locus of control (Robitschek and Cook 1999), concentration on tasks (Robitschek 1998), healthy, reflective coping (Robitschek and Cook 1999), goal directedness, career decision making self-efficacy, intrinsic motivation, and (inversely) externally controlled motivation (Bartley and Robitshek 2000). While PGIS focuses on the thoughts and actions along the process of personal growth more so than on motives, personal growth initiative is similar to growth motivation in its focus on a personal concern for personal growth.

In partial contrast, the self-improvement motive (Sedikides and Hepper 2009) has intuitive ties to growth motivation, but it is not exclusively focused on humanistic concerns. Self-improvement may emphasize the importance of one's own social status, self-image, and material appearance as well as more humanistic concerns (Sedikides and Strube 1997). Our model of growth motivation focuses exclusively on the importance of personally meaningful experiences and fostering the eudaimonic growth of the self and others. Still, self-improvement (regardless of value orientation) seems to function like growth-oriented motives as self-determination theory predicts: Self-improvement motives have been shown to relate more to internal standards than to the external standards of social comparisons (Wayment and Taylor 1995).

Overall, models of growth motivation focus on what we call *experiential* growth motivation—motives for a general, diffuse sense of personally meaningful growth. No model to our knowledge distinguishes what we call *reflective* growth motivation, which aims toward the development of characteristics like wisdom and psychosocial maturity, which are hallmark qualities of eudaimonia.

3 The Model of Eudaimonic Growth

Eudaimonic growth is about the humanistic development of personhood, focusing on the cultivation of qualities such as wisdom, virtue, love, and non-egoistic meaningfulness (Bauer 2008; Bauer and McAdams 2010; Bauer et al. 2008; Bauer and Park 2010). Growth motivation is the motive to foster eudaimonic growth. The motives and processes of growth aim toward not only greater skills but also a good life in the big picture (e.g., Sheldon 2004; Waterman 2013). In this section we present several features of eudaimonic growth: eudaimonia, humanistic and organismic principles in relation to eudaimonia, and two paths of eudaimonic growth.

3.1 Eudaimonia

What is a good life or a life well lived? Two staple answers in Western philosophy and psychology are eudaimonia and hedonia. Aristotle's description of eudaimonia in *The Nicomachean Ethics*, which serves as the foundation of most eudaimonic models today, emphasizes excellence (*arete*) in wisdom and moral virtue. But different theories define eudaimonia differently. Whereas the ingredient list of recipes for eudaimonia varies in length, the list for hedonia has one item (Tiberius 2013). Hedonia is about having a pleasing life, period.

In psychological science, hedonic well-being is generally defined as a combination of pleasurable experiences and evaluative satisfaction in life (Diener et al. 2006; in philosophy see Haybron 2008), whereas eudaimonic well-being is generally defined by qualities like meaning in life, wisdom, moral virtue, authenticity, self-actualizing, psychosocial maturity, growth, a true self, vitality, and engagement (Bauer et al. 2008; Huta and Ryan 2010; Keyes 2007; Ryan and Deci 2001; Ryan et al. 2008; Ryff and Singer 2008; Schlegel

et al. 2013; Steger et al. 2013; Waterman et al. 2008). Most researchers in psychology agree that both hedonic happiness and eudaimonic qualities like wisdom and virtue are important elements of a life well lived (see Sheldon 2013). Similarly, folk psychology seems to hold that both happiness and meaning are two important qualities of a good life (King and Napa 1998).

The philosopher Susan Wolf (2010) argues that a good life is a *meaningful* life, which combines eudaimonic concerns for wisdom and virtue with hedonic concerns for pleasure and satisfaction, such that the pleasures come from eudaimonic concerns. The sense of *meaningfulness* (as distinct from the conceptual meanings in life that one holds) emerges with the fulfillment of those meanings in the living of one's life (see Baumeister 1991). This sense of meaningfulness registers subjectively as a sense of hedonic satisfaction (Haybron 2008), even if the satisfaction has eudaimonic causes and also registers as a sense of meaningfulness. The emphasis on meaningfulness harkens the Aristotelian emphasis on eudaimonia as an "activity" or a property of living (Haybron 2008; Ryan and Deci 2001; Tiberius 2008; Waterman 2013), rather than as an outcome or discrete status such as "wise" or "satisfied." In other words, eudaimonic activity is an end itself (it is *constitutive* rather than *instrumental*; Fowers 2012), much like the self-determination theory distinction between internally and externally motivated activities.

The two facets of growth motivation include motives to cultivate capacities for conceptual meaning-making, such as wisdom, as well as motives to cultivate meaningfulness, i.e., the fulfillment of that meaning-making in the activities of one's life.

3.2 Humanistic, Organismic, and Eudaimonic Perspectives on Self-Development

Having provided a brief orientation to humanistic and eudaimonic perspectives, we wish now to show how they overlap in relation to the organismic perspective, which is the developmental force behind the term "eudaimonic growth."

As described earlier, humanistic concerns focus on *personal experience* more so than on *social status and self-image*. Like growth and safety motivations, both are necessary for navigating a life, but humanistic motives are what make us feel alive (Ryan and Frederick 1997). Plus, their effects last longer. As one example, humanistic motives appear to stabilize higher self-esteem (Kernis 2003). As another example, experiential purchases yield greater and more sustained gains in well-being, compared to material purchases (Carter and Gilovich 2010). Whereas humanistic concerns place value on the self as a person who experiences, materialistic concerns place value on the self merely as a commodity whose value is determined externally. Not all eudaimonic concerns are humanistic, despite the fact that eudaimonia is typically assumed to be humanistic. Eudaimonic concerns (e.g., for wisdom and learning) can be framed in terms of materialistic (i.e., externally controlled) aims like perfectionism (Bauer and Lauber 2013). Indeed perfection is historically a key feature of eudaimonic theory (Haybron 2008). As an example of materialistic eudaimonia, merely consider the academic's pride in his or her C.V., which is more likely about egoistic status than about the humanistic exercising of wisdom. Conversely, a noteworthy subset of humanistic concerns are explicitly hedonic—namely intrinsically motivated activities, which are done for the sheer pleasure of the activity itself. Now, intrinsically motivated activities involve more *effort* than purely hedonic activities, suggesting that intrinsic motivation is more eudaimonic (Waterman 2005). However, few hedonic theories suggest that hedonia is characterized by lack of effort (see Sumner 1996). Thus a humanistic eudaimonia involves a concern for the experience of meaning-making processes (like

wisdom) and meaningfulness themselves, rather than for the status or self-image they might yield.

From a developmental perspective, Aristotle's *arete*—i.e., excellence in wisdom and virtue—does not first appear in full bloom. Such excellences must develop and be cultivated. The present model of eudaimonic growth emphasizes this inherently developmental nature of eudaimonia, the processes of which often go unexamined (Bauer and McAdams 2010; for a developmental approach to eudaimonia in philosophy, see Nussbaum 2011). We take a specifically organismic perspective on development. Organismic theory features the development of self-organizing systems (Goldstein 1939). In the context of human development, organismic concerns focus on the development of one's personhood (McAdams 2008; Murray 1938)—complete with subjective motives, experiences, and perspectives, rather than mere acquisitions or gains. The organismic perspective also holds that the individual person (as a self-organizing system) makes a contribution to his or her own development that cannot be explained away by the external forces of, say, nature and nurture (Bauer and McAdams 2010). This includes the individual's biological processes, but of primary importance here are the person's subjective motives that shape his or her life. As such, self-determination theory is framed as organismic (Deci and Ryan 2000). Similarly, Csikszentmihalyi (1993) describes how flow-inducing activities (which are intrinsically motivated) naturally facilitate human development.

The combination of humanistic and organismic concerns is inherently eudaimonic, in that a subjective concern for growth itself is eudaimonic (e.g., Ryan and Deci 2001). Of particular importance in our model of eudaimonic growth is the notion of self-development (McLean et al. 2007), where the self is understood subjectively (e.g., Leary and Tangney 2005). By focusing on the humanistic, organismic, and eudaimonic qualities of self-development, eudaimonic growth involves the cultivation of qualities in life like wisdom and meaningfulness, which we next consider in more detail. The motivation for such cultivation is what we call "growth motivation."

3.3 Two Facets of Eudaimonic Growth

Eudaimonic growth involves the development of eudaimonia over time (e.g., increases in maturity and well-being; Bauer and McAdams 2010). Aristotle, like Plato and Socrates before him, holds that happiness naturally follows from cultivated virtues like wisdom and virtue. However, empirical research contradicts this enduring and widely held belief (Flanagan 1991). Measures of wisdom and psychosocial maturity typically do not correlate with measures of happiness and well-being, particularly in adult samples (e.g., Bauer and McAdams 2004a, b, 2010; Helson and Roberts 1994; Helson and Wink 1992; King et al. 2000; King and Smith 2004; Pals 2006; Westenberg and Block 1993). In other words, people who can think complexly about their lives are just as likely to be happy as unhappy. By framing eudaimonia as comprised of both *thinking well* and *feeling good*, we view eudaimonic growth as personality development along two, relatively distinct paths: toward increases over time in qualities of reflection and wisdom (or more specifically, "psychosocial maturity"; Staudinger et al. 2005) on the one hand and, on the other, toward increases in experiential qualities that foster enduring happiness and well-being, such as having meaningful activities and loving relationships (Bauer and McAdams 2010; Bauer et al. 2008; King and Hicks 2007; Labouvie-Vief 2003; McGregor and Little 1998; Staudinger and Kunzmann 2005). Next we consider these two facets of eudaimonic growth as well as some personality qualities that incorporate elements of both wisdom/maturity and meaningfulness/well-being.

3.3.1 Psychosocial Maturity and Wisdom

The umbrella term "psychosocial maturity" covers a range of developmental constructs related to wisdom and moral virtue (Pratt et al. 1991; Staudinger et al. 2005), including self-actualizing (Maslow 1968), moral reasoning (Kohlberg 1969), ego or self development (Kegan 1982; Labouvie-Vief 2006; Loevinger 1976), integrative complexity (Suedfeld et al. 1992; Woike and Matic 2004), and psychosocial development (Erikson 1950).[1] In theories of psychosocial maturity, what develops (among other things) is a heightened capacity to think about the self and others from multiple perspectives. In the present studies, we investigate how growth motivation corresponds to two indices of psychosocial maturity—psychosocial exploration and psychosocial inclusivity—which respectively reflect differentiating and integrating functions of maturity, particular in terms of self-identity development (e.g., Erikson 1968; Loevinger 1976). Psychosocial exploration deals largely with the conceptual differentiation that comes from seeking new perspectives from which to understand oneself and one's life. Psychosocial inclusivity deals largely with the conceptual integration of identifying with people beyond one's in-group.

3.3.2 Well-Being and Meaningfulness

Whereas psychosocial maturity deals with how complexly and integratively one thinks about the self and others, well-being generally deals with how good one feels about the self in a world of others. As described earlier, when people think that personal meanings or values are relatively fulfilled in their lives, they feel relatively good—what we call a sense of meaningfulness (Bauer et al. 2008). Research does show that measures of hedonic well-being correlate with measures of having meaning in life (e.g., King et al. 2006). For instance, people who value and are motivated by the idea of growth get a sense of meaningfulness from the assessment that they have in fact grown in personally meaningful ways. Our definition of meaningfulness is captured operationally in the psychological well-being (PWB) scale, a widely used measure of eudaimonic well-being (Ryff and Keyes 1995). PWB asks participants to evaluate their lives in terms of six sources of meaning in life (autonomy, environmental mastery, personal growth, purpose in life, positive relationships, and self-acceptance). Rather than measure how much people differentiate and integrate notions of self and others, PWB largely asks participants to assess the degree to which they "have" these six meanings in life (i.e., to which these meanings are met, fulfilled, or satisfied in life). In the present studies, we use measures of PWB and general life satisfaction.[2]

[1] Erikson's (1950) theory of psychosocial development is a major theory of psychosocial maturity, yet his theory differs from these others in one important aspect—Erikson's explicit focus on the psychologically healthy development of the person. Each of the other theories emphasizes something closer to thinking about the self and others with integrative complexity than to thinking about the self and others in a healthy manner. Elements of integrative complexity are embedded within each of Erikson's stages in that each adult stage, for example, involves an identification with a broader and more complex locus in psychosocial space.

[2] Incidentally, the PWB—Personal Growth subscale (PWB-PG—Ryff and Singer 1998) includes items that measure our definition of meaningfulness (i.e., fulfillment in the sense of having grown personally) as well as motivation (i.e., the valuing of personal growth). PWB-PG has been described as the PWB dimension that "comes closest in meaning to Aristotle's eudaimonia" (Ryff and Singer 2008, p. 21). PWB-PG has empirical ties to both reflective and experiential growth narratives (Bauer et al. 2005).

3.3.3 Characteristics Incoporating Both Wisdom and Meaningfulness

Despite their general differences, maturity and well-being are associated in certain contexts and personality characteristics. For example, higher levels of maturity seem to facilitate adaptation to difficult life circumstances (Bursik 1991). Two personality qualities that incorporate elements of both maturity and well-being are generativity and self-actualization. Generativity is a eudaimonic concern for fostering the development of future generations and society, rather than being concerned with merely one's own welfare (Erikson 1950; McAdams and de St. Aubin 1992). Individuals who report relatively more generative concern tend to score high on measures of both maturity and well-being (McAdams et al. 1986). Self-actualization is conceptualized as the pinnacle of psychosocial maturity (Loevinger 1976), yet self-actualization is also theorized to yield well-being (Maslow 1968). Different measures of self-actualization have demonstrated ties to measures of both maturity and well-being (Bauer et al. 2011; Jones and Crandall 1986).

4 Growth Motivation in the Present Studies

Our model of growth motivation posits two facets of growth motivation that aim toward the maturity-and-well-being facets of eudaimonic growth. The present studies use a new instrument, the Growth Motivation Index (GMI), which was designed to measure two facets of growth motivation—reflective and experiential—that map onto maturity and well-being, respectively. Reflective growth motivation emphasizes a desire for conceptual learning, exploration, and gaining new perspectives on one's psychosocial life. Experiential growth motivation emphasizes a desire for deepening or strengthening one's experiences or relationships, helping others, and building skills in activities of personal interest.[3]

Importantly, the GMI focuses not on the presence of maturity and well-being but rather on the subjective desire to cultivate them. More specifically, the GMI items reflect a subjective interest in the theoretical mechanisms of the development of maturity. In other words, the GMI assesses degrees to which individuals focus on *the kinds of things that foster* eudaimonic growth rather than on whether one already exhibits maturity/wisdom or already has satisfactory degrees of well-being/meaningfulness in one's life.

The GMI items were based on coding criteria for identifying personal narratives that emphasize reflective and experiential growth themes, particularly in people's major life goals (e.g., Bauer and McAdams 2004a, b, 2010). To create items for reflective growth motivation (as with the narrative measures), we drew from the structural, social-cognitive branch of developmental theory, which focuses on the differentiation and integration of thoughts on self and others (e.g., Damon and Hart 1988; Kegan 1982; Loevinger 1976; Piaget 1970). GMI-reflective items focus on the personal motivation to develop new perspectives on

[3] Reflective and experiential growth motives are based directly on reflective and experiential growth narratives, which are personal narratives that emphasize growth. We developed the GMI in order to get a quick, self-report measure of growth motivations without having to employ the time-consuming methods of narrative research. What we call "reflective" growth has also been called "exploratory," "integrative," and "intellectual," whereas "experiential" growth has also been called "intrinsic" and "socioemotional" (Bauer and McAdams 2004a, 2010; Bauer et al. 2005). We hope that we have finally settled on terms that describe the basic phenomenon that cuts across this research. We thank past and present reviewers—and countless colleagues—for their suggestions. We borrow the term "reflective" from Tiberius's book on the reflective life, which captured our sense that eudaimonic wisdom is important but not the only important feature of a good life (2008).

psychosocial life by reflecting on other people's subjective experience, on the veracity of one's own perspectives, and on one's life in relation to society. To create items for experiential growth motivation, we drew from self-determination theory (Deci and Ryan 2000), particularly on intrinsic and internal motivation (Kasser and Ryan 1996) and self-concordant goals (Sheldon and Kasser 1995; Sheldon and Houser-Marko 2001), which theoretically tap into mechanisms of the development of well-being. GMI-experiential items focus on the personal motivation to cultivate humanistically meaningful activities and relationships.

In five studies, we examine the GMI and its ties to measures of eudaimonic self-development. First we expected the GMI to have a two-factor structure. Second, the two GMI subscales are expected to correlate with other measures of concern for personal growth. Third, the reflective subscale was expected primarily to predict measures of psychosocial maturity, whereas the experiential subscale was expected primarily to predict measure of well-being. Fourth, these relations were expected to hold when controlling for other measures of concern for personal growth. Fifth, both subscales were expected in simultaneous regressions to predict measures that incorporate elements of both maturity and well-being: generativity and self-actualization.

5 Method

We present all five studies together to make comparisons across studies easier.

5.1 Participants

All participants were students at the University of Dayton who received course credit for their participation. Studies 1 and 2 (for factor analysis) included, respectively, 415 and 308 participants, 68 and 69 % women, and similar proportions of ethnicities as the following studies. In Study 3 ($n = 98$), women comprised 64 % of the sample, and ethnicities were as follows: African American (4 %), Asian American (2 %), European American (90 %), Hispanic American (2 %), and other (2 %). In Study 4 ($n = 202$), women comprised 56 % of the sample, and ethnicities were as follows: African American (5 %), Asian American (2 %), European American (85 %), Hispanic American (4 %), and other (4 %). In Study 5 ($n = 142$), women comprised 74 % of the sample, and ethnicities were as follows: African American (2 %), Asian American (1 %), European American (94 %), Hispanic American (1 %), and other (2 %).

5.2 Procedures

Participants were recruited from psychology courses and received course credit for participating. All studies involved surveys that included the GMI and other measures of personality, such as motivation, well-being and psychosocial maturity. Study 3 was conducted on-line, whereas the other studies were conducted with paper and pencil. The surveys took anywhere from 30 min to 1 h to complete.

5.3 Measures

5.3.1 Growth Motivation Index

The GMI has 20 items that were designed to measure the degree to which people claim to be motivated by two facets of personal growth. GMI asks participants to rate on 7-point

Table 1 Factor loadings of the GMI in pilot studies 1 and 2

Item	Exploratory		Confirmatory	
	1	2	1	2
5. I ask myself "what if…" questions that place me in others' shoes, such as "What would I think or feel in this situation if I were of a different race or ethnicity?"	.65		.52	
10. I actively seek new perspectives on how to live my life, even if these new perspectives mean I've been wrong	.45		.55	
13. I ask people what they think about current issues so that I can understand other points of view	.64		.59	
17. I seek new experiences as a way to know myself and others better, not just to feel excitement	.48		.68	
18. I consciously think about how I fit into my society and culture, how they have influenced me, and what I might contribute to them	.59		.52	
1. I try to form my personal goals in life around my deeper interests		.59		.51
2. I strive to make my relationships better in the future		.72		.67
14. I strive to create a happy and meaningful life		.42		.61

Exploratory factor analysis, $n = 415$. Confirmatory factor analysis, $n = 308$

Likert-type scale how often they do particular activities for particular reasons of growth (1 = never, 4 = periodically, 7 = always). Items appear in Table 1, along with factor analysis data that are reported in the results section. GMI was used in all studies. Cronbach's alphas for Studies 3–5, respectively, were: GMI-Total—.85, .79, .79; GMI-Reflective—.77, .75. 71; GMI-Experiential—.80, .65, .78.

5.3.2 Personal Growth Initiative

The Personal Growth Initiative Scale (PGIS; Robitschek 1998) measured the degree to which people claim that personal growth plays a role in their lives. Participants rate on a 1–6 scale how much they agree or disagree with 9 items, such as "I take charge of my life," "If I want to change something in my life, I initiate the transition process," and "I have a good sense of where I am headed in my life." PGIS was used in Study 3, with a Cronbach's alpha of .93.[4]

5.3.3 Psychosocial Exploration

To measure the facet of psychosocial maturity that deals with psychosocial exploration, we used the "information orientation" scale of Berzonsky's (1989) Identity Style Inventory (ISI-info). ISI-info assessed how much individuals think they search for information on relevant situations, explore new perspectives, and seek an elaborated understanding of psychosocial life. ISI-info was used in each study. Participants rate on a 1–7 scale the degree to which statements are "very much like me" or "not at all like me." The ISI-info

[4] The present studies employ the original, single-scale version of PGIS. A recent revision of the PGIS has four subscales (readiness for change, planfulness, using resources, and intentional behavior—Robitschek et al. 2012), but they do not appear to differentiate the reflective and experiential facets of eudaimonic growth.

scale has 11 items and was used in Studies 3 and 4, with Cronbach's alphas of .73 and .79, respectively.

5.3.4 Psychosocial Inclusivity

To measure the facet of psychosocial maturity that deals with psychosocial inclusivity, we used the Quick Discrimination Index (QDI; Ponterotto et al. 2002), a 30-item instrument that asks participants to rate on a 1–5 scale how much they agree or disagree with statements about gender and ethnicity. The QDI taps into one's tendency to hold humanity-inclusive values, specifically by advocating for and identifying with people across gender and ethnicity. Examples include: "It is as easy for women to succeed in business as it is for men" (reverse-scored), "In the past few years there has been too much attention directed toward multicultural issues in education" (reverse-scored), and "If I were to adopt a child, I would be happy to adopt a child of any race." QDI was used in Studies 3 and 5, with Cronbach's alphas of .73 and .79, respectively.

5.3.5 Satisfaction with Life

Participants completed the Satisfaction with Life Scale (SWL; Diener et al. 1985). SWL is a well-validated, simple, five-item measure of overall life satisfaction. Items include "I am satisfied with my life" and "If I could live my life over, I would change almost nothing." Items are rated on a scale of 1 (*strongly disagree*) to 7 (*strongly agree*). SWL was used in Studies 3–5, with Cronbach's alphas of .89, .82, and .86, respectively.

5.3.6 Psychological Well-Being

Participants completed Ryff's multidimensional scale of psychological well-being (PWB; Ryff and Keyes 1995). PWB is a well-validated measure of six dimensions of well-being: autonomy, environmental mastery, personal growth, positive relationships, purpose in life, and self-acceptance (each of which is a subscale). Participants rate on a 6-point scale the degree to which they agree with 42 items relating to well-being. Because PWB has a personal growth subscale (PWB-PG), we used this subscale as a variable to test construct validity. While PWB-PG is not typically viewed as a measure of motivation, this subscale's seven items include three items that do focus on motivation or value orientation rather than on well-being as typically construed, i.e., as the fulfillment or satisfaction of (in this case) personal growth in one's life. Thus PWB-PG provides a kind of bridge between measures of motivation and satisfaction-based well-being (see Ryff and Singer 1998). As an additional measure of well-being, we also calculated the aggregated mean of the other five subscales (PWB-5). PWB was used in Studies 4 and 5, with Cronbach's alphas of .91 and .92, respectively.

5.3.7 Generativity

Generativity is the concern for and the fostering of the development and well-being of future generations (Erikson 1950). The Loyola Generativity Scale (LGS; McAdams and de St. Aubin 1992) is a well-validated measure of generative concern, which taps into the individual's motivation to foster the growth of others (indeed society and humanity). The LGS has 20 items that participants rate on a 4-point scale the degree to which they agree

with statements like "I try to pass along knowledge I have gained through my experiences" and "I do not feel that other people need me" (reverse scored). The LGS was used in Study 5, with a Cronbach's alpha of .84.

5.3.8 Self-actualization

The 15-item Short Index of Self-Actualization (SISA; Jones and Crandall 1986) with adequate validation was as an additional measure of psychosocial maturity. Participants rate on a 4-point scale items such as "I can express my feelings even when they may result in undesirable consequences," "It is better to be yourself than to be popular," and "I can like people without having to approve of them." The measure was used in Study 5, with a Cronbach's alpha of .66.

6 Results

6.1 Factor Analysis

6.1.1 Exploratory Factor Analysis

Table 1 presents the final solution drawn from an exploratory factor analysis in the first pilot study ($n = 415$). To explore the factor structure of the measure, we subjected all the items to a maximum likelihood extraction with a Promax rotation. This analysis resulted in a two-factor solution (eigenvalues > 1) that accounted for 42.3 % of the variance (35.7 % on the first factor). These loadings and an investigation of the scree plot suggested that reflective and experiential growth motivations were distinct but correlated ($r = .59$) factors, as they were designed to be. In the process of reduction, we considered an item as associated with a factor if it loaded greater than .40 on that factor and less than .30 on the other factor. Cronbach's alphas are: GMI-Reflective, .73; GMI-Experiential, .74.

6.1.2 Confirmatory Factor Analysis

Table 1 also presents the CFA solution for the second pilot study ($n = 308$). Following the recommendations of Bollen and Long (1993) and Kline (2011), multiple global fit indices were used including the traditional overall Chi square test of model fit (which should be non-significant), the root mean square error of approximation (RMSEA; .08 or less), the comparative fit index (CFI; .95 or greater), the Bentler–Bonett non-normed fit index (NNFI; .95 or greater), a favorable χ^2:df ratio (3 or less), and the standardized root mean square residual (.05 or less). In addition, standardized residual covariances also were be examined and expected to fall between -2.00 and 2.00. Prior to conducting analyses of interest, multivariate normality was evaluated using Mardia's coefficient test for multivariate normality (<3) and univariate indices of skewness and kurtosis (<2). Data from ten participants were removed from the analysis because of large contributions to normalized multivariate kurtosis (Mardia's Normalized Estimate = 3.52). Our hypothesized CFA model, developed after the completion of exploratory factor analyses, yielded two factors, the first labeled "GMI-Reflective" and the second labeled "GMI-Experiential." The CFA allowed the two factors to correlate without allowance for error terms (either within factor or across factors; Hooper et al. 2008). The CFA was performed using EQS (Bentler 1995).

The CFA provided a favorable fit to the data (χ^2 with 19 df = 25.939, $p = .131$, χ^2:df = 1.37, CFI = .98, NNFI = .97, RMSEA = .035). The factor loadings for both factors were all significant at the $p < .0001$ level (see Table 1). GMI-Reflective and GMI-Experiential showed reasonable internal consistency, with Cronbach's alphas of .72 and .74, respectively. The two factors were also significantly correlated, $r = .60$, $p < .0001$. To test an alternative model, namely, that these eight items best reflect a single factor instead of two factors, a second CFA was performed and provided an unfavorable fit to the data (χ^2 with 20 df = 69.207, $p = .00000$, χ^2:df = 3.46, CFI = .87, NNFI = .82, RMSEA = .09). A Chi square difference test revealed that the two-factor model CFA was a significantly better fitting model than the single factor CFA (χ^2 with 1df = 43.27, $p < .0000$), providing additional support for the two-factor model.

6.2 Descriptive Statistics and Demographic Relations

Descriptive statistics appear in Table 2 for Studies 3–5. Gender was significantly related to key variables in Studies 4 and 5. In Study 4, women had higher GMI-Reflective scores ($M = 5.22$, $SD = .87$) than did men ($M = 4.65$, $SD = .59$), $t(191) = 4.28$, $p < .001$, and higher GMI-Experiential scores ($M = 6.11$, $SD = .58$) than did men ($M = 5.73$, $SD = .85$), $t(191) = 3.66$, $p < .001$. In Study 5, women had higher GMI-Reflective scores ($M = 4.95$, $SD = .80$) than did men ($M = 4.50$, $SD = .87$), $t(139) = 2.90$, $p < .01$. In no case in any study did gender alter the significance level of the findings that follow. Ethnicity did not relate significantly to any of the variables.

6.3 Correlations

6.3.1 GMI and Other Measures of Growth Motivation

To test whether the overall GMI and the two GMI subscales both tapped into a general construct of growth motivation, we used two criteria: first, whether the two subscales correlated with each other and, second, whether the GMI overall and its two subscales each

Table 2 Descriptive statistics of primary variables

Measure	Study 3 ($n = 98$)	Study 4 ($n = 202$)	Study 5 ($n = 142$)
GMI-Reflective	4.87 (1.04) *2.4–7.0*	4.95 (1.05) *1.6–7.0*	4.74 (.89) *2.2–6.9*
GMI-Experiential	5.60 (1.03) *1.67–7.0*	6.08 (.74) *2.7–7.0*	5.92 (.83) *3.7–7.0*
PGI	4.48 (.99) *1.3–6.4*		
ISI-info	4.88 (.78) *2.6–6.4*	3.71 (.63) *2.1–6.0*	
QDI	2.65 (.61) *1.2–4.4*		3.74 (.85) *1.8–6.6*
SWL	4.95 (1.24) *1.5–7.2*	3.81 (.87) *1.6–6.0*	5.17 (1.14) *2.0–7.0*
PWB		4.51 (.57) *2.9–5.6*	4.49 (.51) *3.0–5.6*
Generativity (LGS)			3.52 (.50) *1.6–4.8*
Self-actualization (SISA)			4.47 (.58) *2.9–6.2*

Statistics include means, standard deviation in parentheses, and minimum and maximum scores in italics. Not all measures were used in all studies

ISI-info Identity style inventory, information orientation (psychosocial exploration), *QDI* Quick Discrimination Index, *SWL* Satisfaction with Life Scale, *PWB* psychological well being scale, aggregate of six dimensions, *PGI* Personal Growth Initiative Scale, *LGS* Loyola Generativity Scale, SISA Short Index of Self-Actualization

Table 3 Correlations between GMI facets and two facets of eudaimonia

Study	GMI	ISI-info	QDI	SWL	PWB-5	LGS	SISA	PGI	PWB-PG
3	Reflective	.60***	.33**	.22**				.34**	
	Experiential	.44***	.18	.38**				.35**	
4	Reflective	.48***		.10	.22**				.39***
	Experiential	.32***		.23**	.37***				.38***
5	Reflective		.37***	.27**	.41***	.54***	.44***		.47***
	Experiential		.30***	.58***	.67***	.49***	.45***		.65***

Study 3, $n = 98$. Study 4, $n = 202$. Study 5, $n = 142$. Pearson coefficients are reported. Blank cells indicate that a variable was not used in that study

GMI Growth Motivation Index, *Total* aggregate of GMI items, *ISI-info* identity style inventory, information orientation, *QDI* Quick Discrimination Index, *SWL* Satisfaction with Life Scale, *PWB-5* psychological well being aggregate of five subscales (i.e., all except personal growth), *LGS* Loyola Generativity Scale, *SISA* Short Index of self-actualization, *PGI* personal growth initiative, *PWB-PG* PWB, Personal Growth Subscale

* $p < .05$; ** $p < .01$; *** $p < .001$

correlated with measures of motivation for personal growth. GMI-Reflective and GMI-Experiential correlated significantly with each other in each study (all *p*s < .001): Study 1, $r = .59$, Study 2, $r = .60$, Study 3, $r = .67$, Study 4, $r = .52$; Study 5, $r = .56$. In Study 3, each GMI subscale correlated significantly with PGI (see Table 3). In Studies 4 and 5, each GMI subscale correlated significantly with the personal growth subscale of PWB (PWB-PG). Thus, both subscales appeared to tap into the general construct of growth orientation.

6.3.2 GMI, Maturity, Well-Being, Generativity, and Self-actualization

Both GMI-Reflective and GMI-Experiential correlated significantly with most of the measures of psychosocial maturity and well-being (see Table 3). Both GMI subscales also correlated significantly with measures of generativity (LGS) and self-actualization (SISA). As in the research on two comparable forms of growth narratives (e.g., Bauer and McAdams 2010), the capacity of the GMI subscales to relate differentially to psychosocial maturity and well-being was not as clear in bivariate correlations as in simultaneous regressions.

6.3.3 Other Measures of Growth Motivation, Maturity, and Well-Being

In Study 3, PGI correlated significantly with ISI-info, $r = .34$, $p < .001$, and SWL, $r = .36$, $p < .001$, but not with QDI, $p > .10$. In Study 4, PWB-PG correlated significantly with ISI-info, $r = .32$, $p < .001$, with SWL, $r = .20$, $p < .01$, and with PWB-5 (the aggregate of subscales, except the PG subscale), $r = .62$, $p < .001$. In Study 5, PWB-PG correlated significantly with QDI, $r = .30$, $p < .001$, with SWL, $r = .44$, $p < .001$, and with PWB-5, $r = .62$, $p < .001$.

6.3.4 Maturity and Well-Being

ISI-info correlated significantly with SWL in Study 3, $r = .28$, $p < .01$, with SWL in Study 4, $r = .22$, $p < .01$, and with PWB-5 in Study 4, $r = .32$, $p < .001$. In contrast, QDI correlated significantly neither with SWL in either Study 3 or Study 5 nor with PWB-5 in Study 5, *p*s > .10. Overall, then, our measure of psychosocial exploration was related to well-being, but our measure of psychosocial inclusivity was not.

6.4 Regressions of Psychosocial Maturity

Bivariate correlations revealed that all measures of growth motivation correlated significantly with at least one measure of maturity. For each of the following sets of simultaneous regressions, we expected GMI-Reflective (but not GMI-Experiential) to significantly predict measures of psychosocial maturity. We report mediation statistics to determine whether the reflective elements of GMI explained relations between GMI-Experiential and psychosocial maturity.

6.4.1 Reflective Versus Experiential Growth Motivation

In regressions of ISI-info in both studies, GMI-Reflective predicted ISI-info significantly, but GMI-Experiential did not (see Table 4). In both studies, GMI-Reflective mediated the relation between GMI-Experiential and ISI-info, with its β for GMI-Experiential dropping significantly from .44 to .07 in Study 3 and from .32 to .11 in Study 4 (Sobel tests significant in both studies, $p < .001$). As for QDI, GMI-Experiential did not hold a significant, bivariate correlation with QDI in Study 3, so no regression was necessary. In a regression in Study 5, only GMI-Reflective remained a significant predictor, mediating the relation between GMI-Experiential and QDI (β dropped from .30 to .13, Sobel test significant, $p < .001$). Thus, whereas both GMI subscales held bivariate relations with measures of psychosocial maturity, regressions revealed that the reflective, rather than experiential, facet of growth motivation was the driving force in those relations.

6.4.2 Incremental Validity of Reflective Growth Motivation

We also wanted to test whether GMI-Reflective continued to predict psychosocial maturity when controlling for other measures of general growth motivation. In Study 3 our other measure of growth motivation was PGI, whereas in Studies 4 and 5 we used PWB-PG. In Study 3 we regressed ISI-info on PGI and GMI-Reflective and found that GMI-Reflective explained significant variance in ISI-info beyond that explained by PGI (see Table 5). As noted earlier, PGI did not significantly predict QDI in Study 3. In Study 4, we regressed

Table 4 Simultaneous regressions of measures on GMI-reflective and GMI-experiential

Study	GMI	ISI-info	QDI	SWL	PWB-5	LGS	SISA
3	Reflective	**.55*** **	**.40** **	−.06			
	Experiential	.07	.10	**.43** **			
4	Reflective	**.42*** **		−.03	.08		
	Experiential	.11		**.25** **	**.35*** **		
5	Reflective		**.29** **	−.08	.08	**.39*** **	**.28** **
	Experiential		.13	**.62*** **	**.66*** **	**.27** **	**.30** **

β coefficients are reported. Bold values indicate predicted relations. Blank cells indicate that a variable was not used in that study

GMI Growth Motivation Index, *ISI-info* identity style inventory, information orientation, *QDI* Quick Discrimination Index, *SWL* Satisfaction with Life Scale, *PWB-5* psychological well being, aggregate of five subscales (i.e., all but personal growth), *LGS* Loyola Generativity Scale, *SISA* Short Index of Self-Actualization

* $p < .05$; ** $p < .01$; *** $p < .001$

Table 5 Regressions showing incremental validity of GMI subscales beyond other measures of growth motivation

Step	Study 3				Study 4				Study 5			
	Regressed	Model	β	ΔR^2	Regressed	Model	β	ΔR^2	Regressed	Model	β	ΔR^2
1	ISI-info	PGI	.33***	.11	ISI-info	PWB-PG	.32***	.10	QDI	PWB-PG	.30***	.09
2		PGI	.14	.26		PWB-PG	.16*	.15		PWB-PG	.16	.07
		GMI-Ref	.55***			GMI-Ref	.41***			GMI-Ref	.29**	
1	SWL	PGI	.36***	.13	SWL	PWB-PG	.20**	.04	SWL	PWB-PG	.52***	.19
2		PGI	.26*	.07		PWB-PG	.13	.03		PWB-PG	.10	.16
		GMI-Exp	.28**			GMI-Exp	.18*			GMI-Exp	.52***	
1					PWB-5	PWB-PG	.62***	.38	PWB-5	PWB-PG	.62***	.39
2						PWB-PG	.56***	.02		PWB-PG	.33***	.12
						GMI-Exp	.15*			GMI-Exp	.45***	

β coefficients are reported. All ΔR^2 coefficients are significant, $p < .05$, at least

GMI Growth Motivation Index, *Ref* Reflective Subscale, *Exp* Experiential Subscale, *Total* aggregate of GMI items, *ISI-info* identity style inventory, information orientation, *QDI* Quick Discrimination Index, *SWL* Satisfaction with Life Scale, *PWB-PG* psychological well being, personal growth subscale, *PWB-5* psychological well being, aggregate of five subscales (i.e., all but personal growth), *LGS* Loyola Generativity Scale, *SISA* Short Index of Self-Actualization

* $p < .05$; ** $p < .01$; *** $p < .001$

ISI-info on PWB-PG and GMI-Reflective and found that GMI-Reflective explained significant variance in ISI-info beyond that explained by PWB-PG. In Study 5 (see Table 5), we regressed QDI on PWB-PG and GMI-Reflective and found that GMI-Reflective explained significant variance in QDI beyond that explained by PWB-PG. Thus GMI-Reflective demonstrated incremental validity over other measures of general growth motivation in predicting measures of psychosocial maturity.

6.5 Regressions of Well-Being

Bivariate correlations revealed that all measures of growth motivation correlated significantly with at least one measure of well-being. For each of the following sets of simultaneous regressions, we expected GMI-Experiential (but not GMI-Reflective) to predict measures of well-being. We report mediation statistics to determine whether the experiential elements of GMI explained relations between GMI-Reflective and well-being.

6.5.1 Experiential Versus Reflective Growth Motivation

In simultaneous regressions in Studies 3–5, GMI-Experiential but not GMI-Reflective continued to predict SWL (see Table 4). In both studies GMI-Experiential mediated the relations between GMI-Reflective and SWL, with β dropping from .22 to −.06 in Study 4 and from .27 to −.08 in Study 5 (Sobel tests significant, $p < .001$). Studies 4 and 5 employed PWB. In both studies, both GMI-Reflective and GMI-Experiential correlated significantly with PWB-5. In regressions of PWB-5, GMI-Experiential but not GMI-Reflective remained a significant predictor of PWB-5 (i.e., all PWB subscales except PG). GMI-Experiential mediated the relation between GMI-Reflective and PWB-5 in both studies, with β dropping from .27 to .08 in Study 4 and from .45 to .08 in Study 5 (Sobel tests significant, $p < .001$). Thus, whereas both GMI subscales held bivariate relations with measures of well-being, regressions demonstrated that the experiential, rather than reflective, facet of growth motivation was the driving force in those relations.

6.5.2 Incremental Validity of Experiential Growth Motivation

We also wanted to test whether GMI-Experiential continued to predict well-being when controlling for other measures of general growth motivation. Again, in Study 3 our other measure of growth motivation was PGI, whereas in Studies 4 and 5 we used PWB-PG. In Study 3 we regressed SWL on PGI and GMI-Experiential and found that GMI-Experiential explained significant variance in SWL beyond that explained by PGI (see Table 5). In Studies 4 and 5, we regressed SWL on PWB-PG and GMI-Experiential and found that GMI-Experiential explained significant variance in SWL beyond that explained by PWB-PG. Also in Studies 4 and 5, in an especially stringent test, we regressed PWB-5 on PWB-PG and GMI-Experiential and found that that GMI-Experiential explained significant variance in PWB-5 beyond that explained by PWB-PG. Thus, GMI-Experiential demonstrated incremental validity over other measures of general growth motivation in predicting measures of well-being.

6.6 Regressions of Measures with Ties to Both Maturity and Well-Being

Study 5 included measures of generativity and self-actualization, each of which theoretically integrates two facets of eudaimonic growth, i.e., psychosocial maturity and well-

being. First we tested this theoretical integration to determine whether LGS, and subsequently SISA, mapped onto measures of both maturity (QDI) and well-being (SWL and PWB-5). Then we tested whether both GMI subscales independently predicted generativity and then self-actualization.

6.6.1 Generativity and Self-actualization as Integrating Maturity and Well-Being

Earlier we reported that QDI and SWL—representing maturity and well-being as two facets of eudaimonia—did not correlate significantly. In a simultaneous regression of LGS, we found that both QDI, $\beta = .30$, $p < .001$, and SWL, $\beta = .37$, $p < .001$, independently predicted LGS. In another simultaneous regression of LGS, we found that both QDI, $\beta = .27$, $p < .001$, and PWB, $\beta = .59$, $p < .001$, independently predicted LGS. In a simultaneous regression of SISA, we found that both QDI, $\beta = .30$, $p < .001$, and SWL, $\beta = .41$, $p < .001$, independently predicted SISA. In another simultaneous regression of SISA, we found that both QDI, $\beta = .27$, $p < .001$, and PWB, $\beta = .58$, $p < .001$, independently predicted SISA. Thus our measures of generativity and self-actualization each incorporated qualities of both maturity and well-being, as theoretically proposed.

6.6.2 Reflective and Experiential Growth Motivation as Independent Predictors

As for generativity, a regression demonstrated that both GMI-Reflective and GMI-Experiential significantly and independently predicted LGS (see Table 4). As for self-actualization, a regression demonstrated that both GMI-Reflective and GMI-Experiential significantly and independently predicted SISA. Thus reflective and experiential facets of growth motivation independently predicted generativity, and they both independently predicted self-actualization.

7 Discussion

The present studies reveal two facets of growth motivation and their relation to two facets of eudaimonic self-development. Reflective growth motivation involves the desire to cultivate how deeply one thinks about the self and others, whereas experiential growth motivation involves the desire to cultivate a deeper, more meaningful experience in one's activities and relationships. Next we discuss the relations between growth motivation and eudaimonic self-development, the nature of our model of growth motivation, and finally some issues surrounding eudaimonic growth motivation, especially the luxury of growth concerns, the potential elitism of eudaimonic theory, and problems with eudaimonia's cosmopolitanism.

7.1 Growth Motivation and Eudaimonic Self-Development

First we consider how reflective and experiential growth motivation relate to psychosocial maturity and well-being.

7.1.1 Differentiating Maturity and Well-Being

In three studies, these two growth motivations differentiated two facets of eudaimonic growth, such that reflective growth motivation corresponded to psychosocial maturity and

experiential growth motivation corresponded to well-being. Our measures of psychosocial maturity reflect the tendencies to explore new perspectives on life and on themselves as persons (ISI-info) as well as to identify with people across genders and ethnicities (QDI). These qualities of psychosocial exploration and the identification with society and even humanity rather than just oneself or one's in-group are characteristics of maturity in many models of psychosocial development (e.g., Erikson 1950; Kegan 1982; Loevinger 1976; Labouvie-Vief 2006). Our measures of well-being tap into general life satisfaction as well as what we call meaningfulness, that is, the sense of satisfaction that comes from fulfilling various sources of meaning in life. Overall the present findings are consistent with narrative research showing that concern for reflective growth coincides with wisdom but not necessarily happiness, whereas concern for experiential growth coincides with happiness but not necessarily wisdom (Bauer and McAdams 2004a, b; Bauer et al. 2005). In future research we will test whether this explicit measure of growth motivation predicted eudaimonic growth over time, i.e., increases in maturity/wisdom and well-being/meaningfulness, as has been found with growth-themed narratives (which tap into more implicit concerns for growth; Bauer and McAdams 2010). These findings further support the validity of the reflective and experiential subscales of the GMI.

7.1.2 Incorporating Both Maturity and Well-Being

Some qualities of eudaimonia, like generativity and self-actualization, incorporate both thinking well and feeling good. Our measure of generativity (LGS) was related to measures of both maturity and well-being (as independent predictors of LGS), as found in past research (McAdams et al. 1986). As for growth motivation, both reflective and experiential growth motivation independently predicted generativity. As with the other stages in Erikson's model, the healthy resolution of generativity involves at least a moderate degree of integrative complexity combined with humanistic concerns that are appropriate to that particular psychosocial concerns (identity in adolescence, intimacy in young adulthood, generativity in midlife). Similarly, the measure of self-actualization (SISA) corresponds to both reflective and experiential growth motivation. Self-actualization is often framed as characteristic of the highest stage in theories of psychosocial maturity (e.g., Kegan 1982; Loevinger 1976). Yet Maslow (1968) describes self-actualization as the pinnacle of psychological health and well-being as well. Which is correct? A handful of studies (Bauer et al. 2011) suggest Maslow is: The few participants who score at the highest stage of ego development have been shown to report significantly higher levels of well-being than participants at other stages. However, it is important to note that the present measure of self-actualization does not capture highly cultivated capacities for psychosocial differentiation and integration.

7.2 Our Model of Growth Motivation

Next we elaborate on some features of our model of growth motivation in relation to other models.

7.2.1 Growthiness

Growth means many things in research because it means so many things in life. We argue for clearer definitions of growth rather than relying on intuitive assessments of what might

be called "growthiness" (in homage to Stephen Colbert). When a study is simply looking for some measure of growth among an assortment of other measures, growthiness might work just fine. However, when growth is one of the primary interests of a study, finer definitions are more likely necessary. Toward this end, the GMI appears to be the only measure of growth motivation that was designed to differentiate the relatively thinking/reflective and feeling/fulfilling sides of eudaimonia.

7.2.2 The Uniqueness of the Two-Facet Model of Growth Motivation

Importantly, the two growth motivations predicted indices of eudaimonic growth even when controlling for more general forms of growth motivation. In Study 3 we found that the GMI and PGIS each independently predicted identity exploration and well-being, underscoring the differences between the two measures, notably that growth motivation has two facets that aim down two distinct paths of personality development. The uniqueness of the GMI is especially notable for experiential growth motivation, which focuses on the kinds of growth that theoretically foster well-being, since one of the competing measures of growth motivation is designed as a measure of well-being itself (namely, the personal growth subscale of PWB). These findings demonstrate the incremental validity of the GMI—and the fact that specialized measures of growth motivation, rather than more general measures of growth motivation, correspond to key features of eudaimonia. These findings also demonstrate that the reflective and experiential subscales of the GMI appear to function as do the growth themes in narrative research (e.g., Bauer and McAdams 2010), but with a measure that is much less time-consuming.

7.2.3 The Parts and the Whole of Growth Motivation

The GMI subscales are simultaneously related yet functionally distinct. On the one hand, the GMI has two, reliably distinct subscales that differentially predict measures of maturity and well-being. On the other hand, both subscales tap into a general construct of growth motivation and exhibit adequate reliability as a single scale. Some may find these two hands to be methodologically problematic ("subscales should be distinct, period"). But we interpret our findings as ecologically valid. Growth motivation is an umbrella construct that has parts. As a general construct with adequate inter-item reliability, the GMI has been used in two previous studies as a single scale rather than as two subscales. In the first study, those who scored high on self-esteem and growth motivation did not blame others for failure (presumably to learn from the failure), whereas those with high self-esteem generally did (Park et al. 2009). In the second study, women with lower growth motivation displayed more behavioral self-handicapping, a hindrance to growth at the price of maintaining a favorable self-image (Brown et al. 2012). The present studies are the first to validate the two subscales of the GMI in factor structure and in relation to theoretically predicted measures. In a similar fashion, the six PWB subscales tap into the superordinate construct of well-being, and indeed they correlate with each other (they all deal with eudaimonic well-being), yet they are distinct as well (Ryff and Keyes 1995). Thus, the GMI was found to function as it was designed—as two distinct subscales of growth motivation but also as a measure of the general notion of a humanistic, organismic, and eudaimonic form of growth motivation.

7.2.4 Just Two Facets? Exploring Other Models

While we use a two-facet model of growth motivation and eudaimonia, surely these phenomena can be parsed in other ways. Eudaimonia (and aspects of it) can be studied in a single dimension (Huta and Ryan 2010) or in many dimensions (Ryff and Singer 2008). Experiential growth might be further distinguished in terms of emotions (e.g., well-being, psychological health and adaptation, self-related emotions) and behaviors (e.g., skills, mastery), along the lines of the revised PGIS (Robitschek et al. 2012). Narrative research is ideal for exploring how people subjectively construe the elements of growth motivation (as was the case for the GMI). Personal growth, when viewed as a form of autobiographical reasoning (Singer and Bluck 2001), has been divvied into narrative categories of identity clarity, intimacy, and wisdom/insight (Lilgendahl and McAdams 2011). Similarly, reflective and experiential growth narratives each have been divvied into agentic and communal forms (Bauer and McAdams 2004b, 2010). Specific kinds of reflection, wisdom, insight, and learning have been identified in narrative research (McLean and Fournier 2008; Thorne et al. 2004). Longitudinally, increases in agentic growth motivation might be found to precede improvements in psychological health, as growth in agentic narratives was (Adler 2012).

7.3 Limitations

The relations between growth motivation and eudaimonic self-development are multi-faceted, hardly something to be settled in a single set of studies. Among the more obvious limitations of the present studies is the sampling from an exclusively college-age, U.S.-based sample that is not very ethnically diverse. We report below on another set of studies that addresses these issues. Also, we claim to be studying eudaimonic growth, yet we do not use a longitudinal design. As such, the most we can say from the present findings is that the GMI correlates with other measures that suggest some progress in eudaimonic self-development. Next we address common concerns with eudaimonic models that apply to our model of growth motivation.

7.3.1 Growth is Culturally Defined

One of the arguments against theories of eudaimonia, self-actualization, and related qualities of life is that they come from individualist cultures and tend to emphasize (at least on the surface) the importance of the individual person. As mentioned, the present study selected from only university students at the University of Dayton, which offered little opportunity to test the universality of the GMI. However, the GMI has very recently been tested cross-culturally in Japan, Guatemala, and India (Bauer et al. 2013). In a nutshell, we predicted and found that GMI-reflective did not correlate with well-being in the individualist U.S. (like we found in the present set of studies) but that GMI-reflective did correlate with well-being in collectivist cultures. Therefore, we found that growth motivation as a general idea corresponded to well-being across cultures. But we also found cultural differences in terms of the two GMI facets: The happier participants in collectivist cultures viewed critical self-reflection as central to their personal growth, whereas happier participants in individualistic cultures viewed personally meaningful interests as central to their personal growth. As such, the findings of the present study should be interpreted not as universal but rather as characteristic of individualist cultures.

7.3.2 Growth is a Luxury

Our model of growth motivation addresses a limited—and perhaps privileged—portrait of human development. At the very least, the personal concern for growth as humanistic, organismic, and eudaimonic self-development is a luxury to have, at least as a preoccupying or routine concern. Such concerns seem to depend on more basic concerns, notably physical, material concerns—a view held from Aristotle to the present day in philosophy (see Nussbaum 2011), speculative theory in psychology (Maslow 1968), and empirical research. As for empirical research, in a survey of more than 60,000 people from 123 nations, people were generally not concerned about things like belongingness and mastery if their basic physiological and safety needs were not met (Tay and Diener 2011). Thus the empirical likelihood (note: not the philosophical necessity) that one would endorse the concerns of GMI items may somewhat depend on having basic needs met. As Aristotle said, eudaimonia depends on both leisure (i.e., having resources) and luck. Even among psychological concerns, concern for growth is a luxury. A preoccupying concern for one's growth over time presumes that more-basic psychological needs have been relatively met in the present (Maslow 1968), just as internally motivated concerns become more prevalent as the needs for competence, relatedness, and autonomy become met (Deci and Ryan 2000). A personal focus on merely satisfying needs for mastery, esteem, and belongingness—without an accompanying and explicit desire to cultivate psychosocial understanding or meaningfulness—would not "count" as growth in our operational definition of growth. In other words, growth motivation is in many respects a matter of transcending self-interest (note: not dismissing self-interest) and quieting one's ego to the point that one's self-interest *includes* mutual interdependence and longer-term development (Bauer and Wayment 2008). On top of the fact that it may take decades of life experience and often hard-won effort to reach such a point (King and Hicks 2007), such concerns are luxuries to have, relatively speaking.

7.3.3 Elitism and Cosmopolitanism

Taking the luxury idea further, eudaimonia (and by extension our model of growth motivation) has been criticized for being elitist (e.g., Kashdan et al. 2008). Eudaimonia is rooted in an objectivist perspective on values that is rooted in Aristotle's intractably elitist views of a good life (Nussbaum 2011). The GMI essentially claims that some values are better than others, which certainly sounds elitist. We do take issue with the notion that theories of psychosocial maturity (with their "higher stages" etc.) are fundamentally elitist on the grounds that they are empirically descriptive, that they can be used in self-reflection to keep one's egotism in check, and that they refer not to judgments of the person as a whole but to specific capacities or characteristics of a person (dealing specifically with capacities for thinking about psychosocial life; plus, again, they have almost nothing to do with happiness and well-being). Still, eudaimonic models can and have been employed to ill effect. One example comes in the form of cosmopolitanism (Appiah 2006), a worldview and philosophical position that, like our models of growth motivation and eudaimonic growth, are biased toward ideals of universal inclusivity and a shared humanity, rather than of exclusivity, nationalism, or other forms of cultural and in-group favoritism. Cosmopolitan values often sound just fine from the perspective of individuals who have personal freedoms and privileges and whose cultures and neighborhoods are not under immediate threat. However, in the context of cultures and neighborhoods that are under threat of attack by nearby cultures and neighborhoods, social programs that were designed to

encourage an identification with humanity rather than one's local culture have been shown to be problematic for personal development (Hammack 2011). Perhaps such applications of cosmopolitanism were done sophomorically (as Appiah claims can happen), but perhaps such universalist values are simply too abstract to be useful or meaningful in certain life contexts.

8 Conclusion

Ever since Aristotle's portrayal of eudaimonia as the good life, people have assumed that a mature understanding of life coincides with and perhaps even produces happiness and psychological health (Flanagan 1991). Yet psychological science has repeatedly demonstrated that people who think complexly about life are just as likely to be happy or unhappy (e.g., Bauer et al. 2005; King et al. 2000). Longitudinal research suggests that eudaimonic growth—i.e., increases over time in both psychosocial maturity and well-being—is not a matter of striving for one and then also getting the other as a byproduct (Bauer and McAdams 2010; King and Raspin 2004; King and Smith 2004; Sheldon and Houser-Marko 2001). To the degree that growth motivation plays a role in the cultivation of eudaimonia, both reflective and experiential growth motivation may steer the person down two paths of, respectively, wisdom and happiness.

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