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Becoming your true self: Perceptions of authenticity across the lifespan

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ABSTRACT

Two studies investigated how authenticity is believed to change over time. We tested for two possible trajectories: (1) A simple positive linear progression driven by self-enhancement motives and (2) a linear progression followed by a plateau indicative of the end of the history illusion. Across both studies, participants completed measures of perceived authenticity for different points in their lives. Study 1 was over a relatively short period of time. Study 2 was over the course of the lifespan. Both studies revealed upward linear trends suggesting that participants believe they are becoming more authentic over time. Study 2 also revealed that people perceive particularly high rates of change in the recent past and near future. The preponderance of evidence favored the self-enhancement perspective.

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KEYWORDS

Authenticity; true self; selfenhancement; end of the history illusion; time

To be nobody-but-yourself – in a world which is doing its best, night and day, to make you everybody else – means to fight the hardest battle which any human being can fight; and never stop fighting. E.E. Cummings (1972)

Writers and scholars have long encouraged people to find and embrace their true selves. The feeling that one has succeeded in doing so is often referred to as authenticy¹ (Kernis & Goldman, 2006; Lenton, Bruder, Slabu, & Sedikides, 2013; Wood, Linley, Maltby, Baliousis, & Joseph, 2008). Considerable empirical research has found that perceptions of authenticity positively predict a wide variety of well-being outcomes including: self-esteem, positive affect, self-actualization, meaning in life, and reduced anxiety/distress (Heppner et al., 2008; Lenton, Slabu, Sedikides, & Power, 2013; Schlegel & Hicks, 2011; Sheldon, Ryan, Rawsthorne, & Ilardi, 1997). The current research examines whether people believe their level of authenticity is changing over the course of their lives.

In general, we hypothesized that people would see themselves as becoming more authentic over time. Given the central importance of authenticity in promoting psychological well-being, we contend that finding and expressing one's true self may be commonly held goals for people. Indeed, previous work suggests that people hold strong lay beliefs about the importance of the true self in their own lives (Schlegel et al., 2013). Given that people integrate their autobiographical past and imagined future into a story that imbues their life with meaning and coherence (McAdams, 1993, 1995b; McAdams & McLean, 2013; Singer,

2004), a perceived positive progression in authenticity could serve as a powerful cue that one's life is moving in the right direction (i.e., toward a cherished goal) and thus foster an overall sense of coherence and purpose. Further, life stories are shaped by shared cultural expectations of what a healthy life narrative entails (McLean, Pasupathi, & Pals, 2007), and older adults tend to have narratives that emphasize stability and personal continuity, whereas late adolescents and young adults have life stories that reflect self-exploration (McLean, 2008). This suggests that people may believe they are supposed to "find" themselves as they move through life.

Though there seems to be clear reasons to suspect a perceived positive progression in authenticity over time, it has never been explicitly explored in relation to authenticity. Thus, the current research aimed to both explore whether people perceive such a progression and what form that progression might take. Previous literature suggests two distinct trajectories these changes make take: (1) a simple linear progression that suggests one is becoming increasingly authentic over time or (2) an authenticity progression and subsequent plateau that suggests people become more authentic from the past to the present, but change little in the future. Next, we detail previous work that underlies these competing possibilities.

Self-enhancement motives

The first possibility, that people will believe they are becoming increasingly authentic over the lifespan is based on a self-enhancement perspective. A large literature suggests that people have a strong desire to view themselves positively and engage in a variety of selfenhancement strategies to maintain positive self-views (Baumeister, 1998; Sedikides, 1993; Sedikides & Hepper, 2009). Of particular relevance to the current work, people evaluate their past and future selves in ways that bolster their current selves. For example, research on temporal appraisal theory by Wilson and Ross (2001) found that people maintain their current self-regard by criticizing their past selves. Specifically, people tend to rate their present selves more favorably than their past selves, particularly on attributes important to them. Longitudinal studies also show that people even perceive positive changes in themselves in the absence of actual improvement (Wilson & Ross, 2001). Other studies have similarly revealed that people believe their present selves are more successful and happier than their past selves (Brickman, Coates, & Janoff-Bulman, 1978; Robinson & Ryff, 1999; Ross & Wilson, 2003; Ryff, 1991).

People also have a tendency to self-enhance by making highly positive future judgments about the self (Kanten & Teigen, 2008; Ross & Newby-Clark, 1998). Indeed, Robinson and Ryff (1999) argue that "the positivity of the future self may be critical to the maintenance of a positive self-evaluation" (p. 604). In a series of studies, they found that people predict their future selves will experience more happiness and satisfaction in various life domains compared to their past and present selves. Research also suggests that people are overly optimistic about the future and expect more positive events to happen to themselves than to others (Alloy & Ahrens, 1987; Psyzczynski, Holt, & Greenberg, 1987; Weinstein, 1980) and anticipate more positive events to occur in the future compared to the past (Grysman, Prabhakar, Anglin, & Hudson, 2013) or present (Johnson, 2009). Young adults also expect to experience greater subjective well-being in the future than the present and past (Staudinger, Bluck, & Herzberg, 2003).



Overall, a self-enhancement perspective would predict the perceived positive authenticity progression under investigation in the current paper will be linear. That is, it is likely to follow the same patterns Wilson and Ross (2001) observed for attributes that are important to a person. People should be motivated to derogate their past selves as relatively inauthentic compared to the current self as a means of bolstering one's current perceived authenticity and anticipate even greater levels of authenticity in their future compared to their present and past.

The end of history illusion

In some contrast to the self-enhancement perspective, the "end of the history illusion" suggests that people have shared beliefs about how the self changes over time. In a series of studies, Quoidbach, Gilbert, and Wilson (2013) asked participants to report how much they changed in the past decade and predict how much they expected to change in the next decade. They found an "end of the history illusion" that was prevalent across measures of personality, core values, and personal preferences. Specifically, participants, regardless of their age, believed they had changed quite a bit over the past decade, but would change very little in the next decade. Quoidbach and colleagues (2013) suggest that "Both teenagers and grandparents seem to believe that the pace of personal change has slowed to a crawl and that they have recently become the people they will remain" (p. 96).

Recent research by Steimer and Mata (2016) extended these findings by examining how the end of the history illusion affects motivated implicit theories of personality. They contend that people have motivated implicit theories about personality malleability such that perceived strengths in their personality would remain stable through the course of their lives while weaknesses in their personality would be more malleable. In two studies, they replicated the end of the history illusion and found a moderating effect of current trait desirability. Participants did not expect changes from their current personality to future personality, and additionally, demonstrated an end of the history illusion for traits they considered currently desirable. Specifically, personality strengths (i.e., desirable personality traits) were predicted to remain relatively stable in the future.

These findings point to a potential different shared belief about how authenticity might progress across the lifespan. Specifically, the end of the history illusion suggests that people will perceive a progression from the past to the current self. However, the authenticity progression should plateau at the current self, rather than continue to increase in the future.

Overview of the current studies

Together, both of these perspectives suggest that, in general, people should perceive a positive authenticity progression over time. According to the self-enhancement account, people will perceive a linear authenticity progression from the past to the present that extends into the future. On the other hand, the end of the illusion suggests a progression in authenticity from the past to the present and no difference from the present to the future. In the current research, we examined these competing hypotheses. In Study 1, we tested our predictions by having people assess their authenticity across three specific past, current, and future points in time. In Study 2, we aimed to replicate the findings of Study 1 over more temporal periods by adapting a version of "The Life Interview" (McAdams, 1995a).

Study 1

Study 1 examined how people perceived movement towards their true self over a relatively short period of time. Participants were asked to think about the degree of overlap between their true self and specific past, current, and future self-concepts. We predicted that participants would perceive either a linear authenticity progression, consistent with the self-enhancement perspective, or a linear authenticity progression and then a plateau, representative of the end of history illusion.

The temporal authenticity data was collected as part of a larger, unrelated study that happened to include measures of the presence of and search for meaning in life. Thus, the current data afforded an opportunity to assess whether people who perceive changes over time in authenticity also perceived their life as more meaningful, as one might expect given the fact that a positive progression would suggest one is moving towards a cherished life goal.

Method

Participants

One hundred and twenty-five students (89 female, 34 male, 2 unreported; $M_{\text{age}} = 18.65$, $SD_{age} = 1.94$, range 17–37) participated in the study for partial completion of course requirements. Though there was a fairly large range in age, the distribution of age was not normal. The vast majority of the participants (86%) were 18 (n = 81) or 19 (n = 26). Only one participant in the sample was over the age of 24. Participants were predominantly white (65%) and non-Hispanic (78%). Most reported English as their native language (86%). Participants were moderately conservative (M = 4.70, SD = 1.63; 1 = very liberal; 7 = very conservative), and most indicated a religious affiliation (83%).

Materials and procedures

Participants completed the measures described below at the beginning of the academic semester and were debriefed following the completion of the study.²

Participants were first provided with the following definition of the true self: Your TRUE SELF is made up of the characteristics, roles, or attributes that define who you really are – even if those characteristics are different than how you sometimes act in your daily life.

Temporal self-concepts

They were then asked to think about how their true self relates to three temporal selfconcepts: their past self (who they were when they graduated high school), current self (who they are right now), and future self (who they will be at the end of the semester). They were then presented with an adapted version of the Inclusion of Other in the Self (IOS) Scale for each temporal self-concept (Aron, Aron, & Smollan, 1992). Each measure consisted of 8 pairs of overlapping circles (i.e., Venn diagrams) that displayed an increasing amount of overlap between their "true self" and the temporal self-concepts. They were asked to choose the pair of circles that best represented the relationship between their true self and each of the temporal self-concepts. The greater the overlap between the two circles, the greater each temporal self-concept encompassed one's true self-concept. Similar measures have been used in previous research to assess authenticity (see Lenton, Slabu, Sedikides, & Power, 2013).



Meaning in life

Meaning in life was assessed using the Meaning in Life Questionnaire (Steger, Frazier, Oishi, & Kaler, 2006). Five items comprised the presence of meaning subscale (e.g., "I understand my life's meaning."), and five items comprised the search for meaning subscale (e.g., "I am searching for meaning in my life."). Participants indicated their agreement with each statement using a 7-point scale (1 = strongly disagree; 7 = strongly agree). Composite scores were computed for each subscale with higher scores reflecting greater presence of meaning $(M = 5.00, SD = 1.43, \alpha = .91)$ and search for meaning $(M = 4.88, SD = 1.60, \alpha = .90)$.

Results and discussion

A repeated measures ANOVA was conducted to examine the effect of time on perceived overlap with the true self. Results indicated a significant effect of time (Wilks' $\lambda = .634$, F(2, 122) = 35.17, p = .000, $\eta_p^2 = .366$). Pairwise comparisons indicated that participants believed their true self overlapped the least with their past self (M = 4.79, SD = 1.91, $d_{\text{past-current}} = -.51$), followed by their current self (M = 5.73, SD = 1.81, $d_{\text{current-future}} = -.49$), and future self (M = 6.59, SD = 1.73, $d_{past-future} = -.99$; all three means significantly differed from each other; p's < .05). This suggests that participants believe they are becoming more authentic over time and will continue to do so into the future.

Exploratory analyses: Potential moderation of age

The past self measured in this study was fixed at high school graduation. This left open the possibility that the observed effect was driven by older participants for whom high school graduation was much more distal. To address this possibility, we also conducted exploratory analyses that only used the subset of participants that were 18 or 19. Results were very similar to those for the full sample and indicated a significant linear effect with means increasing over time $(F(1, 106) = 50.45, p = .000, \eta_p^2 = .322; M_{Past} = 4.87, SD_{Past} = 1.20, d_{past-current} = -.60; M_{Current} = 5.79, SD_{Current} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 6.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 0.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 0.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 0.57, SD_{Future} = 1.79, d_{current-future} = -.44; M_{Future} = 0.57, SD_{Future} = 1.79, d_{current-future} = 0.57, SD_{current-future} = 0.57,$ $d_{\text{past-future}} = -1.12$).

Exploratory analyses: Correlates of perceiving progress

We computed difference scores between future authenticity and past authenticity and correlated these difference scores with the meaning measures. The results revealed a nonsignificant positive correlation with presence (r(122) = .17, p = .060). Though not traditionally significant, this provides some (limited) evidence that perceiving bigger gains in authenticity correlates with greater perceptions of meaning. Difference scores and search for meaning were uncorrelated (r(122) = .03, p = .785).

Study 2

Study 1 found initial support for the self-enhancement perspective. People perceived a linear authenticity progression over time that did not plateau. Remarkably, this progression was evidenced over a short period in people's lives (e.g., high school to the end of the current academic semester). It is notable that participants reported believing they'd be more authentic than they are now by the end of the current semester. However, these results should be interpreted with some caution given that they are based on a single item assessment of a complex construct (i.e., authenticity). Our exploratory analyses also provided some support that perceived changes in authenticity over time relate to perceived presence of meaning in life (though the relationship did not meet traditional levels of significance).

In Study 2, we wanted to replicate and extend our findings by examining whether people perceive increasing feelings of authenticity across the entire life span. We recruited participants diverse in age and asked them to describe their entire life story. Using an adapted version of "The Life Interview" (McAdams, 1995a), participants organized periods in their life story into chapters like a book and completed measures of authenticity for each chapter of their life story. Consistent with the findings in Study 1, we predicted that people would report becoming more authentic as they moved forward with each chapter in their life story. We also included exploratory single item measures of happiness and meaning for each chapter and exploratory trait measures of meaning in life, self-esteem, and optimism.

Method

Participants

One hundred and thirty-four people (53 female, 74 male, 7 not reporting), recruited from Amazon Mechanical Turk, participated in the study and were compensated with a payment of \$1.50. Participants were from the United States only, diverse in age $(M_{age} = 32.23,$ $SD_{age} = 9.77$, range = 19–67), and predominantly white (78%) and non-Hispanic (85%). Most reported English as their native language (93%), having a bachelor's degree or higher (51%), and having full time or part time employment (69%). Combined household income was measured categorically with an average response of 3.27 (SD = 1.70), corresponding to a salary range of \$35,000–\$74,999. Participants were moderately conservative (M = 4.73, SD = 1.67; $1 = very \, liberal$; $7 = very \, conservative$) and moderately religious (M = 3.17, SD = 2.44; 1 = not religious at all; 7 = very religious). About half indicated religious affiliation (51%). Four participants dropped out of the study before completing any of the authenticity measures and did not contribute any data to the primary analyses.

Materials and procedures

Participants completed the measures described below and were debriefed following the completion of the study.

Life story timeline

Participants were first presented with a timeline of their life from birth to their current age and were asked to think about their life as if it were a book or a novel (McAdams, 1995a; full instructions can be found on OSF). Participants then indicated the number of chapters they wanted to include in their life story so far (M = 6.24, SD = 2.18, range: 1-10). They were instructed to include no more than 10 chapters. For each chapter, participants were asked to give a title and briefly describe the chapter as well as provide their age for each chapter.

Chapter overlap circles

Participants were then provided with the same definition of the true self used in Study 1 and presented with the same adapted measure of the Inclusion of Other in the Self (IOS) Scale used in Study 1 for every chapter.

Chapter authenticity

As an additional operationalization of the construct, participants completed a shortened version of the Authenticity Scale (Wood et al., 2008) for each chapter. Two items were taken from the authentic living (e.g., "I lived in accordance with my values and beliefs."), accepting external influence (e.g., "Other people influenced me greatly."), and self-alienation subscales (e.g., "I felt out of touch with the 'real me.""). Participants indicated their agreement with each item using a 7-point scale (1 = does not describe me at all; 7 = describes me very well). A composite authenticity score was computed for each chapter with higher scores indicating greater chapter authenticity.

Chapter happiness

Participants completed one item ("How happy were you in chapter [X] of your life story?") assessing their levels of happiness for each life chapter. Participants indicated their responses using a 7-point scale (1 = not happy at all; 7 = very much happy).

Chapter meaning

Participants completed one item ("How meaningful do you think your life was in chapter [X] of your life story?") assessing their levels of meaning for each life chapter. Participants indicated their responses using a 7-point scale (1 = not meaningful at all; 7 = very meaningful).

Future timeline

Following the completion of measures of their life stories from birth to current age, participants were asked to imagine what comes next in their life story (full prompt available on OSF). Participants then indicated the number of future chapters they have in their life story (M = 2.52, SD = 1.47, range: 1–10; maximum of 10 chapters) and completed the same descriptions and measures of authenticity, happiness, and meaning they did for the past life chapters.

See Table 2 for n's, alphas (for authenticity), and descriptive statistics for all measures in each life chapter.

Trait measures

Meaning in life

Participants completed the same presence of meaning (M = 5.24, SD = 1.45, $\alpha = .92$) and search for meaning subscales (M = 4.24, SD = 1.65, $\alpha = .94$) as Study 1.

Self-esteem

Self-esteem was assessed using the Rosenberg Self-Esteem Scale (Rosenberg, 1965). Participants indicated their agreement with 10 statements (e.g., "I feel that I have a number of good qualities.") using a 7-point scale (1 = strongly disagree; 7 = strongly agree). A composite self-esteem score was computed with higher scores reflecting greater self-esteem $(M = 5.43, SD = 1.31, \alpha = .94).$

Optimism

Optimism was assessed using the Life Orientation Test-Revised (Scheier, Carver, & Bridges, 1994). Participants indicated their agreement with 6 statements (e.g., "Overall, I expect more good things to happen to me than bad.") using a 5-point scale (1 = strongly disagree; 5 = strongly agree). A composite optimism score was computed with higher scores reflecting greater optimism (M = 3.47, SD = .95, $\alpha = .90$).

Results and discussion

In order to assess whether people believe they are becoming more authentic over time, we conducted hierarchical linear modeling using HLM7 software (Raudenbush, Bryk, Cheong, Congdon, & du Toit, 2011). This multilevel modeling technique accounts for the lack of independence among repeated within-person observations and differing numbers of observations across individuals. Two levels were included in this analysis. Level 1 represented life chapters nested within individuals, and Level 2 represented mean differences between individuals. Time was the primary predictor in the analyses and was centered within-person such that the current chapter was coded as "0" and past chapters were coded with negative numbers and future chapters with positive numbers. This allowed us to examine the purely within-person relationships between time and the dependent measures. Following guidelines from Rosnow, Rosenthal, and Rubin (2000; Equation 2.5), we used the obtained *t* and *df* to calculate effect size *r* coefficients.

First, we estimated an unconditional model in order to calculate the intraclass correlation coefficient (Snijders & Bosker, 1999). According to this model, the vast majority of the variance at Level 1 was within individuals, across life chapter (84% for true self overlap, 87% for the authenticity scale) as opposed to between individuals.

An examination of the plot of means across chapters (see Figures 1 and 2)³ suggested that a cubic model would best capture the nature of the relationship between time and

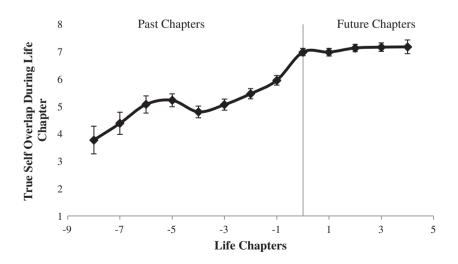


Figure 1. Scatterplot of true self overlap during each life chapter, Study 2. Notes: Error bars represent ± 1 standard error of mean. All of the figures include chapters that had data for at least 20 participants.

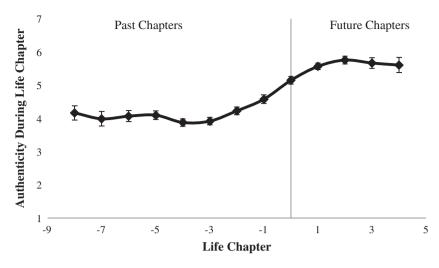


Figure 2. Scatterplot of authenticity during each life chapter, Study 2. Note: Error bars represent ± 1 standard error of mean.

authenticity for both variables. As such, we next estimated a model using restricted maximum likelihood that the model included linear, quadratic, and cubic terms (all effects were estimated as random). Results of this model revealed a significant, positive relationship between time and both authenticity measures, such that time was associated with greater perceptions of authenticity (See Tables 1 and 2). Further, the model revealed significant cubic trends for both measures that suggested a particularly accelerated increase in authenticity in the middle of the curve. As can be seen in Figures 1 and 2, perceptions of authenticity sharply increased in the few chapters preceding the current chapter through the first couple of future chapters. There are plateaus at both the beginning and end of the curves for both dependent variables. Note that some chapters have very little data at these ends of the curve, so we interpret the exact location of these plateaus with some caution. Nonetheless, the within person nature of the analyses suggests there was, on average, a cubic function evident across participants.

Given that the end of history illusion directly suggests that perceptions of authenticity should level off at the current chapter extending into the future, we conducted additional analyses to directly explore whether perceptions of authenticity are projected to increase in the future or plateaued at the current chapter. First, as a simple test, we conducted dependent t-tests comparing current chapters to a collapsed future chapter score (i.e., all future chapters averaged together). For the authenticity scale, the results revealed a significant increase (t(128) = -5.39, p < .001, d = -.47) from current (M = 5.16, SD = 1.31) to future chapters (M = 5.71, SD = 1.02). For the overlap variable, however, there was no difference (t(128) = -.72, p = .47, d = -.08) from current (M = 6.98, SD = 1.55) to future chapters (M = 7.09, SD = 1.36). As another way to test this idea, we conducted a piecewise regression model in HLM. To do this, we recoded the time variable into two variables that represented two different linear segments (one representing the past and another representing the future). This allowed us to test whether there were significant linear trends for each segment. An end of history perspective would suggest that the linear trend would only be significant for the first segment (i.e., past to current chapter). The results of this piecewise model can be found in Table 1 and

Table 1. Restricted maximum likelihood models, Study 2.

	β	Standard error	<i>T</i> ratio	p value	r
Polynomial models					
TS overlap					
Linear	.46	.05	9.99	<.001	.66
Quadratic	03	.01	-4.77	<.001	.39
Cubic	01	.002	-5.41	<.001	.43
Authenticity scale					
Linear	.36	.03	13.10	<.001	.76
Quadratic	004	.01	78	.439	.07
Cubic	005	.001	-5.63	<.001	.45
Happiness					
Linear	.29	.10	9.27	<.001	.64
Quadratic	.01	.03	1.79	.08	.16
Cubic	007	.001	-5.57	<.001	.45
Meaning in life					
Linear	.16	.02	6.34	<.001	.49
Quadratic	02	.006	-3.28	.001	.28
Cubic	004	.001	-3.94	<.001	.33
Piecewise models					
TS Overlap					
Past	.448	.046	6.71	<.001	.51
Future	.165	.044	3.78	<.001	.32
Authenticity scale					
Past	.223	.027	8.28	<.001	.59
Future	.331	.040	8.24	<.001	.59
Happiness					
Past	.05	.03	1.58	.12	.14
Future	.33	.05	5.96	<.001	.47
Meaning in life					
Past	.16	.03	5.89	<.001	.46
Future	.04	.03	1.10	.28	.10

 Table 2. Descriptive statistics for life chapters, Study 2.

Life chapter	n	True self over- lap M (SD)	Authenticity alpha	Authenticity M (SD)	Happiness M (SD)	Meaning M (SD)	
Past chapters:							
_9	17	4.35 (2.89)	.35	4.65 (1.04)	5.41 (1.66)	5.53 (1.42)	
-8	22	3.77 (2.37)	.48	4.17 (1.00)	4.59 (2.06)	5.41 (1.50)	
-7	29	4.38 (2.18)	.71	3.99 (1.18)	5.00 (1.75)	5.52 (1.57)	
-6	54	5.07 (2.29)	.74	4.07 (1.22)	5.11 (1.86)	5.65 (1.60)	
-5	76	5.22 (2.04)	.72	4.10 (1.15)	5.30 (1.83)	5.66 (1.48)	
-4	104	4.80 (2.16)	.72	3.88 (1.15)	4.71 (1.86)	5.70 (1.44)	
-3	120	5.06 (2.19)	.74	3.93 (1.24)	4.67 (1.83)	5.35 (1.78)	
-2	127	5.46 (2.08)	.78	4.23 (1.29)	4.75 (2.00)	5.72 (1.54)	
-1	125	5.95 (1.95)	.85	4.58 (1.44)	4.77 (2.04)	5.99 (1.50)	
Present chapter (0)	130	6.98 (1.55)	.83	5.15 (1.31)	5.43 (1.71)	6.22 (1.23)	
Future chapters:							
1	129	6.98 (1.56)	.78	5.57 (1.13)	6.09 (1.08)	6.43 (.98)	
2	91	7.13 (1.28)	.80	5.76 (1.10)	6.12 (1.38)	6.35 (1.12)	
3	56	7.16 (1.17)	.82	5.67 (1.23)	6.11 (1.28)	6.34 (1.00)	
4	23	7.17 (1.19)	.81	5.61 (1.09)	6.09 (.95)	6.04 (1.07)	
5	13	7.00 (1.08)	.70	5.99 (.78)	5.38 (1.50)	5.62 (1.20)	
6	3	7.33 (1.16)	.96	5.83 (1.61)	6.67 (.58)	6.33 (1.16)	
7	2	7.50 (.71)	.92	5.42 (1.53)	5.50 (.71)	6.50 (.71)	
P + 8	1	8.00		6.83	7.00	7.00	
P + 9	1	7.00		7.00	7.00	6.00	
P + 10	1	7.00		7.00	6.00	6.00	

revealed significant positive linear trends for both the past and future segments on both authenticity measures. Taken together, these results provide more support for the self-enhancement perspective than the end of history perspective, though there was evidence for a plateau in the more distal and future. The end of history perspective does not directly suggest that there should also be a plateau in the distant past, but this plateau is not necessarily inconsistent with either the self-enhancement or end of history perspectives.

As further evidence for the self-enhancement perspective, largely similar patterns were found for the happiness and meaning variables as well. As can be seen in Table 1 (and Figures 3 and 4), the trajectories for happiness and meaning also revealed overall significant

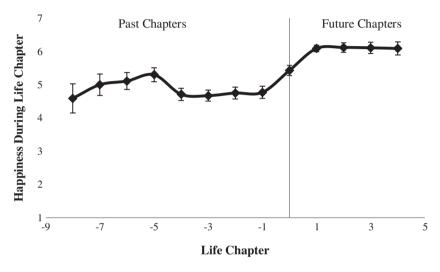


Figure 3. Scatterplot of happiness during each life chapter, Study 2. Note: Error bars represent ± 1 standard error of mean.

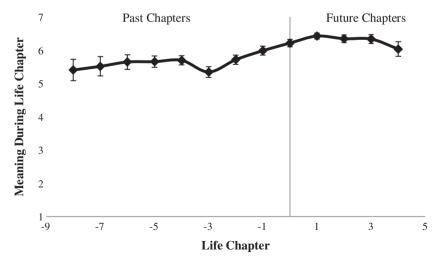


Figure 4. Scatterplot of meaning during each life chapter, Study 2. Note: Error bars represent ± 1 standard error of mean.

positive trends over time that were cubic in nature. The piecewise models were a little more surprising in that the linear trend was only significant for future chapters for happiness and past chapters for meaning. However, the trends were always positive, suggesting that perceptions never decreased over time, just that perceptions regarding happiness and meaning increased less sharply at certain points in the trajectory. Recall that happiness and meaning were included as exploratory variables and measured with only single items. Thus, these results should be interpreted with caution.

Exploratory analyses: The potential moderating influence of age

The greater variability in age in Study 2 relative to Study 1 allowed another opportunity to test for a potential moderating effect of age. To do this, we included age as a level 2 variable (grand centered) in both the polynomial and piecewise models. In both cases, we included age as a level 2 variable for both the intercept and each possible slope. The only significant effect that emerged was on the intercept of the models using the full authenticity scale. Because 0 always represented a participant's current chapter, this suggests that older people feel more authentic in their current chapters than younger people (b = .02, SE = .01, t = 2.98, p = .003). Age never moderated any of the slope terms. Though this relationship between age and the intercept was not replicated in the models with the overlap measure, it provides some limited evidence that people may really feel more authentic as they age and don't just revise their perceptions.

Exploratory analyses: Correlates of perceiving progress

Finally, we also explored whether the extent to which people perceived themselves as becoming more authentic related to other individual differences. There were four relevant individual difference variables available in the data-set: presence of meaning in life, search for meaning in life, self-esteem, and optimism. We computed within person correlations between the time variable and the authenticity scale using deviation scores as recommended by Snijders and Bosker (1999). We then computed the correlation between the within person correlations and the individual difference measures. The results revealed that within person correlations were significantly related to self-esteem (r(122) = .25, p = .006) suggesting individuals with higher self-esteem perceived greater progressions, providing further support for the self-enhancement account of our findings. By contrast, the within person correlations were not significantly related to presence of meaning in life (r(122) = .08, p = .352), search for meaning in life (r(122) = -.17, p = .064), or optimism (r(122) = .14, p = .130).

General discussion

The current research examined how authenticity is believed to change across the lifespan. We hypothesized that, in general, perceptions of authenticity would increase over time. We tested two competing hypotheses regarding the nature of this perceived progression. A self-enhancement perspective would predict a linear authenticity progression from the past to the present and the present to the future. Alternatively, an end of the history illusion perspective would predict a positive authenticity progression from the past to the present and a forecast of stability from the present to the future. Across two studies, we found



evidence that was generally more supportive of the self-enhancement perspective. Specifically, people tend to believe that they are getting closer to their true selves over the course of their lives. This progression was evident over a short period of time (i.e., the course of an academic semester) as well as across a person's entire life story (i.e., from birth to the projected future). These findings are consistent with other work that shows how people use evaluations of temporal selves to enhance current evaluations of the self (Robinson & Ryff, 1999; Ross & Wilson, 2003; Sedikides & Strube, 1997; Wilson & Ross, 2001). Support for the self-enhancement perspective also comes from the positive relationship observed between perceived changes in authenticity and self-esteem.

Though Study 2 revealed that this linear progression is particularly sharp for the recent past and close future, there was little evidence for a sharp plateau beginning with the current self as the end of history illusion would predict. Nonetheless, the current findings point to a potentially interesting complexity in how people think about selves over time. Future research could further explore the cubic trend evidenced in these data and why people believed the greatest amount of change occurred in the recent past into the near future. A more nuanced version of the end of history illusion could still be at play here.

Implications, limitations, and future directions

The present research has implications for several areas of psychological literature. First, the current work contributes to our growing understanding of the concept of authenticity and the great value that people place on knowing and expressing who they really are. Additionally, these findings provide further support to the idea that authenticity and well-being are intertwined (Heppner et al., 2008; Schlegel & Hicks, 2011; Thomaes, Sedikides, Van den Bos, Hutteman, & Reijntjes, in press). First, not only did we observe a perceived increase in authenticity from the past to the future, but we also observed perceived progressions in perceived happiness and meaning in Study 2, suggesting these variables are perceived to covary across the lifespan. The correlation between self-esteem and perceived progressions also speaks to potential downstream consequences of perceiving increasing authenticity over time (of course, the correlational nature of the data means that it could also be self-esteem that leads to perceptions of change).

Future research should explore the limitations of our findings. While our studies suggest that people believe they are becoming more authentic over time, perhaps the most interesting question is whether people are actually becoming more authentic or simply perceive themselves as becoming more authentic. Of course, separating "true" authenticity from perceived authenticity may be an impossible task. However, future research could examine whether perceived changes are revisionist (like temporal appraisal theory would suggest) or accurately reflect how one used to feel about their level of authenticity. That is, regardless of whether one is "truly" becoming more authentic, it is possible that the memory of feeling less authentic in the past is accurate. Indeed, the effect of age on the intercept in the HLM models of Study 2 is possible evidence for the idea that the memories are somewhat accurate. To further explore these issues about retrospective and prospective self-evaluations, future research might employ longitudinal designs.

Another limitation of the current research is that participants did not list nearly as many future chapters as they did past chapters for their life story in Study 2. Previous research has shown that people tend to evaluate their future selves more favorably when the future seems

close rather than distant as close future selves are perceived as part of one's current identity (Wilson, Buehler, Lawford, Schmidt, & Yong, 2012). This is consistent with our data and the self-enhancement explanation of it. Nonetheless, the small number of average future chapters also raises some concerns about the generalizability of our findings. The fact that participants listed few chapters for the futures suggests that they were "chunking" their future into large segments of time. This may be how they really see their future or could be a function of the fact that they were just motivated to finish the study as fast as they could.4 It also makes it hard to know how temporally close the future selves felt (i.e., they were likely a mix of close and far depending on which part of the chapter participants were focused on as they completed the measures). Future research may want to specifically elicit a larger number of chapters to provide different means of assessing projections into the future.

There are also potential boundary conditions to consider. One is whether people would sacrifice authenticity in the name of self-improvement. While a growing area of literature suggests that true selves tend to be positive (Christy, Seto, Schlegel, Vess, & Hicks, 2016; Jongman-Sereno & Leary, 2016; Newman, Bloom, & Knobe, 2014; Strohminger & Nichols, 2014), there may be times when people feel like their true self includes attributes that are less than desirable (e.g., lazy, judgmental). Would people still want to express these true traits more in the future? Kernis and Goldman's (2006) theory of authenticity suggests that unbiased processing of both one's strengths and weaknesses is central to truly being authentic. A positive progression of unbiased processing would suggest that people strive for authenticity even if it means accepting themselves "warts and all." These intriguing possibilities are somewhat counter to the self-enhancing tendency observed in our data, but present an interesting avenue for future research.

Finally, our current findings are exclusively focused on perceived progressions of one's own, thus we do not know whether people perceive similar changes in the authenticity over time for other people. If people projected similar trajectories for others, this would suggest that the observed patterns are not only self-enhancing, but also represent a shared cultural narrative about how a healthy life unfolds.⁵

Conclusion

Our research is the first to examine how changes in authenticity are represented in people's positive expectations about the self across the lifespan. The presence of a positive linear authenticity progression suggests that people believe they are always learning more about and getting closer to their true self over time; this seems to stem from the ongoing desire to view oneself positively. If these reflections are at all reflective of how people feel in real time, it is possible that people believe they will be the closest they have ever been to who they really are when they reach the end of their lifetime.

Notes

- 1. It is important to note that the current work treats authenticity and the true self-concept as completely subjective judgments and doesn't speak to whether people's judgments have any objective truth to them. This is consistent with our previous work that consistently utilizes a lay theory approach (Schlegel & Hicks, 2011; Schlegel, Hicks, Davis, Hirsch, & Smith, 2013; Seto & Hicks, 2016).
- 2. See OSF for a detailed description of all the study materials.



- 3. All of the figures include chapters that had data for at least 20 participants. For figures of the all the life chapters, please see OSF.
- 4. It is important to replicate our findings in other samples. For example, there may be some differences between MTurk participants and the general population (though see Buhrmester, Kwang, & Gosling, 2011 for some evidence that MTurk is a reliable source of data).
- 5. We thank a reviewer for these suggestions for future research.

Disclosure statement

No potential conflict of interest was reported by the authors.

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