

Social Psychological Bulletin

Psychologia Społeczna

Distinguishing Positive and Negative Self-Evaluations in Age Differences in Possible Selves

Adrian Morawiak¹, Joanna Gutral¹, Marzena Cypryńska¹, John B. Nezlek^{2,3}

¹ SWPS University of Social Sciences and Humanities, Warsaw, Poland

² SWPS University of Social Sciences and Humanities, Poznań, Poland

³ College of William & Mary, Williamsburg, VA, USA

Corresponding author: Marzena Cypryńska (SWPS University of Social Sciences and Humanities, 03-815, Warsaw, Poland. E-mail: mcypryanska@swps.edu.pl)

Handling editor: Jan Ciecuch (The Cardinal Wyszyński University in Warsaw, Warsaw, Poland)

Received: 2 October 2017 • **Accepted:** 30 November 2017 • **Published:** 11 April 2018

Citation: Morawiak, A., Gutral, J., Cypryńska, M., & Nezlek, J. B. (2018). Distinguishing positive and negative self-evaluations in age differences in possible selves. *Social Psychological Bulletin*, 13(1), Article e25501. <https://doi.org/10.5964/spb.v13i1.25501>

Abstract

Participants in the present study (82 high school students and 60 seniors) used a version of the Ten Item Personality Inventory (TIPI) to describe their past (10 years ago), present, and future (10 years from the present) selves. From the TIPI we derived measures of positive and negative self-evaluation. We analyzed these data with 2 (young-old) x 3 (past, present, and future) ANOVAs. Consistent with previous research, for positive self-evaluations, we found that younger people thought they were better now than they had been in the past and would be better in the future than they were now, and older people thought that had been better in the past than they were now, and that they were better now than they would be in the future. In contrast, and inconsistent with previous research, for negative self-evaluations, we found few differences among ratings of the three selves. We provide a tentative explanation of these results based on possible differences in how positive and negative age related stereotypes are incorporated into self-evaluations. Previous research has not distinguished positive and negative self-evaluations when examining differences among possible selves, and we believe the present results suggest that this might be a fruitful area of inquiry.

Keywords

possible selves; self-evaluation; age stereotypes



The self has been and remains an important focus of psychological research and theorizing. Although much of the research about the self concerns the self as it exists in the present, there is an important body of research that concerns the self as it might be, or could be in the future. The construct of possible selves was introduced by Markus and Nurius (1986). As they noted “Possible future selves, for example, are not just any set of imagined roles or states of being. Instead they represent specific, individually significant hopes, fears, and fantasies” (p. 954). Possible selves are useful not only as indicators of what people want or expect will happen to them, they are valuable because they also provide an insight into a person’s present state.

As discussed below, research has also focused on what people think they were like in the past (past selves), and similar to the value of research on future selves, knowing what people think they were like in the past can provide insights into what people think of themselves in the present. Moreover, some research has simultaneously examined past, present, and future selves, providing a basis for constructing developmental trajectories – indicators of trends in self-evaluations. The present study focused on perceived trends in self-evaluation and examined differences in these trends as a function of age and of the valence (positive vs. negative) of the dimensions used to evaluate the self. The hypotheses and expectations that guided our study are presented after a review of the relevant research.

Trends Across Time in Self-Evaluation

In their review of perceived changes across time in self-evaluation, Peetz and Wilson (2008; p. 2092) concluded that “People tend to perceive themselves as steadily improving on many domains over the course of their life (Fleeson & Heckhausen, 1997; Ryff, 1991).” Although it has merit, the summary statement of Peetz and Wilson is somewhat misleading. For example, Ryff (1991) studied three groups: young (19 yo), middle-aged (46 yo), and older (74 yo) and found that “Future ratings showed that the 2 younger groups expected continued gains in the years ahead, whereas the oldest respondents foresaw decline on most aspects of well-being” (p. 286). Similarly, Fleeson and Heckhausen (1997) noted that “Anticipated late adulthood personality contained more losses than gains” (p. 125).

These results suggest that although people may view themselves as improving through their lives for much of their lives, perceived improvement is not limitless, and at some point, people think that the future will not be as good as the present. A more accurate summary of the research might be that younger people tend to have positive trajectories (improvement across time), whereas older people tend to have negative trajectories (declines over time), with the caveat that “older” may not be clearly defined. In the discussion section we consider the issue of how age and older are defined.

Positive and Negative Self-Evaluations

Putting aside possible age differences in trajectories of self-evaluation, there is the issue of how the self is evaluated. Existing research has not considered the possibility that changes over time may occur for positive self-evaluations such as “I am becoming more talented”

while they do not occur for negative self-evaluations such as “I am becoming less anxious/easily upset.” In studies of past-present-future selves, measures of self-evaluation have explicitly contained (sometimes balanced) positive and negative self-evaluations, which makes it difficult to determine if people are “becoming more better” or are “getting less worse” or both.

The distinction between the good and the bad, between the positive and the negative, is perhaps the most important dimension underlying human experience (e.g., Osgood, Succi, & Tannenbaum, 1957). Moreover, there is considerable evidence that distinctions between the positive and the negative may be better described by two unipolar phenomenon (or dimensions) rather than by a single bipolar phenomenon on which good is at one end and bad at the other. The positive is not necessarily the opposite of the negative and vice-versa. Such a possibility has been found in research on affective experience (e.g., Larsen, McGraw, & Cacioppo, 2001) and in research on psychological well-being (e.g., Keyes, 2005). Positive emotions do not necessarily represent the absence of negative emotions, and psychological well-being does not necessarily represent the absence of distress.

This is not to say that positive and negative evaluations and states are mutually exclusive; in fact, they tend to be related (negatively). For example, sadness is typically viewed and experienced as the opposite of happiness. Rather, the point is that the positive and the negative can be distinguished, and need to be distinguished to determine whether a specific evaluative context or domain of experience is best conceptualized in terms two unipolar dimensions (positive and negative) or one bipolar dimension (positive or negative). Whether, or how closely, the positive and the negative covary with each other and with other measures are empirical questions, the answers to which may vary as a function of the specific domain being considered. For example, changes in positive self-evaluations may not be accompanied by changes in negative self-evaluations.

The Present Study

The present study was designed to examine the possibility that positive and negative self-evaluations should be distinguished when examining what has been called “future or possible selves. Although the distinction between the positive and the negative is a central feature of human experience, this distinction has not been explicitly made in studies of age differences in future selves. Researchers have discussed “gains” and improving, but the measures that have been used have been essentially bipolar in nature. Gains and losses, improvements and declines, and so forth, have been measured using single continua that were anchored with gains at one end and losses at the other. This makes it impossible to determine the nature of the overall changes people experience. For example, does improvement in well-being represent a decrease in negative states such as depression or anxious moods, does it represent an increase in positive states such as feelings of autonomy or mastery, or does it represent both?

Given the lack of research and theory about differences between the trajectories of positive and negative self-evaluations, we examined such differences on a somewhat

exploratory basis. Interpreted directly, the existing research suggested that positive self-evaluations should be seen as increasing for younger people and decreasing for older people (Fleeson & Heckhausen, 1997; Ryff, 1991). If positive and negative self-evaluations are opposite ends of a single, bipolar continuum, then trends for negative self-evaluations should be the mirror image of trends for positive self-evaluation – decreasing for younger people and increasing for older people. On the other hand, if positive and negative self-evaluations are not opposite ends of a single, bipolar continuum, there may not be trends for negative self-evaluation or the trends may be weak given the trends found in previous research that has combined positive and negative self-evaluations.

Method

Participants and Procedure

Participants were 82 high school students aged 16 to 21 ($M = 18.72$, $SD = 1.13$) and 60 seniors aged 60 to 84 ($M = 68.55$, $SD = 6.43$). Participants volunteered for a study about individual differences among personality traits over the lifespan. No incentives were offered for participation. The high school students completed the questionnaires during community meetings they had with their lead teacher each week. For the seniors group, the primary criterion was to be 60 years old or older. Seniors responded to announcements posted in community centers and health care facilities. Participants in both groups completed the measures in 45 minutes or less. The study described in this paper was conducted in compliance with APA guidelines for ethics in research. Participants provided informed consent, all responses were collected anonymously, and participants were told they had the right to discontinue participation at any time.

Measures

Self-evaluations were defined in terms of the characteristics measured by the Ten Item Personality Inventory (TIPI; Gosling, Rentfrow, & Swann, 2003). The TIPI consists of 10 items, one positively valent item and one negatively valent item for each of the factors of the Five Factor Model (FFM) of personality (e.g., John & Srivastava, 1999). We used the TIPI as the basis for our measures because it is widely used and it is brief, and because it has a balance of positively and negatively valent traits. Moreover, such use is consistent with the belief that underlying the FFM is a general positive/negative factor (e.g., Rushton & Irwing, 2011).

For the FFM factor of agreeableness the items were critical/quarrelsome and sympathetic/warm; for extraversion they were extraverted/enthusiastic and reserved/quiet; for neuroticism they were calm/emotionally stable and anxious/easily upset; for conscientiousness they were dependable/self-disciplined and disorganized/careless; and for openness they were open to new experiences/complex and conventional/uncreative. With a few exceptions, the Polish language items we used are the same as those proposed by Łaguna,

Bąk, Purc, Mielniczuk, and Oleś (2014). The items we used are available at PsychArchives: <https://doi.org/10.23668/psycharchives.783>

Using 7-point scales with points labeled 1 (not at all), 4 (moderately), and 7 (extremely so), participants rated themselves on each of the 10 characteristics in the TIPI in terms of three time perspectives: the past (10 years ago), the present, and the future (in 10 years). Participants were told: “Try to determine to what extent each feature described you 10 years ago, to what extent it describes you now, and what are your predictions about the level of this feature in the future (in the next 10 years)?”

Although the items on the TIPI were not intended to distinguish positive and negative traits per se, most of the items of the TIPI are also part of the BFI44 (John & Srivastava, 1999). The ratings of the traits of the BFI44 described in Robins, Tracy, Trzesniewski, Potter, and Gosling (2001) confirmed our classification of items as positive or negative¹. To examine how participants saw changes in positive and negative self-evaluations, for each of the three self-ratings we calculated the mean of positively valent items (sympathetic/warm, extraverted/enthusiastic, calm/emotionally stable, dependable/self-disciplined, and open to new experiences/complex) and the mean of the negatively valent items (critical/quarrelsome, reserved/quiet, anxious/easily upset, disorganized/careless, and conventional/uncreative). We refer to these as positive self-ratings and negative self-ratings respectively.

Results

Before conducting the primary analyses, we examined the reliability of our measures of positive and negative self-evaluations. To confirm our classification of the items of the TIPI as positive or negative, we calculated a Cronbach's alpha for each of the 6 measures (positive-negative crossed with past-present-future). These analyses suggested that the scales had at least “fair” reliability according to guidelines suggested by Shrout (1998). The reliabilities were for past positive: $\alpha = .72$, past negative: $\alpha = .59$, present positive: $\alpha = .73$, present negative: $\alpha = .60$, future positive: $\alpha = .80$, and future negative: $\alpha = .70$.

The primary analyses were 2 x 3 (Age [young, old] x Time [past, present, future]) ANOVAs, with a trend decomposition for the time effect. When appropriate, these analyses were followed by simple effects tests. Given our interest in distinguishing negative and positive self-evaluations, we analyzed positive and negative self-ratings separately.

The results of these analyses were quite clear. The analysis of positive traits produced a significant age group x time interaction, $F(2,274) = 12.93, p < .001, \eta_p^2 = .250$. When the overall time effect was decomposed into linear and quadratic trends, it was clear that this interaction was due solely to the interaction of age group and the linear trend for time, $F(1,137) = 43.23, p < .001, \eta_p^2 = .240$. The interaction of age group and the quadratic trend for time was not significant, $F(1,137) < 1$. The means from this analysis are presented in Table 1.

¹ We are grateful to Richard Robins for providing these data.

Table 1.
Descriptive Statistics for Positive and Negative Self-Evaluations With Significance Tests of the Linear Trend

Valence	Age	Time						F (linear)	p	η_p^2
		Past		Present		Future				
		M	SD	M	SD	M	SD			
Positive										
	Younger ^a	4.72	1.01	5.10	0.89	5.26	1.01	17.25	< .001	.177
	Older ^a	5.16	0.94	4.88	0.93	4.47	1.11	30.00	< .001	.345
Negative										
	Younger ^b	3.41	1.26	3.18	0.92	3.13	1.18	4.24	.043	.050
	Older ^c	2.82	0.96	2.75	0.79	2.89	0.81	2.32	< 1.00	

^aAll means were significantly different from the other means at the .05 level or beyond. ^bThe past rating was significantly different from both the present and the future at the .05 level or beyond. ^cThe present rating was different from the past rating at $p = .055$.

To understand these results more fully, we conducted follow-up analyses. First, we examined the linear effect separately for each group, and also compared the means for each time period within each group. The results of these analyses, which are also presented in Table 1, indicated that the significant age group \times time (linear) interaction occurred because positive self-evaluations increased from the past to the present to the future for the younger sample, whereas for the older sample, positive self-evaluations decreased from the past to the present to the future. Moreover, for both younger and older participants, the means for the three time periods were significantly different from each other (all $ps < .001$).

We then conducted a parallel series of analyses for negative self-evaluations, and the results of these analyses were quite different from the results of the analyses of positive self-evaluations. The age group \times time interaction was much weaker than it was for positive self-evaluations, $F(2,274) = 2.77$, $p = .064$, $\eta_p^2 = .020$, as was the interaction between age group and the linear effect, $F(1,137) = 3.44$, $p = .066$, $\eta_p^2 = .025$. Similar to the results of the analyses of positive self-evaluations, the interaction of age group and the quadratic trend for time was not significant, $F(1,137) < 1$. The means from this analysis are presented in Table 1.

To be thorough, we conducted the same follow-up analyses for negative self-evaluations that we conducted for positive evaluations, and a summary of these results is presented in Table 1. The results of these analyses suggested that the age group \times time (linear) interaction occurred because there was a linear trend in negative self-evaluation for the younger age group (a decrease over time), whereas there was no such trend for the older group. A summary of the pairwise comparisons for these data are presented in the note to Table 1.

Discussion

Consistent with previous research (e.g., Ryff, 1991), we found that younger people thought they were in the middle of an upward trend of improvement, whereas older people thought they were in the middle of a downward spiral of decline. In contrast to previous research, we distinguished perceived changes in positive self-evaluation from perceived changes in negative self-evaluation and found that neither younger nor older people viewed themselves as changing in terms of negative self-evaluation. The trends across time we found were primarily limited to positive self-evaluations.

Although the present results for positive self-evaluation replicate previous studies, it is not clear exactly what mechanism is responsible for the differences between the young and the old. For the younger sample some type of self-enhancement motive could explain their perceived improvement. The focus of self-enhancement and the related motive of self-protection is to establish or maintain a positive view of the self (e.g., Alicke & Sedikides, 2009). Within the present context this could have taken the form of “I am better now than I was in the past, and I will be better in the future than I am now.” For the older sample, such a mechanism cannot explain the results because they saw themselves as being less positive over time.

A possible resolution to this problem may lie in the model proposed by Kornadt and Rothermund (2012). They suggested that people incorporate age related stereotypes into present and future self-evaluations, and they reported results in support of this possibility. Although they did not mention this explicitly, age-related stereotypes might also be incorporated into the evaluation of past selves. Such a mechanism provides a reasonable explanation of the present results. For younger people, age related stereotypes suggest improvement from past to present to future. These people are transitioning from childhood and the teenage years into adulthood. For older adults, age related stereotypes suggest a decline. These people are getting closer to death and ill health.

Similar to other researchers, Kornadt and Rothermund (2012) did not distinguish positive and negative self-evaluations². They did distinguish self-concept across different domains, but they did not distinguish positive and negative aspects of these domains. Regardless, for the model they proposed to explain the lack of change in negative self-evaluation for the older sample and the meaningfully weaker change in negative self-evaluation (compared to changes in positive self-evaluation) for the younger sample, age-related stereotypes for negative self-evaluations need to remain fairly constant. Alternatively, it could be the case that negative age stereotypes are not incorporated into self-evaluations. Individuals may not want to accept or acknowledge that negative stereotypes apply to them. If this is the case, then their present self-evaluation may serve as the primary basis for making judgments about past and future selves, resulting in the relative stability of

² Kornadt and Rothermund (2012) did discuss negative outcomes such as poor health. We thought that such outcomes were not part of self-evaluation as we and others have considered it.

these judgments. Unfortunately, we know of no research that addresses these specific possibilities, and so determining if either of them applies will require research designed for this purpose.

Limitations and Future Directions

Of course, the generalizability of our conclusions is limited by the samples we studied and the methods we used. Our participants were native Poles, and although there is no reason to expect that they are meaningfully different from members of other industrialized Western countries in terms of the focus of our study, they might be. Moreover, given possible cultural differences in how the elderly are viewed (e.g., Löckenhoff et al., 2009) it is possible that in non-Western and non-industrialized countries younger people's estimates of what they will be like and older person's self-descriptions will not follow the pattern that has been found among Westerners, who have been the focus of most of the published research on this topic.

We defined self-evaluation based on traits taken from the FFM of personality. Although the FFM is meant to represent "the building blocks of personality" and by extension, provides an important basis for self-evaluation, the FFM itself, and particularly a 10-item version of it, cannot be considered as an exhaustive framework. Even within the FFM framework, each factor has facets, and although these facets are positively related, they each possess unique variance. More important is the possibility that differences among past, present, and future selves might vary as a function of the framework that is used to for self-evaluation. Such questions can be addressed only by research that is designed to do so.

Assuming that older people view the future less positively than younger people raises the question about how many years constitutes "old." Different researchers have used different definitions. For example, the average age of the older sample in Ryff (1991) was 73.4. In Heckhausen and Krueger (1993) it was 68.6. By asking people to estimate what they would be like at certain ages, Fleeson and Heckhausen (1997) implicitly defined old as 65 (it was the oldest age they used as a target). Kornadt and Rothermund (2012) did not specify a specific age for older adults when they asked about future selves. Clear definitions of what constitutes "older" or "elderly" are needed; otherwise, research results cannot be compared. Moreover, there is also the possibility that relationships between changes in future selves and age are continuous and not categorical.

Another issue that has not been addressed explicitly in research in possible selves is how age is defined. Research that has examined possible selves has relied exclusively upon the objective criterion of chronological age to determine who is old and who is young. Nevertheless, there is considerable evidence to show that what is called "subjective age" (e.g., Steitz & McClary, 1988) can be an important influence on mental health and well-being (e.g., Keyes & Westerhof, 2012). Admittedly, at some level, objective age is a fact: someone who is 20 is younger than someone who is 80. There is however ample room for interpretation and subjectivity, particularly in the broad expanse of the time from early adulthood (perhaps 25-30) to the earlier segment of what is called elderly (perhaps 55-60 or 65).

Despite these limitations, we believe that the present results make an important point about research on developmental trajectories of possible selves and well-being. Such trajectories may vary meaningfully as a function of the valence of the construct being examined, and future research should consider taking this possibility into account.

Supplementary Materials

Data for this article and Polish language TIPI items we used are available at PsychArchives: <https://doi.org/10.23668/psycharchives.783>

Funding

This research was supported by a grant from the Polish Ministry of Science and Higher Education “The role of time perspective in the perception of quality of life and focus on short-term and long-term goals, in different age groups throughout life” (0209/DIA/2013/42). Diamond Grant awarded to Adrian Morawiak.

Competing Interests

The authors have declared that no competing interests exist.

Acknowledgments

The authors have no support to report.

References

- Alicke, M. D., & Sedikides, C. (2009). Self-enhancement and self-protection: What they are and what they do. *European Review of Social Psychology*, *20*, 1–48. <https://doi.org/10.1080/10463280802613866>
- Fleeson, W., & Heckhausen, J. (1997). More or less ‘me’ in past, present, and future: Perceived lifetime personality during adulthood. *Psychology and Aging*, *12*, 125–136. <https://doi.org/10.1037/0882-7974.12.1.125>
- Gosling, S. D., Rentfrow, P. J., & Swann, W. B., Jr. (2003). A very brief measure of the Big-Five personality domains. *Journal of Research in Personality*, *37*, 504–528. [https://doi.org/10.1016/S0092-6566\(03\)00046-1](https://doi.org/10.1016/S0092-6566(03)00046-1)
- Heckhausen, J., & Krueger, J. (1993). Developmental expectations for the self and most other people: Age grading in three functions of social comparison. *Developmental Psychology*, *29*, 539–548. <https://doi.org/10.1037/0012-1649.29.3.539>

- John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (pp. 102-138). New York, NY, USA: Guilford Press.
- Keyes, C. L. M. (2005). Mental illness and/or mental health? Investigating axioms of the complete state model of health. *Journal of Consulting and Clinical Psychology, 73*, 539–548. <https://doi.org/10.1037/0022-006X.73.3.539>
- Keyes, C. L. M., & Westerhof, G. J. (2012). Chronological and subjective age differences in flourishing mental health and major depressive episode. *Aging & Mental Health, 16*, 67–74. <https://doi.org/10.1080/13607863.2011.596811>
- Kornadt, A. E., & Rothermund, K. (2012). Internalization of age stereotypes into the self-concept via future self-views: A general model and domain-specific differences. *Psychology and Aging, 27*, 164–172. <https://doi.org/10.1037/a0025110>
- Łaguna, M., Bąk, W., Purc, E., Mielniczuk, E., & Oleś, P. (2014). Short measure of personality TIPI-P in a Polish sample. *Roczniki Psychologiczne, 17*, 421–437.
- Larsen, J. T., McGraw, A. P., & Cacioppo, J. T. (2001). Can people feel happy and sad at the same time? *Journal of Personality and Social Psychology, 81*, 684–696. <https://doi.org/10.1037/0022-3514.81.4.684>
- Löckenhoff, C. E., De Fruyt, F., Terracciano, A., McCrae, R. R., De Bolle, M., Costa, P. T., Jr., . . . Yik, M. (2009). Perceptions of aging across 26 cultures and their culture-level associates. *Psychology and Aging, 24*, 941–954. <https://doi.org/10.1037/a0016901>
- Markus, H. R., & Nurius, P. (1986). Possible selves. *The American Psychologist, 41*, 954–969. <https://doi.org/10.1037/0003-066X.41.9.954>
- Osgood, C. E., Succi, G. J., & Tannenbaum, P. H. (1957). *The measurement of meaning*. Urbana, IL, USA: University of Illinois Press.
- Petz, J., & Wilson, A. E. (2008). The temporally extended self: The relation of past and future selves to current identity, motivation, and goal pursuit. *Social and Personality Psychology Compass, 2*, 2090–2106. <https://doi.org/10.1111/j.1751-9004.2008.00150.x>
- Robins, R. W., Tracy, J. L., Trzesniewski, K. H., Potter, J., & Gosling, S. D. (2001). Personality correlates of self-esteem. *Journal of Research in Personality, 35*, 463–482. <https://doi.org/10.1006/jrpe.2001.2324>
- Rushton, J. P., & Irwing, P. (2011). The general factor of personality: Normal and abnormal. In T. Chamorro-Premuzic, S. von Stumm, & A. Furnham (Eds.), *The Wiley-Blackwell handbook of individual differences* (pp. 132-161). London, United Kingdom: Wiley-Blackwell.
- Ryff, C. D. (1991). Possible selves in adulthood and old age: A tale of shifting horizons. *Psychology and Aging, 6*, 286–295. <https://doi.org/10.1037/0882-7974.6.2.286>
- Shrout, P. E. (1998). Measurement reliability and agreement in psychiatry. *Statistical Methods in Medical Research, 7*, 301–317. <https://doi.org/10.1177/096228029800700306>
- Steitz, J. A., & McClary, A. M. (1988). Subjective age, age identity, and middle-age adults. *Experimental Aging Research, 14*, 83–88. <https://doi.org/10.1080/03610738808259728>