Bulkina, Vasilyeva
A study of the relationship between everyday creativity and subjective well-being in old age
Russian psychological journal, ,Vol. 19, No. 2, 174-187. **doi:** 10.21702/rpj.2022.2.13

Research Article

UCD 159.9.07

https://doi.org/10.21702/rpj.2022.2.13

The study of the relationship between everyday creativity and subjective well-being in old age

Natalia A. Bulkina✉, **Olga S. Vasilyeva**
Southern Federal University, Rostov-on-Don, Russian Federation

✉ aboulkina@yandex.ru

Abstract: **Introduction**. The problem of subjective well-being of the elderly is becoming especially relevant in the conditions of demographic aging of modern society. The novelty of the research lies in the deepening of ideas about the relationship between subjective well-being and everyday creativity in old age. The purpose of this study is to research subjective, cognitive and hedonistic well-being in old age in relation to self-assessments of creative level and everyday creative activity. **Methods.** The voluntary study involved elderly people aged 60 to 90 years, 78 of them men (N = 202; M = 68.62; SD = 7.46). Self-report scales were used to determine self-assessments of creative activity and the subjective level of creativity. The level of subjective well-being was measured by the gerontological Life Satisfaction Index scale, LSI (authors Neugarten, Havighurst, Tobin, in N. Panina's adaptation) and the Subjective Happiness Scale, (authors Lyubomirsky, Lepper, in D. Leontiev's adaptation). For statistical analysis, the Wilcoxon, Kruskel-Wallis criteria, Welch's t-test, Pearson's consensus criterion, Spearman's rank correlation coefficient were used. **Results.** Noticeable positive correlations between the level of subjective well-being, creative activity and the subjective level of creativity were revealed: correlation coefficient r from 0.594 to 0.610; $p < 0.001$. Significant differences in the level of subjective well-being were found between creatively active and creatively inactive subjects ($p < 0.001$), as well as between subjects who rated themselves as "not creative" and as "creative": W = 1729; effect value r = 0.654; $p < 0.001$. **Discussion**. The results obtained expand the understanding of everyday creativity in old age, its relationship with subjective, cognitive and hedonistic well-being and can be used by socio-psychological services in working with older people to improve their psycho-emotional state and correct the level of subjective well-being.

Keywords: everyday creativity, subjective well-being, cognitive well-being, hedonistic well-being, old age, everyday creative activity, self-assessment of the creative level, subjective level of creativity

Highlights

- There are pronounced positive correlations between everyday creativity and subjective well-being in old age.
- A positive correlations were revealed between subjective, cognitive and hedonistic well-being on the one hand and daily creative activity and self-esteem of the creative level on the other hand.
- Higher indicators of well-being, subjective level of creativity and creative activity have been established in older people with higher education.

For citation: Bulkina N.A., Vasilyeva O.S. (2022). The study of the relationship between everyday creativity and subjective well-being in old age. *Russian Psychological Journal*, *19*(2), 174–187. https://doi.org/10.21702/rpj.2022.2.13

Introduction

The well-being of the elderly is becoming increasingly important in the context of the aging population of our planet (Kitayama et al., 2020). Modern science and practice considers creativity as one of the opportunities to achieve well-being in old age. Well-being in psychology is a multifaceted construct, which is understood as mental and physical health, emotional and psychological well-being, quality of life and happiness. The conceptual field of well-being constructs is blurred due to the interchangeability of terms (Leontiev, 2020). One of the most stable constructs of well-being is subjective well-being (SWB) - the operational equivalent of happiness, a collective term for various types of analysis, evaluation, calculations (Diener, 1984). Subjective well-being exists only in the present and reflects a holistic psychological experience of one's own life (Leontiev, 2020). Subjective well-being (SWB) includes affective (hedonistic) and cognitive components. The affective component of SWB consists of a balance of positive and negative emotions (Tov, 2018). The cognitive component of SWB (also called life satisfaction) consists of a person's value judgments about his own life, including its various spheres, for example, health, income, social contacts (Pavot, 2018).

As a correlate of subjective well-being in old age, researchers consider everyday creativity (McFadden, Basting, 2010; Richards, 2007). Despite the decrease in fluid intelligence over the years (Silvia, Beaty, 2012), creativity in old age is beneficial (Zhang, Niu, 2013). It helps the elderly to slow down the aging of the brain and prevent the neuropathology of dementia (McFadden, Basting, 2010), adapt to physical, psychological and social changes (Duhamel, 2016), experience personal growth (Kudrina, 2015), to find meaning, to accept the finiteness of being (Tan et al., 2017).

More than seventy years ago, J. Guilford identified the signs of creativity: originality/novelty and relevance, adaptability or compliance with the task (Runco, Jaeger, 2012). Creativity includes such cognitive and personal characteristics as sensitivity to problems, flexibility, ability to analyze, synthesize, evaluate and reorganize information, divergent thinking, surprise (Kampylis, Valtanen, 2010; Runco, 2014a). There is no single scientific definition of creativity due to the complex contextual nature of this construct. Various researchers define creativity as going beyond the requirements of the initial problem situation (Bogoyavlenskaya, 2005); involvement in the production of new, useful products (Mumford, 2003, p.110) reflection of cognition, metacognition, attitude, motivation, affect and temperament (Runco, 2007, p. 320); the process of creating new cultural meanings (Smirnova, 2016).

Creativity is inherent in all people to varying degrees. There is both a great creativity of geniuses and a small creativity of most people (Kaufman et al., 2016). Half a century ago, creativity was studied by the example of outstanding personalities (writers, composers, Nobel laureates), in recent decades the number of studies related to everyday creativity has been growing (Amabile, 2017; Cotter et al., 2019; Ruchards, 2007). Everyday creativity is creative activities common among ordinary people in everyday life, for example, drawing, cooking recipes, poetic holiday wishes that promote and reflect psychological health (Silvia, Beaty, et al., 2014). According to M. Ranko, the nature of creativity is one, and there is no fundamental difference in the creativity of a child and an outstanding master (Runco, 2014b). With the change in approaches to the study of creativity, new definitions have appeared, for example, activities that lead to original, useful, ethical results, at least for the creator (Kampylis et al., 2009, p. 18); a process possible for everyone (Cropley & Cropley, 2013); self-perceived ability to create new and useful products (Karwowski & Brzeski, 2017).

Despite the urgency of the problem of everyday creativity of the elderly, this topic is not a priority in domestic psychological research. In Russian science, the term "creativny" (from the English "creativity") is used both in the meanings of "creative potential" (for example, Popel, 2017) and as an analogue of creativity in all its manifestations (Dorfman, 2015; Miroshnik, Shcherbakova, 2020). In this paper, we use the terms "tvorchesky" and "creativny" as synonyms.

In studies of everyday creativity, scales and self-report questionnaires are usually used, an assessment of involvement in various types of creative activity, as well as a subjective assessment of one's own creative achievements (Forgeard, Kaufman, 2016; Piffer, 2012; Silvia et al., 2011). In recent years, the concept of "creative self-belief" has appeared in the research of personal creativity, meaning the individual's conviction in his creative abilities [Karwowski et al., 2019]. Creative self-confidence is a predictor of creative activity and achievements [Beghetto, Kaufman, Baxter, 2011]. Self-perception of creativity may not coincide with real creative abilities and achievements, but it is of scientific interest. Park and colleagues conducted a comparative study of the results of objective methods for assessing individual creativity with the results of subjective assessment of creativity in a sample of 1.500 people. Subjective assessments had a smaller variance, a higher average value and a moderate correlation with objective methods of assessing creativity [Park et al., 2016].

Methods

The purpose of this study is to identify the relationship between subjective well-being and everyday creativity in old age through self-assessments of creative activity and the level of creativity of the subjects. Hypotheses: 1) there are positive correlations between everyday creative activity, self-assessments of the creative level and subjective well-being; 2) respondents who show daily creative activity and subjectively assess themselves as creative have higher indicators of cognitive, hedonistic and subjective well-being; 3) everyday creative activity and the subjective level of creativity have a strong positive correlation between them.

The voluntary study, based on the principles of anonymity and confidentiality, involved elderly people, 124 women and 78 men, the age of the subjects ranged from 60 to 90 years (N = 202; M = 68.62; SD = 7.46). Participants aged 60 to 69 years made up 62.4 % of the sample (n = 126); from 70 to 74 years made up 29.7 % of the sample (n = 58), from 75 to 91 years – 8.9 % of the sample (n = 18). Given the small proportion of respondents over the age of 75, the increase in life expectancy, we call all respondents elderly. Among the study participants, 136 (67.2 %)

continue to work, 66 people do not work (32.8 %). The subjects have secondary (40.6 %) and higher education (59.4 %), 56 (27.2 %) the subjects live alone, 146 (62.8 %) in families.

Researchers are convinced that measuring creativity is difficult. Traditionally, creativity was evaluated objectively through the products of creativity, intelligence and divergent thinking, creative behavior and personal achievements (Kaufman, Plucker & Baer, 2008). Since the 90s of the twentieth century, researchers have increasingly noted the need for a serious revision of creativity assessments in favor of their subjectivity (Sternberg, 1991; Richards, 2007; Kaufman, 2019).

Measuring the creativity of older people has a number of limitations. Divergent thinking and fluid intelligence are significantly reduced in old age. Creative abilities also decreases (Zhang, Niu, 2013) if a person is not explicitly creative. The products of everyday creativity have significance and value mainly for the creators themselves and their loved ones. When studying the everyday creativity of older people, we relied on the principles of activity, process and conviction, which J. Kaufman laid down as the basis for self-assessment of the creative level (Creativity self-assessments, CSAs), (Kaufman, 2019).

Older respondents were asked about their attitude to creativity, what types of creativity they have been engaged in over the past 12 months. Then the subjects were asked to evaluate their level of creativity in these areas on a ten-point scale. The average self-assessment of the domain level of creativity in the sample was M = 3.24; SD = 2.97. The types of everyday creativity of older people are presented in Table 1.

Table 1

Creative domains of the elderly

Creative domains	Number of responses
Needlework (embroidery, sewing, knitting, macrame, beading)	19
Dance	8
Drawing, painting	15
Literary creativity (drawing up a pedigree, writing books, memoirs, scripts for holidays; writing poems, short stories; newspaper articles)	11
Technical creativity (development of new and modernization of old nodes, blocks, devices); modeling; assembly of computers, repair of household appliances	6
Local history	9
Photo	15
Table setting	8

Creative domains	Number of responses
Music (listening, singing, playing musical instruments, composing, improvisation)	15
Gardening, floriculture	16
Fashion design	5
Chess	7
Home decoration for the holiday	3
Cooking	18
Modeling	4
Theater, acting	9
Scientific creativity	13
Blogging and pages in social networks; moderator in social networks	8

To quantify the subjective perception of their creativity in general, the study participants answered the question: "Taking into account all the circumstances, tell me how many percent conditionally do you feel like a creative person?" Answer options from 0 to 100. Average self-assessment of the overall creative level in the sample: M = 31.53; SD = 30.40 (N = 202). We will call the integral indicator of self-assessments of the domain and general level of creativity the subjective level of creativity.

Table 2.

Descriptive statistics of the subjective level of creativity of respondents

	N	mean	SD	IQR	skewness	kurtosis
Not creative	87	2,24	4,15	0	1,34	-0,16
Creative	115	51,95	23,07	40	0,40	-0,93

To determine the level of creative activity, elderly people were asked how often they are engaged in creativity. Answer options: never, rarely (1-2 times a month), often (1-2 times a week), daily. Points were awarded according to the answers: never - 0; rarely - 1, often - 2, daily - 3. Results of responses: "never" 70 (34.65 %); "rarely" 70 (34.65 %); "often" 46 (22.77 %); "daily" 16 (7.92 %). After the respondents' assessment of their creative activity (the frequency of creative activities) and the subjective level of creativity (an integral indicator of self-assessments of domain and general creativity), two groups were formed. The first group included participants who do not include creativity in their lives, who consider themselves not creative or not creative enough, who rated their creativity from 0 to 10 on a 100-point scale (n1 = 87). The second group consisted of subjects who perceive themselves as creative, for them creativity is part of a profession or everyday life (n2 = 115).

Subjective well-being (SWB), a construct consisting of cognitive judgments and affective reactions, we measured the Life Satisfaction Index (LSI) of the authors Neugarten, Havighurst, Tobin, adapted by N. Panina and Subjective Happiness Scale (SHS) of the authors Lyubomirsky, Lepper, in D. Leontiev's adaptation (Osin, Leontiev, 2020).

Results

Checking the data for the normality of the distribution according to the Shapiro-Francia criterion showed that the distribution in all scales significantly differs from normal. SWB: $W = 0.944$; $p < 0.001$; LSI: $W = 0.940$; $p < 0.001$; Self-assessment of the level of creative activity: $W = 0.876$, $p < 0.001$; Subjective Happiness Scale: $W = 0.963$, $p < 0.001$; the variable "frequency of creative activities" is presented in a rank scale. These circumstances led to the choice of nonparametric criteria for the study.

Descriptive statistics by Life Satisfaction Index (LSI) and Subjective Happiness Scale (SHS).

Table 3

Descriptive statistics by Life Satisfaction Index (LSI) and Subjective Happiness Scale (SHS)

LSI	mean	SD	IQR	asymmetry	kurtosis	0%	25%	50%	75%	100%	n
Not creative	23,24	7,67	9,5	-0,58	-0,30	5	19,5	24	29	38	87
Creative	30,73	5,49	6,0	-0,77	0,40	15	28	32	34	40	115
SHS	**mean**	**sd**	**IQR**	**asymmetry**	**kurtosis**	**0%**	**25%**	**50%**	**75%**	**100%**	**n**
Not creative	16.42	4.56	5.5	-0.053	-0.38	7	14	17	19.5	26	87
Creative	21.63	3.82	5.0	-0.86	0.18	10	20	22	25	28	115

To determine the SWB values, the results on the cognitive (LSI) and affective (SHS) scales were summarized. To maintain a uniform dimension, the scores on the Lyubomirsky, Lepper scale were recalculated using the scales package.

A statistical study of significant differences between levels of creative activity with scales of well–being and subjective level of creativity was carried out using the nonparametric criterion H Kruskel-Wallis. The results are presented in table 4

Table 4

Comparison of respondents' creative activity levels with well-being scales

Scales	Criterion Kruskel-Wallis H	Eta-squared	Pairwise comparison (Conover 's Criterion)					
			1 vs 2 p	1 vs 3 p	1 vs 4 p	2 vs 3 p	2 vs 4 p	3 vs 4 p
LSI	52,208	0,249	0,000	0,000	0,000	0,000	0,000	ns
SHS	68,108	0,329	0,000	0,000	0,000	0,000	0,000	ns
SWB	73,195	0,355	0,000	0,000	0,000	0,000	0,000	ns

With the help of Post-hoc analysis, significant differences in well-being scales were revealed between respondents who never or rarely engage in creativity, on the one hand, and often or daily show creative activity, on the other hand ($p < 0.001$). There were no significant differences in the level of well-being between those who often and daily engage in creativity (p from 0.84 to 0.94). Significant differences between the subjective level of creativity and creative activity ($p < 0.001$) of respondents were revealed.

To compare the groups of "Non–creative subjects" (n1 = 87) and "Creative subjects" (n2 = 115), the Wilcoxon rank sum criterion for unrelated samples (analogous to the Mann-Whitney criterion) was applied. The results are presented in table 5.

Table 5

Comparison of indicators on the scales of well-being between groups of non-creative and creative subjects

Scales	Mean in the in the group of uncreative and little creative (X1)	Mean in the in the group of creative respondents (X2)	Glass effect r	Wilcoxon criterion W
SWB	43,950	60,122	0,654	1729
LSI	23,241	30,730	0,583	2085
SHS	16,425	21,635	0,618	1911

Significant differences in the level of subjective well-being (SWB) between groups of creative and non-creative subjects were revealed (effect size r = 0.654; W = 1729). The average SWB value in the creative group (X2 = 60.12) more than the average value (X1 = 43.95) in a group of non-creative subjects. The levels of cognitive and hedonistic well-being in the groups of creative and non-creative respondents also differ significantly. The average value in the creative group (X1 = 23.24) of cognitive well-being in the non-creative group is less than the average (X2 = 30.73) in the creative group; W = 2085; effect size r = 0.583. Hedonistic well-being (SHS) is significantly higher in the creative group: X2 = 21.63 > X1 = 16.42; W = 1911; r = 0.618. In all cases, the significance level is p < 0.001; 95 % CI.

Using Spearman's rank correlation coefficient, the relationship between the level of SWB, hedonistic (SHS) and cognitive (LSI) scales of well-being with creative activity (how often do you do creative work?) and the subjective level of creativity was investigated. The data is given in table 6.

Table 6

Empirical values of correlation analysis between different scales

Scales	Frequency of creative activities	Subjective level of creativity	LSI	SHS
SWB	0,594	0,610	0,898	0,931
Frequency of creative activities	1	0,914	0,506	0,571
Subjective level of creativity	0,914	1	0,506	0,601

As part of the research of well-being and everyday creativity of older people, a study was conducted to identify differences in indicators of well-being, subjective level of creativity and creative activity between respondents with higher and secondary education using the Welch t-test, which does not require equality of variances. As a result, respondents with higher education were found to have higher indicators on all scales:

LSI: t = 2.88; df = 159.8; p =0.004. The average value for persons with higher education (h/e) is 28.76; for persons with secondary education (s/e) are 25.65. The magnitude of the effect (Cohen's d) = 0.42; 95% CI.

SHS: t = 3.59; df = 163.46, p < .001; mean: h/e 20.40; s/e 17.91; d = 0.52; 95% CI.

SWB: t = 3.51; df = 162.01, p < .001; mean: h/e 56.10; s/e 48.84. d = 0.51; 95% CI.

Subjective level of creativity: t = 5.07, df = 186.1; p < 0.001; mean: h/e 38.83; s/e 18.41; d = 0.51; 95% CI.

To study the differences between the level of education and creative activity of older respondents, the Pearson consent criterion was used to assess the significance of differences in several indicators. The results are shown in table 7.

Table 7

How often do you do creative work

How often	never	rarely	often	everyday
Higher education	9,50	41,58	41,58	27,32
Secondary education	6,49	28,41	28,41	18,67

It has been found that older people with higher education are more likely to engage in everyday creativity.

There were no significant differences between men and women, marital status, employment with scales of well-being and everyday creativity in elderly respondents.

Discussion

We examined the daily creative activity and self-assessments of the creative level of older people in order to understand how they relate to subjective well-being and its cognitive and hedonistic components. The average positive correlations between the scales of well-being (SWB, SHS, and LSI) with the frequency of creative activities and the subjective level of creativity (r from 0.506 to 0.610; $p < 0.001$) were revealed. A high correlation was found between the frequency of creative activities and self-esteem of the creative level ($r = 0.914$; $p < 0.001$) in elderly people.

In the group of creative respondents, the indicators of cognitive, hedonistic and subjective well-being were significantly higher than in the group of non-creative. The results obtained confirm the first and second hypotheses put forward and are consistent with other data, for example, creatively active people with high creative self-esteem often have a higher level of happiness, subjective well-being and life satisfaction (Ceci, Kumar, 2016; Conner et al., 2018); in the process of everyday creative actions, students experienced feelings of happiness and activity, which they wrote about in the self-report diary (Silvia et al., 2014). The revealed strong correlation between the subjective level of creativity and creative activity ($r = 0.914$; $p < 0.001$) can be explained by the fact that creative abilities and skills develop during creative activities, which increases creative self-esteem. Creative abilities, in turn, encourage a person to creative activity. The third hypothesis was also confirmed.

This study found that older people with higher education are more likely to engage in creativity than older people with secondary education. Higher indicators on the scales of well-being and self-esteem of the creative level were revealed in older people with higher education, which turned out to be quite unexpected. The magnitude of the differences depending on the level of education in Cohen's interpretation was moderate on the scale of LSI ($d < 0.5$), significant (d from 0.5 to 0.8) on the scales of SWB, SHS and self-assessment of the creative level.

A meta-analysis of empirical studies (n=286) revealed a weak positive relationship between education and SWB in old age (Pinquart, Sørensen, 2000). A study conducted on a Russian sample

did not reveal such a correlation at all (Kolosnitsyna et al., 2014). Positive correlations ($r > 0.3$; $p < 0.01$) were found between education and creativity in older Chinese (Zhang, Niu, 2013). In this study, there were no significant correlations and differences between marital status, gender, employment with well-being scales, creative self-esteem and creative activity in older respondents. In other studies, contradictory results have been obtained (Gaymu & Springer, 2010; Kolosnitsyna et al., 2014; Hao, 2008).

In the process of creativity, older people feel more energetic, show a less negative attitude towards aging. At the same time, in old age, diverse activity is very important – emotional, social, physical, cognitive, as a predictor of subjective well-being (Gu, Dupre, 2019).

A comparison of the SWB level in the group of "non-creative" subjects, conducted using the Wilcoxon rank sum criterion, showed that active and active respondents had higher SWB indicators ($r = 0.337$; $p < 0.001$; 95% CI (0,065 – 0,582)). The results obtained are consistent with the data of other studies. Withdrawal into oneself, restriction of social contacts entails a gradual extinction of cognitive and physical abilities (Neugarten, 1974; Alperovich, 1998). Resistance to isolation, on the contrary, contributes to the preservation of personality in old age (Ananyev, 1996). Everyday creativity, as one of the forms of activity, helps older people overcome loneliness, expands their social circle, improves physical and cognitive abilities, gives positive emotions, and increases the level of SWB and life satisfaction.

In this study, the average age of creative subjects was slightly lower ($M = 67.68$) than non-creative subjects ($M = 69.85$), $p < 0.02$. A very weak negative correlation was also found between age and the frequency of creative activities ($r = -0.13$; $p < 0.01$). Over the years, people have more health restrictions, which negatively affect creative activity. The weakly expressed negative correlations found between age and SWB ($r = -0.06$; $p < 0.05$) confirm the data of foreign studies that subjective well-being remains at a fairly high level until the age of 75, then slowly begins to decline (Hudomiet et al., 2021).

Conclusions

Summing up the results of the research, the following conclusions can be drawn.

The subjective methods of self-assessment of the frequency of creative activities and creative level are suitable for studying and measuring everyday creativity, which is confirmed by other data (Kaufman, 2019; Piffer, 2012; Silvia et al., 2012). High indicators of well-being in the group of creative subjects, an average positive relationship between SWB, the frequency of creative activities and the subjective level of creativity (r in the range from 0.594 to 0.610; $p < 0.001$), confirm the hypotheses of the research.

Old age is traditionally associated with stagnation of thinking, dogmatism, adherence to old experience. Creativity means openness to new experiences, development and creation. Despite the inevitable physical and cognitive decline, creativity in old age is possible, and everyday creativity is useful for all people regardless of their level of creativity (McFadden, Basting, 2010; Richards, 2010). In interviews, the subjects noted that they enjoyed not only the result of creativity, but also the creative process, accompanied by interest, joy, a sense of fullness of life, meaningfulness of being.

The results obtained are discussed in the context of measuring everyday creativity using self-report scales, as well as further studying the relationship between everyday creativity and subjective well-being in old age.

References

Alperovich, V.D. (1998). Old age. Socio-philosophical analysis. Rostov n/D.: SKNCz VSh. (in Russ.).

Ananyev, B.G. (1996). *Psychology and problems of human knowledge*. M. Voronezh: MPSI. (in Russ.).

Beghetto, R.A., Kaufman, J. C., Baxter, J. (2011). Answering the unexpected questions: Student self-beliefs and teacher ratings of creativity in elementary math and science. *Psychology of Aesthetics, Creativity and the Arts*. 5, 342–349. http://dx.doi.org/10.1037/a0022834

Bogoyavlenskaya, D.B. (2005). Once again about the "Creative Field". *Russian Psychological Journal*. 2(1). (in Russ.).

Ceci, M., Kumar, V. (2016). A correlational study of creativity, happiness, motivation, and stress from creative pursuits. *Journal of Happiness Studies*, 17(2), 609–626. https://doi:10.1007/s10902-015-9615-y

Conner, T.S., DeYoung, C.G., Silvia, P.J. (2018). Everyday creative activity as a path to flourishing. *Journal of Positive Psychology*, 13, 181-189.

Cotter, K.N., Christensen, A. P., Silvia, P.J. (2019). Creativity's role in everyday life. J.C. Kaufman, R.J. Sternberg (Eds.), *Cambridge handbook of creativity*. Cambridge University Press. 2nd ed., 640-652.

Cropley, A., Cropley, D. (2013). The dark side of creativity in the classroom: The paradox of classroom teaching. In J. B. Jones and L. J. Flint (Eds.), *The Creative Imperative: School Librarians and Teachers Cultivating Curiosity Together*. Chapter 3, 39-52, Santa Barbara: ABC-CLIO.

Diener, E. (1984). Subjective well-being. *Psychological Bulletin*. 95, 542-575.

Dorfman, L.Ya. (2015). Levels and types of creativity. *Psychological journal*. 36 (1), 81-90. (in Russ.).

Duhamel, K.V. (2016). Creativity and the Golden Years: Biopsychosocial and Cultural Influences for Living a Successful Life. *Sociology and Anthropology* 4(12), 1093-1098. https://doi.org/10.13189/sa.2016.041208

Forgeard, M. J. C., Kaufman, J. C. (2016). Who cares about imagination, creativity, and innovation, and why? A review. *Psychology of Aesthetics, Creativity, and the Arts*, 10, 250-269.

Gaymu, J., Springer, S. (2010). Living conditions and life satisfaction of older Europeans living alone: a gender and cross-country analysis. *Ageing and Society,* 30(7), 1153-1175.

Gu, D. Dupre, M.E. (eds.), (2019).The Activity Theory. *Encyclopedia of Gerontology and Population Aging*. Springer Nature https://doi.org/10.1007/978-3-319-69892-2_748-1

Hao, Y. (2008). Productive activities and psychological well-being among older adults. *Journal of Gerontology: Social Sciences*, 63B, 64– 72.

Hudomiet P., Hurd M., Rohwedder S. (2021). The Age Profile of Life Satisfaction after age 65 in the U.S. *Journal of economic behavior and organization*. 189, 431-442. https://doi: 10.1016/j.jebo.2021.07.002

Kampylis, P., Berki, E., Saariluma, P. (2009). In-service and prospective teachers' conceptions of creativity. *Thinking Skills and Creativity*, 4(1), 15–29.

Kampylis, P. G., Valtanen, J. (2010). Redefining creativity—Analyzing definitions, collocations, and consequences. *The Journal of Creative Behavior*, 44, 191–214. https://doi:10.1002/j.2162-6057.2010.tb01333.x

Karwowski, M., Brzeski, A. (2017). Selfies and the (creative) self: A diary study. *Frontiers in Psychology*, https://doi:10.3389/fpsyg.2017.00172

Karwowski, M., Lebuda, I., Beghetto, R. A. (2019). Creative self-beliefs. In J. C. Kaufman, R. J. Sternberg (Eds.). *Cambridge handbook of creativity*. 396-417. Cambridge University Press.

Kaufman, J. C. (2019). Self-assessments of creativity: Not ideal, but better than you think. *Psychology of Aesthetics, Creativity, and the Arts*, 13, 187–192.

Kitayama, S., Berg, M.K., Chopik, W.J. (2020). Culture and Well-Being in Late Adulthood: Theory and Evidence. *American Psychologist*. 75 (4), 567–576.

Kolosnitsyna M, Khorkina N, Dorzhiev K. (2014). What happens to happiness when people get older? Socio–economic determinants of life satisfaction in later life. *Basic research program. Working papers. Series: Economics*. WP BRP 68/EC/2014

Kudrina, E.L. (2015). Activation of the creative potential of older people in the new socio-cultural realities of Russia's development. *Professional education in Russia and abroad*, 2 (18), 32-38. (in Russ.).

Leontiev D.A. (2020). Happiness and Well-Being: Toward the Construction of the Conceptual Field. *Monitoring of Public Opinion: Economic and Social Changes*. 1. 14—37. https://doi.org/10.14515/monitoring.2020.1.02. (in Russ.).

McFadden, S., Basting, A. (2010). Healthy aging persons and their brains: Promoting resilience through creative engagement. *Clinics in Geriatric Medicine*, 26 (1), 149-161. https://doi:10.1016/j.cger.2009.11.004

Miroshnik, K. G., Shcherbakova, O. V. (2020). Psychological studies of creativity in Russia (2000-2017). Part I. Analysis of methodological practices. *Psychological Journal*. 41(2), 15-25. (in Russ.).

Mumford, M. D. (2003). Where have we been, where are we going? Taking stock in creativity research. *Creativity Research Journal*, 15 (2 & 3), 107–120.

Neugarten, B.L. (1974). Age groups in American society and the rise of young-old. *Annals of the American Academy of Political and Social Science*. 415, 187 – 198.

Osin, E.N., Leontiev, D.A. (2020). Brief Russian-language diagnostic scales of subjective well-being: psychometric characteristics and comparative analysis. *Monitoring Public Opinion: Economic and Social Changes*, 1, 117-142. (in Russ.).

Park, N.K., Chun, M.Y., Lee, J. (2016). Revisiting individual creativity assessment: Triangulation in subjective and objective assessment methods. *Creativity Reseach Journal*, 28(1), 1-10. http://dx.doi.org/10.1080/10400419.2016.1125259

Pavot, W. (2018). The cornerstone of research on subjective well-being: Valid assessment methodology. In: Diener E., Oishi S., Tay L. (Eds.), *Handbook of Well-Being*. Noba Scholar Handbook Series: Subjective Well-Being. Salt Lake City, UT: DEF Publishers.

Piffer, D. (2012). Can creativity be measured? An attempt to clarify the notion of creativity and general directions for future research. *Thinking Skills and Creativity*, 7, 258–264. http://dx.doi.org/ 10.1016/j.tsc.2012.04.009

Popel, A.A. (2017). The conditionality of creativity by the age factor. *Bulletin of PNRPU. Socio-economic sciences*. 3, 142-153. (in Russ.).

Richards, R. (2007). Everyday creativity: Our hidden potential. R.Richards (Ed.), *Everyday creativity and new views of human nature: Psychological, social, and spiritual perspectives*, 25–53. Washington, DC: American Psychological Association. https://doi: 10.1037/11595-001

Richards, R. (2010). Everyday creativity: Process and way of life – four key issues. J. Kaufman, R. Sternberg (Eds.). *The Cambridge Handbook of Creativity*, 189-215. Cambridge University Press.

Runco, M. A. (2007). *Creativity:Theories and themes: research, development, and practice*. Amsterdam; Boston: Elsevier Academic Press.

Runco, M. A. (2014a) *Creativity: Theories and themes: Research, development, and practice* (2 ed.). Boston, MA: Elsevier Academic Press

Runco, M.A. (2014b). Big C, little c. Creativity as a false dichotomy: reality is not categorical. *Creativity Research Journal*, 26(1), 131–132.

Runco, M., A., Jaeger, G.J. (2012). The Standard Definition of Creativity. *Creativity Research Journal*. 24(1), 92-96.

Silvia, P.J., Beaty, R.E. (2012). Making creative metaphors: The importance of fluid intelligence for creative thought. *Intelligence*, 40, 343–351. http://dx.doi.org/10.1016/j.intell.2012.02.005

Silvia, P.J., Wigert, B., Reiter-Palmon, R., Kaufman, J.C. (2011). Assessing Creativity with Self-Report Scales: A Review and Empirical Evaluation. *Psychology of Aesthetics, Creativity, and the Arts*. https://doi:10.1037/a0024071

Smirnova, N.M. (2016). *Creativity, meaning, interpretation* [Text]. Ros. akad. nauk, In-t filosofii; N.M. Smirnova, A.A. Gorelov, Yu.S. Morkina. M. : IF RAN, 139 p. (in Russ.).

Tan, C. S., Nainee, S., Tan, S. A., Viapude, G. N. (2017). Self-rated creativity relieves death anxiety: The mediating role of meaning in life. *Paper presented at the National Conference on Creativity in Education and Humanities*, Universiti Sains Malaysia, Penang, Malaysia

Tov, W. (2018). Well-Being Concepts and Components. In: Diener E., Oishi S., Tay L. (eds.) *Handbook of Well-Being*. Salt Lake City, UT: DEF Publishers. https://doi:nobascholar.com

Zhang, W., Niu, W. (2013). Creativity in the Later Life: Factors Associated with the Creativity of the Chinese Elderly. *The Journal of Creative Behavior*. (47)1, 60–76.

Received: February 27, 2022
Revision received: May 13, 2022
Accepted: May 16, 2022

Authors Contribution

Natalya Anatolyevna Bulkina - conducting research, analyzing and interpreting the results, working with sources, writing the review part of the article, annotations, keywords and main provisions.
Olga Semyonovna Vasilyeva - article structuring; substantiation of the research methodology; interpretation of results, formulation of conclusions, scientific edition of the text.

Authors Details

Natalya Anatolyevna Bulkina – independent researcher, Master of Psychology, Academy of Psychology and Pedagogy of the Southern Federal University, Federal State Budgetary Educational Institution of Higher Education "Southern Federal University", Rostov-on-Don, Russian Federation; ORCID: https://orcid.org/0000-0002-0525-8313; e-mail:aboulkina@yandex.ru

Olga Semyonovna Vasilieva - PhD in Biology, Professor, Academy of Psychology and Pedagogics of the Southern Federal University, Rostov-on-Don, Russian Federation; ORCID: https://orcid.org/0000-0003-0600-1066, Scopus Author ID: 7004359370, Web of Science ResearcherID: V-8343-2019, RSCI SPIN 6039-8860; e-mail: vos@sfedu.ru

Information about the conflict of interest

The authors declare no conflict of interest