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The relationship between creativity and subjective wellbeing of children

La relación entre la creatividad y el bienestar subjetivo de los niños

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Abstract

The article discusses the phenomenon of subjective well-being, examines the relationship between the two concepts - creativity and quality of life. The paper presents the results of a study of 48 kindergarten pupils and pupils of primary classes. Diagnostics was carried out using the PedsQLtm4.0 questionnaire and test of Guilford and Torrens. Statistical dependencies have been identified, confirming the hypothesis of creativity as a predictor of higher self-esteem of the physical, communicative, emotional, and school well-being of younger schoolchildren.

Key words: creativity, subjective well-being, children of preschool and primary school age.

Resumen

El artículo discute el fenómeno del bienestar subjetivo, examina la relación entre los dos conceptos: creatividad y calidad de vida. El documento presenta los resultados de un estudio de 48 alumnos de kindergarten y alumnos de clases primarias. El diagnóstico se llevó a cabo utilizando el cuestionario PedsQLtm4.0 y la prueba de Guilford y Torrens. Se han identificado dependencias estadísticas, lo que

confirma la hipótesis de la creatividad como predictor de una mayor autoestima del bienestar físico, comunicativo, emocional y escolar de los escolares más jóvenes.

Palabras clave: creatividad, bienestar subjetivo, niños en edad preescolar y primaria.

1. Introduction

Today, creativity is considered as one of the most valuable attributes of a person (Jeffrey & Craft, 2001), and this leads to its universalization in modern world education (Kousoulas, 2010). The definition of creativity as a multidimensional and complex phenomenon is not simple, and many authors have contributed to the discussion

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of what constitutes its essence. It is difficult to determine one of the most complex psychological concepts – the concept of creativity (Kurtzberg, 2005; McCammon, O'Farrell, Saebø & Heap; 2010; Sawyer, 2012). However, most theorists agree that the creative process most often includes such components as imagination, originality (the ability to invent ideas and products that are new and unusual), productivity (the ability to generate various ideas), problem solving (application of knowledge and imagination to solve situations), and ability to produce a result that has creative value.

When adapting the concept of creativity in relation to children of preschool and primary school age, researchers focus on the creative process, rather than on the results (Craft, 2003; Tegano, Moran & Sawyers, 1991). According to a broader, "democratic" definition of creativity, each child can have creative potential and the ability to express creatively (Glăveanu, 2011). That is why most development theories consider young children to be highly creative, with the natural ability to dream, experiment, and explore the environment (Sharp, 2004). However, children's creativity is different from the creativity of an adult because of its subjectivity (Toivanena, Halkilahtib & Ruismäkic, 2013). Novelty in the creative ideas of children is determined not by society, but by their previous knowledge (Kudryavtcev, 2011). At the same time, a high level of creativity in children is not necessarily maintained throughout childhood. For example, Meador (Meador, 1992) provides evidence that creativity (as measured by analytical tests) decreases by the age of six years. In other words, a very creative child at an early age may not show his creative manifestations later.

In contrast to creativity, the concept of subjective well-being has become a relatively recent addition to educational vocabulary. The subjective well-being of a person is determined not so much by his needs and the possibilities of their realization, as by the subjective assessments of his health, relationships with family and friends, social experience and communicative experience. This self-assessment of well-being goes both at the level of cognitive assessment of one's life by comparing it with the life of other people, and at the affective level. In this case, the person gives an emotionally colored assessment of his state of health and his life. This affective assessment is determined by two components – the physical and mental functioning of the individual. The determinants of the second component are ideas about their social and communicative functioning.

In recent decades, it has become clear that the recognition of children as a separate group and their new role in measuring and monitoring their own well-being is clearly increasing (*Fattore, Mason & Watson, 2003*). However, despite the increased interest in the study of children's subjective well-being, too little is known about the factors associated with it. For example, a large international study in which 34,500 children from 14 countries participated showed that understanding the subjective well-being of a child is not related to socio-demographic characteristics (Dinisman & Ben-Arieh, 2016). Economic variables and inequalities are also not significant factors predicting the subjective well-being of children. But the nature of the relationship between children and immediate family and peers is reliably related to the levels of children's subjective well-being in all countries (Lee & Yoo, 2015). The existing literature also shows the existence of a correlation of children's subjective well-being with their school experience, teacher behavior, and academic performance (Huebner at al., 2014). Thus, the family and school life of children are important predictors of their subjective well-being.

Meanwhile, the relationship between the two concepts - creativity and subjective well-being - is considered very rarely, although today there is much evidence that the creative process is associated with the physical and social world of man. So, the researchers found that only creativity, and not intelligence or general openness, improves the quality of life for people. One of the possible reasons why creativity protects health is that it relies on various neural networks in the brain, says study author Turiano, arguing that "people with a high level of creativity retain the integrity of their neural networks even in old age" [Turiano, Spiro & Mroczek, 2012]. He also refers to the ability of creative people to better cope with stress, so the practice of creative thinking, in his opinion, can improve human health by reducing stress and training the brain.

The authors of a recent study published in the journal "Positive Psychology" (Conner, DeYoung & Silvia, 2018) showed that creativity affects the emotional functioning of a person, noting a double "upward spiral of wellbeing and creativity." In other words, creativity helps us to "feel better" and, in turn, affects other aspects of our life (Perach & Wisman, 2016).

The discourse of creativity is noticeable in modern educational documents, but there are no studies on the relationship between creativity and the quality of life of children of preschool and primary school age, although there is an assumption that children's motivation will increase if "creative" approaches to teaching and upbringing are used, which, in turn, will increase the students personal well-being (Humes, 2011). Good health and psychological well-being are central to the effective learning and preparation of children for a successful independent life (Volchegorskaya & Kvanskikh, 2017). At the same time, happiness and subjective well-being of preschoolers and younger students is not in itself an object of formation. For example, a child who plays sports or music will have a higher self-assessment of his quality of life (Volchegorskaya & Nogina, 2014), but this will be a secondary effect of these activities. Perhaps the most effective contribution that teachers can make to a positive assessment of the well-being and development of students can be to develop children's creative abilities.

2. Methods

The sample consisted of 25 children 6–7 years old and 23 primary school students (10–11 years old), among them 28 boys and 19 girls. To measure the level of subjective well-being of children, the PedsQLtm4.0 questionnaire was selected (options for children 5-7 and 8-10 years old), which allows to identify four components of a child's quality of life: physical well-being, satisfaction with communication and mood, and also being in kindergarten or school (Novik & Ionova, 2007). The basis of the questionnaire is the Likert type scale. The number of points on the scales varies from 0 to 100. One hundred points corresponds to the best sense of well-being, and zero points - the worst. The results for each of the four scales underlie the calculation of the overall indicator of the subjective well-being of children. In the choice of methods for the diagnosis of creativity, the battery of tests of Tunic "Creative Thinking" (modification of the tests of Guilford and Torrens, subtest 6 "Sketches") was preferable (Tunik, 2006). Repeated surveys were conducted in a year.

3. Results and discussions

In the course of the study, we obtained the following results of self-assessment of the subjective well-being of children of senior preschool and primary school age (see Table 1).

Quality of life dynamics preschool and primary school age children						
Quality of life indicators	Preschool children Points/100	Students 1 class Points/100				
. ,	M± m (N=25)	M± m (N=25)				
Physical functioning	93.3±1.18	79.1±1.81*				
Emotional functioning	96.8±1.15	73.2±1.83 *				
Social functioning	98.0±0.82	77.4±1.81*				
Kindergarten/ school well-being	97.4±1.39	75.2±1.15*				
Integrative measure of well-being	96.4±0.52	76.3±1.7*				

 Table 1

 Quality of life dynamics preschool and primary school age children

Note: * - significant difference between the studied groups (P≤0.05 in every row)

The dynamics of self-esteem of subjective well-being of schoolchildren of 4-5th grades are presented in Table 2.

Quality of life indicators	Students 4 class Points/100	Students 5 class Points/100
	M± m (N=23)	M± m (N=23)
Physical functioning	80.0±2.45	75.1±15.8
Emotional functioning	65.7±4.04	76.2±18.8
Social functioning	79.6±3.58	72.4±16.8
School well-being	71.1±3.62	78.2±18.1
Integrative measure of well-being	74.1±2.79	74.3±12.7

 Table 2

 Quality of life dynamics schoolchildren of 4-5th grades

Note: no significant difference was revealed between the studied groups (P>0.05 in every row)

Indicators of children's creativity are presented in table 3. Three indicators were used to determine the level of creativity: fluency – the number of adequate tasks in 20 drawings (one figure corresponded to 1 point); flexibility – the number of depicted categories of drawings (one category 3 points); originality – the number of original drawings. The total indicator was calculated by the formula: n+3m+5k, where "n" is the number of drawings; "m" is the number of categories; "k" is the number of original drawings.

indicators of creativity of children of preschool and primary school age				
4.50	Points/100			
Age	(M± m)			
Children of preschool age	46.5±2.91			
First grade students	49.2±1.82			
Fourth grade students	54.7±4.68			
Fifth grade students	57.2±2.63			

 Table 3

 Indicators of creativity of children of preschool and primary school age

As a result of the study, it was found that preschoolers rated their communicative well-being the highest (mean score 98.0), in contrast to younger students, who indicated the highest scores when assessing their physical abilities. Interestingly, by the end of the first class, children are experiencing a sharp drop in indicators of subjective well-being (by 21%). A particularly strong decline is observed on the "emotional well-being" scale: the number of children experiencing feelings of fear, anger, despondency, or sadness increases by almost a quarter (by 24%). Schoolchildren are more likely to notice poor sleep and worry that something can happen to them. As for creativity, these figures showed an average annual growth of 5%.

To study the nature of the relationship between creativity and indicators of the subjective well-being of children, we conducted a correlation analysis, the results of which are presented in Table 4.

subjective weil-being of children (spearmen correlation coefficient)							
Creativity / subjective well- being	Physical functioning	Emotional functioning	Social functioning	Kindergarten/ School well-being	Integrative measure of subjective well- being		
Children of preschool age	-0.16	0.28	0.37	0.35	0.03		
First grade students	0.67*	0.82*	0.63*	0.75*	0.99*		
Fourth grade	0.77*	0.86*	0.63*	0.82*	0.99*		
Fifth grade	0.70*	0.81*	0.61*	0.72*	0.99*		

 Table 4.

 Correlation analysis of the relationship between indicators of creativity and subjective well-being of children (Spearmen correlation coefficient)

Note: * significant correlations (P≤0.05)

The study showed a lack of correlation between creativity and indicators of subjective wel- being in preschool children. However, in primary school, the indicators of creativity and subjective well-being in primary school students are highly correlated from each other. Striking results were obtained both in first-grade students and in children completing primary school education — the correlation coefficient between the indicators of creativity and subjective well-being was equal to unity.

The data obtained indicate that students of different age groups have a pronounced dependence of indicators of all components of subjective well-being (physical, emotional, social and school well-being) on creativity. This pattern correlates well with the already known data on the direct relationship between quality of life and success in the learning process.

4. Conclusions

Thus, the study confirmed our assumption about the predictor value of creativity in the formation of self-esteem of the quality of life in children of primary school age. The results of the study allow us to consider creativity as an important basis for the formation of self-esteem of the subjective well-being of a younger student.

However, it should be emphasized that the noted pattern was established only in a relatively narrow age range from 7 to 10 years, which is a certain limitation of the study. Evaluation of established patterns in other age groups deserves a separate study. It should also be noted that the results of the study do not allow us to evaluate the gender aspect of the revealed pattern, which is also the object of a separate study.

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