

## Ego Identity of Intellectually Gifted and Sport Talented Individuals in Puberty and Adolescence

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### **Abstract**

This study examines the developmental crisis of talented individuals in puberty and adolescence during which there are personality conflicts of identity versus role confusion. The article describes how intellectually gifted and sports talented individuals experience this fundamental opposition and the needs for it to be resolved at the end of adolescence. The research examined the congruence of the structural organization and the nature of ego identity of intellectually gifted and sports talented individuals in puberty and adolescence. It was conducted in two stages (i) the development of a semantic differential for measuring participants' ego identity (following the concepts developed by Erik H. Erikson) and undertaking factor analysis, and (ii) a comparison of the congruence of the structural organization and the nature of ego identity in comparable groups of participants. The factor analysis identified four parameters denoting the nature of ego identity in adolescence: positive identity, negative identity, confusion identity, and identity crisis. Significant differences were found in the congruence of the structural organization of ego identity in puberty and adolescence.

**Keywords:** ego identity, developmental crisis, talented individuals, puberty and adolescence.

## Исследование личностной идентичности в юношеском возрасте при интеллектуальной и спортивной одаренности

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### **Аннотация**

В статье приводятся данные эмпирических исследований личностной идентичности в юношеском возрасте при спортивной и интеллектуальной одаренности. Работа проводилась в два этапа: первый этап – разработка семантического дифференциала для определения характера личностной идентичности в юношеском возрасте на основе теории Э. Эриксона и проведение факторного анализа; второй этап – сравнительное изучение согласованности организации личностной идентичности испытуемых при интеллектуальной и спортивной одаренности. Факторный анализ данных, полученных в результате применения семантического дифференциала, позволил выделить четыре фактора, определяющих характер идентичности в юношеском возрасте. Выявлены достоверные различия в степени согласованности структурной организации личностной идентичности испытуемых при интеллектуальной и спортивной одаренности.

**Ключевые слова:** личностная идентичность, возрастные кризисы, одаренность, юношеский возраст.

## Introduction

There is a current interest in psychological research, connected with the study of identity, is increasingly observed (McAdams & Pals, 2006; Jespersen, Kroger & Martinussen, 2013) There are works devoted to gender, ethnic and professional identity (Lillevoll, Kroger, & Martinussen, 2013) and studies on problems of personal identity in contemporary psychoanalysis, interaction theory and cognitive psychology (Antonova, 1996). There are many significant identity studies within mental health and psychotherapy (Kernberg, 2006; Marcia & Josselson, 2013). Despite the fact that the concept of identity was viewed from different points of view, it is difficult to find a definite unanimous notion of identity (Schwartz, Luyckx & Vignoles, 2011). In addition, the researchers discuss the measurement of the identity of the individual (Ryeng, Kroger, & Martinussen, 2013).

It is especially important to pay attention to the development of identity in adolescence, since it is during this period that identity is the central and most intensive psychological growth (Kroger, Martinussen, & Marcia, 2010). Psychologists have focused on the formation of personal identity at this particular age (Allen et al., 1994; Cramer, 2004; Klimstra et al., 2012). The founder of the theory of ego identity was Erik H. Erikson. His idea was that psychological identity evolves from the gradual integration of all identities. Identity is not something static or immutable. Erickson considered the problem of identity through the prism of finding the place of identity in the cycle of human life. He believed that each person progressed through eight stages of development, which in adolescence is called “identity vs. role confusion”. During this period, teens may have an identity crisis, questioning their roles in the world and future goals (Erikson, 1968).

Giftedness has certain plasticity and it is a dynamic characteristic of personality (Leites, 2003). The structure and main signs of giftedness are derived from the processes of formation and specific features of the formation of personality (Savenkov, 2010). Giftedness should be considered in the context development of the individual at that age (Bogoyavlenskaya, 2013). The formation and enrichment of the child's psyche goes at such a pace and with an intensity that is no longer be available in adulthood (Hill et al., 2013). It is important not only to diagnose intelligence and abilities when exploring children's giftedness (Matushkin, 2003),, but also to find out what influences the formation of the structure of the child's motivational sphere and what motivates the microenvironment in which he is growing (Yurkevich, 2011).

Specific personality characteristics of gifted children affect the formation of the identity ego in adolescence (Franck, Stambulova, & Weibull, 2016). Young men are compelled again to reevaluate their convictions and to look for themselves in a new reality without harming their identity and integrity. Gifted young men have special difficulties during this period, since they have specific personal characteristics and possess distinctive sensitivity and vulnerability. Studies of this problem have not considered young men with different types of giftedness, although this situation is changing with more research in this area.

This contradiction is at the heart of this research which studies the congruence of the structural organization and the nature of ego identity of intellectually gifted and sports talented individuals in puberty and adolescence.

## Methodological Framework

The research employed a number of methods:

- “Personal identity” (Nikishina & Petrash, 2014);
- Semantic differential for measuring participants’ ego identity based on the concept of ego psychologist Erik H. Erikson;
- Factor analysis.

To determine “Personal identity” the subjects were asked to rank the linguistic-semantic forms sequentially in descending order (1 point – the maximum significance, 15 points – the minimum significance). These forms correspond to the cognitive, emotional, motivational and behavioral structural parameters of personal identity from the position of «self». The methodology contains 4 scales: high, average, low and very low degree of coherence in the structural organization of personal identity.

Semantic Differential is a rating scale designed to measure the connotative meaning of objects, events, and concepts. The connotations are used to derive the attitude towards the given statements. We used a semantic differential for measuring participants’ ego identity following the concepts of ego developed by Erikson (1968). The results were processed using factor analysis.

The sample of the study involved 60 participants aged 16-18 years: 30 intellectually gifted (16 boys and 14 girls) and 30 sports talented individuals (19 boys and 9 girls). The average age of the subjects was 16.6 years. Ethical standards were observed during the study. The participants were taught in a school for intellectually gifted children and sport schools in Kazan, Russia. The criteria for classifying adolescents as gifted were government-approved rules for identifying children with outstanding abilities, accompanying and monitoring their further development.

The study was conducted in two stages: (i) the development of a semantic differential for measuring participants’ ego identity following the Erikson’s concepts of ego and a subsequent factor analysis; (ii) a comparison of the congruence of the structural organization and the nature of ego identity in comparable groups of participants.

## Results

### *Calculating a semantic differential for measuring participants’ ego identity*

Subjects were asked to evaluate each of the characteristics as they related to themselves. We then compiled a summary protocol of the values of the semantic differential. The raw values were processed using factor analysis, which presented all the characteristics in four-dimensional space and we then identified four factors that reflect the state of ego identity. Characteristics with a low correlation coefficient ( $< |0.35|$ ) were excluded from the analysis. The selected characteristics of identity were transformed into a new semantic differential with 45 statements. The subjects’ activity was assessed by summing the scores and identifying the average score for each individual subject.

The first factor «Positive Identity,» was the most powerful (Table 1) supported by the statements connected with understanding of the further plans, available achievements, self-expression and self-determination. There is an inverse correlation between the statements and characteristics such as uncertainty, non-acceptance of oneself and others, transfer of responsibility to circumstances. This factor showed internally consistent interiorization of the socio-cultural norms of the surrounding world that assumed psychological self-confidence. A youth who has achieved a positive identity can take responsibility, does not feel the danger from strangers, accepts relatives as they are, knows how to defend their position and their opinion.

The second factor, “Confused identity,” includes statements that reveal the non-acceptance of oneself, stereotypes of ideas, tendency to meet generally accepted standards and expectations (Table 2). The negative pole of the factor is represented by statements which reflect the dependence on the opinion of the closest people, non-differentiation of social roles and distrust of people. This factor arises from the difficulty of final self-

determination for personal or social reasons. Young people with confused identity have difficulty in perceiving people as they really are. It is important for them to have their point of view accepted. They do not seek opportunities to fulfill their duties, often have a desire to leave the house, family and get rid of their duties.

Table 1. Factor «Positive Identity»

Statements	Factor value
I have occupations that are not related to further life achievements	0.694
I have already achieved a lot	0.687
I do not feel the need for a distance between my people and strangers	0.669
I am ready to reject and isolate those people who seem dangerous	0.665
I clearly share my people and strangers	-0.662
I do not accept my parents as they are	-0.610
Sometimes I have a desire to wander somewhere at night	-0.529
It is better not to work at all than to be forced to build a prestigious career that does not bring satisfaction	-0.513
I can be cruel if I do not want to communicate with someone	0.482
I do not compare myself with those with whom I communicate often	-0.480
I'm not sure in my abilities to achieve anything	-0.468
I need ideas that I could follow	-0.428
I try to defend myself if people do not allow me to express myself	0.425
The choice of occupation is more important for me than the question of salary and status	-0.420
Much in life depends on other people and circumstances, and not on myself	-0.402

Table 2. Factor «Confused Identity»

Statements	Factor value
At the moment I'm in search of ways to fulfill my duties	-0.598
In my opinion, to succeed is to be the best	-0.580
I believe that people must prove that they deserve my trust	-0.527
It is important for me to know that my ideals are generally accepted	0.492
I had certain expectations about what it means to be older	0.492
I have many friends, but I'm not looking for real unity and closeness with anyone	-0.487
Nowadays I am carefree	-0.476
I'm worried that I can be the object of ridicule	-0.442
I behave differently with different people	-0.409
I do not accept my parents as they are	0.437

The third factor, "Negative identity," is represented by statements indicating denial of the value of relationships with other people (Table 3). There was a lack of internal introjects, which could promote the development of identity. The principle of pleasure and benefit in decision-making and the lack of understanding of constraints in the realization of needs were noted. The opposite pole of the factor is associated with negative experiences of vulnerability and weakness, avoidance of similar experiences and idealization of attractive other people.

Table 3. Factor «Negative Identity»

Statements	Factor value
It is better not to work at all than to be forced to build a prestigious career that does not bring satisfaction	0.464
I do not compare myself with people I communicate often	0.411
I'm not sure in my abilities to achieve anything	0.429
It is important to me to have peers and teachers' support	-0.712
I often compare my appearance with the appearance of my parents	-0.513
I'm very much like my parents in terms of abilities	-0.506
I often have a sense of hopelessness	0.503
I'm not afraid to be deceived	0.472
I am against any restrictions in my life	0.436
I can follow the example of another if his lifestyle seems worthwhile	-0.407
I'm afraid to seem weak	0.613
It is not necessary to close with others and reveal to others	0.468
I prefer to check my friends for fidelity	0.561

The factor "Identity crisis" reflects a formed identity based on roles that appear to the youth as dangerous and undesirable (Table 4). Such young men oppose any infringement of their borders. Sometimes they have a sense of hopelessness. They do not seek to compare themselves with relatives and friends and do not require their support. The fourth factor has fewer statements. The content of the statements reflects the young men's search for values. They have the desire to rely on family traditions and the continuity of ideas and meanings emanating from the older generation. The negative pole includes statements that disclose avoidance of independent decisions and actions, fear of new experiences.

Table 4. Factor «Identity Crisis»

Statements	Factor value
I appreciate the traditions in which I was brought up	0.682
Personal views are more important than traditions	-0.632
I try to communicate only with my friends	-0.522
Everything that I do is interconnected, and leads to one goal	0.482
I would often travel if I had the opportunity	-0.415
Wisdom depends more on traditions than on personal experience	0.564
I trust people my equals	0.483

This factor reflects the crisis period between adolescence and adulthood. The process of acquiring identity and forming a new attitude to the world take place during this period. Young men with a crisis of identity seek answers to their questions in understanding traditions and customs. They are in contact with different people and are constantly trying to expand their social circle.

From the results of the study of ego identity in the two groups we can assert that the identity of intellectually gifted young men differed significantly from the character of the identity of sports talented individuals.

Further, we used the method of statistical analysis to confirm the supposition that the features of the personal identity of the two groups are different. We determined significant differences in the mean values of the identity indicators in the two groups of

subjects (Table 5). Thus, reliable differences are observed only on the first factor between intellectually gifted and sport talented youths. Positive identity is more pronounced in the first group of subjects than in the second group ( $p \leq 0,01$ ). Intellectually gifted children have a more developed self-knowledge which promotes their self-perception. In addition, they perceive the world around them as stable and reliable. They feel confident and take responsibility for their own lives. The expression of positive identity is less evident in the group of sport talented young men than in the group of intellectually gifted.

*The congruence of the structural organization and the nature of ego identity*

The subjects were asked to sequentially rank in descending order the linguistic-semantic forms presented in the method from the position of “I am about myself”. These forms correspond to the cognitive, emotional, motivational and behavioral structural parameters of personal identity from the position of “I am about myself” (1 point – the maximum significance, 15 points – the minimum significance). This resulted in a distribution of subjects at four levels of ego identity development: high, medium, low and very low. The data enable us to draw the conclusion that levels of ego identity development of intellectually gifted and sports talented individuals differ significantly  $p \leq 0,01$  (Table 5).

The majority of sports talented individuals had an average level of personal identity development. These young men are characterized by positive self-attitude and their value system is stable (figure 1). The degrees of socio-psychological adaptation, reflexivity and independence are also average. The sample of sports talented young men is characterized by the consistency of two parameters of the personal identity – the consistency of the emotional component with a cognitive or behavioral and cognitive component with an emotional or behavioral. If we consider the consistency of the cognitive and behavioral identity parameter, we can conclude that behavioral models of young people and their ideas about themselves and the interpretation of their character coincide completely. However, in this case, the young people’s ideas about their behavioral patterns and feelings related to the image of the «self» are mismatched. If the emotional component is consistent with the cognitive, feelings in connection with the image of «Self» will coincide with the ideas about themselves and explain the reasons for their actions.

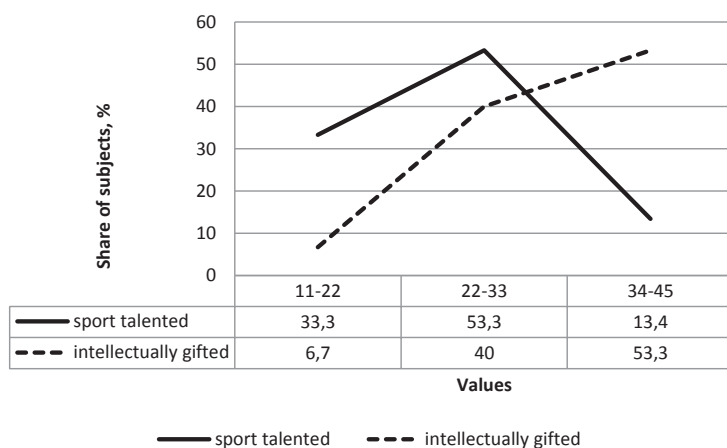


Figure 1. Distribution of average values by indicators of the congruence of the structural organization and the nature of ego identity of subjects (Level of Identity)

Intellectually gifted participants are characterized by a high level of development of personal identity. These young people are distinguished by a stable system of value orientations, positive self-attitude, a high level of development of socio-psychological adaptation, reflexivity and independence. The cognitive, behavioral and emotional parameters of their personality identity are harmonized. Interpretations by athletes of their own nature, ideas about their behavioral patterns, and feelings related to the image of "Self", are not contradictory. So, their level of socio-psychological adaptation is higher than that of sport talented young men.

## Discussion

We determined significant differences in the mean values of the identity indicators in the two groups of subjects. Thus, reliable differences are observed only on the first factor between intellectually gifted and sport talented youth. Positive identity is more pronounced in the first group of subjects than in the second group. Intellectually gifted children have a more developed self-knowledge promoting their self-perception. In addition, they perceive the world around them as stable and reliable. They feel confident and take responsibility for their own lives. The expression of positive identity is less evident in the group of sport talented young men than in the group of intellectually gifted.

Table 5. Analysis of the Mean Values for Identity Indicators

Group	Mean values	Positive Identity	Confused Identity	Negative Identity	Identity Crisis	Level of Identity
Intellectually gifted	mean	4.28	3.78	4.86	4.61	32.6
	$\sigma$	0.38	0.35	0.60	0.51	4.63
Sport talented	mean	3.68	4.04	4.37	4.63	24.2
	$\sigma$	0.37	0.51	0.50	0.58	5.51
	<i>t</i>	4.61	0.01	0.05	0.44	3.04
	<i>p</i>	$p \leq 0.01$	-	-	-	$p \leq 0.01$

The tendency is connected with the fact that intellectually gifted young men have qualities of independence and social autonomy. They are used to trusting themselves and being responsible for their actions. Due to the fact that most sports talented young men work in a team and under the guidance of a coach, they tend to trust others and share responsibility with other people. In the case of a distorted development of identity, the division of responsibility can be transformed into a rejection of personal responsibility and the development of conformism.

The second factor did not reveal significant differences. These characteristics were similar for both groups of subjects. This can be attributed to the fact that it is specific in adolescence for young people to look for solitude and it is important to be independent. They have a reassessment of values. Young people are interested in issues of outlook that go beyond family traditions.

The absence of reliable differences in the third factor may be due to the specificity of adolescence as a whole. There is certain ambivalence in the period of youth. On the one hand this is a desire for independence, with another – fear of the future. As a result, some young men experience feelings such as hopelessness and self-doubt, which are components of a negative identity.

The lack of significant differences in the fourth factor is probably due not only to the specificity of adolescence, but also to the characteristics of gifted people. They are trying

to find ways to overcome the crisis in the traditions and customs, try to expand the circle of communication, to find new friends in order to help them overcome the identity crisis.

The results of the study showed that the levels of development of subjects' ego identity are reliably different. Intellectually gifted participants have higher results than young sports talented people who are. The results of the empirical research indicate that the study of the identity of gifted young men is a real phenomenon in psychological science.

## Conclusion

We calculated a semantic differential for measuring participants' ego identity following the concepts developed by Erik H. Erikson and carried out a factor analysis. This indicated that there are four parameters denoting the nature of ego identity in adolescence: positive identity, negative identity, confusion identity, and moratorium. The results of the study made it possible to assert that the identity of intellectually gifted young men differed significantly from the character of the achieved identity of sports talented individuals.

We detected true differences in the congruence of the structural organization of ego identity in puberty and adolescence. To achieve ego identity at the end of adolescence intellectually gifted individuals need more pronounced confrontation to role confusion, support and sensory impressions. But they lack a sense of comradeship with peer group. Sports talented youth need respect and protection affinity and avoidance of negative social evaluation but they do not seek the autonomy that is important for achieving ego identity. Intellectually gifted individuals have higher level of social and psychological adaptation, stable self-attitude, have a more certain system of values, and a sufficiently high level of reflection and independence in comparison with sports talented youth.

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