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## DYNAMICS OF SEX AND AGE CHARACTERISTICS OF MOTIVATION IN THE EPOCH OF ADOLESCENCE AND YOUTH<sup>1</sup>

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The article is devoted to the system-psychological analysis of the dynamics of sex and age characteristics of motivation in the epoch of adolescence and youth. The motivational structure is a relatively stable system, but different age periods are characterized by the predominance of certain types of motivation. At the same time, the dominance of certain tendencies in the motivational profile of an individual has a socio-cultural and sex-and-age conditionality.

The study of the dynamics of sex and age characteristics of motivation structure in the epoch of adolescence and youth was conducted from October 2019 to March 2021 in the Moscow region using the test of the system profile of motivation. The total number of subjects was 385 people aged 17 to 36 years, of which 137 people were men, 248 people were women.

In the course of the conducted research, a number of features of motivational dynamics were identified. In particular, in the general sample, the indices of cognitive motivation reach their peak values in the adolescence epoch (17–24 years), and the indices of reproductive motivation reach their peak in the youth epoch (25–36 years). However, in the youth epoch, in the male sample a statistically significant excess of self-realization motivation indices was revealed. At the same time, in the same period in the female sample a statistically significant excess of self-preservation motivation indices was found. The empirical data obtained generally confirm the results of the population study 2006–2011, permitting at the same time to clarify a number of sex and age features in the development of motivational trends.

*Keywords:* system psychology; motivation; sex and age characteristics; system periodization of development; system-psychological analysis; the epoch of adolescence; the epoch of youth.

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## Introduction

The structure of motivation is the core of the personality, representing a fairly stable system for most of a person's life [3: p. 112; 6: p. 148; 12]. At the same time, certain age periods are characterized by the predominance of certain types of motivation [5; 9: p. 63]. This is related to both the systemic patterns of the development of psyche and socio-cultural and sex-age characteristics [8: p. 177].

Currently, the number of works devoted to the assessment of psychological effects determined by biological sex [13] is significantly inferior to the number of works devoted to psychological features caused by gender differences [11; 14; 15]. In the works of I. I. Vartanov [2], A. V. Karpov [4], T. V. Razina [7], the question of sexual characteristics of motivation is raised. However, a significant part of the research is aimed at considering the problem of gender stereotypes [1; 17]. Despite the socio-cultural stereotypes that have developed in modern society, the role of sex and age differences in a number of phenomena of a person's mental life, including the peculiarities of the motivational sphere, cannot be ignored [10; 16].

In 2012, the results of the population study of motivational dynamics performed from the standpoint of systems psychology were presented on the pages of this journal, which, however, does not contain the analysis of sex and age differences<sup>2</sup>. The present work is devoted to the refinement of the results obtained in this study, and aims to assess the influence of sex and age differences on motivational dynamics in two age epochs — adolescence and youth.

### System periodization of development

The system periodization of development is based on empirical data on the predominance of certain types of motivation in different age periods. From the standpoint of systems psychology, there are eight twelve-year epochs,

each of which is characterized by the dominance of a certain type of motivation. Human development reflects the general phase dynamics of the systems development. Meanwhile, the biological orientation of motivation is replaced by the social one, and the tendency to develop the elements of the system is replaced by the tendency to organize them, i.e. to preserve them [8: p. 141]. So, for the epoch of childhood (0–12 years) the predominance of vital motivation, which is based on the physical development and growth of an individual, is characteristic. For the age of adolescence (13–24 years), the motivation of cognition plays a crucial role, when the value of intellectual development prevails over biological growth. The epoch of youth (25–36 years) is characterized by a reproductive orientation, when the biological continuation of the genus comes out in the first place. The epoch of adulthood (37–48 years), which is characterized by the motivation of self-realization of an individual in the society, completes the ascending stage of a person's life, and as a result the final of this epoch is often marked by the onset of a midlife crisis. Then follows middle age (49–60 years) — the epoch of morality; mature age (61–72 years) — the epoch of altruism; old age (73–84 years) — the epoch of preserving the “Ego”; old age (85 years and older) — the epoch of self-preservation.

Along with it, for a more in-depth analysis within each age epoch, it is possible to allocate particular periods. The most logical division of age is into two phases the early-age phase, covering the first six years, and the late-age phase, covering the last six years. However, sometimes an even more fractional division of the epoch is advisable. For example, the division of the age into three phases, in which the age period is divided into three equal parts can be used. In this case, the first four years of the epoch will correspond to its early or first period, the next four years to the second one, and finally the last four years to the late or third period.

In this paper, we use the division of the age epoch into three phases. In this case, in the adolescence epoch, the first part is distinguished — early adolescence — from 13 to 16 years; the second part of adolescence corresponds

<sup>2</sup> Ryzhov B. N. System periodization of development // Systems psychology and sociology. 2012. № 5. P. 5–24.

to 17–20 years, and the third — late adolescence lasts from 21 to 24 years.

Similarly, the twelve-year period of youth is also divided into three 4-year parts: the first — early youth from 25 to 28 years; the second — from 29 to 32 years; and the third — late youth from 33 to 36 years.

### Research methodology

The study of the dynamics of sex and age characteristics of the motivational profile was conducted from October 2019 to March 2021 on the territory of the Moscow region. The study used the test of the system profile of motivation (SPM) [8: p. 350]. The total number of subjects was 385 people, including 137 men and 248 women.

The age of the subjects ranged from 17 to 36 years. Taking into account the provisions of the systemic periodization of development<sup>3</sup>, the subjects aged 17 to 24 years were assigned to the epoch of adolescence, and the subjects aged 25 to 36 years — to the epoch of youth. At the same time, four-year periods were allocated to obtain refined characteristics of sex and age dynamics. Data on the number of subjects groups in each of these periods are shown in Table 1.

### General trends of motivational dynamics in the epoch of adolescence and youth

Figure 1 shows the dynamics of motivation indices averaged over two-year periods in the adolescence epoch (17–24 years) and the youth epoch (25–36 years). At the same time, the types of development motivation are located on the left side of the figure, and the types of conservation motivation are located on the right. From the above data, the dominant role of most types of motivation for maintaining order (altruism, preservation of Ego, self-preservation), whose indices invariably turn out to be higher than the median value of 50 % is visible. At the same time, among the types of development motivation, only reproductive motivation has a dominant value in the considered epochs. The indices of cognitive motivation, which occupy a dominant position in the epoch of adolescence and early youth, go below the median line in the period of late youth.

Similar trends were noted during the population study of the systemic profile of motivation in 2006–2011, when altruism, preservation of Ego and self-preservation were also noted among the most significant types of motivation<sup>4</sup>.

As can be seen from Fig. 1 (1) vital motivation is one of the depressive types of motivation, since its average index is below the median value. The cognition motivation, which begins to decline only in the epoch of youth (Fig. 1, (2)), can be attributed to the most significant types of development motivation. Peak

Table 1

The number of subjects in the age periods ( $N = 385$  people)

Epoch of life	Age period (years)	Total number (people)	Sex	Number (people)
Adolescence	17–20	104	women	58
			men	46
	21–24	96	women	60
			men	36
Youth	25–28	57	women	33
			men	24
	29–32	68	women	51
			men	17
	33–36	60	women	46
			men	14

<sup>3</sup> Ryzhov B. N. The specified work.

<sup>4</sup> Ryzhov B. N. The specified work.

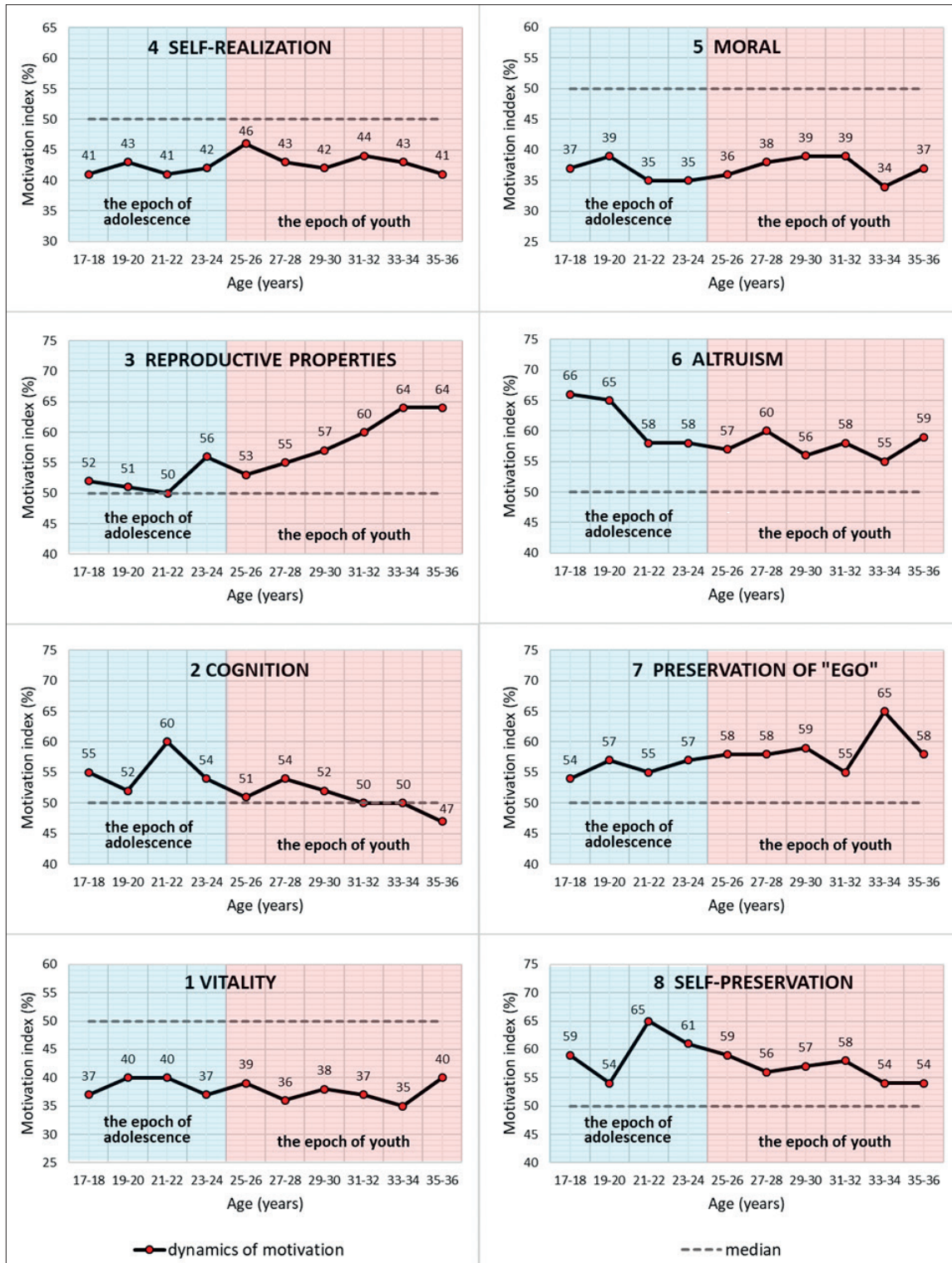


Fig. 1. General age-related trends in the dynamics of motivation in the epoch of adolescence and youth

values of the cognition motivation index are obtained at the age of 21–22, which corresponds to the completion of higher education and the change of a social role, when a former student is faced with the need to implement the acquired knowledge in a proper professional field. During the transition to the epoch of youth, cognitive motivation loses its dominant position and after 30 years reaches the level of the median values of the motivation index, and after 34 years it acquires a depressive level, decreasing to 47 %.

As can be seen from Fig. 1 (3), during most of the adolescence epoch, the indices of reproductive motivation are close to the median level. Only with the onset of youth, this type of motivation acquires a confident dominant trend. Peak values of the index of reproductive motivation fall on the period of late youth — 33–36 years.

The indices of self-realization motivation and morality motivation in the considered epochs are in the depressive zone and change slightly (Fig. 1 (4 and 5)). In contrast to this, altruism motivation has an expressed dynamics. As can be seen from Fig. 1 (6), the index of this type of motivation decreases sharply in late adolescence. The reason for the decline is the beginning of independent professional activity and the associated reduction of the values of the adolescence group. In the future, during the epoch of youth, this decline continues, although at a slower pace.

The motivation to preserve the “Ego”, on the contrary, tends to increase both in adolescence and in youth (Fig. 1 (7)). The last type of motivation, self-preservation, is among the dominant ones in both epochs under consideration, but comparing Fig. 1 (2) and Fig. 1 (8), we see that the dynamics of this type of motivation is very similar to the dynamics of cognitive motivation. Continuing the comparative analysis of motivational trends, we can notice the contrasting dynamics of two types of development motivation: cognition and reproduction. If the value of the cognition motivation index reaches its peak in the epoch of adolescence, then reproduction becomes most relevant in the epoch of youth.

Higher indices of cognitive motivation in the epoch of adolescence are associated with the priority tasks of this period, among which the main place belongs to education and professional self-determination. In the Moscow

region, young people aged 17–20 years are striving to get higher or secondary professional education. In this connection, the high level of cognitive motivation in the epoch of adolescence is due to the very atmosphere of university life, when students engage in intellectual interaction with both teachers and fellow students, constantly exchanging new information, thereby expanding the boundaries of their own knowledge. Such involvement in the educational process, combined with the requirement of independent work, determines the achievement of peak values by cognitive motivation during late adolescence.

Reproductive motivation occupies a strong leading position in the second half of the youth epoch. However, already at the final stage of the adolescence epoch, there is a distinct splash of reproductive trends, which indicates the emergence of a conscious desire to create a family. At the same time, it should be noted that the peak of reproductive motivation falls on the period of late youth.

In the course of the population study of the systemic profile of motivation in 2006–2011, a monotonous increase in the indices of reproductive motivation up to 27–28 years was shown. It was during this period of early youth that reproductive motivation reached peak values [8: p. 174]. However, in a relatively short period of time (10–12 years) since then, the peak of this type of motivation has shifted by 5–6 years towards an older age.

#### **Sex and age features of the dynamics of motivation in the epoch of adolescence and youth**

Figure 2 shows the sex and age dynamics of motivation in the epoch of adolescence and youth. The presented data allow us to note the absence of noticeable sex differences in the dynamics of a number of motivation types. They include cognitive and reproductive motivation, which are of particular importance for adolescence and youth, as well as the motivation to preserve the Ego. No statistically significant differences were found between the indicators of male and female samples for any of these types of motivation (Fig. 2 (2, 3, 7)).

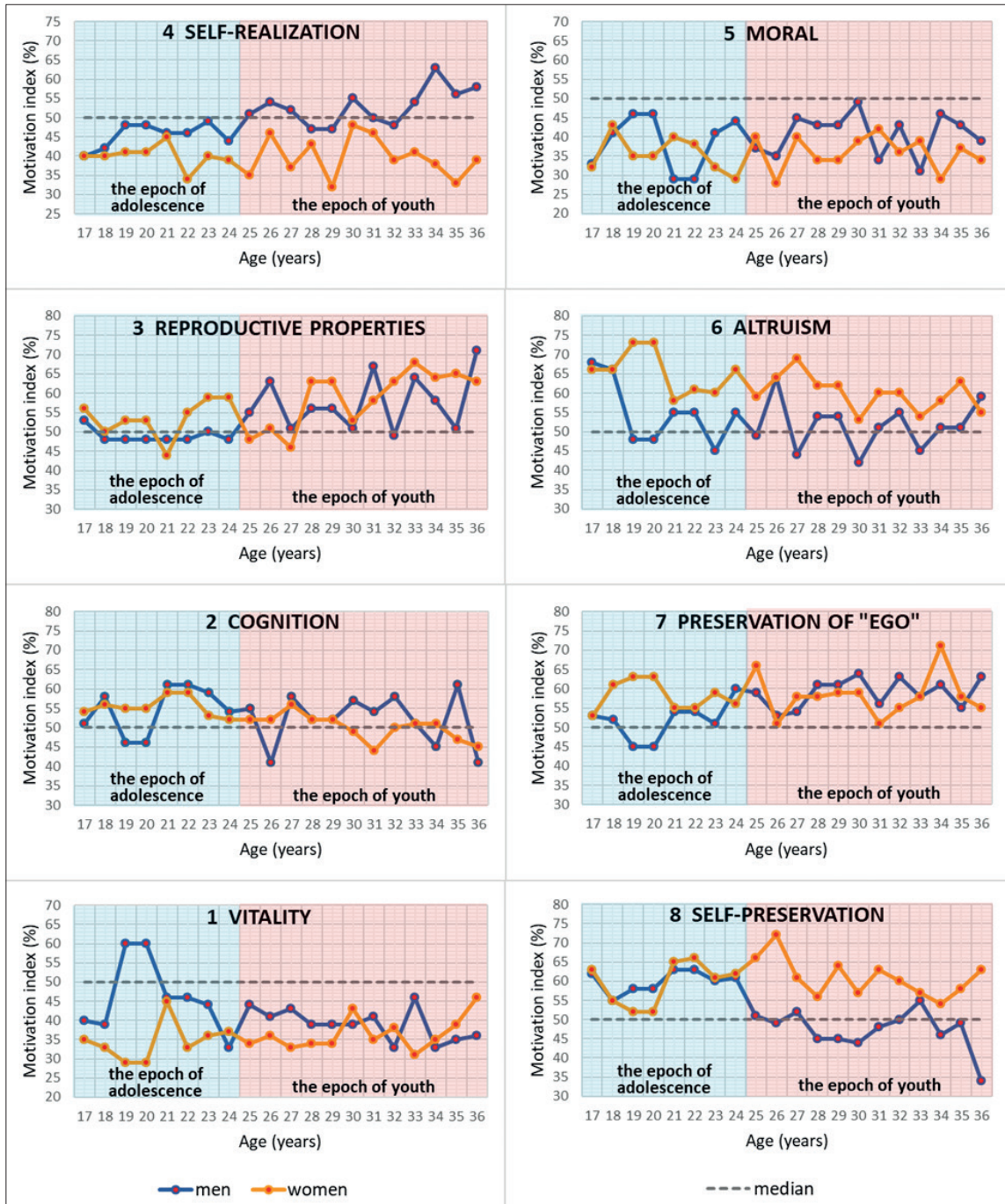


Fig. 2. Sex and age dynamics of motivation in the epoch of adolescence and youth

The dynamics of self-realization motivation gives a different picture (Fig. 2 (4)). Based on almost one point lying significantly below the median level during early adolescence, the data of male and female samples then progressively diverge during the entire investigated age period. In late youth, they differ by 20 percentage points of the motivation index. Statistically significant sex differences between the male and female samples were recorded at the age of: 25–28 years ( $p \leq 0.01$ ); 29–32 years ( $p \leq 0.01$ ) and 33–36 years ( $p \leq 0.01$ ).

The role of self-realization motivation in men is constantly increasing and in the epoch of youth, the indices of this motivation steadily move to the area of dominant values. Women, on the contrary, have a weakly expressed negative trend of the index. At the same time, its values do not reach the area of dominant values in any of the age periods.

The differences obtained can be explained by the fact that although it is no longer uncommon for an active reproductive period in a woman's life to begin at a later age, in the absolute majority of cases it falls on the epoch of adolescence and youth. Meanwhile, despite all the changes taking place in the society, the worries associated with the creation of a family, birth and upbringing of children still shift the social self-realization into the later period of time for many women at this stage of their life path.

At the same time, for most men, late adolescence and youth is the time for the beginning of professional activity and active career growth. During this period, the trend of reproductive motivation coincides for men and women, and for men, as well as for women, the role of family life values increases. However, the traditional role of a man in these circumstances implies taking care of the financial well-being of a young family. At the same time, the need to ensure material prosperity often becomes an indirect incentive strengthening the desire for self-realization.

Along with it, more general psychological effects of the natural separation of the function of the sexes should not be ignored. The main role in the biological reproduction or development of the species belongs to the woman. The compensation for this disparity is a greater desire

for social reproduction or, from a systemic point of view, self-realization in men<sup>5</sup>.

Among other types of motivation, you can find similar differences, although they are much less expressed. Thus, in the dynamics of moral motivation, there is also the tendency for the male sample indices to prevail, although there are no statistically significant differences between the samples (Fig. 2 (5)). The reason for the revealed differences is related to the desire to preserve order in society, which is more typical for men during the period under review.

The dynamics for altruism motivation and self-preservation is complementary to the considered trends (Fig. 2 (6 and 8)). Statistically significant prevalence of altruistic motivation in women is noted at the age of 21–24 years ( $p \leq 0.01$ ), as well as at the age of 25–28 years and 29–32 years ( $p \leq 0.05$ ).

Significant sex and age differences are also observed in the dynamics of self-preservation motivation (Fig. 2 (8)). With the onset of the epoch of youth, the indices of this type of motivation decrease in both samples. But in men, this trend is much more expressed. The differences between the samples are statistically reliable at the age of 25–28 years ( $p \leq 0.01$ ), 29–32 years ( $p \leq 0.01$ ) and have the character of a trend at 33–36 years ( $p \leq 0.05$ ).

The interpretation of the obtained results may be related to the remaining socio-cultural attitudes. In accordance with them, the desire for a comfortable existence, careful behavior and close attention to one's own health contradict the stereotypes of masculinity. The society imposes a number of requirements on men, expecting perseverance and self-control, physical strength and endurance, stability in overcoming life's difficulties. All these requirements

<sup>5</sup> No human community is free from ideological biases. Every society creates myths that are not subject to discussion by contemporaries. However, as time passes, the absurdity of the ideas that recently seemed indisputable becomes obvious. But in place of some myths, others immediately come. This general maxim should be kept in mind in the context of the topic under discussion, since the legal principle of gender equality adopted in modern society is often, contrary to many facts, mistakenly interpreted as a denial of psychological differences due to gender.

are in a certain contradiction with the desire for self-preservation, which is revealed in the results of the study.

### Conclusion

Thus, the empirical data obtained generally confirm the results of the population study conducted on an all-Russian sample in 2006–2011, clarifying a number of sex and age features

in the development of motivational trends. Among them, there is a significant difference in the dynamics of self-realization motivation in women and men in the epoch of adolescence and youth. Self-realization indices in men are steadily increasing and significantly exceed similar indicators in women, where they have a slight negative trend. In contrast, in adolescence and youth, the indices of altruism motivation in women exceed those of men.

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