

## **Interrelation of emotional intelligence, aggressiveness and anxiousness indicators of students of pedagogical specialties: gender differences study**

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**Abstract.** The article covers the results of the empirical research which allow to reveal and compare the interrelations of emotional intelligence, aggressiveness, hostility, situational and personal anxiousness indicators of young men and girls - future teachers studying at the 2 course of the faculty of arts of Kazan federal university. The comparative analysis has not revealed consistent gender peculiarities of emotional intelligence, aggressiveness, hostility, situational and personal anxiousness indicators of future teachers. The obtained results allow to draw the following conclusions: the better the students understand their psychology, the better they treat other people; this influences the ability of social adaptation, the level of their aggressiveness and hostility is lowered, their anxiousness is controlled by means of emotional intelligence.

[Fedorenko M., Potapova V. **Interrelation of emotional intelligence, aggressiveness and anxiousness indicators of students of pedagogical specialties: gender differences study.** *Life Sci J* 2014;11(7s):453-456] (ISSN:1097-8135). <http://www.lifesciencesite.com>. 97

**Keywords:** emotional intelligence, aggressiveness, hostility, anxiousness

### **Introduction**

The issues of emotional intelligence have become the subject of interest for many scientists during the last few decades. According to the model offered by Bar-On, emotional intelligence is a cross-section of interrelated emotional and social competencies, skills and facilitators that determine how effectively we understand and express ourselves, understand others and relate with them, and cope with daily demands. [1]

A certain level of anxiousness is a natural and obligatory feature of a personality vigorous activity. Each person has their optimum, or desirable level of anxiousness, it is the so-called "useful anxiousness". The person's assessment of their state is an essential component of self-control and self-education in this regard. [2]

The researchers conducted a series of experiments and identified that social exclusion increases the inclination to perceive neutral information as hostile, inclination to perceive neutral information as hostile, which has implications for aggression. Therefore social isolation produces aggression. [3]

In another research structural regression modeling showed that only high Novelty Seeking predicted Anxiety score, trait depression and anxiety were linked to high harm avoidance and low self-directedness, and trait depression was linked to high self-transcendence whereas trait anxiety was linked to low reward dependence, persistence, and cooperativeness.[4]

In our opinion, the analysis of these qualities is extremely important for the future teacher personality and pedagogical professional compliance evaluation.

### **Results of research**

We have conducted a psychological empirical personality research of students-future teachers studying at the 2 course of the faculty of arts of Kazan (Privolzhsky) federal university. They are artistically gifted young men and girls who had become winners of special competition of creative works before 5 they entered the University.

The goal of our research is to compare the emotional intelligence, aggressiveness, anxiousness of young men (20 people at the age of 20-21) and girls (20 people at the age of 20-21), to make the correlation analysis and to reveal significant interrelations between the studied indicators. All students were informed about the purposes of research and gave written consents.

There have been applied the following techniques: 1) the scale of reactive (A-state) and trait anxiety (A-trait) of Spielberger-Khanin (State – Trait – Anxiety – Inventory (STAI) adapted by Khanin), the inventory allows to measure differentially the anxiousness both as a personal property, and as a state; 2) Buss-Durkey inventory (BDI - Buss – Durkey Inventory), defining the level of aggressiveness and hostility [5]; 3) "Level of emotional intelligence" technique which contains scales: "attitude towards oneself" (awareness of own emotions, self-confidence, self-esteem, self-realization, independence); "attitude to others" (interpersonal relationship, social responsibility, empathy); "attitude to life" (ability for adaptation, problem solution, reality-testing, adaptability); "the general level of EI". (LEI – Level of Emotional Intelligence) (Belyaev S. A. Yanovich A.I. Mazurov

M. I.) [6]. Quantitative processing of obtained data was carried out by means of Microsoft Excel applied package and STATISTICA 7.0 program (average data calculation, correlation analysis, significance test of differences).

The comparative analysis of gender differences has not revealed significant differences in indicators of future teachers' emotional intelligence, aggressiveness, hostility, situational and personal anxiousness (by Student's-t and Fisher criteria). (Table 1).

**Table 1. Comparison of two independent samples "Young men" and "Young women" by Student's – t and Fisher criteria**

	Young men	Young women	t-value	p	Std.Dev.	Std.Dev	F-ratio	p
General level of EI	113,9	120,7	-0,93	0,36	17,18	15,12	1,28	0,71
Hostility	8,4	9,6	-0,67	0,50	3,65	4,22	1,33	0,67
Aggressiveness	17,3	18,1	-0,25	0,80	7,49	6,64	1,27	0,72
A-trait	41,9	43,3	-0,37	0,71	7,79	9,03	1,34	0,66
A-state	25,0	24,6	-0,84	0,93	12,56	8,07	2,42	0,20

Half of young men and girls have a high level of emotional intelligence, they are able to understand their feelings and feelings of other people, they are capable to control their emotional sphere, their behavior in society is rather adaptive, they have low indicators of personal anxiousness. All these are preconditions for the formation of effective professional instrument in future successful pedagogical activity. Significant gender differences on these indicators have not been revealed.

Within the standard, the personality has to possess a specified degree of aggressiveness. The absence of it leads to the passivity, submissiveness, conformity. Aggressiveness is understood as the personality property, it is characterized by the presence of destructive tendencies, generally in the sphere of subject- object relations. Hostility is understood as the reaction that develops negative feelings and negative assessments of people and events. The results obtained by Buss-Durkey inventory, show that average values of aggressiveness and hostility index correspond to standard but if the index of aggressiveness is close to the lower limit of the standard, the index of hostility is close to the top of it, with girls it is slightly higher.

Average values of A-state STAI correspond to the norm. Situational or reactive anxiousness as a state is characterized by subjectively experienced emotions: tension, discomposure, concernment, nervousness. This state arises as an emotional reaction to a stressful situation and it can be different in intensity and dynamism in the course of time. Values of A-trait STAI have a moderately high level. Personal anxiousness is understood as the stable

individual characteristic, reflecting predisposition of a subject to anxiety and assuming the presence of tendency to perceive many situations as the threat, answering each of them with a definite reaction. As the disposition, personal anxiousness becomes more active at the perception of specified stimulus estimated by a person as dangerous to self-assessment, self-esteem. Girls have higher indicators of personal anxiousness than young men. Students with a high level of emotional intelligence have low indicators of personal anxiousness while students who have average or low values of emotional intelligence display a high rate of personal anxiousness. Essential gender differences of these indicators have not been revealed.

The correlation analysis has displayed strong negative interrelations of the scale "attitude towards oneself" LEI indicators with reactive STAI ( $r=-0.55$ ;  $p<0.05$ ) indicators and personal anxiousness STAI ( $r=-0.57$ ;  $p<0.05$ ), with aggressiveness BDI ( $r=-0.33$ ;  $p<0.05$ ) and hostility BDI ( $r=-0.37$ ;  $p<0.05$ ). Positive interrelations of indicators of the scale "attitude towards oneself" LEI with scale indicators "attitude to others" LEI ( $r=0.67$ ;  $p<0.05$ ) and with scale indicators "general level of EI" ( $r=0.86$ ;  $p<0.05$ ). It is possible to assume that the better the students understand themselves, their emotions, control own anxiousness, the better they explain to themselves the behavior and emotional tuning of other people (in our case – schoolchildren, their colleagues - teachers, parents of their pupils), treat other people with great understanding, and on this basis they will show less aggressiveness, be able to control possible hostility. The indicator of the scale "attitude to others" LEI has negative correlation connections with reactive STAI ( $r=-0.40$ ;  $p<0.05$ ) indicators and personal anxiousness STAI ( $r=-0.31$ ;  $p<0.05$ ), with aggressiveness BDI ( $r=-0.39$ ;  $p<0.05$ ) and insignificant connection with hostility BDI ( $r=-0.20$ ;  $p<0.05$ ). Positive interrelations of indicators of the scale "attitude to others" LEI with the scale "general level of EI" ( $r=0.91$ ;  $p<0.05$ ) and the scale "attitude to life" LEI ( $r=0.50$ ;  $p<0.05$ ). The ability for successful psychological adaptation, high adaptability to different life situations directly depend on the positive attitude to other people. Manifestations of aggressiveness, reactive and personal anxiousness can prevent it. Essential gender differences of these indicators have not been revealed.

The scale indicator "general level of EI" has negative correlation connections with indicators of reactive STAI ( $r=-0.47$ ;  $p<0.05$ ) and personal anxiousness STAI ( $r=-0.31$ ;  $p<0.05$ ), with aggressiveness BDI ( $r=-0.43$ ;  $p<0.05$ ) and with hostility BDI ( $r=-0.34$ ;  $p<0.05$ ).

The hostility BDI positively correlates with reactive STAI ( $r=0.42$ ;  $p<0.05$ ) indicators and personal anxiousness STAI ( $r=0.27$ ;  $p<0.05$ ), with aggressiveness BDI ( $r = 0.67$ ;  $p<0.05$ ).

The aggressiveness BDI has positive connection with reactive anxiousness STAI ( $r=0.63$ ;  $p<0.05$ ) indicators. The situations connected with nervousness, discomposure, concernment and other factors of a future teacher's reactive and personal anxiousness enlarge and lead to the increase of their hostility and aggressiveness level. Essential gender differences of these indicators have not been revealed.

## Discussion

The presented results of the empirical research showed that gender differences in the indicators of emotional intelligence, aggressiveness, hostility, situational and personal anxiousness of second-year students – future teachers studying at the faculty of arts have not got consistent differences.

E.Yu. Raycheva has studied the influence of gender differences on subjectivity and self-attitude of the student's personality studying in a technical college. She has singled out three approaches to the student's personality gender development: the influence of socialization process, the influence of biological processes, simultaneous influence of social and biological processes. The hypothesis about the influence of gender differences caused only by a social context on the students' personality subjectivity and self-attitude has been confirmed in her work. [7].

Another author in the work "The gender aspect of teenagers' emotional intelligence study" proves that there are no gender differences in the sphere of emotional intelligence and its components development. Though, the changes in the emotional sphere of girls are present, but they have rather quantitative than qualitative character [8].

Our conclusions that half of young men and young girls, participating in the experiment, have a high level of emotional intelligence, find its confirmation in the researches of N.S. Krasnopol'skoy. The results of the comparative analysis of the emotional intelligence and vitality of students studying at the faculty of psychology have been presented in the article "The interrelation of emotional intelligence and vitality of students studying in higher education institutions". The obtained data of this research show that more than half of the respondents possess a high level of emotional intelligence, and vitality corresponds to average standard values, there also have been revealed interrelations between the scales of

emotional intelligence and some indicators of vitality [9].

The singled out negative connection between the indicators of emotional intelligence and personal anxiousness corresponds to O.V.Gribkovoy researches. The results of the research of students' personality studying at the faculty of psychology and law faculty are shown in the work of this author, there have been revealed the following features: the low level of emotional intelligence and its components "Control your emotions" and "Self-motivation" development correspond to the average or high indexes of personal anxiousness level [10].

N. P. Aleksandrova has also come to the same conclusions. She considered the following personal characteristics: the level of neuroticism characterizing the subject from their emotional resilience (stability); the level of personal anxiousness; the level of alexithymia (abilities to verbalize emotions); the level of empathic abilities; the level of subjective control; the level of self-control. The establishment of interrelations between the level of emotional intelligence development and a certain set of personal characteristics prove that the increase of self-confidence, self-esteem, self-appraisal, self-actualization level decreases the level of anxiousness [11].

## Conclusion

Let us formulate the conclusions:

- the comparative analysis of gender differences in indicators of emotional intelligence, aggressiveness, hostility, situational and personal anxiousness of future teachers has not revealed significant differences;
- the better the students understand themselves, their emotions, control own anxiousness, the better they explain to themselves the behavior and emotional tuning of other people - schoolchildren, colleagues-teachers, parents of their pupils;
- a high level of emotional intelligence allows young men and young girls to treat other people with greater understanding;
- a high level of emotional intelligence allows to control their aggressiveness and possible hostility manifestations;
- the ability to psychological adaptation, adaptiveness in different life situations directly depends on the attitude to other people;
- the more situations associated with nervousness, discomposure, concernment and other manifestations of reactive and personal anxiousness take place, the more probable is the manifestation of hostility and aggressiveness;

• situations, connected with nervousness forcing, increase of discomposure, concernment and other factors of reactive and personal anxiousness of future teachers, increase of level of their hostility and aggressiveness.

### Acknowledgements

The authors of the research and this article express gratitude to people and organizations that facilitate the research: Kazan (Privolzhsky) federal university, Institute of Pedagogy and Psychology of K(P)FU, the department of psychology, (department chair Fakhrutdinova L.R.), students who have kindly taken part in the experiment.

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12/06/2014