
GENDER CHARACTERISTICS OF INNOVATION AND LEADERSHIP EXPLICITY IN STUDENTS

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The paper presents the theoretical and empirical analysis of gender studies devoted to the innovative behavior component. The theoretical research on innovative behavior considers its separate aspects: the specificity of decision-making, the flexibility of various actions means, the attitude to risk, the motivation of achievement and value-motivational attitude to activity and leadership. Basing on the theoretical analysis of the innovative behavior components, the authors of the article presents an empirical study of gender characteristics of innovative traits and leadership skills among students.

Key words: innovative behavior, innovation, leadership skills, gender characteristics.

The success of human society existence in the twenty-first century will directly depend on personal qualities and abilities development. The identity, its potential and activity aimed at creation, not the destruction of human civilization, are the objects of modern psychological research. In the context of globalization and multi-polarity of the modern world, society needs innovation—not revolution. It needs leaders, whose potential abilities are the basis for progress and social growth. Certainly, among many personal qualities that characterize an effective leader, innovation is one of the most important components. Constructively minded individuals, capable of generating and, most importantly, introducing progressive ideas rapidly, are the main assets of any civilized State.

According to a systematic-dispositional approach in studying the individual's traits, innovation is a combination of personal qualities of perception, assessment, development, rapid adoption and implementation of original ideas [7].

Innovation results are expressed in efficient activity and are characterized by innovative behavior. Innovative behavior is a form of activity, deprived of behavioral attitudes and prevailing stereotypes that appears initiatively, being influenced by three main factors: 1) a person has certain abilities, due to his/her potential; 2) there is a value-semantic background of the environment conducive to this potential realization; 3) a formed motivational readiness to implement opportunities “here and now” [6].

The main characteristics of innovative behavior can be the specificity of decision-making, the flexibility of actions, the attitude to risk, the motivation of achievement and value-motivation attitude to work, innovation, and leadership.

Human behavior, including the innovational one, is determined by three components: the genotype (inborn properties of the nervous system), the social environment and the selecting activity of the person. Selection activity expressions are associated with the person's level of education, age and sex. The psychological research traditionally shows gender along with age, education, nationality as a contextual variable. Meanwhile, gender, or sex, is not a binary variable. The multidimensionality of gender was revealed in studies that questioned the biological nature of sex and demonstrated its social and con-

structed nature (V.S. Ageyev, V.E. Kagan, I.S. Kletsina, I.S. Kon, L.N. Ozhibova, I.Y. Shilov, T.I. Yuferova and others). The gender “dimension” of innovative behavior makes it possible to interpret the innovation manifestations taking into account the psychological nature of sex differentiation. Behavior and individual’s activity in a changing world concerning the attitude to something new, changes and innovation, to the vital events and situations, etc., can be studied through the innovative dispositional system, where the innovative disposition intensity depends not only on age, but also on gender [2].

The present condition of the society blurs the specifics of male and female roles, erases many differences, previously seeming natural, while the idea of equality is sometimes interpreted as sameness.

It is also provoked by an unclear delineation of the psychology of sex differences, which is associated with the presence of sexual dimorphism and its manifestations in different spheres of personal behavior. It must be borne in mind that psychological characteristic of gender differences is various, internally contradictory and not always takes into account the purely individual characteristics. At the same time the diversity of subjects and problems do not preclude the need for separate, private studies of gender differences.

The gender characteristics of innovative behavior (the specificity of decision-making, the flexibility of the means of activity, the attitude to risk, the motivation of achievement and value-motivational attitude to activities, innovation, leadership) and their manifestations are considered by modern psychologists as separate phenomena.

The studies of the nature of decision-making in both men and women, conducted under the guidance of B.G. Ananyev, were based on the relationship between the anticipation processes (from Lat. *Anticipation* — the pre-experimental view, a guess), i.e. by the speed of hypothesis and control actions, i.e. by how thoroughly the participants tested their hypothesis. As a result of the experiment it was found out that men more often make “impulsive and risky decisions” compared to women. Women make more “balanced” and “cautious” decisions. More flexibility in the means of actions was demonstrated by men, while women were exposed to actions under the influence of prevailing stereotypes [4].

The gender attitude to competition and entrepreneurial risks was explored by A.L. Zhuravlev and V.P. Pozdnyakov. The results showed that men prefer the relationships of competition, contest with other people. A group of men-entrepreneurs pointed out that they liked to compete with people, and they preferred to work in a competitive environment. At the same time, women-entrepreneurs avoid competition. Men evaluate their competitiveness more highly, and the women-entrepreneurs evaluate their competitiveness twice as much [3].

A similar situation exists in the assessment of possible success. Women estimated the potential success of their business much lower. Men-entrepreneurs were more optimistic about any change in business activity evaluation: 70% noted its improvement and 7% noted its decrease. Women-entrepreneurs in 59% of cases indicated the increase of their business activity, and 16% indicated its decrease. A higher percentage of women than of men felt that their activity had remained at the same level [3].

The gender peculiarities of motivation to achieve and the locus of control among entrepreneurs, both men and women, are expressed by the predominant motivation to achieve success over the failure avoidance motivation. The desire to succeed in both

groups is stronger than demonstrated by the people who are non-entrepreneurs. In the men-entrepreneurs' sample the motivation of business success achievement is considered more important than in the female sample group.

Both men and women entrepreneurs have the internal locus of control dominating over the external one. The study revealed the relationship between the level of internality and motivation for success, as well as the interrelation between these indicators with business activity assessments [3].

The success of innovative behavior implementation is definitely connected with leadership manifestations. Studying the leaders from the viewpoint of sexual dimorphism in Russian works was carried out in line with the positions of the B.G. Ananiev's scientific school, starting from the 60-s of the XX century.

At present, the works of S.A. Alifanov, T.B. Bendas, I.N. Logvinov, O.G. Lopukhova, V.I. Rumyantseva, I.V. Khodyreva, and others are devoted to the gender problems of leadership. As T.V. Bendas points out, in most works on gender leadership the following *six issues* of leadership and gender are most often studied: 1) the quantitative representation of the leader role in the men's and women's sample groups; 2) the specific features of a leadership style; 3) the efficiency of the leader's performance; 4) the leadership and gender-role characteristics of the group; 5) leadership potential; 6) leaders' gender identity specifics [1].

Some scientists believe that female leadership has its own specific characteristics, and assign a woman with a more democratic, flexible style of leadership, adding that it has empathy, lower aggressiveness, great plasticity of the nervous system, sociability, adaptability [5]. Women leaders increasingly demonstrate internality, ostentatiousness, competence, creativity, and work performance. They have a high self-esteem, the clarity of objectives, they realize their potential and feel no constraints, they are sensible, pushy, and independent. They often act as an emotional leader, focused on interpersonal relations, they dominate in small groups, they are more open, expansive, and interact with the staff better.

In numerous studies of Alice Eagly and her colleagues, various performance characteristics of male and female leadership were identified. Male leaders demonstrated greater effectiveness in meeting objectives; in managing the representatives of their gender; in military and sports organization; at the lowest level of management that requires technical skills. Women leaders were more effective in the development of interpersonal co-operation; in their leadership skills realization in education, business, social and public service [8].

It should be noted that the views on women's and men's behavior, including the leaders, are often narrow-minded, not only on a social level, but even in scientific stereotypes. In a "struggle for leadership" there are stereotyped patterns of behavior, which both men and women try to follow. With the dominance of the male community, women did not even lay claim to leadership, but rejected it under the pressure of public opinion. Thus, the stereotypes inculcated in the public opinion that women-leaders are losing to male leaders in governance, as they have less power, influence and resources.

When studying leaders and monitors in student groups, T.V. Bendas found out that groups of young men and young men situation-leaders, compared to girl-leaders in women's groups, demonstrate greater productivity. The young female leaders have authorita-

rian traits, young men leaders are democratic, female student groups in comparison with male ones have a more noticeable formal and informal leadership mismatch [1].

Despite the different models of leadership, which, with varying frequency, are found in both sexes, gender psychology formed an opinion that it is more typical of men to demonstrate the competitive model (dominance, aggressiveness, self-confidence, egocentrism, desire for power) in combination with muscular behavior type. Women show a combination of a competitive model with a cooperative one (focus on communication, altruism, extroversion) and dominance of feminine behaviour (leadership is accepted only if there is no representative of the muscular model). However, many foreign and domestic scholars have noted that the opposition of male and female styles of leadership is invalid from a scientific perspective and is a barrier to the development of the society. A research interest is arisen by a universal program for the development of leadership skills and innovation among young people in the light of the changed stereotypes and gender attitudes in the society.

The development of correcting study programs should be based on empirical data. In 2013–2014, a study of gender-sensitive peculiarities of leadership and innovation in undergraduate students was conducted. The study involved 88 students of the 3d year of philological and economic departments of Peoples' Friendship University of Russia. "Self-evaluation scale of innovative qualities of a person" (N.M. Lebedeva, A.N. Tatarko) and "Leadership diagnostics test" (E. Zharikov, E. Krushelnitskiy) were chosen as techniques.

Leadership diagnostic results have shown that, in general, throughout the sample, neither the young men nor the girls revealed a high level of leadership skills. In the group of young men 64% of respondents have an average level of leadership ability, while 36% have a low one. Most of the girls in the group (68%) showed a low level of leadership, as only 32% had a medium level of leadership skills. Thus, students demonstrate a middle level of leadership abilities, and the girls predominantly show the low level of such skills.

To examine the characteristics of innovation, we used the technique of "Self-assessment scale of the person's innovative qualities" (N.M. Lebedeva, A.N. Tatarko). The authors preferred an English-language version of the term: "innovativeness" to the more common in Russian: "innovation". We regard these terms as synonyms, and continue to use the term "innovation", according to the name of the method. For the quality analysis of innovation there were three scales used: 1) *creativity*; 2) *risk for the sake of success*; 3) *focus on the future*.

The study found out that more than half of the young men (72%) are characterized by a medium degree of innovative skills and 28% of them have a high level of innovative qualities. Even students with a high level of innovation have an average level of leadership skills.

Male students generally demonstrated high results on all three scales, characterizing the innovative quality. 40% of respondents had high level figures on the scale of *creativity*, 48% of respondents showed an average level of *creativity* and only 12% revealed low results on the scale of *creativity*.

On the scale "risk for the sake of success" high rates were shown by only 32% of people, 64% of respondents' "risk for the sake of success" indicators were average and only 4% of young men demonstrated low scores. Thus, most young male respondents are ready to risk for the sake of success.

In the analysis of the results on the scale “*focus on the future*” identical data were obtained. Only 32% of respondents have high results, 64% of respondents have intermediate level of ‘*focus on the future*’ and 4% of young people have low scores on the scale of “*focus on the future*”. It can be assumed that the representatives of the sample, on the whole, are quite well oriented toward the future and have a forward-looking view on the prospects of their self-realization.

In contrast to the audience of young men, the young women’s innovative indicators appeared to be much lower. Only 12% of the girls have a high level of expressed innovative qualities, 64% have the average and 24% have the low level. Although on the whole scale of *creativity*, the girls’ sample figures are close to those of the young men’s. As well as with the men, 40% of girls-respondents showed high results on the scale of *creativity*. Unfortunately, the girls have not shown good results on the scale “*risk for the sake of success*”. Only 8% of them have high rates on the scale “*risk for the sake of success*”. 44% have average results and 44% have low scores. Thus, women’s sample did not reveal much readiness to risk for the sake of success.

The figures on the scale of “*focus on the future*” of the girls are quite low, around 20% of them are highly oriented towards the future, 52% of the girls are averagely oriented and 28% have low values. It can be assumed that most girls do not have clear milestones in the implementation of their competencies. In spite of high rates on the scale of *creativity* the girls, unlike the young men, most of them are not prepared to take risks for the sake of success and more loosely focused on the future.

Therefore, for the correction of the girls’ innovative qualities it is necessary to develop their ability to risk reasonably and to have a clearer professional self-realization representation in the future. The comparative data of the quality analysis for the study of leadership skills and self-esteem of innovative qualities are given in the table below.

Table

The results of qualitative analysis of leadership qualities and innovative traits in young men and women (%)

Innovative Traits	The average level of leadership qualities						The low level of leadership qualities					
	Male			Female			Male			Female		
	H	M	L	H	M	L	H	M	L	H	M	L
Creativity	25.0	33.3	8.3	16.6	16.6	0.0	15.3	15.3	3.8	23	34.6	7.6
Risk for the sake of success	20.8	41.6	4.1	8.3	16.6	8.3	11.5	23.0	0.0	3.8	26.9	34.6
Focus on the future	25.0	37.5	4.1	12.5	16.6	4.1	11.5	23.0	0.0	7.6	34.6	23.0

Note: H — high level, M — medium level, L — low level.

The synthesis of results was produced on a sample of people with middle-and lower-leadership skills, because the high level of abilities was not demonstrated by any respondents.

The young men with an average level of leadership showed higher indicators on the scale of *creativity* than the men with low levels of leadership. The data suggest that there is a direct correlation between leadership skills and creativity.

The figures on the scale “*risk for the sake of success*” of the young men with a low level of leadership qualities are much lower than of the young men with an average level

of leadership. On the scale of “*focus on the future*” the young men with an average level of leadership have a better result. In total the young men of the sample expressed an obvious connection between the level of leadership and innovativeness.

During the comparative analysis of women’s sample the following results were obtained: 1) on the scale of *creativity* women with a low level of leadership skills had higher indicators than the girls with medium levels of leadership; 2) the indicators on the *risk for the sake of success* for the girls with an average level of leadership skills are higher than those of the girls with a low level of leadership skills; 3) the girls with an average level of leadership are more focused on the future, unlike the young women with a low level of leadership.

The qualitative data analysis on the female sample also found connection between leadership skills and innovativeness.

Regardless of the level of leadership skills, the men’s innovation indicators are higher than the women’s ones, but the young women with low levels of leadership skills demonstrated a high result on the scale of *creativity*. The tendency is that despite the high levels of creativity, the girls in this age group do not seek for leadership or their innovative qualities implementation. Thus, psychological and pedagogical work with a group of female students should focus on the development of innovative behavior and professional self-realization.

The study revealed a connection between the level of leadership skills expression and innovative qualities. The students with higher scores on scales of *creativity*, *risk for the sake of success* and *focus on the future* have more brightly expressed leadership abilities. However, even students with a high self-esteem of innovative qualities demonstrated average levels of leadership skills. There is a risk that in the process of personal and professional growth, even with the development of innovative qualities, but at an average level of leadership skills there will not be any practical effects. Therefore, to maintain, develop and implement innovative behavior in the process of studying in high school it is necessary to develop not only innovative traits of modern students, but also their talent for constructive leadership.

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ГЕНДЕРНЫЕ ХАРАКТЕРИСТИКИ ПРОЯВЛЕНИЙ ИННОВАЦИОННОСТИ И ЛИДЕРСТВА У СТУДЕНТОВ

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В статье представлен теоретико-эмпирический анализ гендерных исследований компонентов инновационного поведения. Теоретические исследования инновационного поведения рассматривают его отдельные составляющие: специфика выработки и принятия решений, гибкость способов действий, отношение к риску, мотивация достижения и ценностно-мотивационное отношение к деятельности, лидерство. На основе теоретического анализа компонентов инновационного поведения авторами статьи представлено эмпирическое исследование гендерных особенностей проявления инновативных качеств личности и лидерских способностей у студентов.

Ключевые слова: инновационное поведение, инновационность, лидерские способности, гендерные характеристики.