

Relationship Between Propensity To Risky Behavior and Psychogeometrical Types Of Personality

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Abstract: *This article will analyze the dependence of personality's quality such as propensity to risky behavior on psychogeometrical type of personality. The article includes results of the research carried out with adolescents and youngsters.*

Keywords: *risky behavior, psychogeometry, rational thinking, circumspection, risk avoiding, typology, teenagers, youths.*

1. INTRODUCTION

Because risky behavior is often associated with life-threatening situations, it is sometimes used as a "dangerous" behavior.

The difference between these two statements is that, the first indicates a random behavior or the choice of an action based on the "inner voice", and the second expresses that such behavior to some extent threatens a person's life, gives rise to danger. Risky behavior can be carried out in direct connection with the individual psychological characteristics of a person.

The scientific study of the peculiarities of risk preparedness in adolescents and youths, being a major problem, requires many scientific and practical studies. Indeed, the problem of riskiness has been widely studied by such large foreign specialist psychologists as K. Star (1969), K. Coombs (1975), Yu. Kozeletsky (1979), M. Borkman and B. Bremer (1982), H. Moskovichi and D. Bunn (1987), these studies served to measure the characteristics of risky

behavior, predict, solve many scientific problems in the framework of mathematical calculation of possible risky actions.

Along with this, risky activity was deeply studied by famous Russian scientists like D.N. Zavalishin (1976), V.A. Petrovsky (1977), M.A. Kotik (1981), G. Solntseva, A.M. Volkov, U.V. Mikadze (1987), A.P. Algin (1989), V.A. Lefevre (1991), B. Gardiner (1994), M.A. Rogov (1994), T.V. Kornilova (1997). In these studies were widely considered and analyzed general psychological features such as specific manifestations of the subject's activity in risky situations, the motivational sphere of the person's readiness for risk, connection with the determination, the subject's perception of uncertain situations, decision-making as a result of the struggle of motives, creative thinking. Among the scientists who studied the psychology of adolescence, B.M. Masters (2001) emphasizes that risky behavior often occurs in unconscious (undefined) situations in the teenage period, and caution is shown with growing and developing consciousness in conscious risky or dangerous situations. The studies also argue that the risky behavior formed in adolescents is mainly of a social nature.

In the research work of scientists of Uzbekistan E.G. Goziev, V.M. Karimov and F. Akromova, R.Z. Gainutdinov, R.I. Sunnatova, M.M. Mamatov, A.A. Fayzullaev, T.M. Adizova, O.E. Khaitov and other specialists studied the economic, social, and psychological aspects of the risk problem. In particular, according to the results of O.E. Khaitov on the socio-psychological characteristics of motivation for entrepreneurial activity, entrepreneurs with a high motivation to achieve success have a medium risk aim, and entrepreneurs with the motivation to avoid failure show either its level too low or too high.

It should be noted that currently psychological, psychophysiological, and socio-psychological features, manifested in individual psychological features as the perception of geometric shapes, are related to risk aim, and the differences between adolescence and youth based on empirical data are not well understood. Therefore, the patterns, age and individual psychological characteristics of risk preparedness in teenagers and youngsters are investigated.

The following were used as methods of scientific research:

1. R. Schubert's risk preparedness test (R. Schubert's risk preparedness test consists of 25 questions and is adapted for teenage and youth groups in Uzbekistan).
2. Test "Psychogeometry" by S. Delinger (this technique involves choosing one of five shapes: a triangle, a square, a zigzag, a regular quadrangle, and a circle).

Object of scientific research: boys and girls (teenagers 13-14 years old) of the 7th grade of schools № 129, № 203, № 194, № 251, № 287 of the Uchtepa district of the Tashkent city, as well as the 3rd year students (youthful age - 18 -19 years) of the Zangiata Academic Lyceum at the National University of Uzbekistan.

2. MATERIALS AND METHODS

According to the character properties of our respondents, the method of psychogeometry was used to divide into groups. It is known that the respondent, according to the instructions of the methodology, ranks five types of figures (square, triangle, regular quadrangle, circle and zigzag) according to the degree of attractiveness. However, only the first figure selected by this respondent helps determine the prevailing character traits. For this reason, depending on the first selected figure of our respondents, their character properties are determined. The

results on the choice of other figures were used in individual feedback to respondents, but due to the fact that their processing methods of mathematical statistics generated certain difficulties, they were not used in this study. The distribution of the first selected geometric shape of respondents by age and gender groups is given in the 1-table.

As can be seen from the table, the choice of geometric shapes by the subjects has an almost uniform distribution. Namely, each geometric figure was chosen by 100-136 respondents (583: 5 = 116.6).

Table №1 . Age and gender features of the choice of geometric shapes according to the psychogeometric test

		Triangle	Square	Regular quadrangle	Circle	Zigzag	Total
Girls	Teenager	31	28	58	38	27	182
	Youth	28	30	10	26	29	123
Boys	Teenager	53	31	35	27	17	163
	Youth	24	20	23	21	27	115
Total		136	109	126	112	100	583

The table shows that there is a tendency towards a relatively greater choice of the shape of the triangle (136 respondents). If we take into account that the triangle expresses such qualities as leadership, a tendency to compete, lack of fear on the way to achieving the goal, self-confidence, we can assume that such a result in this study reflects such psychological characteristics that correspond to this period, such as temper, determination risk appetite.

The zigzag (100 respondents) became the smallest geometrical figure chosen by the subjects; it is possible that such positive, constructive qualities as creativity, the preparation of accurate plans for the future indicate their lack of formation in this period.

Almost one-third (58 respondents) of teenage girls (182 respondents) chose a figure - a regular quadrangle. Perhaps this result expresses such qualities inherent in adolescent girls as variability, internal uncertainty (inconsistency), variability of mood, imitation of others, indecision, dependence on others. The most interesting thing is that by the youthful age, among girls, the choice of this geometric figure is almost 6 times less than in adolescence (only 10 respondents).

In this period, the choice of the shape of the square, which includes almost the opposite to the regular quadrangle of quality, quantitatively took the highest place (30 respondents). This result indicates that by the youthful age, girls have such qualities as discipline, discretion, accuracy (cleanliness), depth of thinking, diligence, serious attitude to practical matters, and responsibility become important. Perhaps it is precisely that seriousness, the ability of deep introspection and self-control may led to a sharp decrease in such negative qualities inherent in teenage girls as internal uncertainty, variability, lack of awareness of their capabilities and low self-esteem. In general, "regular quadrangles", being not yet formed, immature personalities, in our opinion, their sharp decrease among young girls indicates their certain degree of maturity.

If you carefully consider the data of the 1st table, you can see that the most frequent geometric shapes chosen by adolescent boys (163 respondents) are a triangle (53

respondents) and a regular quadrangle (35 respondents). It should be emphasized that leadership, the desire for competition, excessive self-confidence and risk appetite inherent in the "triangular types", as well as variability, internal uncertainty, a quick change of mood, trust in others as a result of the desire to avoid problems, curiosity inherent in the "correct quadrangular types", Fully reflect the behavior of psychologically insufficiently mature adolescent boys. The interesting thing is that the results of those who have reached a certain maturity and have chosen a triangle and a regular quadrangle normalize to the youthful period (a triangle - 24 respondents), a regular quadrangle - 23 respondents).

The Table №1 also attracts attention to the fact that the least common "teenage zigzag types" among teenage boys (17 respondents) by the youth period became the most common types (27 respondents). This means that such positive qualities as creativity, the desire for new knowledge, orientation toward the future, which make up the symbolic significance of the zigzag figure, begin to manifest themselves more clearly as they grow older.

In order to study the level of risk preparedness of our respondents, the R. Schubert risk preparedness test was used. According to the results obtained from the experimental group, according to this technique, respondents were able to score from -50 to +50 points. The results obtained by the test of R. Schubert in accordance with the foundations of the methodology are interpreted as follows.

Indicators of -30 and below are very cautious people, such people never risk, are of the type "measure seven times, cut once". Each action is carried out thinking; do not bother with various events and phenomena. They never do business first. Frequently, they follow others. Such individuals cannot become managers. They are good executors.

From -10 to +10 - the average result. People of this type prefer to perform each action in moderation. If they believe in the usefulness of their actions, they can take a chance. If it is suggested that this does more harm than good, then they are not at risk. They can control their actions and in any situation, they can control themselves.

Respondents with +20 or more have a high-risk appetite. People of this type are individuals who are ready to endanger themselves in any situation. They like dangerous situations; they enjoy any gain made by a risky action. If necessary, it is advisable to stop such people from taking risky, rash, hasty actions, because taking risks in each situation can be a serious danger.

In boys and girls of adolescence and youth, the average score was 7.23. The standard deviation is 16.14. This means that the majority of our respondents in the R. Schubert risk preparedness test scored points in the range from -9 to +24. The average score of boys and girls shows the average value of the overall results. The standard deviation index gives a deviation from the average value, that is: the average value (7.23) - standard deviation (16.14) = -8.91. Such a result, being a normative phenomenon for our group, shows the probability of the lowest indicator falling into this group norm. The highest norm is considered as follows: average value (7.23) + standard deviation (16.14) = 23.37. The probability of increasing the highest rate to 23.37 points is the norm for this group.

However, when comparing the results of boys and girls using this technique, significant differences between them were revealed. Namely, statistical differences were revealed in the level of reliability ($t = 2.49$, $n_1 = 278$, $n_2 = 305$, $p < 0.05$) between the degree of risk appetite for boys (8.97 points) and girls (5.66). The numbers given indicate that boys are more risk

averse to girls. The grounds for this content are observed in the scientific studies of many scientists, they reflect the fulfillment by men of the leading role in society, the assumption of responsibility in difficult and problematic situations, and their desire to overcome obstacles. Namely, a greater risk appetite for boys relative to girls is characterized by their fulfillment of a certain social role.

In a comparative study of the degree of risk appetite of respondents in adolescence and youth, certain differences were revealed. There are statistical differences in the level of reliability ($t = 2.25$, $n_1 = 345$, $n_2 = 238$, $p < 0.05$) between the degree of risk preparedness for teenage students (average score 8.48) and young students (average score 5.43). The statistics provided are evidence that adolescent children are more at risk for younger respondents (boys and girls). The psychological meaning of these data is that in graduate students of the Lyceum, relative to the 7th grade students, mental abilities are more developed, they also differ in the formation of their conscious behavior. In our opinion, the balance, prudence and quality of performing each action through deep deliberation that arise as they grow older are contrary to "risky behavior," for this reason the degree of preparedness for risk in people decreases as they grow older.

As a result of a deeper analysis of the data obtained, boys and girls of adolescence and youth received the following results (2-table).

Table №2. Age and gender differences according to the method of R. Schubert

Age	Gender	N	Average	Student's t-criteria	Reliability level
Teenagers	Boy	163	11,48	3,43	$p < 0,01$
	Girl	182	5,79		
Youth	Boy	115	5,41	-0,21	$p > 0,05$
	Girl	123	5,46		

As can be seen from this table, there is a statistical difference in the level of reliability between the degree of risk preparedness for boys and teenager girls ($t = 3.43$). There were almost no statistical differences between the degree of risk appetite for boys and girls of adolescence ($t = -0.21$). Namely, while teenager and youth girls remained almost unchanged in their risk appetite, the degree of risk appetite in teenager and youth boys changes dramatically as they grow older (compare average scores). In our opinion, these data reflect the specific characteristics of teenager boys; this is characterized by their variability, curiosity, and the tendency to "try" themselves in all areas in the transition period.

3. RESULT AND DISCUSSION

Of course, such a riskiness characteristic of adolescence is of great positive importance in the formation of personality. Curiosity, the desire to develop new areas and in this regard, the manifestation of risky behavior, characteristic of adolescents, help in choosing a future profession, using their abilities, and awareness through their application. However, in the event that educational work was not carried out at the time, the necessary instructions were not given to adolescents, then there is a risk of developing consequences that adversely affect

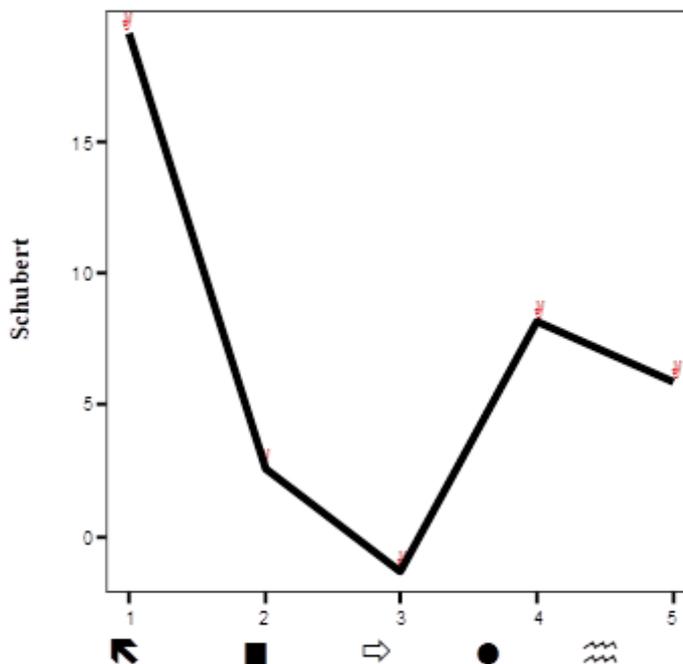
the lives of adolescents, on their formation as an individual. For example, according to the World Health Organization, most drug addicts first used the drug in the teenage period. In order to study the relationship of risk preparedness and typology of character, that is, the results of the psychogeometric test, the histogrammic method was used. On the histogram in the 1st figure, one can see a pattern reflecting the relationship between the degree of risk appetite of the study participants and the results of the psycho-geometric test.

As can be seen from the figure, the quality of risk preparedness among respondents who chose the “triangle” shape is expressed at a high level (average score - 19). This result is fully consistent with the explanations (comments) presented by the author of the methodology of psychogeometry. Namely, persons belonging to the “triangular” type, together with leadership, a focus on success, the ability to manage, are characterized by such qualities as self-confidence, decisiveness, aptitude for risk.

Based on the 1st figure, we can say that respondents who chose the “square” figures and especially the “regular quadrangle” do not prefer to take risks (3 and -2 points, respectively), perhaps a desire for accuracy, compliance with the rules, and a strong development of analytical rational thinking, the quality of prudence inherent to the “square” type, contribute to the emergence of a negative attitude regarding riskiness. The choice of the “correct quadrangle” according to the instructions of the methodology is characterized by such qualities as uncertainty in their capabilities, low self-esteem, desire to avoid problems, independent thinking, lack of a specific worldview. It is possible that the qualities associated with insufficient personality formation and maturity, especially the traits of volitional passivity as avoiding obstacles, are the reason for their prevailing motives for avoiding risk.

If you carefully look at the 1st figure, you can see that the degree of risk preparedness for the respondents who chose the “circle” and “zigzag” figures is closest to the average norm relative to the respondents who chose other figures. The degree of risk appetite for “circles” was 8 points, and the “zigzags” are close to 6 points. When comparing these figures with the overall average value (7.23 points) received from all participants, one can clearly see a neutral attitude towards risk among respondents who chose the “circle” and “zigzag” figures. From the point of view of psychogeometric typology, the “circle” is a symbol of harmony, that is, comprehensive perfection; such people are characterized by maintaining a certain balance in interpersonal relationships and other areas of life. Perhaps it is precisely these positive qualities that ensured their compliance with a certain norm in relation to risk.

Picture №1. Relationship between risk preparedness and psychogeometric types



Note: on the ordinate axis: average points scored according to the method of R. Schubert (N = 583); on the abscissa axis: the selected types according to the psychogeometric test 1 - "triangle"; 2 - "square"; 3 - "regular quadrangle"; 4 - "circle"; 5 - "zigzag".

"Zigzag" is a figure reflecting creativity, wit, ability of holistic thinking, such people are characterized by the ability to quickly and easily get out of a situation, the ability to move on to other activities, solving any problem "in a jiffy", and the ability to quickly synthesize than analytical and logical thinking. Therefore, the "zigzags" struggle of motives does not proceed so hard and long, they immediately solve any problem. However, due to the development of intuition (inner voice, internal directions), they can feel every danger in advance and restrain themselves in such situations. It is possible that such specific features typical of the zigzag type ensured their neutral attitude towards risk.

One of the most important conditions in ensuring the stability of the socio-political, cultural environment is the education of a comprehensively developed young generation. Through the formation of independent thinking, abilities and skills to make a conscious decision, it is possible to create "immunity" against the influence of various social and political threats, various criminal groups. One of the main measuring indicators of the ability to make the right decision in dangerous situations is risk appetite. Based on all the theoretical and practical research carried out, we came to the following conclusions.

As special studies show, risk appetite is more pronounced in adolescence than in adolescence. This is explained by the transition of youth consciousness one step higher, the emergence in the youthful period of such qualities as poise, prudence in every business. According to the

data, the quality of risk preparedness is more pronounced in boys than in girls. This phenomenon can be explained by the place of the male sex in human evolution and social development. A man in a human population performs the task of managing the family and society, protecting them from various evil forces, ensuring their well-being, and in the process of their implementation he faces a lot of dangers. The main task of women was to maintain a “family home”, the distribution of material wealth created by a man between children, the transfer of cultural achievements to the next generation, and risky behavior in their lives did not play such an important role as in men.

4. CONCLUSION

One of the interesting ways to determine a person's character is based on the peculiarities of the perception of geometric figures, that is, on the expression by the subject of a positive or negative attitude towards a triangle, circle and other figures. As a comparative analysis of the data obtained by the psychogeometric test showed, the quality of risk preparedness is formed and improved as one grows up together with other personality traits as an integral phenomenon. In the process of transition from adolescence to adolescence, along with psychological, psychophysiological and socio-psychological changes, changes in the characteristics of risky behavior in various quality and quantity also appear.

Theoretical and empirical data obtained in the process of scientific research for many years allowed practicing psychologists to formulate the following recommendations:

- In connection with the identification in the teenage period of a very high degree of unconscious preparedness for risk, and given the possibility of occurrence of forms of deviant and delinquent behavior, it is necessary to develop reasonable measures against this in a consistent way;
- It is recommended that special psycho-consultation, psychocorrection and the development of training sessions aimed at creating an optimal degree of risk appetite and risk avoidance, as well as at creating a conscious relationship with respect to risky behavior, as well as implementation into practice;
- Considering that a high degree of risk preparedness was found mainly in adolescents inclined to leadership and leadership, it is recommended to send them to the relevant areas of activity, to encourage their active participation in socially useful events.

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