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**CORRELATION BETWEEN RESILIENCE AND HARDINESS
OF TEENAGERS IN PREVENTION OF ADDICTIVE BEHAVIOR**

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Abstract

The relevance of the study is due to the development of a new stage of prevention and the need to justify new educational goals and objectives of the pedagogical prevention of addictive behavior in the educational environment. The author proves that today the goal of psychological and pedagogical prevention of addictive behavior of teenagers is the development of personal resilience, and hardiness is of one of the most important protection factors. The main objective of our research is the formation of resilience as the means of prevention of addictions in teenagers. The article presents the results of an experimental study of the correlation between resilience and hardiness in teenagers in the prevention of addictive behavior. We have shown that hardiness increases the level of resilience of schoolchildren and we have identified a correlation between the indicators of resilience and hardiness of teenage students. The article presents theoretical and practical significance for teachers, social workers and psychologists involved in the development and implementation of educational programs of addictive behavior prevention in the educational environment.

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Keywords: Resilience, hardiness, prevention, addictive behavior.



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1. Introduction

The «Concept of preventing psychoactive drug abuse in educational environment» states that one of the most important tasks in the prevention of drug abuse is the development of student resources that would help them cope with difficult real-life situations. The main structural and conceptual component of the system of primary prevention of addictive behavior is pedagogical prevention which primarily aims at the formation of personality resources that increase the resistance of children and youth to the negative influence of society.

For that reason, it is of utmost importance to scientifically define the psychological and pedagogical content of the concept of «personal resources» and set the specific tasks of preventive pedagogy. The tasks of pedagogical prevention of addictive behavior in various educational settings include not only taking care of the health of students and promoting a healthy lifestyle among them, but also reducing the risk factors based on developing the life competencies of children and teens, forming active strategies for solving problems, personality traits (resources) that help to effectively cope with difficult real-life situations (Shubnikova, 2013, 2014).

2. Problem Statement

In this regard, analysis of the concept of «resilience» in psychological science is of particular importance for our study. In diagnosing human resilience, Makhnach (2016) proposes to rely on its six structural components: 1) self-efficacy; 2) perseverance; 3) internal locus of control; 4) ability to cope and adapt; 5) spiritual life, religious faith; 6) family and social relationships.

According to Makhnach (2012), resilience is different from hardiness in that the former trait represents “the ability of a person to exist and develop, to adapt to life in general and its adverse conditions in particular” (p. 94)

Hardiness is an inclination and ability to survive, a personality trait that a priori motivates people to find ways out of difficult real-life situations. It allows people to cope with distress effectively and always move towards personal growth. This is an internal personal resource which people can alter by themselves by adding value and meaning to their life. From a practical point of view, it is very important to note that the term «resilience» has a much broader meaning than «hardiness». Hardiness can be considered a set of personal inclinations and skills to turn changes that occur in a person’s life into opportunities. It includes the ability of a person to protect oneself from strong negative influences, as well as the ability to live a full-fledged life under adverse circumstances. Thus, «hardiness» is an integral part of resilience. Resilience does not only imply a person’s ability to overcome difficulties and return to the previous state, but also the ability to progress, cope with difficulties and move onto a new stage of life (Laktionova, 2010).

S. Muddy notes that hardiness is the path to resilience. Hardiness contributes to increased resilience in various life situations. This personality trait can be defined as a sustainable factor that contributes to resilience in a stressful situation and is associated with more active efforts and motivation towards success (as cited in Makhnach, 2012).

In the chapter «Hardiness as a Component of Personal Potential» of their monographic study «Personal Potential: Structure and Diagnosis», Leontiev and Rasskazova (2006) point out that “components of hardiness develop in childhood and partly in adolescence, although they can be developed later” (p.15). Therefore, we need a tool to enable us to perform their psychodiagnostic study (Leontiev, 2011).

3. Research Questions

The current stage of the prevention development we named with a new term – pedagogical prevention of addictive behavior in the educational environment. This is mostly due to the results of researches by Velikanova (2006), Karpov and Goryachev (2011), Mendelevich (2003) and other scientists, based on common etiopathogenic mechanisms of addiction behavior development. Mendelevich (2003), developing the concept of a dependent person, considers the addiction as a personal quality that underlies the establishment of any form of addictive behavior. The authors note that it is impossible to distinguish fundamental differences and specific personality or character traits that determine alcoholism, smoking, drug addiction or overvalued fascination with gambling, virtual reality (internet).

The introduction of the concept of «personal resilience» as one of the objectives of pedagogical prevention of addictive behavior in an educational environment is caused by the fact that the structural components of resilience delineate a set of necessary and sufficient conditions for an effective protection of teenagers from various types of addictive behavior (Shubnikova, 2015; Shubnikova, Khuziakhmetov, & Khanolainen, 2017).

4. Purpose of the Study

We have conducted an experimental research of hardiness and resilience in teens to identify their correlation and to measure their potential in the prevention of addictive behavior in educational settings. The study involved 19 9th-graders from a secondary school of the city of Cheboksary (Chuvash Republic). The average age of the participants of the study is 14-15.

5. Research Methods

5.1. Research methods

To test the hypothesis and solve research problems we used a complex of mutually complementary methods: 1) theoretical – analysis of the literature, normative and legislative acts in the field of pro-prevention, study and generalization of innovative pedagogical experience, classification, analysis, synthesis, etc.; 2) empiric – pedagogical supervision; psychodiagnostic methods, socio-psychological training.

5.2. Psychodiagnostic methods

At the first stage of the ascertaining experiment we used the Hardiness Test which is Leontiev and Rasskazova’s (2006) adaptation of the Hardiness Survey developed by the American psychologist S. Muddy (as cited in Leontiev & Rasskazova, 2006). Hardiness characterizes the degree of a person’s ability

to cope with stress, maintain internal balance and progress. It includes three relatively autonomous components: involvement, control, risk awareness.

At the second stage of the ascertaining experiment we used the Child and Youth Resilience Measure (CYRM) test. It is known to consist of two parts – “national” and “international”, both created according to a single standard within the framework of an international resilience research project. The national part of the test was authored by Laktionova and Makhnach (as cited in Laktionova, 2010). In our study we only used the national part of this test, consisting of 15 statements.

6. Findings

At the first stage of the ascertaining experiment we used the Hardiness Test which is Leontiev and Rasskazova's (2006) adaptation of the Hardiness Survey developed by the American psychologist S. Muddy (as cited in Leontiev & Rasskazova, 2006). Hardiness characterizes the degree of a person's ability to cope with stress, maintain internal balance and progress. It includes three relatively autonomous components: involvement, control, risk awareness.

In the course of the study, we found out that 12 students in the class (63.1% of the respondents) had a high involvement rate and 5 students (26.3% of respondents) displayed an average degree of involvement. These school children are sure that involvement in the general course gives a chance to find something worthwhile and interesting for an individual and is useful in the process of problem solving. 2 students (10.6% of the respondents) have a low level of involvement. First of all, educational psychologists should pay attention to these students, since they are at risk of developing a feeling of isolation.

5 students in the class (26.3 % of the respondents) had a high control rate. They are convinced that endeavor can influence the results, even though this influence is not absolute, and there is no guarantee of success. The majority of the respondents, 10, or 52.6%, have a medium control rate. 4 teenagers (21.1% of the respondents) displayed a low level of control in stressful situations. They do not feel responsible for making life choices.

9 students in the class (47.3% of the respondents) have a high level of risk awareness and acceptance. They are convinced that whatever happens to them contributes to their development due to the knowledge they accumulate through experience. 8 students (42.1% of the respondents) displayed a medium level of risk awareness. 2 students (10.6% of the respondents) had a low level of risk awareness.

We measured the general level of hardiness in the class. 8 students, or 42.1% of the respondents, have a high level of hardiness. These students are characterized by a developed and productive ability to cope with stressful situations and an understanding that these situations are insignificant and temporary. 7 teenagers in the class (36.8% of the respondents) displayed a medium level of hardiness. 4 students (21.1% of the respondents) have a low level of hardiness.

At the second stage of the ascertaining experiment we used the Child and Youth Resilience Measure (CYRM) test. It is known to consist of two parts – «national» and «international», both created according to a single standard within the framework of an international resilience research project. The national part of the test was authored by Laktionova and Makhnach (as cited in Laktionova, 2010). In our study we only used the national part of this test, consisting of 15 statements (Laktionova, 2010). This technique allows us

to study resilience as an individual human ability to manage their own resources. Also, this method makes it possible to assess the degree of development of resilience (high, medium, low) in teenagers.

We obtained the following results: 6 students of the class (31.6% of the respondents) have a high level of resilience, which implies they are willing to overcome the difficulties of life, adapt to the world around them, resist its negative influence, and able to develop and improve themselves on a regular basis. 9 students, or 47.3% of the respondents, have a medium level of resilience. These children can successfully develop under normal circumstances in a familiar environment, but they need help from the outside in critical situations. 4 respondents (21.1% of respondents) have a low level of resilience. They have low rates of social adaptability and performance. When dealing with problems, these students rarely resort to their personal resources and in most cases are unable to handle the challenges of life. These last two categories of teenagers are the object of our interest, and measures should be taken to boost their resilience.

According to the results of the psychological assessment of the students in the ascertaining experiment, we analyzed the results of the two methods and tried to find some correlation.

All the six students with a high level of resilience (100%) show a high level of hardiness. These children are active, have a high level of self-motivation and a developed goal-setting system. They take a proactive approach towards their lives, when making everyday decisions and resolving difficult life situations. In difficult situations, these pupils use adequate coping strategies appropriate for their age. They are able to withstand stressful situations and to find some meaning and value even in negative situations.

Only one student (11.1% of the respondents in this group) has a high level of hardiness out of the 9 students with a medium level of resilience, while the other 8 students show a medium level of hardiness (88.9% of the respondents of this group). These teenagers successfully develop under ordinary conditions, but need help in critical situations. In a difficult situation, they resort to active strategies of coping behavior.

4 pupils in this class were assessed as having a low level of resilience (21.1% of the respondents). They rarely resort to personal resources and always need help in difficult real-life situations. They often resort to avoidance as a leading coping strategy in stressful situations. All of them showed low levels of hardiness. The psychologist and the social care teacher will especially have to work with this group of students.

For the formative experiment we organized training sessions according to the program of psychological and pedagogical prevention of addictive behavior in teenagers by developing individual resilience through the development of hardiness (Shubnikova, 2015; Zeleeva & Shubnikova, 2016). Different stressful situations from the life of adolescents were analyzed in class; the students played them out and discussed various ways of resolving these problems. Then the students explained their understanding of hardiness and assessed their coping strategies as productive or nonproductive. In the sessions the teenagers learned to develop an action plan for solving problems, discussed the possibilities of changing them, and practiced relieving stress and tension in different ways (Leontiev, 2011).

For the control experiment, we again conducted the Hardiness Test adapted by Leontiev and Ras-skazova (2006).

On the Involvement Scale the results showed that 13 students (68.3% of the respondents) have a high involvement level, 5 teenagers (26.34% of the subjects) have a medium level, and only 1 pupil (5.26% of the respondents) has a low level of involvement.

On the Control Scale the results showed that 6 schoolchildren (31.5% of the respondents) have a high level of control, 11 pupils (58% of the subjects) have a medium level of control, and 2 students (10.5% of the respondents) have a low control in stressful situations.

On the Risk Awareness Scale the results showed that 10 students in the class (52.6% of the respondents) have a high level, 6 schoolchildren (31.7% of the respondents) have a medium level of risk awareness. 3 pupils have a low level of risk awareness (15.7% of the respondents).

The results of the ascertaining and control experiments compared show that the overall level of hardiness among the students has increased. The number of pupils having a high level of hardiness increased from 8 (42.1% of the respondents) to 12 people (63.1% of the respondents). While the numbers of students with medium and low levels of hardiness decreased from 7 (36.8% of the subjects) to 6 people (31.5% of the respondents) and from 4 (21.1% of the respondents) to 1 pupil (5.26% of the respondents) respectively.

At the second stage of the control experiment, we again used the method of Child and Youth Resilience Measure (CYRM) by Laktionova and Makhnach (as cited in Laktionova, 2010). According to the results of the psychological assessment, we revealed that 11 students in the class (58% of the respondents) have a high level of resilience. 7 students have a medium level (36.8% of the respondents) and only one teenager showed a low level of resilience (5.26% of the respondents) after the training sessions.

If we compare the results of the ascertaining and control experiments, we can see that the number of teenagers with a high level of resilience increased from 6 (31.5% of the respondents) to 11 (58% of the respondents), the number of students having a medium level decreased from 9 (47.3% of the respondents) to 7 (36.8% of the respondents), and only 1 teenager has a low level of resilience (5.2% of the respondents), whereas at the beginning this number was 4 (21.1% of the respondents).

7. Conclusion

We used the Pearson Correlation formula to carry out statistical analyses in order to see the correlation between the results of the two methods: Child and Youth Resilience Measure (CYRM) by Laktionova and Makhnach (as cited in Laktionova, 2010) and Hardiness Test adapted by Leontiev and Rasskazova (2006).

The Pearson correlation coefficient for our study is 0.964, which proves the close correlation of the results of the two methods. Changing the results by one method, whether resilience or hardiness, causes changes in the results of another method.

After summarizing and comparing the results of our research and after the formative experiment, we can make the following conclusions:

- the number of students with a high level of hardiness increased to 12 students (63.1% of the respondents), and the number of students with medium and low levels of hardiness decreased to 6 students (31.5% of the respondents) and 1 student (5.26% of the respondents) respectively;
- the number of teenagers with a high level of resilience increased to 11 schoolchildren (58% of the respondents), and the number of students with a medium level of resilience decreased to 7 people (36.8% of the respondents), and only 1 teenager (5.2%) had a low level of resilience.

In conclusion it should be noted, that we revealed a positive correlation between the general level of hardiness and resilience in teenagers. The main objective of our research is the formation of resilience

as the means of prevention of addictions in teenagers. Thus, we have shown that hardiness increases the level of resilience of schoolchildren. The revealed correlation proves that it is necessary to include the development of hardiness in children into the program of psychological and pedagogical prevention of addictive behavior in the educational environment.

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