

DIAGNOSIS AS A TOOL FOR MONITORING THE EFFECTIVENESS OF ADDICTION PREVENTION IN ADOLESCENTS

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Abstract. The article presents the results of analytic-diagnostic work which was carried out on the basis of the educational institutions of Tyumen region with 250 respondents (aged 14 – 17 years old) in order to reveal the structural and content features of resistance as predictors of its development in order to improve the effectiveness of prevention work with addicted teenagers. We used Pearson's χ^2 criterion to evaluate significance of the differences between qualitative characteristics of the sample falling into one or another category (as revealed by testing) and theoretical number which could be expected in the studied groups of teenagers if the null hypothesis is true; we determined the most significant characteristics of resilient teenagers with high level of resilience.

Keywords: adolescent; resilience; resilience; structural components of resilience; dependent behavior

Introduction

The modern world is changing, putting in the first place the problems associated with the upbringing of a healthy, active, resistant to the difficulties of life and adversity of the younger generation. Practice shows that, despite the efforts made around the world to overcome the negative factors destabilizing the living and working conditions of the younger generation, the problems of child alcoholism, drug addiction, crime, etc., are still relevant.

In today's society, urban children are often exposed to higher levels of crime and violence, poverty, school dropout, incarceration, substance abuse, and many other factors associated with increased risk of social and/or emotional problems (Babbitt & Byrne; Jeffries; Schensul; Van Horn; Natosha Peterson Speight). Many of these factors interfere with the learning and educational process of urban adolescents

(Keye, Aileen 2013). Although many children face similar risk factors, some children manage to overcome stressors and show positive adaptation in adverse environments.

The hypothesis of the work is that the main resources of preventive activities for adolescents with low alcohol dependence (SUN) should include innate dynamic properties and personality characteristics of the child himself, in particular his resilience.

By resilience we mean an innate dynamic property of a personality expressed in the ability to overcome unfavorable life circumstances with the possibility to recover and develop using internal and external resources (Selivanova, Bystrova, Derecha, Mamontova, Panfilova 2020).

The aim of this research was to identify the structural and content features of resilience as predictors of its development in order to increase the effectiveness of prevention work with addicted adolescents.

Literature Review

Throughout the extensive literature on resilience, there is no unified understanding of the definition. Three general categories of definitions have been established in the concept of resistance: resistance as an outcome, as a process, and as a personality trait. Resilience as an outcome represents successful adaptation despite risk, chronic adversity, and stress. Resilience as a dynamic process of adaptation to risk involves interaction between risk factors and protective resources. Zeynep Karatas within the general category of personality traits defines resilience as a positive personality trait that allows people to recover from adversity, adapt, develop, and thrive in the face of adversity (Karatas 2011).

Researchers (Farkas, Orosz 2015) note that different components of resilience are responsible for different functions. Stability or resilience keeps a person's personality intact when faced with adversity; whereas the component related to flexibility allows a person to respond adaptively to change.

According to Johnson, Gooding, Wood, and Tarrier (2010), resilience is defined as an assessment of an individual's ability to (a) cope with emotions, (b) solve problems, and (c) receive social support.

Research findings (Powell, Arriola 2009) showed at the time that resilience in African American urban adolescents was primarily related to self-efficacy, resilience, and academic achievement.

Zolkoski and Bullock (2012) suggested that everyone is born with the ability to be resilient and identified five common attributes that resilient children possess: problem solving skills, social competence, critical awareness, autonomy, and sense of purpose. A sense of purpose, according to scientists, includes a belief in the future, having goals and educational aspirations.

Australian scientists have examined resilience as resistance to stressful situations and confirmed the hypothesis that those who are more resilient also cope better with

stress, noting that factors such as supportiveness, self-efficacy are indicators of the level of resilience (Marriner, Cacioli, Moore 2014).

It should be noted the fact that cultural values that contribute to the development of resilience of adolescents in one country do not always coincide with the values characteristic of another country.

David Fletcher and Mustafa Sarkar (2013) reviewed the definitions of resilience. Based on a theoretical study of the problem, the authors concluded that an educational initiative to increase resilience in the population is needed. The authors suggest the use of evidence-based assessment workshops and meta-reflective strategies as methods for developing resilience.

Researchers at the University of Birmingham T. Edwards, J.C. Catling, and E. Parry (2016) identified significant individual indicators of high levels of resilience among 16- to 20-year-old students and concluded that a lack of adversity in relationships with parents/guardians and internal locus contributes to high levels of resilience to life challenges.

Alexander Makhnach, in an international study, studied the resilience of Russian youth and concluded that there are four significant components to the resilience phenomenon: community, culture, relationships, and personality traits (Makhnach 2016).

Despite the great interest in the concept of resilience, the works we analyzed lack age-appropriate criteria for measuring its various components. If we want to better understand the essence of the concept of adolescent resilience, it is crucial to develop resilience criteria specifically focused on adolescence.

Materials and methods

Theoretical analysis of foreign and domestic approaches (S. Maddi, M. Rutter, E. Werner, E.D. Miller, G.A. Bonanno, G. Shiraldi, M. Anger, B.G. Ananyev, F.I. Valiyeva, E.B. Zabelina, K.A. Ivanova, E.K. Kuznetsova, A.I. Laktionova, D.A. Leontiev, A.V. Makhnach, A.A. Muravyova, O.N. Oleynikova, E.I. Rasskazova, E.A. Rylskaya, R.I. Stetsishin, I.A. Khomenko, and others) made it possible to define the most often encountered in the field of education.) allowed to determine the most frequent structural components of resilience: involvement; control; decision-making, positive self-esteem; developed social skills; adaptability; temperament; will; personal qualities, character (responsibility, self-esteem, humor, optimism, goodwill, mutual help, empathy); developed motivation to achieve success, etc.

In order to determine the degree of expression of these components in adolescents, diagnostic work on the basis of urban and rural schools in the south of the Tyumen region was carried out. The study involved 250 respondents aged 14 – 17 years old.

Structural analysis of the concept “resilience” allowed us to determine the main criteria and indicators of the phenomenon in question (Selivanova, Bystrova, Panfilova 2020) which we used to select appropriate diagnostic techniques (Table 1).

Table 1. Components of resistance and methods of their diagnosis

Diagnostic methods	Criterion	Indicator
1. The Resilience Test (Leontiev D.A., Rasskazova E.I.)	Involvement	Satisfaction with their own activities
	Risk-taking	Feeling of independent choice of activity
	Control	Knowledge drawn from life experiences (positive or negative); subsequent use of life experiences; willingness to act without guarantee of success
2. S.A. Budass's method of studying personality self-esteem	Positive self-esteem	A person's perceptions of the qualities of his or her ideal and the real qualities
3. Scales of social competence of a learner by A.M. Prikhozhan	Developed social skills	"Outperformance" and "underperformance" in social competence
4. K. Rogers and R. Diamond's socio-psychological adaptation diagnostic technique	Adaptability	"Outperformance" and "underperformance" in social competence Adaptability, acceptance of self and others, emotional comfort, internal or external control, dominance, withdrawal from problems
5. G. Eisenck Personality Questionnaire	Temperament	Strength, steadiness, and fluidity of nervous processes
6. Study of volitional self-regulation by A.V. Zver'kov and E.V. Eidman	Will	Persistence, self-control
7-12. Express Diagnostics of Responsibility (EDR) (V.P. Prydein) / M. Rosenberg Self esteem Questionnaire / Martin's Humor Styles Questionnaire / STONE-P "Style of explaining successes and failures" questionnaire (in the Russian-language adaptation by T.O. Gordeeva, E.N. Sycheva-Osin) /Diagnostics of benevolence (according to the Campbell scale) /Express-diagnostics of empathy (modification by I.M. Yusupov)	Personal qualities, character (responsibility, self-respect, humor, optimism, goodwill, mutual help, empathy)	Necessity and obligation to take responsibility for one's actions and deeds, confidence in one's worth, affirmative principle in relation to the right to live and be happy, comfort, sense of joy as an inalienable right, direction of humor, supportive or derogatory tone, ability to assess optimistically the causes of events, friendly attitude to others, empathic tendencies
13. Diagnostics of Motivation to Achieve Success technique (T. Ehlers)	Developed motivation to succeed	Strength of motivation to achieve success in activities, willingness to take risks

Let us analyze the results of the study.

Resilience test (Leontiev, Rasskazova 2006). According to the interpretation of this test, the diagnostic semantic components of resilience as a personal characteristic manifested in the ability to resist stress influences and the ability to keep the internal balance without negative psychophysiological consequences were Involvement, Control, Risk-taking.

Involvement is considered here as interest in what is happening, desire and then conviction of the need for personal development, self-improvement and the need to enjoy one's own worldview and activities. The low level of expression of this component, the absence of such conviction and need testify to the vital self-denial of the personality. Results of diagnostics: from 250 respondents low level of its expression have 32 %, average level – 48 %, high – 20 % of tested teenagers.

Control as a personal characteristic reveals itself in the feeling and subsequent development of the conviction of domination of one's inner energy over what is going on. Weakly developed control is indicative of the personality's own helplessness. Diagnostic results: the predominant level of expression is the average level, revealed in 64% of respondents; 28% of adolescents had a high level; the low level was observed in 8% of the subjects.

Acceptance of risk. Insufficient expression of this component indicates the unpreparedness of the person to act in conditions of uncertainty, in the absence of reliable guarantees of success, the inability to make responsible decisions in feelings of fear and risk. The results of diagnostics: the low level of its expression was noted in 12 %, an average level – in 52 %, high – in 36 % of the interrogated.

Analyzing the triad of diagnosed components, we can conclude that there is an average level of resilience in most modern adolescents. In this construction the “lagging” component requiring further development was Involvement.

S.A. Budassi's method of studying personality self-esteem. The proposed questionnaire focuses on self-assessment of qualities necessary for communication with other people; character traits that are directly related to behavior; qualities related to activities and subjective experiences. Diagnostic results: out of 250 respondents, 56% adequately assessed their abilities and capabilities and 44% overestimated them; no teenagers were found to be insecure, timid, or humble, and they assessed their capabilities below the real ones.

A.M. Prikhozhan (2007) scales of social competence of the learner. This questionnaire revealed not only the general social competence of adolescents in accordance with age, but also competence in specific areas. In its structure contains the following scales: Independence; Self-confidence; Attitude towards one's responsibilities; Development of communication; Organization, development of voluntariness; Interest in social life, availability of hobbies, mastery of modern technologies. Diagnostic results: social competence in most adolescents (66.8%) in general corresponds to their age. In rare cases (14%), there is an unfavorable

developmental trend expressed in excessively rapid maturation, and some (19.2%) adolescents, on the contrary, lag in the development of social competence. The components requiring further development in the structure of social competence for the resolution of arising conflicts of values were Attitude to one's duties; Organization, development of voluntariness; Interest in social life.

Diagnostic technique of socio-psychological adaptation (Rogers, Diamond). It allows to correlate the statements about a person, formulated in the third person (in order to neutralize the examinees' attitude towards socially approved answers) with one's own way of life. High level of adaptation manifestation is characterized by high level of expression of such indicators as: self-acceptance, acceptance of others, emotional comfort, internalism, desire for dominance, ability to solve problems independently without turning away from them. Disadaptation, on the contrary, assumes a low level of self-acceptance, a low level of acceptance of others, emotional discomfort, a low level of internalism, dependence, and the inability to solve problems that arise on the path of life.

Diagnostic results: 56% had a high level of adaptability; moderately pronounced manifestations of maladaptiveness were identified in 44% of adolescents.

G. Eysenk Personality Questionnaire. Allows revealing the peculiarities of human behavior in different conditions and circumstances. To interpret the answers used three grounds - scales: Extraversion, Introversion, Neuroticism, by which you can deduce the classic types of temperament: choleric, sanguine, phlegmatic, melancholic.

Diagnostic results: from 250 respondents, 16% have a choleric type of temperament, 22% – sanguine type, 40% – phlegmatic type, 22% – melancholic type.

In general, if we talk about the type of temperament as a fairly stable characteristic of the individual, the predominant, according to the results of diagnosis, was found to be phlegmatic type, as a highly active type of nervous system, allowing teenagers quite calmly and patiently cope with difficulties in various situations of tension.

Study of volitional self-regulation by A.V. Zverkov and E.V. Eidman.

According to the authors of the test, the indicators of volitional self-regulation are Persistence and Self-control.

Low values of expression of Persistence may be a characteristic of inactive, insecure, inconsistent people, but inclined, therefore, to creativity, scattered actions.

Self-mastery, as an indicator of the emotional stability of the individual, reflects the strength of expression of voluntary control over psychophysiological and physical manifestations. Extreme manifestations of the indicator in question: hypersensitivity, anxiety, fatigue, nervousness. Diagnostic results: out of 250 respondents, a high level of volitional self-regulation has 52% of adolescents, an average level – 32%, low – 16%. The data obtained indicate a pronounced level of self-control in almost half of the respondents.

Express Diagnostic of Responsibility (EDR) (Prydein 2019) / “Self-esteem Questionnaire” by M. Rosenberg / Martin Humor Styles Questionnaire / STOUN-P (Russian adaptation by T.O. Gordeeva, E.N. Sycheva – Osin) / Benevolence Diagnostic (Campbell scale) / Express Empathy Diagnostic (modification by I.M. Yusupov).

The selected set of the above-mentioned techniques made it possible to study such personal qualities as: Responsibility, Self-Esteem, Humor, Optimism, Benevolence, Mutual Aid, Empathy in the respondents. It is the level of manifestation of these qualities, in our opinion, that deserves attention when studying the structure of resilience. Let's answer why.

The results of the responsibility diagnostics: 38.8% of the adolescents had expressed responsibility, 59.2% had situational responsibility; only 2% of the adolescents were found to be irresponsible.

Self-respect test results: out of 250 teenagers surveyed, 22% have very high self-esteem, 42% have fairly high self-esteem, 20% have self-esteem combined with excessive self-criticism, and a very low score is typical for 16% of teens tested.

Humor. Rod Martin's identification of different styles of humor (affirmative, self-supportive, aggressive, and self-deprecating) reveals two main criteria: self/other orientation and supportive/deprecating.

Diagnostic results: Affiliative humor style is characteristic of 44.4% of adolescents, Self-supportive – 14.8%, Aggressive – 34%, Self-deprecating style – 6.8%.

Optimism. Diagnostic results: out of 250 teenagers tested 46% have a positive attitude towards life phenomena, 26% – pessimistic and depressive tendencies, 28% – belong to the “middle-aged”, whose healthy optimism is combined with moderate pessimism, which most reflects the realities of life.

Benevolence. The results of the diagnostics: of the 250 respondents 50% of them had a high index of friendliness towards others, 46% had an average index, and 4% had a low one.

Empathy. Diagnostic results: the majority of respondents, and that is 70.4%, have an average level (normal), which indicates a sufficiently good control of their own emotional manifestations, but poorly developed ability to predict the behavior of other people and the development of interpersonal relationships between them. The remaining teenagers – 29.6% – have a low level of empathy development, which affects the character of relations with other people, whom they value not for responsiveness and sensitivity, but for their clear mind and business qualities.

The most important factor in achieving success, according to the methodology, is Developed motivation. As a rule, an inversely proportional correlation is observed here: the higher the level of motivation for success, the lower the level of risk. At the same time, motivation for success also forms the hope for success, and the stronger

the motivation, the less expressed the hope. Conversely, the weaker the motivation to succeed, the stronger the hope. Diagnostic results: 36% of adolescents have too high a level of motivation to succeed, 28% have a moderately high level, 32% have an average level, and 4% have a low level of motivation to succeed.

To quantify the results we used Pearson's χ^2 criterion, a non-parametric method which allowed us to evaluate the significance of differences between qualitative characteristics of the sample falling into one or another category (revealed by testing) and the theoretical number that could be expected in the studied groups of adolescents if the null hypothesis is true. The results were reported in Table 2.

Table 2. Significant characteristics of a resistant teenager

Characteristics of an adolescent's personality	Pearson's χ^2 value	Statistical significance/insignificance of the parameter
Style of explaining successes and failures	9,11	Significant
Teen's self-esteem	43,05	Significant
Sense of humor	14,36	Significant
Kindness	7,51	Not significant
Empathy	11,18	Significant
Teenage self-esteem	7,77	Not important
Motivation for success	15,66	Significant
Temperament	74,69	Significant

The table shows that the characteristic of a modern teenager includes: style of explanation of successes and failures, self-esteem, sense of humor, empathy, motivation to success and temperament. Targeted developmental influence on each meaningful, meaning-forming component of resilience will allow juveniles to activate their personal potential for overcoming stressful, and sometimes even extreme, life-critical situations.

Research results and discussion

Theoretical analysis of the works of foreign and domestic scientists, allowed us to argue that as components of the phenomenon of resilience can act as gender, health, temperament, self-control, empathy, optimism, sense of humor, self-esteem, etc. Summarizing the available points of view, having carried out a structural analysis of the very concept of "resilience", we came to the conclusion that the most frequently mentioned components are: involvement; control; decision-making, positive self-esteem; developed social skills; adaptability; temperament; will; personal qualities, character (responsibility, self-esteem, humor, optimism, goodwill, mutual help, empathy); developed motivation to succeed. Our study on the basis of schools

in the south of the Tyumen region, allowed us to identify significant structural components, proving them using the methods of mathematical statistics (Pearson's chi-criterion). Paradoxically, benevolence and self-esteem were not significant among modern Russian teenagers, which, incidentally, in most respondents is adequate or overestimated. The components requiring further development were: attitudes toward their duties, organization, development of voluntariness, interest in social life, involvement, and responsibility. For 36% of respondents too high level of motivation to achieve success is observed.

Conclusion

The conducted analytical and diagnostic work allowed to identify the most significant characteristics of the personality of modern teenagers, which are a kind of predictors of resistance development and serve as a general guide in the prevention of addictive behavior of minors, development of a cardinaly new model built on the development of an innate dynamic property of personality, expressed in the ability to overcome adverse life circumstances with the ability to recover and develop, using internal and external.

Acknowledgements

We thank the Russian Foundation for Basic Research (RFBR) for the opportunity to conduct this study as part of the project “Preventive Potential of Resistance Development in Adolescents with Low-Alcohol Dependence”, under the supervision of Dr. O.A. Selivanova (project № 20-013-00605).

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