

INFLUENCE OF TEMPERAMENT ON THE FORMATION OF ADDICTIVE BEHAVIOUR OF STUDENTS



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UDK 159.923.4:159.97-057.87

Abstract. The authors of the article have considered the concept of temperament and addictive behaviour of an individual. The results of the empirical study of the influence of temperament on the formation of addictive behaviour of students are presented. The research results are analysed based on the methods of defining the type of temperament, Internet addiction, interpersonal dependence, alcohol, narcotic addiction and addictive identity in general. To establish correlation relations between the indicators of the methods and the defining of the influence of temperament on the formation of various forms of addictions, mathematical and statistical analysis of the data has been carried out.

Keywords: *addictive behaviour, addiction, bad habit, alcoholism, drug addiction, internet addiction, temperament, individual-typological peculiarities, student period.*

Introduction

Addictive behaviour is one of the most common types of deviant behaviour of an individual. Displays of addictive behaviour become increasingly observed in the younger generation. Many young people, experiencing the impact of instability of economic, social and political conditions, are not able to cope with this pressure. Escape from reality, changing the mental state by using different substances, fixing attention to certain activities, are the consequences of such influence. Addictive behaviour in this case becomes for an individual a way of adapting to the surrounding reality. New forms of addictions begin to emerge and spread together with the society development.

Preconditions for the emergence of addictive behaviour vary depending on the individual characteristics of an individual, lifestyle, environment, etc. Finding out the most common factors in the formation of addictions is among the most important tasks of modern studies of the problem of addiction.

Temperament is one of the most significant features of personality. In turn, it can determine the mental differences between people. Different features of temperament (sensitivity, reactivity, pace of reactions, emotionality, etc.) determine the way of human life and relationship with the environment. The influence of temperament on the appearing of personality addictive behaviour is not completely defined, which makes the research of this issue relevant.

The problem of temperament study has become the subject of research of numerous scientists. Scholars A. Basset and R. Plomin, developers of one of the most popular in modern American psychology concept of temperament, have made an important contribution to the study of this problem. N. Leites and V. Chudnovsky have researched the age peculiarities of displays of temperament properties [3].

The following scientists have made the significant contribution to the study of addictions: T. Korolenko (the author of one of the first, in the domestic studies, classification of non-chemical addictions); V. Mendeleovich (whose recent publications are devoted to research in the field of narcology); A. Tomas and S. Ches (whose research is devoted to the problem of studying the temperament and the formation of addictive behaviour); V. Belov (who studies addictions, including the main issues of the theory and practice of prevention of addictive behaviour) [8]; O. Simatova (who studies the issue of prevention of addictive behaviour of an individual) [10].

Addictive forms of behavioural deviations are quite common types of deviations. Various forms of addictive behaviour are often called harmful or disruptive habits. Conditionally, one can distinguish between normal and excessive dependence. Normal dependence is a dependence on vitally important objects. The tendency to excessive dependence generates problematic symbiotic relationships or addictive behaviour [1, p.58].

Along with the dependence, the main thing in the behaviour of addictive personality is the desire to withdraw from reality, the fear of everyday life, filled with life obligations and regulations, the inclination to search of limitless emotional experiences, even at the cost of serious risk and the inability to be responsible for anything.

Leaving the reality occurs when addictive behaviour takes the form of «escape», when, instead of harmonious interaction with all aspects of reality activation in one direction takes place [9, p.36].

Often, different forms of addictive behaviour are combined or transmitted from one form to another [6, p.42].

The student age (17-23 years old) is characterised by the most favourable conditions for psychological, biological and social development [2]. Of great interest is the issue of determining the main factors that can lead to the emergence of addictive behaviour in the student's age.

The tendency to the addictive behaviour can be determined by typological peculiarities of the nervous system. A. Tomas and C. Chess have identified nine basic parameters of temperament, such as: adaptability (to new situations), quality of mood, sensitivity, and contactness. Some of the innate qualities, under other unfavourable conditions, contribute to the formation of addictive behaviour. Often, deviant forms of behaviour are mediated by the power and expressiveness of temporal qualities [4].

Temperament is one of the most significant qualities of an individual. It determines the existence of many mental differences between humans, including intensity and stability of emotions, emotional vulnerability, pace and vigour of action, as well as a range of other dynamic characteristics [5, p.553].

The **aim of the paper** is to empirically research the psychological features of the influence of temperament on the formation of addictive behaviour of students.

Research Methods

Research organisation. The research has been conducted at Uzhhorod National University, Faculty of Social Sciences.

Participants. 73 students of psychology specialty, 17-21 years old.

Techniques. To study the influence of temperament on the formation of addictive behaviour in students, the following psychodiagnostic techniques have been used:

1. structure of temperament questionnaire after V.Rusalov;
2. method on determining the type of temperament after H.Eysenck;
3. method of tendency towards addictive behaviour after V.Mendelevich;
4. method of defining the interpersonal dependency after R. Bornstein (adapted by O. Makushin);
5. Internet addiction test after K. Young (adapted by V. Burova);
6. method of diagnosing the addictive identity.

The research has been conducted in three stages.

Research Results and their Discussion

(I) The first stage of research.

1. Having applied the structure of temperament questionnaire after V.Rusalov, the following results have been obtained (see Figure 1):

(i) at the high level the participants demonstrate:

- social ergicity – 44%, which is displayed in the need for social contacts, in the perception of the world through communication;
- social pace – 44%, which is displayed in the rapid verbalisation of own thoughts in the process of communication;
- emotionality – 51%, which is displayed in the sensitivity to work performed by an individual.

(ii) at the low level the participants demonstrate:

- ergicity – 42%, which is displayed in the need to master the subject world, in the pursuit of intense activity;
- social plasticity – 47%, which is displayed in the degree of ease of switching from one person to another in the process of communication.

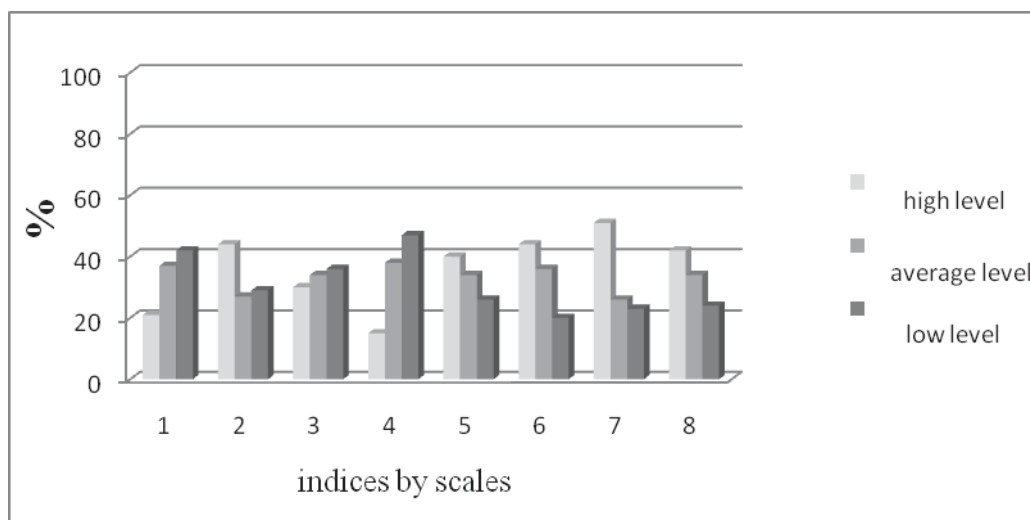


Figure 1. Average indices of the groups studied by the method of structure of temperament questionnaire after V.Rusalov

Note: 1 – ergicity; 2 – social ergicity; 3 – plasticity; 4 – social plasticity; 5 – pace; 6 – social pace; 7 – emotionality; 8 – social emotionality.

2. Having applied the method on determining the type of temperament after H.Eysenck, the following results have been obtained (see Figure 2): sanguine – 19%; choleric – 38%; phlegmatic – 11%; melancholic – 32%.

Thus, we see that individuals with choleric and melancholic type of temperament predominate in this sample, and phlegmatic type of temperament is the least observed.

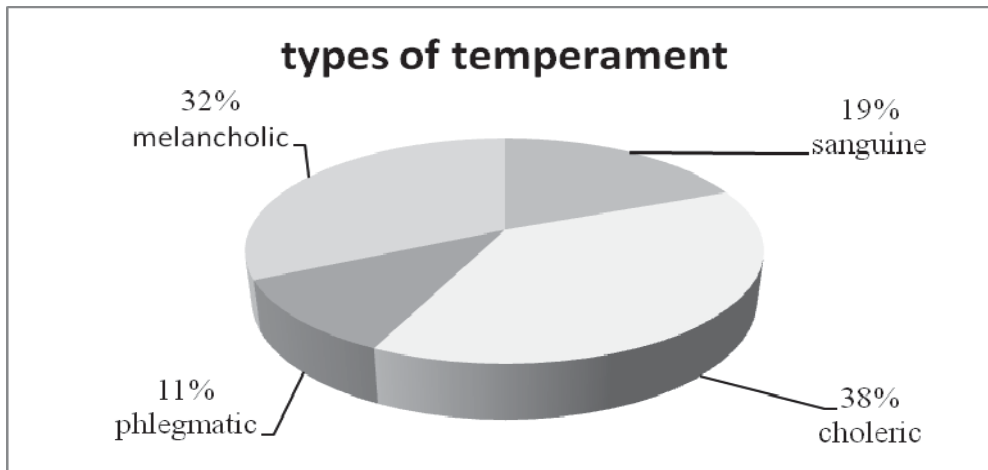


Figure 2. Average indices of the groups studied by the method of determining the type of temperament after H.Eysenck

3. Having applied the method of tendency towards addictive behaviour after V.Mendelevich, the following results have been obtained:

– according to indicators of drug addiction, the lowest rates have been obtained with the third year students – 85%, with the sign of tendency – 15%, with the sign of high probability – 0%. This can be explained with the fact that the third year students face the beginning of specialisation, the strengthening of interest in the scientific work as evidence of the further development and deepening of professional interests [7]. The highest rates with the high probability have been obtained with the first year students – 19%. This can be explained with adaptation of students to the university education environment. The behaviour of most freshmen is marked by the high degree of conformism; there is no differentiated approach to their social roles [7].

– according to the indicators of alcohol addiction, the lowest rates have been obtained with the third year students – 62%, with the sign of tendency – 15%, with the sign of increased predisposition – 23%, with the sign of high probability – 0%. High rates have been obtained with the first year students (the sign of high probability – 33%, which can be explained by adaptation) and the second year students (the sign of high probability – 21%, which can be explained with the fact that this is the period of the most intense academic activity of students. Life of second-year students is associated with the intensive inclusion into all forms of education and up-bringing organisation) [7].

On the scale of «tendency to drug addiction» in this sample the following results have been observed: norm – 61%; the sign of tendency – 26%; the sign of increased inclination – 8%; the sign of high probability – 5%. On the scale of «tendency to alcohol addiction» in this sample the following results have been observed: norm – 45%; the sign of tendency – 15%; the sign of increased inclination – 23%; the sign of high probability – 17% (see Figure 3).

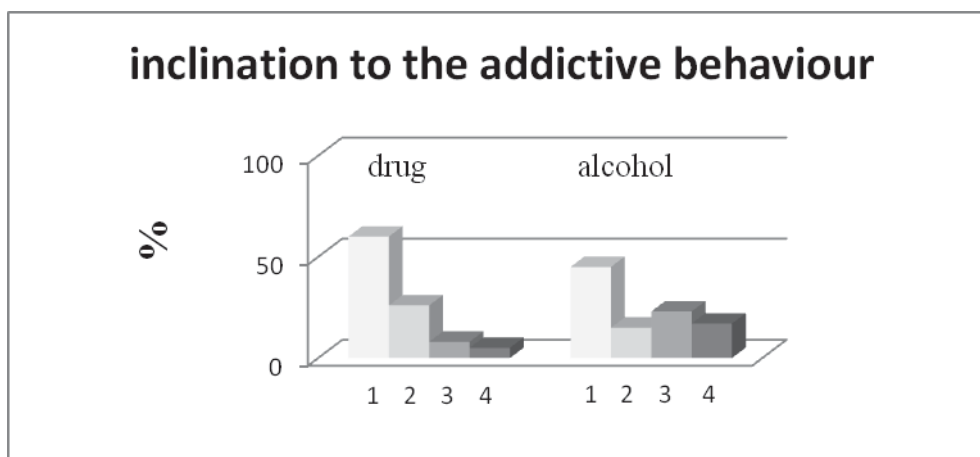


Figure 3. Average indices of the groups studied by the method of tendency towards addictive behaviour after V.Mendelevich

Note: 1 – norm; 2 – the sign of tendency; 3 – increased inclination; 4 – high probability.

4. Having applied the method of defining the interpersonal dependency after R. Bornstein (adapted by O. Makushin), the following results have been obtained:

- on the scale of destructive dependence, which is based on a strong need for emotional closeness, on a rigorous desire to get support, in this sample the average level prevails – 62%;

- on the scale of destructive separation in this sample the average level prevails – 60%. Indicators on the given scale are displayed in the inability of an individual to develop social relationships, to establish close relationships;

- on the scale of healthy dependence, which is displayed in the flexibility of communication, in the ability to establish long-term emotional relationships, in this sample the average level prevails – 53%.

It means, that in this sample in general the average rates prevail, that are not within the scope of deviations (see Figure 4).

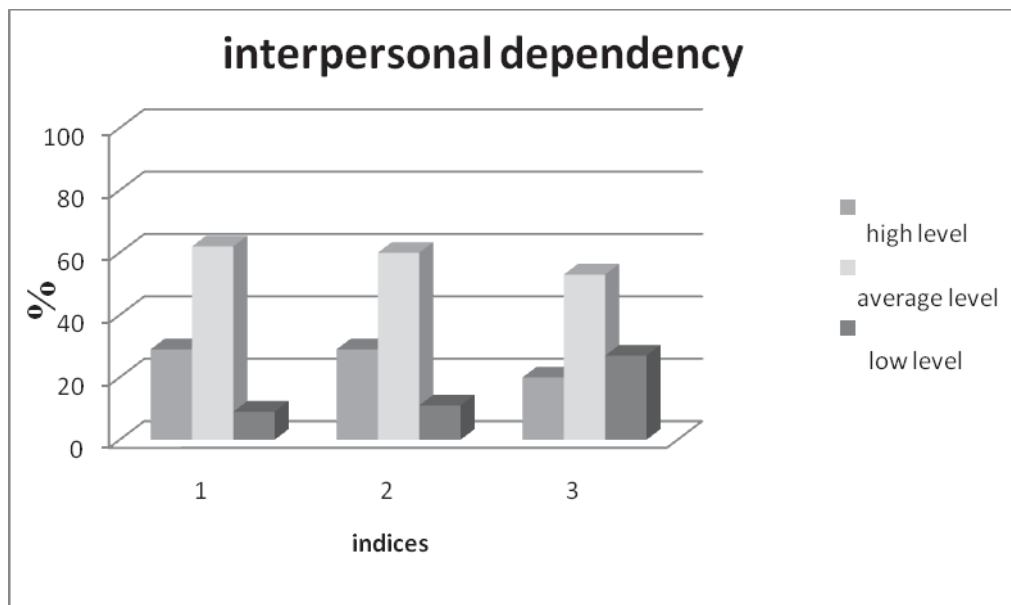


Figure 4. Average indices of the groups studied by the method of interpersonal dependency after R. Bornstein (adapted by O. Makushin)

Note: 1 – destructive dependence; 2 – destructive separation; 3 – healthy dependence.

5. Having applied the method of Internet addiction test after K. Young (adapted by V. Burova), the following results have been obtained:

- the highest rates by the level of Internet addiction have been found among the first year students (high level – 5%, average level – 33%, low level – 62%);

- the lowest rates have been found among the third year students (high level – 0%, average level – 8%, low level – 92%).

It means that the first year students are more likely to become Internet addicted than students from other years of study. In general, in this sample high level has been defined in – 1%; average level – 21%, low level – 78%. Thus, in this sample, low rates prevail, characterising the average Internet user (see Figure 5).

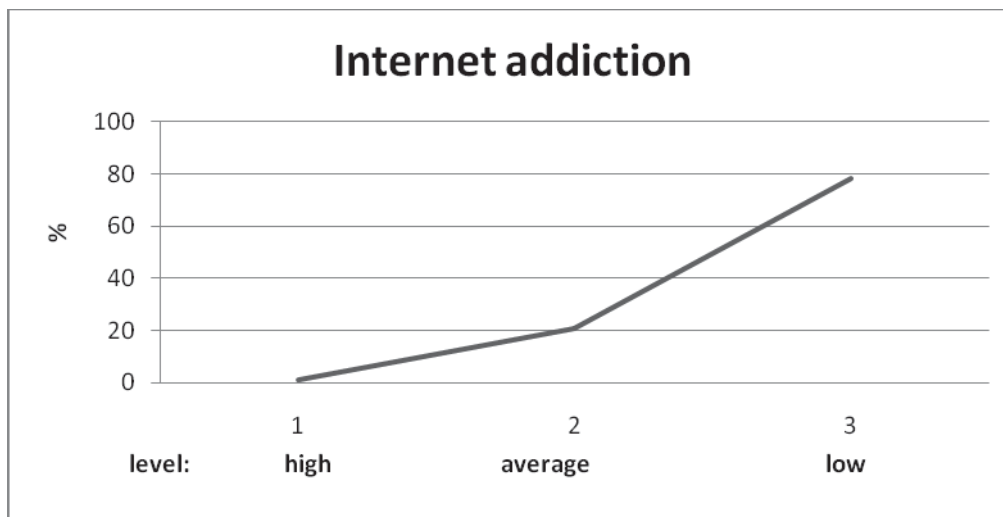


Figure 5. Average indices of the groups studied by the method of Internet addiction test after K. Young (adapted by V. Burova)

6. Having applied the method of diagnosing the addictive identity (referred to as the socio-psychological phenomenon, which is accompanied by the escape from reality with the help of chemical and non-chemical addictive agent), the following results have been obtained:

- the highest rates have been found among the first year students (high level – 19%, average level – 81%, low level – 0%);
- the lowest rates have been found among the third year students (high level – 0%; average level – 100%; low level – 0%.)

It means that students in the first year are more inclined to escape from reality through the use of certain substances, or to fix attention to various activities, which as a result can lead to the formation of addictive behaviour. In general, in this sample, high level has been defined in – 14%; average level – 86%; low level – 0% (see Figure 6).

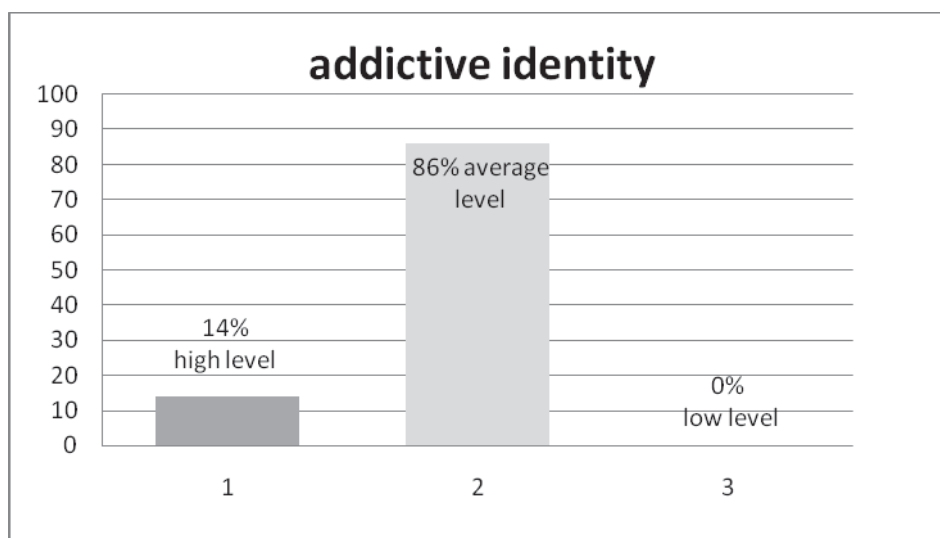


Figure 6. Average indices of the groups studied by the method of diagnosing the addictive identity

(II) The second stage of research.

At this stage the correlation between the indicators of temperament and the types of addictive behaviour has been established. The Pearson correlation coefficient has been used to calculate the correlation. The results of data processing are as following:

– negative correlation between the scale «plasticity» (structure of temperament questionnaire after V.Rusalov) and destructive dependence ($r = - 0.396^{**}$; $p < 0.01$). The easier it is for an individual to switch from one type of activity to another, to switch from one form of thinking to another in the process of

interaction with the subject world, to the lesser extent the destructive dependence (rigorous aspiration to get support, pronounced need for emotional closeness) is displayed;

- negative correlation between the scale «plasticity» (structure of temperament questionnaire after V.Rusalov) and addictive identity ($r = -0.434^{**}$; $p < 0.01$). The more an individual displays the ability to switch from one activity to another, the ability to move faster from one form of thinking to another in the process of interaction with the substantive world, to the lesser extent the addictive identity (expressed in the tendency to escape from reality for with the help of chemical and non-chemical addictive agent) is displayed;

- negative correlation between the scale «emotionality» (structure of temperament questionnaire after V.Rusalov) and healthy dependence ($r = -0.520^{**}$; $p < 0.01$). The greater extent of sensitivity an individual displays to the results of his/her work, planning of work, to the lesser extent the healthy dependence is displayed, flexibility of communication, the ability to establish emotional relationships with others;

- positive correlation between the scale of «emotionality» (structure of temperament questionnaire after V.Rusalov) and addictive identity ($r = 0.492^{**}$; $p < 0.01$). The greater sensitivity an individual displays in the process of interaction with the objective world, the more chances are there to develop addictive identity, the tendency to deviate from reality, artificially changing own state with the help of certain substances or actions;

- positive correlation between temperament «extraversion-introversion» (method on determining the type of temperament after H.Eysenck) and healthy dependence ($r = 0.487^{**}$; $p < 0.01$). The greater is the need of an individual to be involved in social contacts, communication and social orientation on society, the more chances are there to form healthy dependence, the ability to easily establish constructive emotional contacts with others;

- negative correlation between the indicator of temperament «extraversion-introversion» (method on determining the type of temperament after H.Eysenck) and addictive identity ($r = -0.280^{*}$; $p < 0.05$). The more communicative and socially oriented an individual is in the process of communication,

the less chances are there for the displays of addictive identity expressed in the tendency to escape from reality with the help of chemical and non-chemical substances or addictive actions.

- positive correlation between the indicator of temperament «neuroticism» (method on determining the type of temperament after H.Eysenck) and drug, alcohol addiction ($r = 0.482^{**}$, $p < 0.01$, $r = 0.632^{**}$, $p < 0.01$). The more emotionally unstable, labile an individual is, the more likely the tendency to form drug and alcohol addiction develops.

- positive correlation between the indicator of temperament «neuroticism» (method on determining the type of temperament after H.Eysenck) and internet addiction ($r = 0.684^{**}$; $p < 0.05$). The more emotionally unstable, labile an individual is, the more likely the tendency to form the Internet addiction develops.

(III) The third stage of research.

At this stage of empirical study the influence of temperament on the formation of different types of addictive behaviour among students has been determined. To calculate the correlation the Kruskal-Wallis H-criterion has been used. The results of data processing are as following:

- between the type of temperament and Internet addiction, we have got an indicator at the significance level $P > 0.05$. It indicates that the type of temperament does not affect the formation of Internet addictive behaviour;

- between the type of temperament and drug, alcohol addiction, we have got an indicator at the significance level $P < 0.05$. It indicates that the type of temperament affects the inclination to form drug and alcohol addiction. Thus, it has been found that students with choleric and melancholic temperament type are more likely to be addicted to drugs and alcohol than students with phlegmatic and sanguine temperament types.

- between the type of temperament and destructive dependence, we have got an indicator at the significance level $P < 0.05$. It indicates that the type of temperament affects the inclination to form a destructive dependence. Thus, it has been found that students with choleric and melancholic type of temperament are more likely to form a destructive dependence (characterised by the excessive need for emotional closeness) than

students with phlegmatic and sanguine temperament types;

– between the type of temperament and healthy dependence, we have got an indicator at the significance level $P < 0.05$. It indicates that the type of temperament affects the inclination to form a healthy addiction. Thus, it has been found that students with sanguine and phlegmatic type of temperament are more likely to develop a healthy dependence (displayed in flexibility in the communication process, in the ability to establish constructive emotional contacts with others) than students with choleric and melancholic type of temperament;

– between the type of temperament and addictive identity, we have got an indicator at the significance level $P < 0.05$. It means that the type of temperament affects the inclination to form a destructive dependence. Thus, it has been found that students with choleric and melancholic type of temperament are more likely to be inclined to form an addictive identity (which is the sign of a tendency to escape from reality by artificially changing own condition by means of certain substances or actions) than students with phlegmatic and sanguine type of temperament.

Conclusions

The conducted analysis of the data obtained from the empirical research of addictive behaviour and the peculiarities of temperament in students shows that according to the indicators of the structure of temperament, the highest figures in this sample are obtained on the scale of social ergicity, social pace, emotionality, displayed in the need for social contacts, for grasping the world through communication, in the sensitivity to the work performed by an individual. The lowest rates are obtained on the scale of ergicity and social plasticity, which is displayed in the need to grasp the objective world, in the desire for intense activity, in the degree of easy switching from one person to another in the process of communication. It has been established that in this sample individuals with choleric and melancholic type of temperament predominate, the less individuals have been defined having phlegmatic temperament.

As a result of the study of the features of addictive behaviour, we have found the first year students demonstrate the highest rates of inclination to form different forms of addictions. The lowest rates have been observed among the third year students.

It has been found out that the emergence of addictive behaviour can be associated with individual-typological peculiarities of an individual. In particular, the presence of many mental differences can be determined by temperament.

As a result of this study, it has been found out that the type of temperament can influence the formation of addictive behaviour in students. The tendency to alcohol, drug addiction, interpersonal dependence and the formation of addictive identity in general can be determined by such types of temperament as choleric and melancholic.

The problem of influence of temperament on the formation of addictive behaviour is not fully studied in this article. The issues of deepening of theoretical and empirical data on this issue, namely, the study of the factors of the emergence of addictive behaviour are the prospective areas for the further research.

The current issue is the development of a corrective programme aimed at developing of skills to overcome the addictive behaviour of students. The ability to withstand all kinds of addictions requires harmonious development of an individual in different spheres of activity. One of possible ways to overcome addictions is to build skills to interact with all aspects of reality. Correctional programme is designed to establish special conditions, by setting tasks, that require the ability to look at the situation from a different point of view, to promote the development of skills for self-control, communication, responsibility, to raise self-esteem of an individual.

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