

Psychological Factors of Adolescents Disposition towards Addictive Behavior

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Abstract

The problem of loneliness and addictive behavior is one of the most important in modern developmental and pedagogical psychology. In studies of the problem of addictive behavior quite often the attention of scientists focuses on the existing addiction and not enough attention is paid to the prerequisites for addictive behavior development. The influence of parent-child relationships and subjective feelings of loneliness on the formation of addictive behavior in early adolescence are analyzed. The subjective feelings of loneliness of younger adolescents, destructive relationships with parents are ones of the conditions for the emergence of a predisposition to addictive behavior.

Keywords: *adolescent, loneliness, family, relationships, addictive behavior, younger adolescence.*

I. Introduction

The relevance of the study

In recent years, the relevance of the study of the causes of various types of addictive behavior increases. Behavioral addictions have similar effects to psychoactive addictions on relationships, which are often neglected in favor of the addictive behavior, undermining trust and putting pressure on partners and other family members to cover up and make up for difficulties arising from the addiction (Hartney, 2019). Therefore, it is very important to research and develop effective strategies to prevent the formation of addictive behavior in early adolescence.

The scientific problem is that in modern research there is no clear concept of compensatory mechanisms by which it is possible to prevent the occurrence of addictive behavior.

The aim of the study

The aim of our study is to identify the causes of addictive behavior in early adolescence, when addictive behavior itself is not yet formed, to find ways to prevent its occurrence. The main objective of the article is to analyze and substantiate the essence of addictive behavior as a consequence of feelings of loneliness of younger adolescents and destructive relationships with parents.

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Object of the study

In our study we studied the influence of subjective feelings of loneliness and the quality of parent-child relationships on the formation of addictive behavior of younger adolescents.

II. Literature review

Shaef

As indicated by Shaef, people can become addicted to any substance or activity. In her opinion, addictive behavior regardless of the type of addiction is mainly manifested in the same way and leads to the same consequences, which means that there are general mechanisms for the formation and development of addictive behavior (Larson & Richards, 1991; Schaef, 1988).

Vanhalst & Rankin

The absence of close trust relations with parents and loneliness according to Vanhalst & Rankin and others are closely associated with socio-emotional maladjustment in adolescence. Therefore, adolescence is considered a critical period for the study of loneliness and dependent behavior and the study of how both phenomena are related to each other. There is a certain lack of empirical research concerning these two phenomena in the younger adolescence (Rankin & Kem, 1994; Vanhalst, Klimstra & Luyckx, 2012).

Bonetti & Goswick

A special factor in the emergence of a sense of loneliness in adolescents, as it is emphasized by Bonetti & Goswick (Bonetti, Campbell & Gilmore, 2010; Goswick & Joaves, 1982) is a father's indifference, manifested in the neglect, abandonment, deprivation, obscurity of teenagers.

Bowlby, Anderson, French & Horowitz

According to the theory of Bowlby, the lack of parental warmth deprives the teenager of the necessary confidence and a sense of security, promotes the emergence of a sense of anxiety that can persist throughout life (Kulakov, 1998). Under such conditions, according to the data of Anderson, French & Horowitz, the teenagers often grow up weak and insecure, along with the formation of style and way of behavior, which limits the number of social contacts, makes them inadequate and provokes the feeling of loneliness (Anderson, Horowitz & French, 1983).

Young & Liu

Young & Liu emphasize that addictive behavior is a reaction to poor adaptation in the real world. Most addicts experience anxiety and inconvenience because of poorly developed social and communication skills, which, in turn, were formed by the quality of relationships with parents (Liu & Kuo, 2007; Young, 1998).

Hanewinkel, Maller, Morgenshtern & Shek

The works of Hanewinkel, Maller, Morgenshtern & Shek, convincingly testify to the importance of parent-child relationships in the formation of both the feeling of loneliness and a proneness to addictive behavior (Shek & Yu, 2012; Walther, Morgenstern & Hanewinkel, 2012).

Shi, Wong & Zou

Shi, Wong & Zou in their research indicate the role of the family in the development of children. They consider the family as a dynamic ecosystem that is much larger than what is commonly thought of as a family. The effective functioning of this system minimizes the possibility of formation of addictive behavior of adolescents (Shi, Wang & Zou, 2017).

Lindström, Rosval, Vigna-Taglianti, Fumero, Lai & Lei

The influence of the quality of relations with parents on the development of dependent behavior in their works is denoted by Lindström, Rosval, Vigna-Taglianti, Fumero & Lei. Scientists emphasize that adolescents with much social support have a lower level of Internet addiction. Emotional deregulation is, according to Mo, a potential risk factor for the addiction development, and social support is a potential protective factor from the formation of dependent behavior (Vigna-Taglianti, Brambila, Priotto, Angelino, Cuomo & Diecidue, 2017; Fumero, Marrero, Voltes & Peñate, 2018; Lei, Li, Chiu & Lu, 2018; Lindström & Rosvall, 2018; Mo, Chan, Chan, Lau, 2018).

The importance of social support not only in the parent family, but also in the circle of peers, as a possible prevention of the development of addictive behavior, is proved by the results of the study of Lai & Kwan. They determine that having a close emotional relationship with peers can act as a prevention of addiction (Lai & Kwan, 2017).

Kim, Cho & Han

The positive correlation between commitment, loneliness, depression and drug addiction is evidenced by studies of Kim, Cho & Han. The results of their study showed that loneliness consistently mediated between the destructive relations and proneness to addiction (Kim, Cho & Kim, 2017; Han, Geng, Jou, Gao & Yang, 2017).

Simcharoen

Along with screening for potential dependence Simcharoen recommends to pay attention to identifying those who are experiencing loneliness and interpersonal problems, because both are strong predictors of addictive behavior (Simcharoen, Pinyopornpanish, Haoprom, Kuntawong, Wongpakaran & Wongpakaran, 2018)

MacKay

The indirect influence of the feeling of loneliness on the formation of alcohol dependence is indicated in the works of MacKay. The feeling of loneliness predicted possible alcohol dependence (McKay, Konowalczyk, Andretta & Cole, 2017).

Yen & Ary

Thus, according to Yen & Ary and others, the conflicts between parents and teenagers, addictive behavior of parents, low level of parents participation in life of teenagers, feeling of loneliness are the prognostic criterion of addictive behavior occurrence (Ary, Duncan & Biglan, 1999; Yen & Chen, 2007). The family system can influence the reduction of the risk of addictive behavior in adolescence. However, the family influence on the behavior of adolescents can be relatively weak in the late teenage years through the rise of personal autonomy in adolescents.

III. Materials and methods

The methods

The methods were selected basing on the criterion of desirability of a teenager inclusion into the social context. Diagnostic methods for the subjective feelings of loneliness of Russel and Ferguson (Mendelevich, 2002), the technique of general predisposition to addiction of Lozovaya (2007) are selected as main diagnostic tools and to identify the quality of the relationship of adolescents with parents – questionnaire, which contains eight statements which aimed at identifying the quality of the relationship with parents.

The research data

Research data was collected from 279 Ukrainian adolescents of 11-13 years. Written informed consent was required from the parents or legal guardians of all study participants. School classes participated as primary sampling units. The official and complete school and classroom register was a sample of 5 and 6 classes. All students who attended the selected classes on the day of data collection were included in the procedure with parental permission. The individual anonymous questionnaires were filled out independently by students in the classroom during school hours.

Participants were asked to be tested anonymously to ensure confidentiality and to minimize any possibility of bias in reporting. In total, 279 teenagers were interviewed. Overall, 93% of the students who were on the class registers took part. During the study, participants were confident that personal information is to be kept confidential. Throughout the testing process, at least one trained researcher was present to answer questions that could be arisen by participants. Data analysis was carried out with SPSS 17.00. The significance level was set to $p=0.05$. To study the relationship between the feeling of loneliness and the tendency to addictive behavior, a linear regression analysis was carried out with the dependent variable – the predisposition to addictive behavior and independent variable, subjective feeling of loneliness. All reported p values are bidirectional. The analysis was carried out using the procedure of complex samples in the statistical software SPSS (version 17.0).

IV. Results

The value of this work

The value of this work is conditioned by the fact that almost all research works study the behavior of people with already formed addictions. This may call into question the truth of the causes of addictive behavior, because what is being studied may be a consequence, not a cause. Given the fact that in early adolescence there is a subjective feeling of loneliness, it is possible the negative impact of this feeling on the teenager.

The conceptual hypothesis of empirical research

The conceptual hypothesis of empirical research is the assumption that the feeling of loneliness is a factor in the emergence of the predisposition to addictive behavior. The hypothesis of the linearity of the relationship between the two variables (subjective feeling of loneliness and addiction) indicates that the higher the level of subjective feeling of loneliness, the higher the predisposition to addictive behavior.

The regression analysis

In order to prove the hypothesis that the feeling of loneliness is a factor of addictive behavior, a regression analysis was chosen. To carry it out by the dependent variable, the predisposition to addictive behavior is chosen, and the predictor (independent variable) is the feeling of loneliness. At the same time, we test the hypothesis of the influence of loneliness on the formation of computer and television addiction.

1) Three models of regression analysis

For the convenience of testing the hypothesis, there were formulated 3 models of regression analysis:

- the first model: constant - subjective feeling of loneliness, dependent variable - predisposition to addictive behavior;
- second model: constant - subjective feeling of loneliness, dependent variable - computer addiction;
- the third model: constant - subjective feeling of loneliness, dependent variable - television addiction.

The results of the regression analysis are given in *Table 1*.

Table 1: Coefficient of regression equation

Model	H	R-squared	Adjusted R-squared	Standard evaluation error
1	0,737 ^a	0.543	0.516	11.89756
2	0,913 ^a	0.833	0.827	2.36866
3	0,501 ^a	0.251	0.222	3.81025

The predictor (constant) is a subjective feeling of loneliness, the dependent variable is the predisposition to addictive behavior, television and computer addiction.

The greatest influence of subjective feeling of loneliness is observed on the formation of computer addiction (H=0.913), the lowest – on the formation of television addiction (H=0.501). This can be explained by the fact that watching television is most often done with parents. But such a joint activity still does not compensate for the needs of a teenager in an emotionally close relationship with his/her parents.

As it can be seen from the results of regression analysis, there is a significant linear relationship (R=0.543 at p=0.0001) between the variables of subjective feelings of loneliness and the predisposition to addictive behavior of younger adolescents. This means that as the level of subjective loneliness increases, the predisposition towards addictive behavior also tends to increase. The value of addictive behavior calculated by model 1 correlates well with the actual values (H=0.737). The model explained 54.3% of the dispersion (R-squared = 0.543). At the same

time, the model does not explain 45.7% of the dispersion, since the addictive behavior is determined not only by the feeling of loneliness, but also by biological and social factors.

The aim of our study is to prove that the very feeling of loneliness is the main factor of addictive behavior. Figure of 54.3% of the dispersion confirmed this.

The significance of each of the model coefficients is estimated using the t-criterion (see *Table 2*).

Table 2: Estimation of values reliability for control and experimental groups on t-criterion of Student of subjective feeling of loneliness

Mode	Non-standardized coefficients	Standard error	Standardize d coefficients	t	p value
1	B	d			
1	1.44	0.051	0.737	28.04	0.00
	1			5	0
2	0.31	0.027	0.913	11.81	0.00
	9			9	0
3	0.14	0.050	0.501	2.953	0.00
	9				0

As can be seen from *Table 2*, the obtained value of the t-criterion of the first model is $t = 28.045$, which greatly exceeds the critical value of $t_{cr}(p=0.05) = 1.960$ and $t_{cr}(p=0.01) = 2.576$.

In the second model, $t = 11.819$, which significantly exceeds the critical value of $t_{cr}(p=0.05) = 1.960$ and $t_{cr}(p=0.01) = 2.576$.

In the third model, $t = 2.953$, which exceeds the critical value of $t_{cr}(p=0.05) = 1.960$ and $t_{cr}(p=0.01) = 2.576$.

Based on these positions, we used the method of Lozova with a list of statements regarding the relationship of younger adolescents with family members (father, mother), which are the condition for the development of addictive behavior or for its absence.

2) Correlation between the subjective feeling of loneliness and the addictive behavior of younger adolescents

To identify the correlation between the subjective feeling of loneliness and the addictive behavior of younger adolescents, we used the Spirmen correlation coefficients given in the *Table 3*.

Table 3: Indicators of correlation coefficients of Student among the relations of younger adolescents with parents, subjective feeling of loneliness and addictive behavior

No.	Scale	Subjective feeling of loneliness	Predisposition to addictive behavior
1	I have a close and trusting relationship with my mother	0.171** 0.0001	0.226** 0.0001
2	I have a close and trusting relationship with my dad	0.337** 0.0001	0.368** 0.0001
3	I care when my mom doesn't admit my achievements.	-0.246** 0.0001	-0.66 0.92
4	I care when dad doesn't admit my achievements.	-0.107** 0.008	-0.141** 0.0001
5	I'm afraid my mom will find out that I'm not really like she thinks I am.	-0.198** 0.0001	-0.148** 0.0001
6	I'm afraid dad will find out that I'm not really like he thinks I am	-0.172** 0.0001	-0.057 0.162
7	I don't like to ask my parents for help, even when I need it	-0.063 0.105	-0.264** 0.0001
8	I have a feeling that my parents control my life.	-0.070 0.072	-0.21 0.594

As it can be seen from the results of the study, for early adolescence, the correlations between the subjective feeling of loneliness of adolescents and close relationships with parents were significant. Moreover, close and trusting relationships with the father in early adolescence are more significant and have a stronger impact on the subjective feeling of loneliness ($r=0.337$, at $p \leq 0.01$). Similar to the subjective feeling of loneliness, the densest positive relationship is found between addictive behavior and a close relationship with the father ($r=0.368$ at $p \leq 0.01$).

This leads to the conclusion that in early adolescence, the quality of the relationship with the father plays a more important role in creating a sense of loneliness than with the mother. This situation is quite natural, since the father performs the function of social control and is the bearer of requirements, discipline and sanctions. But the mother's love is unconditional.

V. Discussion

1) The study revealed a close statistically significant *negative correlation between the importance of parents' recognition of the adolescents' achievements and the subjective feeling of loneliness*. A teenager who is not satisfied with the indifferent attitude of parents to his/her achievements, experiences a subjective feeling of loneliness. At the same time, the indifferent attitude of the teenager to whether the mother recognizes his/her achievements ($r=-0.246$, at $p\leq 0.01$) is a stronger factor in experiencing the subjective feeling of loneliness than the same, but concerning the father ($r=-0.107$, at $p\leq 0.01$).

2) There was also revealed a statistically significant *negative correlation between the importance for a teenager of his/her father's recognition of his/her achievements and addictive behavior* ($r=-0.141$, at $p\leq 0.01$). At the same time, the *importance of the mother's recognition of the achievements of the teenager has no effect on the formation of addictive behavior* ($r=-0.66$, at $p=0.92$). Adolescents whose parents are actively involved in their upbringing are more socially adapted and resistant to stress. (Brish, 2014).

3) As a result of the correlation analysis, a statistically significant *negative relationship between the fear of a teenager that the parents find out what he/she really is, and the subjective feeling of loneliness was revealed*. A teenager who does not feel parental acceptance, demonstrates an indifferent attitude to what parents think about him/her, but actually feels a subjective feeling of loneliness. At the same time, *indifference to the mother's opinion on the teenager himself/herself is a slightly more significant factor in the emergence of feelings of loneliness* ($r=-0.198$, at $p\leq 0.01$) than to the father's opinion ($r=-0.172$, at $p\leq 0.01$).

4) In addition, a statistically significant *negative correlation was established between the fear of the teenager that the mother learns what he/she really is and the addictive behavior* ($r=-0.148$, at $p\leq 0.01$). The adoption of the teenager's personality by the father has no significant impact on the formation of addictive behavior ($r=-0.057$, at $p=0.162$).

5) The study revealed a close statistically significant *negative correlation between the desire to ask for help from parents and addictive behavior* ($r=-0.264$, at $p\leq 0.01$). Both the inability to ask for assistance and the constant requests for assistance, no matter how necessary, are important factors in the development of addictive behaviour. In the case of constant appeal for help, we can talk about the formation of a co-dependent relationship between parents and adolescents.

Therefore, the results of the correlation analysis given above show how psychologically it is difficult for younger adolescents to feel anxiety and inconvenience about the relationship with their parents. Preservation of emotionally close contact with parents in their younger adolescence is vital.

VI. Conclusion

The data obtained point to the statistically significant indicators of the study. It gives grounds to assert that subjective feeling of loneliness can be a basis for formation of both predisposition to addictive behavior, and to computer and television addiction of younger teenagers. The emergence of feelings of loneliness in adolescence begins in the family and depends on the quality of the relationship. The family can develop such relations between its members, which will significantly complicate the successful socialization. Dysfunctional socialization will increase the subjective feeling of loneliness of teenager.

Addiction is the result of a complex interaction of hereditary, social and individual psychological factors. But all these factors become a condition for the development of addictive behavior only under certain conditions. Among the psychological factors that create conditions for the development of addictive behavior, great importance is given to families. If a teenager grows and develops in a dysfunctional family, experiences the influence of the negative factors (negative emotional background in the family, fear of punishment, dissatisfaction with communication with family, etc.), it can provoke addictive behavior.

Therefore, it is the quality of parent–child relationships that is the very first prerequisite for both the emergence of addictive behavior and the prevention of this process. We consider the prolonged monitoring of mental development and personal development of young adolescents with a predisposition to addictive behavior to be a promising area of future research.

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