Information stress and emotional well-being of teenagers in the digital era

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Introduction

The use of digital tools in the educational process has sparked debates regarding the risks and benefits [1; 3; 4; 5; 8]. Modern teenagers' use of electronic devices has become a source of both information and emotional stress [1; 5; 8]. The research aimed to examine the psychological and emotional state and emotional well-being of contemporary teenagers in the digital era, as well as to identify personal and family factors contributing to computer dependence in younger teenagers.

Methodology and research methods

The study utilised

1) the full original M. Lusher test [6] and
2) the "Screening Diagnosis of Computer Addiction" questionnaire by L.N. Yuryeva and T.Y. Bolbot [9] : for example *https://psytests.org/cyber/sdkz.html*.

1) The complete M. Luscher's test [6] consists of three subtests. In the first subtest, the participant expresses their attitude towards shades of grey; in the second one – towards eight different colours (four primary and four additional); and in the third one – towards primary colours as well as shades of primary colours. The calculation of the total deviation from the autogenic norm (TDAN). The autogenic norm of colour preferences established by Valneffer on patients during psychotherapeutic courses was defined as red-yellow-green-purple-blue-brown-grey-black (34251607). This colour sequence was adopted by M. Luscher as the norm of colour preferences, a benchmark indicator of mental well-being.

Methodology and research methods

2) **Screening diagnosis of computer dependency according to the methodology of L.N. Yuryeva and T.Yu. Bolbot** [9]. The authors aimed to identify not only established dependency (II stage of addiction) but also initial dependency (I stage) and emerging dependency (pre-dependence, attachment). The questionnaire consists of 11 statements regarding manifestations of the individual's emotional state while using a computer or the Internet. Indirectly, the test results allow for the identification of a "risk group" with signs of computer dependency.

Results

Respondents included members of 20 families: 25 teenagers aged 10-12, 38 parents, totaling 63 individuals. The total deviation from the autogenous norm (TDAN) and the intensity of variability in colour choice (preference 3 and 4) in the results of M. Luscher's full test correlate significantly with the intensity of cyber-dependency. In the results of the eight-colour subtest of teenagers with pronounced computer dependency, a preference for green, yellow, and red (2, 3, and 4 in various combinations) is observed while rejecting the colour blue (1).

In regulatory psychology by M. Luscher, four variants of self-perception are described:

- self-esteem (Luscher green),
- inner freedom (Luscher yellow),
- inner satisfaction (Luscher blue), and
- self-confidence (Luscher red).

Empirical Research Results

Lifestyle (trend) according to the complete M. Lusher test	**Adolescents at risk** of cyber addiction	Teenagers with mild cyber addiction	Teenagers with a moderate level of cyber addiction	Parents of at-risk of cyber addiction teenagers	Parents of Teenagers with mild cyber addiction	Parents of Teenagers with moderate level of cyber addiction
Constant	-	-	-	-	-	-
Variable	4	8	4	4	9	3
Directive	-	1	-	8	5	2
Receptive	1	2	1	-	-	-
Integrative	2	1	-	3	3	-
Separative	1	-	-	1	-	-
Total people (n)	8	12	5	16	17	5

Results

These four emotions are unevenly developed in many people: in this case, teenagers with pronounced computer addiction have developed self-esteem, inner freedom, and self-confidence, but internal satisfaction is almost absent, leading the individual into a closed destructive cycle of self-underestimation and overestimation.

It is noteworthy that variability in the results of the full colour test by M. Luscher prevails in **42,1** % of all parents of teenagers and **70,6** % of teenagers with pronounced cyber-dependence, i.e. the majority of those surveyed. This lifestyle (red-yellow) is described by M. Luscher as one that seeks popularity: "*to be seen, to receive applause*." The therapeutic strategy in this case will be the blue-green lifestyle: elite (self-esteem and inner satisfaction - "*To be more than to appear*").

Conclusions

- Based on the results of the full M. Lusher test, teenagers with pronounced computer addiction tend to overestimate dimensions of self-perception such as self-esteem, inner freedom, and self-confidence, while internal satisfaction is almost absent. This leads the addict into a closed, destructive cycle of self-deprecation and overestimation.
- It can be concluded that teenagers with cyber-dependency exhibit significant emotional distress, as supported by empirical research data. The prevalence of variability in the personal profiles of such teenagers and most of their parents has been identified. The therapeutic strategy in this case would involve developing their constancy, meaning the consistency of interests and purposefulness in achieving set goals.

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