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INTENSITY OF THE ADOLESCENTS' SUBJECTIVE
EXPERIENCE OF MENTAL STATES

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Abstract

The article describes the intensity of characteristics of the subjective experience of mental states of high, medium and low levels of mental activity. It describes the specificity of the subjective experience of mental states of orphans, which plays a significant role in understanding the problems of adaptation and socialization of children of this category. Mental states act as an important determinant for the development of communication and interaction skills in society, for personal development and the formation of an emotional-volitional sphere and it determines the scope of this research. The research involved 40 children: adolescents being brought up an orphanage institution (20 individuals) and adolescents living in families (20 individuals). The age of the subjects in both groups varies from eleven to sixteen years. To study the intensity of mental states, we used Prokhorov's "Mental state relief" technique. We have revealed the peculiarity of the intensity of characteristics of mental states in subjective experience depending on social conditions. The research shows that family deprivation leads to a specific dullness of experiences, "stiffness" of the course of mental states of a high and medium level of mental activity, and to a greater immersion in experiencing states of a low level of activity.

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1. Introduction

1.1. Mental states in childhood

The category of mental states of children and adolescents relates to the pedagogical and age-related areas of research in psychology and has a number of distinctive features. Mental states in childhood age are studied through the prism of the leading activity of children and their general course of age development. These are not only the individual features of a child's development, but also the unique conditions for the development of their psyche. Children mastering new forms of interaction and new activities specific for their age experience certain states that were not characteristic for them in the past. Thus, we can claim that mental states, on the one hand, can be determined by activities of a child, and on the other hand, they can determine the process of activity itself and act as a determining factor of its course and the nature of child's interaction with others.

The factor of a family well-being is an important component in assessing the emotional sphere, including the category of mental states. The period of primary school age is very sensitive to an unfavourable family atmosphere. Children who find themselves in conditions of psychological deprivation often experience such mental conditions as fear, anxiety, and sadness.

1.2. Mental state of adolescents

The central role in the development of the category of adolescents' mental states is played by a qualitative change in their semantic space, which is determined by the unique experience, general emotional and cognitive development of adolescent children (Prokhorov, 2002, 2011).

The distinctive feature of descriptions of mental states by adolescents is the increase in their lexical elements, especially when describing states of a high level of mental activity (Prokhorov, 2011). In their statements about mental states, one can notice their intellectual complexity. As a result of the development of the motivational sphere and volitional component in general, we can observe the development of the process of self-regulation of mental states in children of this age. Early adolescence reflects the least reflection of mental states (Prokhorov, 2011). The fact of reduced reflection of emotional state during the period of early adolescence is associated with adolescent age crisis.

Deep involvement of adolescents in the sphere of interpersonal interaction and the influence of educational activity determine changes in the course of mental states. They show a tendency to increase negative mental states, which is closely associated with age changes and adolescent crisis.

Adolescents have their own specifics of the course of mental states and in their quality. Due to their tendency to developing negative emotions, states of irritation, hostility and aggression, specific for younger adolescents, will often manifest themselves in their actions. These features are expressed in a negative attitude towards others and in negative perception of events. In experiencing positive mental states, they tend to increase their intensity: "elation", a state of "increased happiness", etc. These features are associated with success in educational activities of a child and successful process of interpersonal interaction with peers (Prokhorov, 2011). We also note that all mental states experienced by adolescents are reflected in the behavioural aspect (Prokhorov, 2011).

A number of studies have revealed the dominant states of adolescents such as "joy", "apathy", "excitement" (Prokhorov, 2002, 2011). The characteristic feature of the emotional sphere in adolescents

is a frequent change of mood which manifests itself in the rapidly changing emotions. Adolescents are characterized by the so-called “school anxiety”, which is closely interconnected with the process of educational activity and emotional difficulties of adolescents that arise during this process. This is a temporary emotional state which manifests itself in a feeling of anxiety, emotional excitement, as well as in various kinds of specific experiences.

1.3. Mental state of children brought up in conditions of family deprivation

Mental states of adolescents reflect the main tasks and signs of development specific for this age. The study of mental states of adolescents is determined by the age-specificity and social conditions of their development.

Numerous studies of children left without parental care revealed a delay not only in intellectual and social development, but also in the emotional aspect of their personalities (Alekseeva, 2009; Artishcheva, 2014). Such children have a reduced rate of mental development, low indicators of the intellectual sphere, as well as depletion of the emotional aspect – in contrast to peers brought up in a family environment (Horoshko, 2012; Olifirenko, 2004). Orphans are characterized by insufficient development of complex emotional states such as shame, guilt, pride, and so on (Vitoshkina, 2015). Due to emotional deprivation, orphans show emotional “coldness”, reservedness, difficulty in building interpersonal interaction, specificity in the ways of regulating their emotional manifestations (Mihaylova, 2004; Savchenko, 2017; Vitoshkina, 2015).

In the studies of the emotional characteristics of children living in orphanages, there is a tendency to focus on external causes and factors that affect the emotional states of orphans. This trend leads to a decrease in interest in the inner side of the experiences of orphans, which often plays a more significant role in the emotional aspect (Vitoshkina, 2015). Many foreign studies exploring the specific features of the emotional sphere of children living in orphanages indicate that the leading factor in the emotional development of orphans is the conditions of social and emotional interaction – not the fact of their stay in an orphanage (Crockenberg, 2008; Vitoshkina, 2015).

Adolescence is the most critical age in the development of the emotional sphere. Due to the fact that adolescent stage of development is the final one in the stay in orphanage institutions, many unfavorable characteristics of the emotional sphere of a teenager get fixed and later negatively affect the subsequent life stages that take place outside the walls of an orphanage (Trofimova & Khakhlova, 2015).

Foreign studies prove that most orphans show signs of an emotional trauma. Typical manifestations of emotional trauma of adolescents who lost their parents include frequent states of anger, guilt, sadness (Teresa, 2012). In addition to these emotional states, many orphans who lost their parents have the signs of depression in their medical history (Teresa, 2012).

2. Problem Statement

Orphans are characterized by the following negative mental states: emotional discomfort, irritation, aggression, frustration, anxiety, etc., which have a stable nature, and get fixed in the structures of life experience. The specifics of the subjective experience of orphans’ mental states has not been clearly studied, but it is a significant factor in the process of adaptation and socialization of children

playing an important role in the development of communication and interaction skills in society, in personal development and formation of an emotional-volitional sphere (Artishcheva, 2014).

3. Research Questions

- 3.1. For studying the experience of mental states of children brought up in family deprivation conditions, researchers must take into account not only generally accepted ideas about this category of mental phenomena, but also consider age-related characteristics, factors of individual personality development, and social environment conditions.
- 3.2. Our research was aimed at determining the characteristics of the intensity of mental states in the subjective experience of adolescents living in different social conditions. We studied the subjective experience of such mental states as joy, anger, calm, indifference, fatigue, and sadness in adolescents brought up in families and in family deprivation conditions. These states belong to different levels of modality and of activity: states of joy and anger belong to the group of mental states of an increased level of mental activity, states of calm and indifference have an optimal or average level of mental activity, and mental states of sadness and fatigue are characterized by a reduced level of mental activity.

4. Purpose of the Study

- 4.1. To study the intensity of mental states of adolescents in their subjective experience.
- 4.2. To show specifics in the intensity of the course of mental conditions in orphan adolescents.

5. Research Methods

5.1. Sample

This research was conducted in an orphanage for children with no parental care, as well as in a secondary school. The research involved 40 people. The first sample includes adolescents being brought up in an orphanage (20 individuals). The second sample includes adolescents living in a family (20 individuals). The age of the participants in both groups varies from eleven to sixteen years. Both samples of the subjects were mixed; they included both girls and boys.

5.2. Research Methodology

The study of the intensity of mental states was conducted with the use of Prokhorov's "Mental state relief" technique, consisting of 40 characteristics of the states evaluated by an 11-point scale. The characteristics of mental states are combined into 4 groups (10 characteristics each), which determine the intensity of the course of mental processes, physiological reactions, experiences and behavioural manifestations.

5.3. Mathematical processing of data

The following programs were used to process the data obtained with the help on the “Mental state relief” technique:

- Microsoft Office Excel 2010 Tools;
- SPSS 16.0, Statistika 6 program (Student’s t-test).

6. Findings

6.1. Mental state of joy

The analysis of the data showed the following results. The state of joy in adolescents brought up in orphanage institutions is more active (Table 1). Unlike children brought up in a family, teenage orphans are less likely to associate a state of joy with vigour or drowsiness.

Table 01. The results of a comparative analysis of the mental state of “joy” which belongs to the group of the states of increased mental activity

Indicator number	Indicator	1 sample	Student’s t-test value	2 sample
Mental processes	6. Imagination	6.9	t = - 2,845 p ≤ 0,01	9.1
	7. Speech	5.95	t = - 2,278 p ≤ 0,05	8.1
	8. Emotional processes	6.25	t = - 3,784 p ≤ 0,01	9.65
	10. Attention	6.3	t = - 2,193 p ≤ 0,05	8.15
Physiological reactions	15. Cardiovascular system	6.3	t = - 2,112 p ≤ 0,05	8.7
	19. Oral mucosa condition	6.5	t = - 2,513 p ≤ 0,05	8.55
Scale of experiences	21. Dreariness / gaiety	6.6	t = - 2,103 p ≤ 0,05	8.3
	22. Sadness / optimism	6.6	t = - 3,284 p ≤ 0,01	8.95
	24. Passivity / activity	5.55	t = - 3,142 p ≤ 0,01	8.45
Scale of experiences	25. Drowsiness / vigour	6.25	t = - 4,398 p ≤ 0,001	9.2
	26. Lethargy / liveliness (vivacity, agility)	6.25	t = - 3,077 p ≤ 0,01	8.7
	27. Lowers / raises	6.05	t = - 3,199 p ≤ 0,01	8.85
	29. Severity (difficulty) / lightness	5.65	t = - 3,472 p ≤ 0,01	8.15
Behavior	32. Inconsistency (randomness) / consistency (determination)	7	t = - 2,289 p ≤ 0,05	8.9
	40. Reservedness / openness	6.7	t = - 2,833 p ≤ 0,05	8.9

The most noticeable indicators in the 2nd sample (adolescents brought up in a family) of individuals being in a state of joy are such mental phenomena as imagination and emotional processes ($p \leq 0.01$). Our data indicate a positive effect of joy on the emotional sphere and the process of imagination. Adolescents brought up in a family note the ease of the appearance of mental images, fantasies, as well as a positive state of gaiety and joy ($p \leq 0.01$). Adolescents brought up in an orphanage often choose negative characteristics of these indicators, describing difficulties in the appearance of fantasies, feeling of despair, hopelessness and fear.

In contrast to orphans, the unit of experiences of adolescents who brought up in a family looks statistically more expressed ($p \leq 0.01$). When experiencing a state of joy, adolescents brought up in a family note a more optimistic mood, pronounced activity of their actions, ease and sensation of vigour, which is less typical for children from sample 1.

The data covering the unit of mental and physiological processes, as well as the unit of behaviour where $p \leq 0.05$ is significantly less pronounced in terms of the differences in indicators. The category of experiences – namely, sadness / gaiety – is clearly expressed in adolescents who were brought up in a family. They are characterized by a cheerful, joyful mood ($p \leq 0.05$). Adolescent orphans often mention sadness. Adolescents brought up in a family are characterized as more open, consistent and purposeful in their actions when being in a state of joy – in contrast to adolescents brought up in orphanage institutions ($p \leq 0.05$).

Thus, the main characteristics of the state of joy are more variable and versatile in adolescents who were brought up in family. Adolescent orphans are characterized by less mobility in changing the basic characteristics of their mental state when experiencing joy.

6.2. Mental state of anger

Next, we shall consider the intensity of the state of anger (Table. 2).

Table 02. Comparative analysis of the mental state of “anger”, referring to a group of states of increased mental activity, for two samples.

Indicator number	Indicator	1 sample	Student's t-test value	2 sample
Mental processes	2.	Clarity, awareness of perception	$t = -3,371$ $p \leq 0,01$	7.8
	3.	Features of attitudes	$t = -3,720$ $p \leq 0,01$	8.25
	6.	Imagination	$t = -3,606$ $p \leq 0,01$	8.15
	8.	Emotional processes	$t = -3,215$ $p \leq 0,01$	7.7
	10.	Attention	$t = -2,628$ $p \leq 0,05$	8.15
Physiological reactions	13.	Motion coordination	$t = -2,671$ $p \leq 0,05$	8.2
	18.	Gastrointestinal sensations	$t = -2,558$ $p \leq 0,05$	8.45
Scale of experiences	21.	Dreariness / gaiety	$t = -3,541$ $p \leq 0,01$	7.95
	22.	Sadness / optimism	$t = -4,341$ $p \leq 0,001$	8.25
	25.	Drowsiness / vigour	$t = -3,028$	7.7

				$p \leq 0,001$	
	29.	Severity (difficulty) / lightness	4.8	$t = - 2,914$ $p \leq 0,01$	7.35
	30.	Rigidity / Relaxedness	5.7	$t = - 2,218$ $p \leq 0,05$	8.05
Behavior	32.	Inconsistency (randomness) / consistency (determination)	6.5	$t = - 2,201$ $p \leq 0,05$	7.85
	34.	Hastiness/reasonableness	6.5	$t = - 2,347$ $p \leq 0,05$	8.5
	35.	Uncontrollability (lack of control) / controllability (control)	5.85	$t = - 4,046$ $p \leq 0,001$	8.4
	38.	Instability (unsteadiness) / stability (balance)	5.45	$t = - 2,139$ $p \leq 0,05$	7.25
	39.	Uncertainty (doubt) / confidence	5.15	$t = - 3,340$ $p \leq 0,01$	8.4
	40.	Reservedness / openness	5.1	$t = - 2,639$ $p \leq 0,05$	7.6

Processes associated with behaviour and experiences in the state of anger are most variable in adolescents brought up in a family. These children are characterized by more stable behaviour and more optimistic experiences. Such characteristics of the mental state of anger as clarity, perception awareness, features of attitudes, imagination and emotional processes are expressed in sample 2 (adolescents brought up in a family), where p is ≤ 0.01 .

Being in a state of anger, adolescents brought up in families have the most ($p \leq 0.01$) flexible basic parameters of the mental state. In other words, being in a state of anger, they easily create mental images and experience clarity of ideas, a sense of joy and gaiety. In the state of anger, adolescent orphans are more likely to have a melancholy mood, the severity of their own experiences, as well as deterioration of the entire process of attention, increased distractivity and difficulty of concentration. Their movements are less coordinated. Adolescent orphans are more often characterized by the constraint of their own experiences and a feeling of tension. Their behaviour is characterized by anger, inconsistency, randomness and thoughtlessness of their actions. Volitional efforts necessary for regulation of the state of anger are more pronounced in adolescents brought up in families.

Next, we shall consider all the other mental states that have different intensity in the subjective experience of mental states of adolescents brought up in family deprivation conditions.

6.3. Mental state of calm

Orphans in the state of calm are less confident in their actions and have difficulties with doing anything ($p \leq 0.001$), their physiological manifestations are negative. The sadness / dreariness parameter also has significant differences in the two samples. Adolescents brought up in a family are more likely to experience the feeling of optimism, cheerfulness ($p \leq 0.001$) when being in a state of calm, which is less typical for adolescents brought up in orphanage institutions.

Being in a state of calm, subjects from sample 1 (adolescent orphans) are characterized by less controlled behaviour, more pronounced impulsiveness in their actions, and lack of thought in their actions – even despite the state of optimal mental activity. Such indicators as features of attitudes, imagination, speech and emotional processes have significantly more pronounced positive signs in a state of calm of

the subjects from sample 2 (adolescents brought up in a family). In terms of these parameters, children from sample 1 (adolescents brought up in an orphanage) are characterized by frequent negative manifestations.

In a state of calm, adolescents brought up in an orphanage note discomfort in the heart area in the form of pain, an increase in heart rate which brings a feeling of discomfort, as well as a feeling of contraction in the heart area. On the part of the organs of the respiratory system, there is a discomfort in the form of a “lump in the throat”, the appearance of shortness of breath, and a feeling of insufficient inspiration ($p \leq 0.01$).

Many significant differences encompass the unit of experiences and behaviours. Such parameters as dreariness / gaiety, sadness / optimism are more negative in adolescent orphans. They are characterized by a more depressed mood, a feeling of sadness, passive behaviour, inconsistent actions, predominance of randomness, instability and the presence of signs of uncertainty ($p \leq 0.01$).

The state of calm is statistically more expressed in terms of the main parameters in adolescents brought up in a family. Most of the parameters have positively coloured main aspects (parameters) of the mental state precisely in children who are brought up in families. Negative experiences or negatively coloured changes in the parameters of the mental state correspond to children who are brought up in orphanages.

6.4. Mental state of indifference

Mental state of indifference does not have clearly expressed statistical differences between the two samples. Statistically significant differences cover the unit of physiological reactions, as well as the unit of experiences. Since the indicators of a cardiovascular system and the skin tone are statistically more pronounced in adolescents from families, they are characterized by minor changes in the form of weak heart palpitations and slight reddening of the skin, $p \leq 0.05$. Negative manifestations in the form of a pain in the heart area, heart palpitations causing discomfort and blanching of the skin are typical for adolescents brought up in an orphanage. A more joyful, cheerful mood is statistically more pronounced in adolescents brought up in a family ($p \leq 0.05$). Orphans (sample 1) are more characterized by a feeling of sadness and negatively colored experiences.

6.5. Mental state of sadness

The mental state of sadness has no statistically significant differences between the two samples.

7. Conclusion

The study of the intensity of the course of mental states in adolescents brought up in family deprivation conditions allowed us to reveal certain specifics.

The intensity of the characteristics of the studied mental states in adolescents deprived of family is significantly lower than in adolescents from families, which is reflected in their subjective experience. Family deprivation leads to a certain dullness of experiences, “stiffness” of the course of mental states of a high and medium level of mental activity (joy, anger, calm, indifference) and to a greater immersion in experiencing states of a low level of activity (fatigue and sadness).

Being in a state of joy, adolescents brought up in families note a more cheerful mood than adolescent orphans. The most significant differences in the intensity of manifestations are found in the characteristics of the experience unit. In a state of joy, adolescents brought up in families experience cheerfulness, optimism, activity, liveliness and ease of experience. Behavioural manifestations differ significantly only in terms of greater consistency and openness. Describing the experience of the state of joy, adolescents raised in a family note the ease in the appearance of images, fantasizing, improving attention, a high focus on their work and increased speech activity. Adolescents brought up in an orphanage often talk about difficulties in creating mental images, feelings of despair, hopelessness and feelings of fear. Their state of joy is characterized by passivity, sadness, lethargy and heaviness, tension of experiences.

Processes associated with behaviour and experiences in the state of anger are most variable in adolescents brought up in families. They are characterized by more controlled, confident behavior, optimistic experiences – in contrast to orphans. In their subjective experience of the state of anger, adolescents brought up in families note the severity of such characteristics as clarity, awareness of perception, imagination and emotional processes. Adolescent orphans are likely to have opposite manifestations – the lack of clarity of ideas, lack of perception clarity, distraction of attention, feelings of apathy, fear and panic, they are more characterized by a dreary mood, severity of their own experiences, their stiffness and tension. The experience of the state of anger in adolescents brought up in family deprivation conditions shows signs of deterioration in the coordination of movements in the form of difficulties in performing small movements, deterioration of handwriting. Being in a state of anger, adolescents brought up in a family are characterized by greater consistency, purposefulness of behaviour, as well as by thoughtfulness of their decisions – in contrast to teenage orphans.

The subjective experience of the state of calm in adolescents brought up in families has significant differences in the intensity of a number of characteristics. In the state of calm, they note the ease of self-management, the belief in success, optimism, cheerfulness of experiences, ease of representations, their clarity, as well as high resourcefulness, quick wit, ease in the emergence of associations, fantasies, and new images. At the same time, adolescents from orphanages are characterized by feelings of sadness and dreariness, depressed mood, less controlled behaviour, more pronounced impulsiveness and the lack of thought in their actions as well as by difficulties in the emergence of any images, ideas, and the lack of logic of their thoughts.

The subjective experience of the mental state of indifference does not have clearly expressed statistical differences between the two samples. Statistically significant differences cover the unit of physiological reactions and the unit of experiences. For example, indicators of the cardiovascular system and the tone of skin are statistically more expressed in adolescents brought up in families; they are characterized by minor changes in the form of slightly increased heart rate and slight reddening of the skin. Negative manifestations in the form of a pain in the heart area, as well as heart palpitations which causes discomfort and blanching of the skin are typical for adolescents brought up in an orphanage.

Adolescents brought up in families have significant differences in the intensity of one characteristic in the subjective experience of the state of fatigue. Being in a state of fatigue, they are more

fervent, cheerful which contrasts to adolescents brought up orphanages who are more likely to experience the feeling of sadness and have negatively coloured experiences.

The subjective experience of the mental state of sadness has no statistically significant differences between the two samples.

Findings:

1. The intensity of characteristics of the subjective experience of adolescents' mental states has differences associated with social conditions.
2. Family deprivation leads to a certain dullness of experiences, "stiffness" of the course of mental states of a high and medium level of mental activity (joy, anger, calm, indifference) and to a greater immersion in experiencing states of a low level of activity (fatigue and sadness).

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