

Analysis of Differences in Aggression, Anxiety and Adaptability between 2nd Grade and 4th Grade Pupils

[O analiză a diferențelor privind agresiunea, anxietatea și adaptabilitatea elevilor din clasele a II-a – a IV-a]

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Abstract

This study aims to explore differences in levels of aggression, anxiety and adaptability between second and fourth graders. Based on the premise that the developmental stages children go through in primary school directly influence their behaviours and how they react to stress, the research focuses on identifying the specific emotional and behavioural characteristics of each age group. The methodology applied includes the use of standardized questionnaires and direct observations in the school environment to assess levels of aggression and anxiety, as well as the ability to adapt to new or challenging situations. Comparative analysis of the results shows significant differences between the two age groups. Second graders generally show higher levels of anxiety and difficulties in coping, while aggression seems to be higher among fourth graders. These findings suggest that, as children progress through the primary cycle, aggressive reactions may become more frequent coping mechanisms in the face of challenges, while anxiety and coping difficulties seem to be more prominent among younger children. The study highlights the importance of implementing tailored educational programs to support pupils' emotional and social development, with a particular focus on managing anxiety and improving coping skills, as well as reducing aggressive behaviour by promoting empathy and peaceful conflict resolution.

Keywords: analysis, differences, aggression, anxiety, adaptability, students.

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1. Aggression

Aggression is „behaviour that is intended to harm a person (physically or verbally) or destroy property” Behaviour can be considered aggressive when a person does something intentionally, accidents cannot be considered as aggressive acts¹.

Aggression (derived from the Latin *aggressio*) is „a set of hostile behaviours that may be manifested consciously, unconsciously, phantasmagorically, with the aim of destroying, degrading, constraining, denying or humiliating an object invested with meaning, behaviours felt as such and not provoked by it”².

Aggression and violence in and around schools has become an extremely serious problem for students and teachers as well as authorities³.

It is immediately necessary to differentiate the terms aggression, violence and the specifics of school violence as follows⁴:

a) Aggressive behaviour is translated as any type of behaviour, physical or symbolic, intended to cause harm to someone.

b) Violence means acute aggressive behaviour, characterised in particular by the use of physical force.

c) School violence includes, in addition to aggressive behaviour, other types of violent behaviour, such as: inappropriate or offensive expression, such as: name-calling, harassment; teasing, mimicking, hurting, taunting, threatening, bullying, hitting, pushing, and many other behaviours that fall under the law⁵.

In trying to define aggression there is a wide variety of views. Some authors question whether in defining aggression we should focus more on the aggressive act or on intention. Can a parent show aggression towards his child or to educate him?

It seems that some authors lean towards emphasising intention, and then aggression becomes: „any act intended to cause harm to the intended target”.

So, if intention is the most important thing, how do we determine or judge intention? What about „good education”? How does the spanking a child receives now determine good

⁴ Radu Ciumașu și Mihai Duminiță, „Cerințe esențiale ale educației în învățământul preuniversitar,” p. 109, accesat 19 decembrie 2022, https://colmil_sm.forter.ro/publicatii/cerinte.pdf#page=109.

² Cătălin Dunca, „Agresivitatea – un răspuns la neadaptare,” accesat 22 decembrie 2022, https://ibn.idsi.md/sites/default/files/imag_file/235-237_6.pdf.

³ Y. S. Ahmad și P. K. Smith, „Behavioural measures review: 1. Bullying in schools,” *Newsletter: Association for Child Psychology & Psychiatry* 12, nr. 4 (1990): 26–27.

⁴ Albert Bandura, „Self-efficacy: Toward a unifying theory of behavioral change,” *Psychological Review* 84, nr. 2 (1977): 191–215.

⁵ G. V. Bonea, „Agresivitatea și violența în școlile din România: Bullying și mobbing,” *Calitatea vieții* 30, nr. 1 (2019): 59-75, accesat 22 decembrie 2022, <https://revistacalitateavietii.ro/journal/article/view/148/118>.

adult behaviour 20-30 years later? And who makes the judgement that this adult behaviour is „good” or „educated behaviour”⁶.

2. Anxiety

Anxiety is a psychological entity that can be described as a vague, diffuse emotional experience of restlessness, pressure, tension, worry, unmotivated fear, with no precise object or objective factors that condition this state. Thus, anxiety causes psychological discomfort, but at a low level it is necessary because it acts as a motivator for actions⁷.

Anxiety corresponds to physical manifestations that are largely due to the difficult and interrupted transmission of nerve impulses from the brain system to different parts of the body, whereby consciousness is strongly influenced.

The physical manifestations are: muscle tension, accelerated heart and breathing rate, excessive and permanent vigilance⁸.

How does anxiety manifest itself?⁹

At level cognitively	At level affective	At the biological level	At level Behaviour
– decrease in the power of concentration; – exhaustion and tension mental; – intellectual confusion; – mental discomfort – concern.	– the fear; – tension; – nervousness; – restlessness; – irritability.	– tremors; – agitation; – muscle tension; – perspiration; – dizziness, diarrhea, pallor; – short and fast breathing; – palpitations; – cold and wet hands; – dry mouth; – hot flushes or chills; – feeling sick, nausea; – feeling of emptiness in the stomach.	– avoid; – generalized fatigue; – hyperventilation; – agitated verbal expression; – rubbing and shaking hands; – insomnia.

⁶ „Ce este agresivitatea,” UMF Carol Davila, 8 septembrie 2021, accesat 15 decembrie 2022, <https://www.umfcv.ro/ro/despre-noi/ccop/ccop-legaturi-utile/ccop-resurse-pentru-sanatate/ccop-agresivitatea/ccop-ce-este-agresivitatea>.

⁷ E. Losîi și I. Racu, „Anxietatea școlară la preadolescenți,” *Psihologie, revista științifico-practică*, vol. 3 (2011): 3-7.

⁸ Ala Lozan, „Anxietatea normală și anxietatea maladivă la elevi,” *Psihologie, revista științifico-practică*, nr. 1 (2009): 40-47.

⁹ Nicolae Silistraru și Lilia Maximenco, „Anxietatea școlară consecința curenților educaționale,” în *Materialele Conferinței Republicane a Cadrelor Didactice: Psihopedagogie și managementul educației*, ediția 1, 10-11 martie 2018, Chișinău, Vol. 5 (Chișinău: Universitatea de Stat din Tiraspol, 2018), 117-122.

3. Suitability

Cognitive adaptation consists in the exchange of information between the subject and reality, exchanges mediated by discursive intellectual operations, with longer and more complex trajectories J. Piaget¹⁰.

Adaptation: the fundamental property of the organism to adequately modify its functions and structures in accordance with the quantitative and qualitative changes of the environment – in the Piagetian conception, it means the process of establishing the balance between assimilation and accommodation – adaptation intervened in the interaction between man and the environment.

Therefore, adaptation presupposes the presence of man's ability to cope, to respond positively to the demands and demands of the environment, fulfilling his individual requirements.

School adaptation is the process of achieving the balance between the evolving personality of the student during his training and the ascending demands of the environment under the conditions of assimilating the informational content in accordance with his own availabilities and agreeing to the qualitative and quantitative changes of the set of norms and own values of the education system education¹¹.

4. Research methodology

4.1. Objection

The general objective is to identify a significant difference regarding the level of anxiety, aggressiveness and adaptability between pupils of the 2nd and 4th grades.

4.2. Hypotheses

1. It is assumed that there is a significant difference in the level of anxiety of pupils in 2nd and 4th grades.
2. It is assumed that there is a significant difference in the level of aggression of pupils in the 2nd and 4th grades.
3. It is assumed that there is a significant difference in the level of adaptability of 2nd and 4th grade pupils.

4.3. Study participants

To carry out the research, the parents of children aged between 6-11 took part. The sample is made up of 40 parents, 20 parents whose children are in the 2nd grade and 20 parents whose children are in the 4th grade, from a school in Constanța County.

¹⁰ Victoria Verdeș și Svetlana Rusnac, „Adaptabilitatea social-psihologică ca o condiție a depășirii crizei vârstei adulte,” în *The contemporary issues of the socio-humanistic sciences*, ediția 6, 11-12 decembrie 2015, Chișinău, Vol. 1 (Chișinău: Editura ULIM, 2015), 389-397.

¹¹ Aurelia Mihai, *Adaptarea școlară. Abordare psiho-socio-pedagogică în învățământul primar* (Sfântul Ierarh Nicolae, 2010).

4.4. Research methods and tools

In order to collect the data, process and interpret it, we used the following research methods: the bibliographic study method; investigation method; graphic method.

For this study, we used the Behaviour Assessment System for Children Second Edition (BASC-2) questionnaire. It is one of the most popular systems used by psychologists, educational specialists, doctors and other clinicians to gain more information about children's behaviour and emotions.

A comprehensive system developed by eminent experts in child behaviour, the BASC-2 includes a wide range of components for gathering informants from children as well as parents and teachers.

This information focuses on both the strengths and weaknesses of the child's behaviours and emotions so that the child's positive qualities are not overlooked while potentially problem areas are explored. Therefore, this study focused on the PRS-C Parent-Child Rating Scale questionnaire (ages 6-11) ¹².

5. Hypothesis testing

Hypothesis 1: It is hypothesized that there is a significant difference in the anxiety level of pupils in 2nd and 4th grades.

Table 1. The t-test

		Levenes Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	Df	Sif (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Anxiety	Equal variances	1.001	.323	-	38	.231	-1.850	1.521	-	1.228
				1.217					4.928	
	Equal variances			-	35.147	.232	-1.850	1.521		1.237
	not assumed			1.217					4.937	

To interpret the provided data and conduct statistical and psychological analyses, it is essential to categorize this data into two distinct segments: one concentrating on Levene's test for variance equality and another on the t-test for mean equality. The data are segregated based on each psychological variable (Aggressiveness, Anxiety, Adaptability), with each segment undergoing independent analysis.

¹² N. Mitrofan, A. Ion, și D. Iliescu, „Sistemul de Evaluare a Comportamentului Copiilor - 2 (BASC®-2),” 22 iulie 2019, <https://monitorulpsihologiei.com/basc-2-behavior-assessment-system-for-children-2/>.

Regarding Anxiety, the p-value obtained (0.323) surpasses the typical significance threshold (e.g., 0.05), indicating insufficient evidence to dismiss the null hypothesis. Consequently, we infer that the variances for the anxiety data groups are comparable.

The t-test for mean equality is employed to assess if significant variances exist between the means of two distinct groups.

Concerning Anxiety, the elevated p-value suggests the absence of notable differences between the groups concerning anxiety.

In summary, for anxiety, no significant disparities are observed between the groups.

Hypothesis 2: It is assumed that there is a significant difference in the level of aggression of pupils in the 2nd and 4th grades.

Table 2. The t-test

		Levenes Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sif (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
Aggresivity	Equal variances	8.687	.005	-	38	.000	-6.300	1.072	Lower	Upper
				5.875					-8.471	-4.129
	Equal variances not assumed			-	25.795	.000	-6.300	1.72	8.505	-4.095
				5.875						

Aggressiveness: Since the p-value (0.005) is less than the usual significance level (eg 0.05), there is sufficient evidence to reject the null hypothesis. Thus, we can conclude that the variances are not equal for the aggression data groups.

Thus, for aggression, there are significant differences between groups, with a significantly lower mean score in the intervention group.

Hypothesis 3: It is assumed that there is a significant difference regarding the level of adaptability of pupils from the 2nd and 4th grades.

Table 3. The t-test

		Levenes Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sif (2- tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
Adaptability	Equal variances	.248	.621	2.012	38	.051	1.800	.894	-.011	3.611
	Equal variances not assumed			2.012	37.164	.051	1.800	.894	-.012	3.612

Adaptability: Here, the p-value (0.621) is greater than the usual significance level (eg. 0.05), which means that there is not enough evidence to reject the null hypothesis. There are no significant differences between data groups in adaptability before intervention or manipulation.

This suggests that participants in the control and intervention groups show comparable levels of adaptability at baseline.

Adaptability: The p-value is close to the usual significance level (0.05), indicating a significant difference between the data groups regarding adaptability, but this difference is not significant enough to be considered statistically significant in the traditional way. However, it is important to analyze the results from a practical point of view and to consider the possible clinical or psychological implications of this marginal difference.

6. Strategies for prevention and management/intervention of the phenomenon of aggression

The specialized literature abounds with numerous solutions, at the age of secondary school students, through which it is possible to prevent manifestations of aggression as well as intervention measures aimed at reducing it, as much as possible. Below, at a schematic level, we present a series of preventive and intervention measures:

Prevention strategies:

- Compliance with the school regulations in which the role of the director, teachers, counselors, as well as the obligations and rights of the students are provided. This regulation is supposed to be brought to the attention not only of the students, but also of the parents;
- Frequent meetings of the teaching staff to mention the situations in which the students' aggression was reported and to discuss possible solutions. The meetings are opportunities to train teachers to know how to take, at the right time, an attitude against aggression. During these trainings, teachers are helped to develop positive attitudes (pleasant looks, kind gestures, appropriate words instead of reprimands) towards students, attitudes that, indirectly, will help to reduce aggression;

- The use of games in the school, after classes, where the teaching staff closely supervises the students' activities. It has been found that many acts of violence occur outside the program hours, when the students know that they are not supervised by an adult;

Running programs such as Anti-aggression in school, which aims to prevent and reduce the frequency of violent manifestations in schools

3.2 Intervention strategies:

- Sanctioning children through individual observation, "public" reprimand (in front of the class, class council/teacher) and written reprimand. Also, in the mentioned study, it is considered that the school discusses not only with the student involved, but also with the parents, the principals;

- The interventions of school counselors through counseling activities for victims of assault, but also by organizing counseling sessions, in which students learn how to get to know themselves/those in the group and how to relate;

- Involvement of parents in activities at the school or local community level that aim at the socio-emotional development of students. The involvement of model families in the organization of mini-excursions where children who have shown aggressive behaviour are invited, to learn how to relate and behave appropriately in various situations;

- Involvement of the local community (Police, Local Authority for Child Protection, NGOs, Church) through individual or group assistance programs for children who show aggression in the school space.

Conclusions

Based on the data obtained after the study, from a psychological point of view, we can support the fact that the class level is not a factor that influences the students' states in relation to anxiety and adaptability, a fact for which no significant differences emerged.

In general, we could say that fourth grade students tend to be more aggressive because a person's aggressive behaviour is very much related to how they value themselves, to the self-image that everyone builds about himself.

Students, like any human in general, need signs of recognition, a certain amount of contact with other peers.

At the same time, it should be stated that, in the case of anxiety, due to their age, the students did not have interactions that caused them anxiety states, therefore no significant differences were recorded between the two classes of students.

This fact is also due to the level of adaptability that students have due to their age. The younger the age, the greater the degree of adaptability. Therefore, no significant differences were recorded regarding the level of adaptability between the two classes.

In conclusion, following the study, we were able to identify the fact that the class level is not a factor that influences the level of anxiety and adaptability between the 2nd and 4th grades.

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