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The Necessity of Using Adaptive Coping Mechanisms in the Context of Online Teaching

Angela Mariana JIBOC[1]

[1] Clinical psychologist, cognitive-behavioral psychotherapist, specialist speech therapist, expert, supervisor, first degree speech therapist teacher, employee of C.J.R.A.E. Satu Mare, Romania, jibocangi@yahoo.com

Abstract: *This article is based on a study in which we investigated the relationship between coping mechanisms manifested by students and their reading level measured by number of errors and time, reading speed comprehension and writing in the case of one group of students (N = 55) with ages between 12-14 years. For this purpose, the Battery for the assessment of developmental dyslexia and dysgraphia was used- DDE-2. The Battery includes eight subtests: five for the analysis of the reading process and three for the analysis of the writing process, and the CERQ Cognitive Emotion Regulation Questionnaire identifies nine coping strategies. The results show that, in general, our group adopts highly adaptive coping strategies in stress management, especially refocusing on planning, positive reassessment, while their dysfunctional coping mechanisms are: ruminating, self-blame.*

Keywords: *students; coping strategies; refocusing on planning; positive reassessment.*

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Introduction

Online teaching / learning can be defined as an alternative form of education in which the continuation of the educational process under normal or self-isolation conditions is ensured, through various digital tools for distance communication.

Coping behavior, defined as the totality of cognitive and behavioral efforts to reduce or tolerate the demands created by a stressful transaction (Lazarus & Folkman, 1984). Adaptive coping designates a stabilizing process in the management of disruptive events (Georgescu et al., 2020; Harja, 2020; Ichim, 2021; Rus, 2021), management that pursues two main purposes: a) to help the person to maintain a psychosocial adaptation in his existential environment; b) to help eliminate or reduce the mental distress inherent in disturbing situations. We used as base studies such as: Geisthard and Munsch (1996), students with learning disabilities reported that they use more cognitive avoidance as a coping mechanism in order to cope with the stress caused by school and family problems (Garcia & Pintrich, 1994). The authors, Sara Givon and Deborah Court (2009), interviewed 20 Israeli high school students with learning disabilities over three years to identify coping strategies specific to high school students, they identified as coping mechanisms used: "Avoidance", "Rebellion", "Reconciliation" and "Determination". The study by Noala Firth and Erika Frydenberg (2010) on students aged 12 to 13 with learning difficulties, identified a greater use of a generally unproductive coping style in particular, strategies to ignore the problem they face.

Research Methodology

The design of the research is correlational, multifactorial intragroup. The *independent variables* are: the level of difficulties in writing - reading acquisition among students with a medium-low level of cognitive abilities (IQ). The *dependent variables* are given by: the 9 coping methods, established by the Questionnaire - CERQ and the reading time and the number of reading errors, time and comprehension, made by each child (established with the ***Evaluation Battery - DDE-2***). The data were processed with the statistical program SPSS 18.

General hypothesis: The coping mechanisms used by students in the conditions of the difficulties of the reading and writing process constitute important predictors in the acquisition of reading and writing.

The objectives we pursue in this paper aim at:

• Evaluation of the coping mechanisms used by students in stressful situations within the instructive-educational activities.

• Identification of the relationship between reading level, time, number of errors, writing after dictation and coping mechanisms used by students.

This article is based on our study in which we investigated the relationship between coping mechanisms manifested by students and reading level measured by number of errors and time, reading speed comprehension and writing in the case of one group of students (N = 55) with ages 12-14. In our study we used the Battery for the evaluation of dyslexia and developmental dysgraphia - DDE-2 (Sartori et al., 2007). The battery includes eight subtests: five for reading process analysis and three for writing process analysis; The CERQ Cognitive Emotion Regulation Questionnaire (Garnefski et al., 2007) identifies nine coping strategies.

Research Results

Analyzing the results of our research, we present in Table 1 a primary analysis of data at the sample level, the most commonly used mechanisms of positive or adaptive emotional cognitive coping are: refocusing on planning, positive reassessment, positive refocusing, acceptance and perspective, and as dysfunctional coping mechanisms: ruminating, self-blaming, catastrophizing and blaming others.

Table 1. Frequencies of manifestation of coping mechanisms at the sample level
Source: authors' own conception

		Self-blame	Acceptance	Ruminating	Positive refocusing	Refocusing on planning	Positive reassessment	Perspective	Catastrophizing	Blaming others
N	Valid	55	55	55	55	55	55	55	55	55
	Missing	0	0	0	0	0	0	0	0	0
Mean		11.3818	13.8545	12.5091	13.0182	14.3455	14.0182	12.0727	10.0364	8.3273
Median		11.0000	14.0000	12..0000	13.0000	14.0000	14.0000	11.0000	10.0000	8.0000
Mode		9.00	12.00	10.00	11.00	14.00	12.00	11.00	9.00[a]	4.00[a]
Std. Deviation		2.93441	3.141123	3.45271	4.20534	3.15183	3.03371	3.64059	3.36080	3.07351
Minimum		5.00	9.00	5.00	4.00	7.00	7.00	5.00	4.00	4.00
Maximum		18.00	20.00	20.00	20.00	20.00	20.00	20.00	18.00	16.00

a. Multiple modes exist. The smallest value is shown.

In order to determine whether differences exist at the grade level in terms of accuracy of writing-reading, we will evaluate the differences at the rank level between more than two independent samples using the Kruskal-Wallis test. The values follow the shape of the chi-square distribution, which

has its origin in the value 0, the more the sums of the ranks for the 14 groups are different from each other, the higher the value of the test and potentially closer to a significant variation.

There are significant differences between the averages of the ranks in reading errors between grades at the level of the following subtests: Test 2 errorsFM Abs: high frequency, low imaginative content, we have Chi-square coefficient, $\chi 2 = 9.640$, DF = 3 and p = 0.022, since the value of p is less than 0.05, the statistical link is significant (95% trust). Test 2 errors FM Con: low frequency, high imaginative content, we have Chi-square coefficient, $\chi 2 = 11.786$, DF = 3 and p = 0.008, since the value of p is less than 0.05, the statistical link is highly significant (99% trust). Test 2 errorsFM Abs: low frequency, low imaginative content, we have Chi-square coefficient, $\chi 2 = 10.996$, DF = 3 and p = 0.012, since the value of p is less than 0.05, the statistical link is significant (99%trust). Test 8 homophone errors, Chi-square coefficient, $\chi 2 = 10.130$, DF = 3 and p = 0.017, the statistical link is significant (99% trust).

Table 2. Chi-square test to assess a significant difference between the averages of ranks of reading and comprehension time by grade
Source: authors' own conception

Test Statistics [a,b]

	Test 1 Time	Test 2 Time FM_Con	Test 2 Time FM_Abs	Test 2 Time FMCon	Test 2 Time FMAbs	Test 3 Time_a	Test 3 Time_a	Test 3 Time_c
Chi-square	8.863	9.228	5.516	11.437	8.362	5.834	2.809	4.434
Df	3	3	3	3	3	3	3	3
Asymp. Sig.	.031	.026	.138	.010	.039	.120	.422	.218

a. Kruskal Wallis Test
b. Grouping Variables: grade

Analyzing table no. 2 we determine the existence of differences at the level of grades in terms of speed of writing - reading, the differences in rank at the two independent samplesare evaluated using the Kruskal-Wallis test again. We notice that there are significant differences between the averages of the reading time ranks between grades at the level of the following subtests: Test 1 time, we have Chi-square coefficient, $\chi 2 = 8.863$, DF = 3 and p = 0.031, since the value of p is less than 0.05, the statistical link is significant (95% trust). Test 2 time FM Con: high frequency, high imaginative content, we have Chi-square coefficient, $\chi 2 = 9.228$, DF = 3 and p = 0.026, since the value of p is less than 0.05, the statistical link is highly significant (95% trust). Test 2 time FM Con: low frequency, high imaginative content, we have Chi-square coefficient, $\chi 2 = 11.437$, DF = 3 and p = 0.010, since the value of p is less than 0.05, the statistical link is highly

significant (99% trust). Test 2 errorsFM Abs: low frequency, low imaginative content, we have Chi-square coefficient, $\chi 2 = 8.362$, DF = 3 and $p = 0.039$, since the value of p is less than 0.05, the statistical link is significant (95% trust).

Discussions

The results show that, in general, our group adopts highly adaptive coping strategies in stress management, especially refocusing on planning, positive reassessment, while the dysfunctional coping mechanisms are: ruminating, self-blame.

Another important conclusion shows that as students grow, the time spent on reading and writing tests decreases and thus implicitly the level of speed, accuracy and comprehension of reading increases, but unfortunately the number of errors recorded does not decrease as students approach the eighth grade, which correlates with specialized studies showing that the reading speed of a student with dyslexia is lower than that of a child of the same chronological age without specific learning disorders.

Analyzing the data we notice that as students increase the time spent on reading and writing tests, the level of speed, accuracy and comprehension of writing-reading decreases also, but unfortunately the number of errors recorded does not decrease as students approach the 8th grade. Specialist studies show that the reading speed of a student with dyslexia is lower than that of a child of the same chronological age without dyslexia (Pierart, 1994; Burlea et al., 2010) and the reading speed of pseudowords is lower than the reading of words (Grégoire & Piérart, 1994; Ziegler & Goswami, 2005) which our study also demonstrates. Possible explanations for this situation would be: in the secondary school in Romanian language and literature classes there are no more reading exercises and the lack of reading exercise is felt, students are more concerned to read quickly to finish the passage quickly than to read with awareness, to understand what they read. The tendency towards superficiality in reading is felt with the approach of the eighth grade, students do not have enough time to deepen the meaning and significance of the word (Thoits, 1995). Being the generation that lives very much online (Luca et al., 2020), where the images succeed each other quickly, the depth of understanding might be affected, at the same time, while online, they use many abbreviated words, grammatically distorted, and these written distortions might be maintained in their school activity. Students record a large number of errors in low-frequency words in their usual language (Burlea et al., 2012; Panadero & Alonso-Tapia, 2014), which

indicates that their reading focuses on form reading and does not deepen the meaning of the word because it takes time, so some students will develop over time a denotative reading focused on the common meaning of words ignoring polysemantism, affecting the understanding of meaning and significance (difficulties encountered in test 4), which may be a possible explanation for functional illiteracy.

Conclusions

In online teaching the teacher offers generalized suggestions, in a traditional classroom, students can directly share their opinions and clarify their own questions with the teacher, getting the answers immediately. Online instruction can be an impediment for students with poor school results; the contents exposed in the online environment can be more difficult to assimilate in the conditions in which their understanding is not facilitated by the teacher.

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