

Age Changes in Personal Appraisals Among 12-15 Year Old Pupils Concerning Emotions such as Enjoyment, Anxiety and Boredom

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Abstract: The article presents the most valuable results of a research effort conducted involving schoolchildren ages 12–15. The sample comprises 343 pupils. The GLM Multivariate analysis reveals some statistically relevant differences in the judgements concerning the emotions of pupils in twenty out of a total of 33 statements included in the questionnaire. The data confirm the significant changes in pupils' judgment between the 12th and 15th years. The research is based on the control-value theory of achievement emotions, developed by R. Pekrun. In the presented research the theory is implemented for measuring the effects of age on the experienced emotions during the classes. In the first section of the article, a short introduction is presented and some basic transformations in the personality sphere in the early adolescence are described. In the second section, I discuss the essence of Pekrun's control-value theory about emotions and their importance in the field of the school settings. Next, I give a detailed account of instrument and measurements which were used in the research. The questionnaire deals with three scales – enjoyment, anxiety and boredom. The study aimed to determine the content of the emotional judgments of the fifth to eighth grade pupils in the Bulgarian comprehensive school. It covered a total of 343 pupils. The zero hypothesis of this research says there is no difference in the subjective judgements of the pupils concerning the experiencing of enjoyment, anxiety or boredom generated by the age. The zero hypothesis turns out to be partially correct.

Keywords: Emotion, Enjoyment, Anxiety, Boredom

1. Introduction

The perception of emotion by the pupils over the period of the early adolescence appears to be an important aspect of their development. That is when the transformation in the personality sphere takes place and so does the awareness of the emotional identity, which is a precondition for more or less successful coping with difficulties at school or outside it. As early as in 1999, Scherer [1] presented his thesis concerning the assessment of emotion as a process, which comprises a series of judgements, and reactions that are related closely to the particular situation provoking them. The assessment directly affects the subjective sensory sensations, gesturing and the dominant trend in the actions of an individual's personality. It is this idea that prompted me to present the research in this article.

2. Control-Value: Theory of Emotions in the Process of Training

Control-Value, the theory of emotions, was presented in details in the publications of Pekrun [2] and his associates Götz, Frenzel, Hall and Lüdtke [3]. Within this theory, the "emotions are seen as multi-component, coordinated processes of psychological subsystems including affective, cognitive, motivational, expressive, and peripheral physiological processes" [2]. According to the author's understanding, emotions are a complex psychological construct that affects all elements of the experience, thinking and behaviour of pupils. Furthermore, he also admits that emotions can be of different intensity and mode of action: they might stimulate or inhibit the activity of pupils. He shares Scherer's view of the personality-based and situational

nature of the causes that drive emotional responses.

Over the past few years, research on various authors affirm the importance of the value-control- theory of emotions. There are experiments that prove the link between attention and emotions [4]. Bad memory is linked to stimuli that are judged as emotionally "negative" and with the use of larger resources of attention. Emotions modulate attention which affects the associative links between the concepts used by participants in the experiments.

The influence of cognitive processing on emotions and vice versa, is evidenced in the survey on Trezise & Reeve [5] for teaching mathematics. The limited working memory increases the anxiety of pupils in short periods of time and the emotions change and affect the speed and accuracy of solving of mathematical problems. The highest degree of stability shall be established for students with high working memory and a high degree of anxiety. Statistical analysis gives them a reason to make the following conclusion: "High WM (working memory – N.G.) (with low or high worry) was associated with accurate problem solving for easy problems, but for hard problems only WM low with high worry predicted high accuracy" [5].

In another new study [6] the hypothesis about the influence of the emotional content of the academic task on cognitive processes is verified. The participants are the students of the university. It reveals that there is no difference between the two groups, whether they be placed "hot" or "cool" task. The two experimental groups use the same cognitive resource to process the necessary information.

Hargreaves maintains, that "the emotions are at the heart of teaching" [7]. The positive attitudes to the pupils influence the efficiency of their communication in the classroom. We need to know more about their impact on the ability of pupils to learn, because "fear of specific emotions and real world experiences of those emotions" could be very informative about the quality of teacher – pupil's relationships [8]. Obviously, data in current studies are contradictory. That's what gives rise to the need to establish a relationship between age and judgments of emotions in a sample of Bulgarian pupils.

3. Instrument and Measurements

Based on his theory, Pekrun and his associates created a

questionnaire to study the emotions of the pupils in the learning process: Achievement Emotions Questionnaire [9]. I used three of the scales from the questionnaire in my study: class-related enjoyment, class-related anxiety and class-related boredom. The first scale encompasses ten items covering the experiencing satisfaction by the presence at the class, by the understanding of the educational content; the desire for active participation in the class is shared. The second describes the anxiety scale by means of twelve items. Students here are required again to share what they experienced during the class: e.g., they feel nervous, not sure if they understand the learning content, whether they meet the requirements of the teacher; they are, also, anxious that they would give wrong answers to the teacher's questions; worrying not responding to the teacher's questions wrong, experiencing tension and having an accelerated heartbeat. The third scale describes boredom during classes in eleven items. Pupils have to judge how boring they are, are they absent, are they eager to wait for the hour to end up, whether they sit relaxed in their chair. The content of those scales corresponds to the Pekrun's concept [2] on the essence of emotions as a multi-component psychological construction where the important is the cognitive judgement, the physiological processes and the expectations of a pupil to the content of educational activities over the class. The relationship between values, subjective perception, and the regulation of individual activity manifested by the naming of emotions is an important indicator of determining the quality of learning, which explains why such studies are useful in practice.

4. Objective, Conduction, Sample and Reliability

The study aimed to determine the content of the emotional judgments of the fifth to eighth grade pupils in the Bulgarian comprehensive school. It covered a total of 343 pupils from schools situated in the region of Smolyan. 114 of them attended the fifth grade (first group), 162 were from the sixth grade (second group), while 67 attended the seventh and the eighth grade (third group).

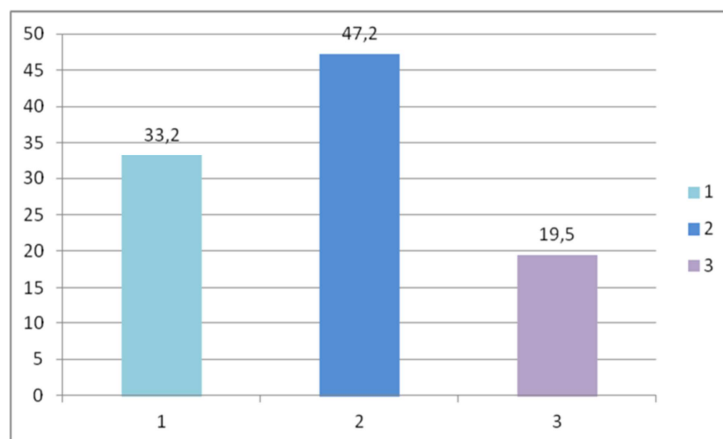


Figure 1. Structure of the sample within the research effort.

The questioning with pupils from individual schools was conducted within two weeks, allowing them to identify their emotional judgments, practically at the same time of the school year - in the middle of the second term. The sample was reduced to 328 pupils owing to the absence of answers to some of the questions from the questionnaires. Cronbach's Alpha for each of the three scales is as follows: "Enjoyment":.88; "Anxiety":.83; "Boredom":.89. The value of the rates proof the high level of reliability of the three scales while carrying out the following statistical procedures.

5. Hypothesis and Main Results

The zero hypothesis of this research says there is no difference in the subjective judgements of the pupils concerning the experiencing of enjoyment, anxiety or boredom which is generated by the age. GLM Multivariate analysis with SPSS. 13 was conducted. Pupils were distributed into three groups: 101: 12 years old; 160: 13 years old, and 67: 14-15-years old. Data showed statistically relevant differences in all three scales.

The "Enjoyment" Scale showed differences in the judgements in seven out of ten statements. As a whole, 14-15 years old showed considerable differences of compared to the 12 years old in terms of motivation to attend classes "because it's exciting" (.649). In terms of the statement "I enjoy being in class" (.838) the difference between the same groups is even larger. The two groups show medium differences both in terms of their satisfaction caused by their participation in classes (.549) and in terms of their sense of energising (.641). The differences in some of the same items are lower among the 13 and 14-15-years old: for example, in terms of "I enjoy being in class", the difference in the average values is .613; in terms of the statement "I enjoy participating so much that I get energize", it is .434; in terms of "After class I start looking forward to the next class", it is .430; in terms of "I am happy that I understood the material", the difference is .434, while within the group of those 12 and 14-15-years old, it is .741; in terms of "I am glad that it paid off to go to class", the differences are .423, among those 13 to 14 years old, and .647 among those 12 to 14-15-years old.

Pupil's judgements along the "Anxiety" scale show differences in terms of six of the total of the twelve statements suggested. As a whole, anxiety among those 14-15-years old gets lower in comparison with the other two groups. For example, those 14-15-years old get worried much less than those 13 years old in terms of whether the requirements to them in class might be too high:.725. At the same time, the difference in terms of the same statement among the 14-15 and 12 years old is too narrow: .439. In their thoughts about the classes, those 14 and 13 years old do not show any essential difference: the difference in their sense of anxiety is .347, while their sense of nausea or uncertainty is .484 and the difference between those 14-15 and 12 years old gets as high as .509. The 14 years old do not feel scared during a class. This is very much the case of those

12 years old, with the difference in the average values being .426, and of those 13 years old where it is .562. The 14-15 years old are anxious about saying something wrong so they would rather not say anything. This is what the values of the differences between them show in the other two groups: for the 12 years old it is .439 while for the 13 years old, it is .548. The perception of tension makes statistical differences only between the 14-15 and 12 years old, and is relatively low: .305.

Seven out of the eleven items in the "Boredom" scale reflect the difference in the age development of the pupils. The 14-15 years old again state openly that classes bore them. The differences for those two groups were manifested in terms of the following statements:

1. I'm tempted to walk out of the lecture because it is so boring (.530);
2. I get bored (.658);
3. The lecture bores me (.387);
4. Because I get bored my mind begins to wander (.462);
5. I find this class fairly dull (.621);
6. I think about what else I might be doing rather than sitting in this boring class (.428).

The group of those 13 years old shows a bit lower values of differences in terms of the same statements. The judgement on one of the key statements is indicative of the scale: "I get bored" gets a difference of .561. It provides orientation of the overall tendency toward approximation of pupil's perceptions in terms of activities included in the individual subjects of study.

6. Discussion

The zero hypotheses turn out to be partially correct. In about half of the items in the three scales – "Enjoyment", "Anxiety" and "Boredom" establishe a difference between pupils in three age groups. Overall, the differences between the 12-year-olds and 14-15-year-olds are greater than those between 13-and 14-15-year-olds. Cognitive dimensions of enjoyment to be present in the class are more pronounced in younger pupils. 14-15-years-old school pupils worried considerably less in relation to your participation in class. They have already devised a strategy of behavior and prefer not to say anything if you are not sure of the answer. There are also statistical differences in responses to the Boredom scale which confirm the rational behavioral strategy of 14-15-years old, who tend to leave the hours and do not worry about saying they are bored.

The results presented clearly outline the tendency in the age changes happening in terms of experiencing enjoyment, anxiety or boredom. The reduction in the enjoyment of presence in class is accompanied by the intensifying anxiety among those 14-15 years old. Boredom in class is also manifested as a sustainable element in the judgements of those 14-15 years old. They sense a desire to leave the class, yawn more often, get bored and start thinking about other things. Such data are supposed to evoke some reflections

among educationalists and psychologists on the need of change both in terms of the educational content and in terms of the activities carried out by the pupils during a class. The sustainable reduction in the motivation to take part in class could be a symptom of low quality of teaching. This is why innovative models for structuring the lessons in all disciplines for the first degree of the obligatory secondary education in Bulgaria need to be experimented. Restructuring the educational content by key competences will change the nature of the activities carried out by the pupils, which would influence positively their experience.

7. Conclusion

The findings point to the concept of "affective arrangement" [10]. It implies an interdisciplinary interpretation of emotional judgment. For its formation contribute both, cultural traditions and situational conditions under which act the social actors. The emotionality is heterogeneous in nature and originates from the dynamics of the interaction between individual affective states and social surroundings. The intensity and the valence of emotions depend on the age of the participants in the process of interaction. The influence of educational content on judgments of emotions is determined more by the personality of the pupil and simultaneously by the professional skills of the teacher to use appropriate methods for the implementation of the learning tasks.

The research clearly shows that pupils, aged 12-15, expand their emotional experience. The data have shown the age dynamics of the occurring emotional appraisals. The main reason for this is the changing peer relationships as well as pupils – teachers' relations. It is indeed possible that there are some hidden and vague changes in the emotional experience of adolescents that need to be further investigated by other methods such as microcoding or interviews.

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