

The Importance of Motivation in Teaching Math for Primary Students in Uzbekistan

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Abstract: In this article, it is given the type of motivation in teaching math for primary students. It is also discussed the importance of the motivation to lead them reaching success in math.

Keywords: primary school children, math lessons, difficulty in math, motivation, Intrinsic motivation, Extrinsic motivation, reward, punishment.

Motivation plays an extremely important role in achieving something in human's life. Motivation is not only necessary to achieve business management policy or something, but it plays a special role in learning a subjects in school for children. The motivation given to schoolchildren by their teachers helps them to develop their interest in science from an early age and to overcome difficulties.

Mathematics is one of the most important sciences that should arouse the interest of students from childhood and overcome any difficulties in a timely manner. It must be admitted that many high school students have some difficulty in acquiring mathematical knowledge compared to other subjects. Therefore, it is important to motivate pupils, taking into account the psycho-physiological characteristics of them. Encouraging students to acquire mathematical knowledge from primary school onwards will ensure that they are able to acquire knowledge later. Even though there has been much research in psychology and general education generating several theories aiming to support explanations about motivation and learning, such as Bandura's (1977) theory about self-efficacy or Wigfield and Eccles' (2000) expectancy-value theory, the topic has not received much attention in mathematics education (Hannula, 2006; Schukajlow et al., 2017). There are different motivations in helping students to overcome math challenges in primary school in Uzbekistan.

Intrinsic motivation is defined as the doing of an activity for its inherent satisfaction rather than for some separable consequence. When intrinsically motivated, a person is moved to act for the fun or challenge entailed rather than because of external products, pressures, or rewards.

Intrinsic motivation **fosters positive dispositions toward mathematics**, which, in turn, encourage students to develop self-efficacy and mathematical autonomy as they discuss and share their understandings with their classmates. At the same time, students enjoy doing mathematics and develop ownership of their ideas.

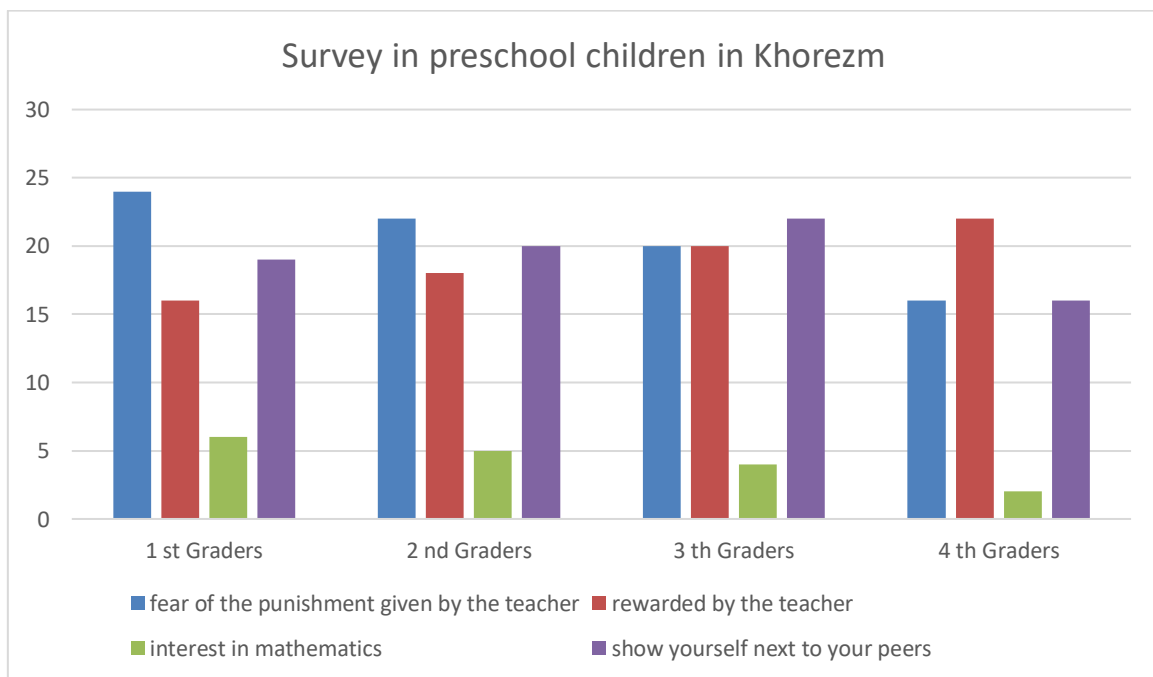
Previous studies found boys to be more intrinsically motivated toward mathematics than girls (Guay et al., 2010). One study showed sex differences favoring males in mathematics in the beginning of junior high school, but no such difference in the early grades of elementary school (Leahey & Guo, 2001).

Extrinsic motivation involves completing a task or exhibiting a behavior because of outside causes such as avoiding punishment or receiving a reward.

According to Middleton and Spanias (1999), extrinsically motivated students do not necessarily have a sense of ownership of the mathematics that they study; instead they focus on praise and interest from teachers, parents and peers and avoiding punishment or negative feedback. Despite the negative ideas on extrinsic motivation, several researchers argued that extrinsic motivation triggers the intrinsic motivation rather than undermining it and it has positive effects especially when students have low levels of intrinsic motivation (Brophy, 2004; Cameron, 2001; Lepper, Corpus and Lyengar, 2005).

Primary school pupils are more attached to this type of motivation in particular. Obviously, a first-grader who takes the first step into school is terrified of the punishment that a math teacher gives them. Their childish feelings of fear towards adults are strong in their hearts. For example, a student who fails to do his homework or does not solve a problem may be beaten, insulted and punished by a teacher. As a result, they try to complete the given tasks and math problems in a timely manner. When they are in fourth grade, this motivation may diminish from first or second grade. Because they are familiar to the math teacher and the fear is lost. Let's take reward, which is another component of Extrinsic motivation. We know that every child, especially young children, expects encouragement from adults. In math lessons, the fact that a student who solves a difficult problem or task is rewarded by a math teacher plays a huge role in motivating other students in the class to solve the same level of task next time. Primary school students are very eager to show themselves in front of their peers, their parents. This is why such an award is so important when there is a difficulty in math lessons or when a topic is challenging for students.

This bar chart shows the share of motivation of primary schools of school No. 36 in Shavat district of Khorezm region in overcoming difficulties in mathematics lessons.



According to the bar chart, the most popular type of motivation in math classes among 1th and 2 nd Graders was fear of the punishment given by the teacher being 25 children out of 30. The least children motivate by their interest in all graders. In addition to this, there are downward trends in the number of pupils who are motivated by punishment and personal interest in math. However, the motivation which is given by reward hold upward trend in the group.

In conclusion, it should be noted that in developing Uzbekistan, nothing should be neglected in educating the younger generation. In particular, the in-depth teaching of mathematics to the younger generation encourage them to think logically in the future, to easily learn other sciences. Although motivation in mathematics lessons in the primary grades has not yet been studied in detail, it is very important to motivate the younger generation to overcome any difficulties in mathematics in the primary school.

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