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The causal attributions of achievements and success of senior schoolchildren learning

The author of the article reviews the results of the study of the influence of causal attributions of achievements upon senior schoolchildren's learning success. She shows the negative influence of the unfavourable attribution type, as well as the implicit theory of the intellect predetermination upon the learning. The necessity of further research of this topic is proven.

Key words: causal attributions of achievements, favourable attribution of success and failure, unfavourable attribution of success and failure, implicit theory of the intellect increase, implicit theory of the intellect predetermination, learning success.

One of the central problems of the psychological and pedagogical researches is the studying of the different factors in order to increase the success in the learning activity of the schoolchildren, which is influenced by a great number of the facts as social, psychological, pedagogical and etc. The biggest interest is attracted to the students' individual and psychological particularities, determining their learning possibilities as well as the success of the educational activity.

The received results are contradictory and do not let to make unambiguous conclusions about the impact of these or those factors upon educational activity results. One of the criteria of the success (efficiency) is the educational activity, which reflects its resultative characteristic – the volume and quality of the knowledge assimilated, developed skills, expressed into the merit point system [2]. The researchers of the problem of the success of the learning more often connect it with the cognitive characteristics of the pupils, due to their intellect, abilities, training standards, cognitive strategies and etc.

However in psychological and socio-psychological studies (T.O. Gordeeva, 2002; N.A. Batourin, 1999; V.A. Yanchouk, 2001; D.A. Tsiring, 2001; G.M. Andreeva, 1979; V.P. Trousov, 1981; T.G. Stephanenko, 1999) we can find large data, characterizing interrelations of the activity efficiency and particularities of causal attributions of their subjects. At the same time only single studies are dedicated to the influence of the causal attributions upon the achievement motivation and learning success (T.O. Gordeeva, 2006; M.M. Dalgatov, 2001, 2006; A.M. Moutalimova, 2006; N.V. Tagaeva, 2005; A.A. Shepeleva, 2008). In the experimental researches (Wilson, Linville, 1985) it was revealed that, pupils' attribution of the bad marks to changeable, instable reasons leads to the positive expectations about future marks and increases their academic results. Besides in the researches of B. Licht and C. Dweck it was discovered that, when they face troubles (in the situation of failure) children with the pessimistic and optimistic styles of the explanation of their achievements behave themselves in a different way. The first ones have problems with solving the problems, while the optimists stay at the same level (Dweck, Licht, 1990) [1].

It was established that their achievements are attributed to such characteristics of the causal attributions like stability (constancy), internal localization and unaccountability. Moreover, in the studies of Dweck and Leggett it was found that the explanation of



the failures by the absence of the abilities doesn't have any negative impact upon the activity, if they are interpreted by the subject at the level of the intuition as the quality which can be changed, developed and formed (Dweck, 1991; Dweck, Leggett, 1988). A. Bandura's studies also showed that, the representations of the subjects of the educational activity, connected to the confidence in their abilities and their own efficiency, have positive influence upon their success (Bandura, 1995; Cervone, 1993; Zimmerman, 1995). The results of the studies, carried out in the frame of the attributive theories, testimony that the explanation style while facing the difficulties, and casual attribution of the success and failure influence the motivation of the behavior, particularly, activity or passivity, persistence or helplessness, and schoolchildren's success in whole, too (Abramson, Seligman, Teasdale, 1978; Peterson, Seligman, 1984). It means that, between causal attributions of the subjects and results of their activity and success of their activity, and also emotional and motivational indices there are some certain interrelations (B. Viner, M. Seligman, K. Dweck, A.B. Orlov, M.M. Dalgatov and others). However their correlations are still unknown, we aren't sure about the fact that the causal attributions influence the learning success and what is the nature of this influence.

Taking into consideration all the above said, we started the research to find out the influence of the causal attributions of the achievements upon learning success of the senior schoolchildren, where 225 schoolchildren of the secondary schools of Dagestan took part. The indices of the learning success were studied with the help of the expert teachers' assessment, pupils' learning success analyzing the documents (class registers, tables and others). While using causal attributions we applied: modified versions of the methods to measure types of the attribution Bugental-Ueylen-Haneker (modification of M.M. Dalgatov, I.I. Ilyassov); Dembo-Roubinshtein-Prikhozhan (modification of M.M. Dalgatov, I.I. Ilyassov); methods of C. Muller and C. Dwek to identify the implicit representations about the intellect. The results, received according to the methods of Bugental-Ueylen-Haneker, showed that casual attributions have an influence upon the learning success at the level of statistical significance (Table 1). Notably, the significance of the influence of the favourable, as well as the unfavorable attribution turned to be lower separately than their cumulative influence. This tendency takes place in the situation of the success as well as in the situation of the failure.

Table 1
The main results of ANOVA of the influence of the attribution to success and failure upon the level of the success of the learning activity of the senior schoolchildren

Dependent variable	Independent variable	F	Mean
Assesement of academic results	Attribution of success	30,725	,000
	Attribution of failure	33,872	,000
	Attribution of success * attribution of failure	4,725	,031
Teacher's assessment	Attribution of success	26,679	,000
	attribution of failure	31,176	,000
	Attribution of success * attribution of failure	4,278	,040



The analysis of the mean value of the success level showed, that the level of the success of the respondents with favorable attribution to success and failure higher in comparison with the respondents with the unfavorable attribution.

ANOVA of the results of each factor influence upon the level of the success of the learning activity testifies that there are significant differences in the average indices of the success and expert pupils' marks depending on the type of the attribution (Table 2).

Table 2

The main results of ANOVA of the influence of the types of the attribution upon senior schoolchildren's learning

Independent variable	Dependent variable	F	Mean	F	Mean
		Situation of success	Situation of failure	Situation of success	Situation of failure
Attribution to abilities	Assesment of academic results	8,824	,003	10,163	,002
	Teacher's assessment	6,374	,012	7,893	,005
Attribution to efforts	Assesment of academic results	22,602	,000	,002	,040
	Teacher's assessment	33,024	,000	10,941	,001
Attribution to luck	Assesment of academic results	13,453	,000	1,314	,255
	Teacher's assessment	14,543	,000	4,128	,443
Attribution to difficulties	Assesment of academic results	6,163	,014	,842	,360
	Teacher's assessment	4,949	,027	,221	,679
Attribution to help	Assesment of academic results	4,378	,038	,742	,707
	Teacher's assessment	4,703	,031	,385	,535
Attribution to the mood	Assesment of academic results	1,132	,289	8,854	,003
	Teacher's assessment	,324	,570	3,702	,056

The results of the descriptive statistics let us conclude that the respondents with success attribution to abilities receive higher marks (3,95) of the success level in comparison with the respondents, who have no success attribution to abilities (3,24). In the conditions of failure we can observe the opposite situation: the success level of the respondents with the failure attribution to abilities is greatly lower (3,60) then the level of the success of the respondents having no failure attribution to abilities (4,06).

The explanation of the success by the efforts, and failure –by their absence positive-ly influences senior schoolchildren's learning success. The senior schoolchildren, having no attribution to the luck in both situations of the success and failure, demonstrate the indices of success lower (3,52) then the pupils with other types of the attributions (4,05). Attribution to the difficulty of the task (in the situation of the success) and attribution to help (in the situation of success), are less favorable to learning success.

Senior schoolchildren, explaining their failures by such temporary factor, as the bad mood, are more successful at learning (4,02), then senior schoolchildren, who do not use this causal factor (3,59). So, the results, received with the application of the modified version of the methods Bugental-Ueylen-Haneker, confirm our hypothesis about the dependence of the senior schoolchildren's learning success from the types of the causal attribution. The pupils with the favourable type of the attribution are characterized by higher level of the success, then the pupils with unfavorable type of the attribution who stand out by their lower academic results.



The results received according to the methods of Dembo- Roubinshtein –Prikhozan, justify and enlarge abovementioned conclusions. The studies of the influence of the self-assessment of the abilities, efforts, luck and difficulties of the studies upon senior schoolchildren's learning success showed that this correlation takes place at the level of the statistic significance (Table 3).

Table 3**The main results of ANOVA of the influence of the self-esteem upon senior schoolchildren's learning success**

Independent variable	Dependent variable	F	Mean
Self-assessment of abilities	Assesment of academic results	9,768	,002
	Teacher's assessment	5,896	,016
Self-assessment of efforts	Assesment of academic results	14,114	,000
	Teacher's assessment	8,358	,004
Self-assessment of problem difficulty	Assesment of academic results	5,378	,021
	Teacher's assessment	6,699	,010
Self-assessment of luck	Assesment of academic results	5,333	,012
	Teacher's assessment	5,096	,025

The analysis the mean-values of the success level of the senior schoolchildren shows, that the pupils with relatively high self-assessment of the abilities, efforts and difficulties are more successful (4,11), then the pupils with low self-esteem (3,57). The opposite tendency is typical for schoolchildren, who differ by the factor of the luck: «lucky» pupils have lower academic results (3,68) in comparison with «unlucky» ones (4,02).

In the studies of the foreign authors (B. Viner, C. Dweck, Kh. Heckauzen and others) it is underlined that the most affective for the individual is the failure attribution to abilities, because it has more important negative consequences for the subject (for example the phenomenon of the learned helplessness). Starting from the importance of the attribution to abilities, we thoroughly examined this causal factor. Besides we take into consideration the data of C. Dweck and her colleagues, which speak about the fact that the influence of the failure attribution to abilities becomes significantly lower if the intellect (abilities) perceived by the individual is a changeable quality of the personality. It was important to check whether the experts assessments differ from the academic results of the senior schoolchildren, having different ideas about possibilities of changing their abilities (intellect). This difference was found at the level of the statistic significance (Table 4).

Table 4**The main results of ANOVA of the influence of the implicit theory of the intellect upon the senior schoolchildren's learning success (using the method of C. Muller and C. Dweck and questionnaire of C. Dweck)**

Independent variable	Dependent variable	A mean square value	F	Mean
Implicit theory according to the methods of C. Muller and C. Dweck)	Assessment of academic results	93,247	117,484	,000
	Teacher's assessment	61,909	131,041	,000
Implicit theory of the intellect according to the questionnaire C. Dweck)	Assessment of academic results	68,368	75,523	,000
	Teacher's assessment	33,174	55,171	,000



Data, received with the help of the questionnaire of C. Dweck and method of C. Muller – C. Dweck, in the whole they confirm our hypothesis, that the respondents who believe in the intellect growth (the abilities are changeable) have higher indices according to the level of the learning success (4,21) in comparison with those who support the theory of hereditarian viewpoint on intelligence (3,03) (the abilities aren't changeable).

Thus, the results of our research show that the senior schoolchildren with the favorable type of the attribution of success and failure differ much more by higher level of the learning activity. These results are additionally proven by other data which testify that the students with high indices of the academic success are characterized (according to implicit theory of the intellect growth) by higher self-assessment of the abilities and efforts. At the same time the received data testimony that the unfavorable type of the attribution gives negative impact upon learning activity, it is proven by low academic results of those schoolchildren who have this type of the attribution.

The further researches in the context of these problematics can be dedicated to finding out mechanisms of the influence and interrelation between schoolchildren's causal attributions and other individual and psychological particularities, this information will help to find other ways of increasing success of learning.

References

1. Dalgatov M.M. Development of the favourable attribution in the learning process.– Yaroslavl: MAPS, 2001. – 124 p.
2. Moutalimova A.M. Psychological characteristics of the senior schoolchildren's learning and criteria of success. // Psychology and education. Materials of all-Russia scientific conference.– Makhachkala: DSPU, 2009. – p. 140-148.

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