# The impact of a teacher's motivational influence on pupils'emotional experience

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### Abstract

It is necessary to pay increased attention to the managing of emotions, to motivation and empathy, which requires most of all an individual approach to pupils in the process of teaching. This scientific study focuses on motivating and demotivating reactions of teachers and their impact on positive and negative emotional experiences of pupils during lessons. Our goal was to find out, if there are differences between emotional experiences of pupils taught by teachers, whose motivating had a positive character, and pupils of those teachers, whose motivating had a negative character. We have executed a quantitative research supplemented by a qualitative analysis. The research sample consisted of students of higher secondary education and their teachers from secondary vocational schools in the Trenčín district. Ten teachers and 375 students had been included in the research. We have identified the differences with the help of a method of microteaching analysis with the use of analytical scheme AS9 (author is Miron Zelina) and a modified version of the Questionnaire of Emotional Experience. The questionnaire contains entries focusing on positive and negative experiences. In both variables we have observed a statistically significant difference with students taught by Teacher 10, whose motivating had a negative character.

**Keywords:** Microteaching analyses; index of motivation; questionnaire of emotional experience; lesson; teacher; pupils.

# 1. Theoretical background

The issue of motivation is one of the most topical and most discussed pedagogical theories and praxes of today. It is the level of motivation and the teacher's activities related to it that influence not only the quality of pupils' results, but also their emotional experience. The statement of M. Nakonečný (2014), that without motivation there are no emotions and without an emotion there is no motivation, makes us conclude that emotions and motivation are closely interconnected. In the sense of the above stated W. McDougall and M.B. Arnold (In Nakonečný, M. 2000) also considered emotions to be an organic component of motivation. Also K.B Madsen (In Nakonečný, M. 2000) introduces two basic concepts of the relation between emotions and motivation. He states that emotions are on one hand a sign of motivation and on the other hand they become the condition for motivation. According to the author these two concepts are not in opposition with respect to the fact that some emotions directly motivate (fear) and that some names for the emotions are at the same time also motivating terms. Motivation is thus a way of achieving a set goal and emotions form the result of a situation that either supports or threatens the achievement of the stated goal.

The issue of emotion was also the research subject of R. Pekrun (1998). He proved that internal positive emotions have a positive influence on motivation, while negative emotions reduce motivation. In other words, to induce pupils' motivation a teacher should utilize their positive activating emotions and minimize the formation of negative ones. N. Eisenberg, et al., (In Schulze, R. - Roberts, R. 2007, p.79-80) supported this notion by stating that pupils with positive emotions, who approach new and different situations eagerly, are more likely to expose themselves to learning opportunities that help them understand the reasons for their emotional experiences and their subdued nuances. In regards to the school environment, it is the class itself, that in given moments influences pupils' experiences the most. Based on the afore-mentioned material, we must stress that the essence and quality of the teacher-pupil relations affects not only pupils' behavior, but also influences the level of educational and motivational impact, while at the same time affects the emotionality of teaching. There were other authors, who were trying to make the connection between motivation and emotions on an empirical level. They included U. Schiefele (1996), A. Erez and A. M. Isen and R. Pekrun (2002).

## 2. Motivational impact of a teacher on emotional experiences of pupils

Following the theoretical background we have conducted a research with an aim to find out, if there are differences between the degree of emotional experiences of pupils taught by teachers, whose motivating had a positive character and pupils of those teachers, whose motivating had a negative character. In particular we had postulated the following:

H1 We are assuming that there is a statistically significant difference in the degree of emotional experience between the pupils taught by teachers of individual groups.

The research sample was formed by teachers of secondary vocational schools in the Trenčín district (N=10) and the secondary school pupils of the higher secondary education from secondary vocational schools in the Trenčín district (N=375), which is approximately 3% of the total research population. From the total number of respondents 164 were male and 211 female. The Questionnaire of Emotional Experience (DEP36), whose author is J. Kožený, serves as a means for determining the frequency of positive and negative emotional experiences (Kožený, 1993). The original version of the questionnaire has 36 entries, in our case we created a modified version with 30 entries (15 questions for positive experiences and 15 for negative experiences). Pupils answers ranged on the original five level scale starting from never, not even for a moment (1), rarely, only for a moment (2), sometimes I felt like that (3), almost the whole time I felt like that (4), I felt like that the whole time (5). Cronbach's alpha of the questionnaire is 0.724.

Currently, we may encounter a number of models for systematic observation and a subsequent analysis of the educational process. Many models, however, focus on the activity of a teacher, but microteaching analyses enable us to judge the interaction between a teacher and a pupil and not just the result. For this reason we decided, with the help of analytical scheme AS9, whose author is M. Zelina, to observe the level of pupils' motivation induced by a teacher's verbal reactions. Besides motivation, it is also possible to observe to what extent a teacher's style is dictatorial as well as the development of pupils' individual cognitive functions. According to P. Gavora (2012, p. 65) with microteaching analyses an observer makes use of a record sheet directing his observation, where he/she records the occurrence of given phenomena. The record sheet was used to capture pre-recorded interactive units – sentences a teacher said to pupils, his/her thoughts and sentences used during lessons. At the conclusion, after adding up individual interactive units in appropriate rows, a researchers acquires an overall behavior profile of a teacher during his/her lessons. Subsequently, relevant indexes can be calculated. In our case it is the index of motivation (Im=A/R).

## 2.1. Results

With the use of the microteaching analysis and the analytical scheme AS9 we observed to what extent a teacher induces motivation of pupils by his/her verbal reactions. Two lessons were recorded for each teacher. Altogether 20 lessons of 10 teacher were recorded. Each lesson was attended personally, which means we have executed a direct and complex observation. Subsequently we transcribed the course of events from each lesson and according to the chosen analytical scheme (AS9) we coded and arranged individual interactive units. Based on the number of interactive units in individual areas we calculated

the index of motivation for relevant teachers. The results of the analysis are presented in table 1.

Table 1. The index of motivation values (Im)

	Im	_		Im
Teacher1	1.82	_	Teacher 6	1.95
Teacher 2	1.07	_	Teacher 7	2.40
Teacher 3	1.72	_	Teacher 8	1.72
Teacher 4	1.55	-	Teacher 9	2.56
.Teacher 5	1.39	-	Teacher 10	0.83

Source: own source

Only in the case of Teacher 10 the values were below 1.0, which means that his motivating influence had a negative character. Index of motivation for Teacher 10 represents an absence of motivating influence of pupils. Based on a deeper analysis we have discovered that in cases of Teacher 1, Teacher 2 and Teacher 8 their motivating influence also had a negative character, although their values were above 1.0. Teacher 1 used words conveying approval, praise and reward only as his "crutches" (..."good", "good, correct", "yes, good"...), which manifested itself in his final index of motivation. Index of motivation for Teacher 2 (1.07) represents more of a negative evaluation, which was manifested through degrading of pupils and disagreeing with their answers. His motivating had a predominantly negative character despite his Im value reaching above 1.0. Teacher 8 used strict instructions and pushed pupils to answer his questions, his use of words like "good", "yes good", "yeah" was rather stereotypical. Consequently, his score for category A increased, but it doesn't correspond to his real motivational influence. Despite his attempts to encourage pupils, it had a predominantly negative impact.

Subsequently we studied the intensity of research variables: positive emotional experience (EPP) and negative emotional experience (EPN) for individual teachers. Based on the LSD analysis, we then identified the differences between positive and negative emotional experience for individual research groups. The first group consists of pupils taught by teachers, whose motivating had a positive character compared to the pupils taught by teachers, whose motivating influence had a negative character. Table 2 presents the results of the comparison of individual research groups EPP (positive emotional experience).

Table 2. Comparison of individual research groups (index of motivation) in EPP (positive emotional experience)

Variable	Research group		F	p
	Ž_UIm3	Ž_UImn1	-1.123	0.717
		Ž_UImn2	-4.990	0.118
		Ž_UImn8	-6.029*	0.029
		Ž_UImn10	2.736	0.433
	Ž_UIm4	Ž_UImn1	4.228	0.148
		Ž_UImn2	0.361	0.905
		Ž_UImn8	-0.678	0.791
		Ž_UImn10	$8.087^*$	0.015
EPP		Ž_UImn1	0.926	0.756
	Ž III5	Ž_UImn2	-2.941	0.339
	Ž_UIm5	Ž_UImn8	-3.979	0.131
		Ž_UImn10	4.785	0.158
	Ž_UIm6	Ž_UImn1	7.411*	0.011
		Ž_UImn2	3.543	0.236
		Ž_UImn8	2.505	0.321
		Ž_UImn10	11.269*	0.001
ЕРР	Ž_UIm7	Ž_UImn1	3.482	0.233
		Ž_UImn2	-0.385	0.898
		Ž_UImn8	-1.423	0.578
		Ž_UImn10	7.341*	0.028
	Ž_UIm9	Ž_UImn1	-0.551	0.849
		Ž_UImn2	-4.418	0.139
		Ž_UImn8	-5.457 <sup>*</sup>	0.031
		Ž_UImn10	3.308	0.317

Source: own source

\*Notes.: EPP- positive emotional experience, Ž\_UImx- (x)-number of a teacher, whose motivating had a positive character; Ž\_UImn- (x)-number of a teacher, whose motivating had a negative character; F- Fisher Least Significant Analysis; p- the level of statistical significance;

The LSD analysis for the EPP variable revealed the following significant correlations. There was a statistically significant difference between pupils taught by Teacher 3, whose motivating influence had a positive character and pupils taught by Teacher 8, whose motivating had a negative character (p= 0.029) and whose pupils scored 6.03 points higher. The difference between pupils taught by Teacher 6 and pupils of Teacher 1 was 7.41 points and between pupils of Teacher 6 and Teacher 10 it was as high as 11.27 points. There was also a statistically significant difference between pupils of Teacher 7, whose motivating had a positive character and pupils of Teacher 10, whose motivational influence was negative (p= 0.028). Pupils of Teacher 7 scored 7.34 points higher in comparison with pupils of Teacher 10. The comparison between pupils of Teacher 9 and Teacher 8, whose motivating was negative, also produced a statistically significant difference (p= 0.031). In this case pupils of Teacher 8 scored 5.46 points higher compared with pupils of Teacher 9. Comparisons of individual research groups in EPN (negative emotional experience) are presented in Table 3.

Based on the LSD analysis of the EPN variable we found a statistically significant difference between pupils of Teacher 3, whose motivating was positive, and pupils of Teacher 8, whose motivating during lessons had a negative character (p=0.000). In this case, however, the pupils of Teacher 8 had a 9.37 points higher score. In the case of pupils taught by Teacher 4, whose motivating was positive, we found statistically significant differences with pupils of Teacher 1 (p=0.027) and Teacher 10 (p=0.025), whose motivating had a negative character. The score of pupils taught by Teacher 4 was higher than the score of pupils taught by Teacher 1 by 5.42 points and in the case of Teacher 10 the difference was 6.26 points.

Table 3. Comparison of individual research groups (index of motivation) in EPP (negative emotional experience)

Variable	Research group		F	p
	Ž_UIm3	Ž_UImn1	-3.544	0.172
		Ž_UImn2	-4.743	0.076
		Ž_UImn8	-9.371*	0.000
		Ž_UImn10	-2.707	0.353
	Ž_UIm4	Ž_UImn1	5.423*	0.027
		Ž_UImn2	4.224	0.094
		Ž_UImn8	-0.404	0.850
		Ž_UImn10	$6.260^{*}$	0.025
EDM		Ž_UImn1	3.587	0.151
EPN	Ž_UIm5	Ž_UImn2	2.389	0.353
		Ž_UImn8	-2.240	0.309
		Ž_UImn10	4.424	0.118
	Ž_UIm6	Ž_UImn1	7.202*	0.003
		Ž_UImn2	6.003*	0.017
		Ž_UImn8	1.374	0.515
		Ž_UImn10	$8.038^{*}$	0.004
	Ž_UIm7	Ž_UImn1	6.722*	0.006
		Ž_UImn2	5.523*	0.029
		Ž_UImn8	0.894	0.676
		Ž_UImn10	$7.559^*$	0.007
EPN	Ž_UIm9	Ž_UImn1	1.778	0.462
		Ž_UImn2	0.580	0.816
		Ž_UImn8	-4.049	0.056
		Ž_UImn10	2.615	0.344

\*Notes: EPN- negative emotional experience, Ž\_UImx- (x)-number of a teacher, whose motivating had a positive character; Ž\_UImn- (x)-number of a teacher, whose motivating had a negative character; F- Fisher Least Significant Analysis; p- the level of statistical significance.

As was the case in EPP (positive emotional experience), in EPN (negative emotional experience), too, there were no differences between pupils of Teacher 5, whose motivating had a positive character, and pupils of teachers, whose motivating had a negative character.

In case of Teacher 6, whose motivating was positive, we discovered statistically significant differences with pupils of Teacher 1 (p= 0.003) and Teacher 10 (p= 0.004). Both teachers' motivating influence had a negative character and in both cases pupils of Teacher 6 scored higher. Between pupils of Teacher 6 and Teacher 1 the difference was 7.2 points and between pupils of Teacher 6 and Teacher 10 it was 8.04 points. The results for pupils of Teacher 7, whose motivating was positive, were similar to those taught by Teacher 6. There were statistically significant differences with pupils of Teacher 1 (p= 0.006) and Teacher 10 (p= 0.007), whose motivating had a negative character. Again in both cases pupils of Teacher 7 had a higher score. The difference was 6.72 points between pupils of Teacher 7 and Teacher 10. In addition, we found a statistically significant difference between pupils of Teacher 7 and Teacher 2 (0.029). Pupils of Teacher 7 scored 5.52 points higher. With both the pupils of Teacher 5 as well as Teacher 9, whose motivating was positive, we found no differences with teachers, whose motivating had a negative character.

### 2.2. Discussion

The aim of the research study was to find out whether there are differences in the intensity of emotional experience between pupils taught by teachers, whose motivating influence had a positive character and pupils of those teachers, who motivated in a negative way.

Based on R. Pekrun's (1992) findings, as well as findings of other authors (Renninger, K.A – Hidi, S. 2006; Voss, J.F – Schauble, L. 1992), who emphasize that motivation impacts emotional experience and that a teacher's motivating and his/her style influence pupils' mental processing of information, we have set our research hypothesis. We have verified its validity via the questionnaire of emotional experiences and via microteaching analyses. We have found most differences with pupils taught by Teacher 10, whose motivating had a negative character. We have also discovered that in three cases (pupils of Teacher 4, Teacher 6, Teacher 7), whose motivating had a positive character, these pupils achieved higher score in both the positive as well as the negative emotional experience than pupils taught by Teacher 10. However, in two cases (Teacher 3, Teacher 9) pupils of Teacher 8, whose motivating had a negative character, scored higher in positive emotional experience than pupils of Teachers 3 and 9. We believe that this was a result of the fact that pupils felt no anxiety and that despite constant scolding they were in a good mood, they laughed, which also manifested itself in the research findings.

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