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**ASSESSMENT OF TEACHERS' PROFESSIONAL COMPETENCES
IN CONSIDERATION OF MOTIVATION FACTOR**

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Abstract

In the research study we are dealing with Motivation factor and its consideration in the assessment of teachers' competences. The aim of the research study is to investigate the motivation of teachers to the evaluation of their professional competences with respect to the degree of the importance of these competences in the teaching process. We set variables such as degree of motivation to teacher assessment by his superiors and level of importance of professional competences. The research was conducted on 535 respondents (secondary school teachers from all over Slovakia). Our research shows that teachers, who are motivated for assessment attach importance to competences oriented at student, educational process and self-development of teacher.

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Keywords: Assessment of teachers, professional competences, motivation.

1. Introduction

Motivation factor and its consideration in the assessment of teachers' competences can be seen as a key one because it leads teachers to positive or negative perception of the assessment of their professional competences and thus, it enables them to distinguish or recognize the importance of different professional competences. We consider motivation as an important factor for teacher's educational success because it tells about value orientation, which determines teacher's needs and his aspiration level. The research of the issues aimed at teacher's evaluation is currently represented on a small scale. Recent research has focused on creating tools to assess competences of teachers and their standardization (Moreno-Murcia,

Torregrosa and Pedreño, 2015; González and López, 2010; Lukas et al. 2014; Gold and Holodynski, 2015; Gadušová and Hašková, 2016b). Although the current research is focused on training and evaluation of teachers' competences (Šarníková, 2010, Blömeke et al. 2011; Fritsch et al 2015; Kleickmann et al 2013), it, however, is not based on the perception of teachers' motivation towards assessing their competences. It is important that teachers perceive evaluation as motivating as motivating teacher's evaluation by their superiors affects teacher's personal and professional growth as well as their success in the educational process. If teachers are motivated by the assessment of their superiors, the distinction among different professional competences can be assumed and their adequate use in the educational process as well, and thus the increase of the quality of education. The paper is the continuation of the works published within the research project APVV-14-0446 Assessment of Teacher's Competences (Magová et al., 2016; Fandelová, Gadušová, Lomnický, 2016; Gadušová, Hašková, 2016b; Stranovská, Lalinská, Boboňová, 2017 and other) in which the issues of the teachers' professional competences in the European and Slovak context, assessment of teacher's competences depending on the length of their service, perception of the teacher by the school head teacher (depending on oral or written evaluation), assessment of teacher's competences in terms of school leadership skills and others were analyzed.

The aim of the paper is to detect the differences in the category of motivating assessment of teachers (secondary school teachers) and other assessment of teachers (discouraging, unnecessary, unfair, and other) depending on professional competences and the next task was identification of competences which promote different assessment categories with respect to motivation.

2. Theoretical basis of the assessment of teacher's professional competences and motivation factor

The assessment of teacher's competences assumes defining performance criteria in terms of professional standards for different categories of teachers and conditions of their work at school. The aim of evaluation is to improve and develop the educational work of teachers, or their educational efficiency. Assessment and diagnosis of teacher's competences by Sokolová et al. (2014) has several aims - research of competences, diagnostics of competences, and self-evaluation. A prerequisite for these objectives are valid and reliable methods and tools for the assessment of teaching competences. To assess their level is, however, a difficult task for several reasons (Frey, 2006; Philpott, Scott and Mercier, 2014; Sokolová et al. 2014):

1. The specification and indicators of different competences are not clearly defined, different experts and different educational concepts use different competence models and emphasize different areas of competences.
2. The individual tools for the assessment of competences usually cover only certain content category, or only one component of competence, so teacher's competence profile is then reduced and distorted.
3. Quantitative tools (mainly questionnaires) dominate; they, however, just like in other areas, also in evaluating teaching competences, have limits and increase the risk of becoming a mechanical evaluation tool, which so to say "quantifies quality", i.e. it classifies, but does not penetrate

deeper to teacher's individual characteristics and abilities and fails to capture the process of their changes.

Evaluation of teachers, as seen by Gadušová and Hašková (2016b), Gadušová and Vítěčková (2015) performs several functions: diagnostic (it observes the actual professional performance of the teacher), comparative (the teacher can compare his/her professional performance with that of their colleagues, or to follow their own self-development in the course of acquiring new experiences), stimulatory (teacher's career promotion depends on evaluation), corrective (it serves as a basis for self-correction of teacher's activities and motivates them to seek ways to improve their performance), judging (the ways of remunerations, whether in the form of transaction, material or relational, intangible benefits, are based on the evaluation results), educational (assessment forms personality of the evaluated person in a long-term) and, finally, social function, because the results of assessment help to shape the social status of teachers, affect the growth of their professional self-confidence and ensure the satisfaction of their need for self-realization.

Motivational process determines the direction and intensity of the behavior of the individual in the broadest sense. Motivation cannot be examined in isolation. Dörnyei (2014) highlights the close interaction of motivation with emotions and cognition. Earlier concepts of motivation emphasized intra-psychic dimension which should have determined the quality of motivation. According to Gardner (1985) these were two types of motivation: integrative and instrumental. In the process of teacher's motivation, thus, an individual goal, meaning and purpose of the educational process played an important role. In this context, however, it is questionable how important for the teacher's success, with respect to the assessment their professional competences, has the desired goal or state that they want to achieve. The latest theoretical models, therefore, seek to integrate previous motivational theories and understand the complexity of motivation (Dörnyei, 2014; Riemer, 2010; and others). These models are usually multidimensional and observe the interaction among different internal and external dimensions of motivation. Noteworthy is also the current theory, so called the hypotheses of individual (Riemer, 2010; Dörnyei, 2014), which belongs to the current trends of research in the field of motivation and its predictors. If teacher experiences positive feedback in the process of the first evaluation by head teacher, they see the assessment of their professional competences as motivating.

3. Problem Statement

In this paper, we pay our attention to the motivation factor and its consideration in the assessment of teachers' competences. The perception of teachers' motivation to assessing their professional competences by their superior and the degree of importance of their professional competences in the educational process was investigated using the Questionnaire for teacher's competences assessment developed for teachers. The questionnaire can be considered as a primary tool to measure teachers' motivation for assessing their professional competences and the importance of different professional competences of teachers in the Slovak educational context. The questionnaire was anonymous, administered to 535 respondents from secondary schools. The aim was to get a picture of the current state of the evaluation of teachers in Slovakia from the point of view of the evaluated, or the picture of their motivation for evaluation. The questionnaire contained 11 questions. This study deals with statistical

processing of the data related to the degree of motivation for evaluation and perception of the degree of importance of different professional competences. Through these variables we investigated the motivational aspect of teacher's assessment by their superiors with respect to the level of importance of different professional competences of teachers. Statistical processing of the other variables is the subject of scientific articles to which we refer in references, or they will still be processed within further investigations. The degree of motivation for the assessment by superior was divided into the following levels: 1. motivating, 2. discouraging, 3. unnecessary, 4. unfair, 5. other. Based on these levels, in processing the data the respondents were divided into five groups. Under group M we understand teachers who perceive assessment by superiors as motivating. Similarly, the group D designates teachers, for whom the assessment by superiors is discouraging. The group UN sees evaluation as unnecessary; UF as unfair and finally the group O stated other attributes of the assessment when considering its motivating aspect.

The perception of the degree of importance of professional competences of teachers for the success of their teaching activities was rated with numbers from 1 to 5 (1 = low importance, 5 = very high importance) while the following competences were taken into account: A. can identify developmental and individual characteristics of students; B. can identify the psychological and social factors of student's learning; C. can develop student's personality and their competences; D. can create a positive climate in the classroom; E. can plan and implement their own career development; F. is well aware of the content and methodology of the subjects taught; G. can plan and design teaching / educational process; H. is able to select and implement the teaching forms and methods; I. is able to use teaching materials and aids in teaching process; J. can evaluate the progress and results of teaching and student's learning.

4. Research Questions

In connection with our research, we have formulated the following research question as well as the hypothesis.

Research question: Do there exist differences in perception of importance degree of professional competences as to belonging of teachers to the group according to degree of teachers' motivation for their assessment?

Research hypothesis: There exist differences in the perception of the degree of importance of professional competences as to belonging of the teacher to the group M and the others groups (D, UN, UF, O) according to the degree of motivation of teachers for their assessment by their superiors. We expect differences especially in the competences marked A, B, C, E (Stranovska, Lalinska, Bobonova, 2017).

The stated research hypothesis should be operationalized, because of the clarification and refinement of the functions of the different variables. The first (one-dimensional) variable is considered to be the level of the degree of importance of the listed professional competences of teachers for the success of their teaching. This variable is within the scatter range of 1 - 5. The second variable of the set research hypothesis has two levels, namely, the level of motivation of teachers for the assessment by supervisor, or belonging of a teacher to a group of M, D, UN, UF or O.

5. Purpose of the Study

The aim of the research study is to investigate the motivation of teachers to the evaluation of their professional competences with respect to the degree of the importance of these competences in the teaching process. It can be stated that the research that would be devoted to the subject of the paper has not been carried out in a global scale yet. In the Slovak Republic the research was conducted under the auspices of the State Institute for Education in Bratislava. It surveyed the views of teachers and head teachers on educational innovations. In the course of this research project it was found that teachers considered the need to innovate strategies and methods to be the most important. This led us to the idea of comparing different perspectives of teachers on motivation for their evaluation by superiors regarding their perception of the importance of different professional competence in the educational process (Štátny pedagogický ústav, 2011).

We believe that the differences will mainly be observed in these competences due to the degree of teacher's motivation for evaluation by superior, or belonging of a teacher to the group M - O. Currently the increased interest of teachers in workshops developing just the competences associated with the ability to identify the developmental and individual characteristics of pupils, identify psychological and social factors of student's learning, develop student's personality and their competences, plan and implement own professional development can be observed. Approach of teachers, who perceive these competences as important, can be judged in the light of current educational trends as still relevant and needed.

6. Research Methods

In connection with the search for the answer to the stated research question, whether there are differences in the perception of the degree of importance of professional competences among groups of teachers with regard to their level of motivation for their evaluation by superiors and, if so, which professional competences are perceived by teachers differently due to their belonging to the same group M – O, or for which professional competences of differently motivated teachers for evaluation statistically significant differences can be observed, we used the Friedman test and Man-Whitney U-test. Friedman test was used in the first phase to determine the existence of differences and Man-Whitney U-test was used to identify significant differences in perception of the rate the importance of different competences as to the degree of teacher's motivation for the assessment by supervisor. We set variables such as degree of motivation to teacher assessment by his superiors and level of importance of professional competences.

7. Findings

To verify the set research hypothesis, Friedman test and Wilcoxon two-tailed test (Mann-Whitney U-test) was applied. Friedman test was used in order to determine the existence of differences in the perception of the importance of professional competences as to the belonging of teachers to the different groups M – O. In other words, we try to answer the fundamental question whether there is a difference in the category motivating versus other categories (discouraging, unnecessary, unfair, other) of teacher

assessment by their superiors and the importance of which professional competences can have some impact on the degree of motivation for assessment. This test can be considered appropriately chosen method, as it is used to compare a number of core sets based on the dependent selection sets. At the same time there is no need to fulfill the presumption of normal distribution of basic sets (Markechová, Stehlíková, Tirpáková, 2011, p. 321). Based on the evaluation of the collected data using SPSS software, the tested hypothesis H0 (the degree of perception of the importance of professional competences by teachers in the group M and other groups is the same) is rejected at the significance level $\alpha = 0.001$ (***) in favor of the alternative hypothesis H1 (the degree of perception of the importance of professional competences by teachers in the group M and other groups is different). The degree of perception of the importance of professional competences of teachers in the given groups is therefore different. The result is presented in Table 01.

Table 01. Statistical parameters according to Friedman's test - the existence of differences in the degree of importance of professional competences between the group of motivated teachers for evaluation (group M) and the group of other teachers (Group D – O).

Compared groups : M / others	N	Chi-Square	Df	Asymp. Sig.
	535	3371.78	10	0.000

Further we try to identify in which cases due to belonging of the teacher to the group M and to the group of other teachers (D – O) is the degree of perception of professional competences significantly different. For this purpose we used Man-Whitney U-test. Man-Whitney U-test, also called as Wilcoxon two-tailed test, allows to test the hypothesis of a match between two distribution functions (Markechová, Stehlíková, Tirpáková 2011, p. 309) are understood the random selection from the core set of point evaluation of the competence by teachers from the group M - teachers motivated for evaluation by their superiors (selection 1) and point evaluation of the same competence by other teachers from the groups D – O (selection 2), wherein the number of values in view of the two selections may not be the same. It is also our case, since in different groups we do not have the same number of teachers who answered this question in the questionnaire. Let's test the null hypothesis H0: $f = g$ (differences in the perception of the importance of the competence by the teachers with respect to the group of teachers motivated for assessment by superiors and by all the other groups are not significant compared to the alternative hypothesis H1: $f \neq g$ (the differences in the perception of the importance of the competence by the teachers with respect to the group teachers motivated for assessment by their superiors and all the other groups are significant. The data were processed by SPSS program and we present them in Table 02. The value of testing statistics is given in the Table as Z.

Table 02. Statistical parameters of perception of the degree of importance of different professional competences between teachers from the group M and other groups of teachers according to Mann-Whitney test.

Professional competence	A	B	C	D	E	F	G	H	I	J
Mann-Whitney	44403.0	41723.0	49824.0	50146.0	45981.0	45993.5	47245.5	48384.0	47255.5	47942.0
Wilcoxon	62931.0	60251.0	68352.0	68674.0	64509.0	64521.5	65773.5	66912.0	65783.5	66470.0
Z	-3.169	-4.279	-0.896	-0.799	-2.407	-3.054	-2.182	-1.566	-1.912	-1.851
Asymp. Sig. (2-tailed)	0.002**	0.000***	0.370	0.424	0.016*	0.002**	0.029*	0.117	0.056	0.064

Statistical significance at the level $\alpha = 0.05$ (*), $\alpha = 0.01$ (**), $\alpha = 0.001$ (***)

From the table we can see that for the chosen level of statistical significance $\alpha = 0.001$ the tested hypothesis H0 is rejected in this case: B. the teacher can identify the psychological and social factors of student's learning.

Further, the table shows that for the selected level of statistical significance $\alpha = 0.01$ the tested hypothesis H0 is rejected in these cases, or the importance of the following professional competences by teachers in the group M and in other groups is perceived differently: A. can identify developmental and individual characteristics of students, F. is well aware of the content and methodology of the subjects taught.

Finally, for the selected level of statistical significance $\alpha = 0.05$ the tested hypothesis H0 is rejected in these cases or the importance of the following professional competences by teachers in the group M and in other groups is perceived differently: E. can plan and implement their own career development, G. can plan and design teaching / educational process.

8. Conclusion

We assumed mutual differences in different motivation categories (motivating, discouraging, unnecessary, unfair and other evaluation) with respect to professional competences. We found that teachers, who are motivated for evaluation, attribute importance to the assessment, or importance to other professional competences in the educational process than teachers, who consider evaluation to be discouraging, unnecessary, unfair or other. In this respect we agree with Dörnyei (2014) who distinguishes the "ideal self" and "ought-to-self". While "ideal self" is targeted at voluntary achievement of the personal objective, "ought-to-self" is limited to their attribution to expectations of others and duties the person has to fulfill. This means that for teachers with motivation system based on "ought-to-self", their intention is to "survive" somehow the educational process and in relation to professional competences they do not have any specific individual target, which professional competences they consider to be important and which of them they would like to develop. It can be said that intentionality appears to be an important factor that is closely related to motivation for assessing professional competences of teachers.

Then we investigated which specific professional competences the teacher motivated for assessment considers to be important. Most notable differences can be observed at the level of statistical significance $\alpha = 0.001$ (***) with respect to assessing the degree of the importance of the competence B. teacher can identify the psychological and social factors of student's learning. This phenomenon was even anticipated. This may be connected with the theory of interaction of motivation and success (Riemer, 2010), whether the individual is motivated by success or motivation leads to the success of the individual. In our research it was proved that if the teacher can identify psychological and social factors of student's learning, they are motivated for assessment of professional competences. It can also be understood in the opposite sense, if the teacher is motivated for evaluation, they consider it important to identify the psychological and social factors of student's learning. To identify psychological and social factors of student's learning is not a simple matter, because during the process of measurement of learning outcomes latent (hidden) factors enter into the process. In addition to the fundamental factors that can affect the overall performance of students, such as the abilities of the student, difficulty and discriminatory feature

of the measurement tool, here also gender of student/investigator, student's belonging to a social group, a variety of learning disabilities and behavioral disorders can be incorporated. Not all teachers are so conscious that they are willing to disregard and break away from the objective evaluation results. On the level of statistical significance $\alpha = 0.01$ (**) we recorded differences between the group of teacher motivated by evaluation and other groups in the perception of the degree of importance of these competences: A. can identify developmental and individual characteristics of students and F. is well aware of the content and methodology of the subjects taught. Motivated teacher attributes importance to observation of student and subsequent understanding of their individual differences (specifics, e.g. decentralized perception, emotional sensibility, and others) in order to achieve the expected result. In this sense, we support the causal hypothesis of motivation (Riemer, 2010; Dörnyei, 2014), while motivation influences result.

In addition we would like to focus on the achieved results regarding the competence C. can develop student's personality and their competences. Here we assumed differences in the perception of the degree of importance as to the motivating factor for the evaluation of teacher by superior, which was not confirmed. The reasons may be several. This is a phenomenon which, in our opinion, is closely related, or is linked to the nature of the professional competences A and B. In this respect, in terms of teacher's view this notion can be view as a vague one, or the issue for which the teacher is not responsible or which is out of their reach. In the development of human personality the whole society with which a student comes into contact from their birth is involved in. It comes into play not only their own genetic equipment, but above all family environment, and last but not least also friends. The teacher may, in this context, feel somewhat helpless in the view of the many factors that enter into the process. It can be stated that the motivation for evaluation seems to be one of the key indicators of the quality of the educational process.

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