UDK 331.101.264.6:005.5

Primljeno: 04. 09. 2020.

Izvorni naučni rad
Original scientific paper

## Gabriel Pinkas

## PRINCIPAL LEADERSHIP STYLES AS PERCEIVED BY ELEMENTARY SCHOOL TEACHERS IN RELATION TO THEIR WORK MOTIVATION


#### Abstract

This paper presents the results obtained on a sample of 467 teachers from 25 elementary schools in the wider city area of Tuzla. The subject of the research was the relationship between principal leadership styles, as perceived by teachers, and the work motivation of teachers. The Multifactor Leadership Questionnaire (MLQ) and the Work Tasks Motivation Scale for Teachers (WTMST) were used to collect data. The obtained results showed a correlation between the perceived principal leadership style and teacher motivation, in a way that transformational leadership primarily contributes to intrinsic motivation, transactional leadership contributes to types of extrinsic motivation (introjected, identified, and external regulation), and laissez-faire contributes to motivation. At most $13 \%$ of the variance in teacher motivation can be explained by the principal leadership style. The probable reason for such results is the complexity of teacher motivation, which is influenced by numerous both hygiene and motivating factors.


Keywords: school principals; transformational, transactional, laissez-faire leadership; teachers; work motivation; SD theory

## INTRODUCTION

The first successful attempt to scientifically identify and describe leadership, which in practice probably occurred with the first social groups, dates to 1939 and American social psychologists K. Lewin, R. Lippit and R. K. White. They pointed to three fun-
damental types of leader attitudes toward group members: autocratic, democratic, and laissez faire (Lewin, Lippit, \& White 1939). Depending on the type of leader, the group's performance differs in terms of achieving common work goals. All three authors conclude that, in the medium and long term, the best results are achieved by the democratic behavior of the leaders. Autocracy is most effective in the short term, while laissez faire leadership in most cases leads to the lowest achievement (Krech, Crutchfield, Ballachey 1969).

During the 20th century, other authors also studied the topic of leadership, mainly starting from the pioneering theories of Lewin, Lippit and White, and supplementing and modifying their findings. Despite possible differences in the understanding of leadership styles, researchers studying this phenomenon still put their main focus on the differences detected in the very beginning which relate to interpersonal relationships (manager-employee and employee-employee relations), emotional, social and work climate, and work performance in groups with different leaders (Bojanović 2004).

Applying general knowledge on leadership to work organizations, Bass (1985) identifies transformational, transactional, and laissez faire leadership. The first contains elements of democratic and the second contains elements of autocratic leadership style. According to Bass and Riggi (2006), a particularly significant aspect of transformational leadership is that it leads to changes in employees themselves; raises the level of motivation and shapes them morally.

The relationship between leadership style and employee motivation has also aroused the interest of researchers in the field of education. Eyal and Roth (2011) found a positive association between transformational leadership style and intrinsic motivation, as well as between transactional leadership and extrinsic motivation. Wasserman, Ben-eli, Yehoshua, and Gal (2016) reported multiple positive correlations of variables related to the perceived leadership style of the school principal, perception of profession, and teacher initiative in doing their job. Alasad (2017) points to a positive connection between the transformational leadership style and intrinsic motivation of teachers, and even a somewhat stronger connection between this principal leadership style and extrinsic motivation. Shepherd-Jones and Salisbury-Glennon (2018) found a positive association between autonomy, commitment, and competence in teachers' task performance and the democratic style of leadership used by school principals.

Eres (2011), however, did not find any significant correlation between the transformational leadership style, which teachers generally rarely noticed in school principals, and their work motivation. Gilbar (2015) did not find a connection between
the self-perceived style of principal leadership and the self-perceived teacher motivation either.

A generally higher level of motivation and dominant intrinsic motivation in teachers are important for pedagogical practice and theory because it was determined that these factors correlate with teachers' commitment to their work, and, ultimately, with student performance and the educational goals of the school (Jesus and Lens 2005; Karabenick and Conley 2011; Perlman 2013; Gorozidis and Papaioannou 2014).

Considering the above, the focus of this research was to determine the relationship between the perceived leadership style of school principals and the motivation of teachers to do their job. Three leadership styles were observed: autocratic, democratic, and laissez faire. Motivation for work was assessed on a five-point continuum, which begins with amotivation, continues with external regulation, through motivation by introjection and identification, to internal regulation.

## The leadership role of the school principal

The leadership role of the school principal is determined by the functions and areas of work that need to be covered, the competencies he must have, the training he needs to gain the appropriate competencies and to provide professional guidance of staff efforts, and responsibilities for resources.

Since the school is a non-profit organization with a unique goal and function, it should be viewed as a specific unit, in which both general and specific organizational rules apply. In that sense, Staničić (2011) cites two basic functions of the school: ad-ministrative-technical and developmental-pedagogical. The purpose of administrativetechnical tasks is optimal functioning of the school, which, unlike other organizations, performs educational work. The professional-pedagogical area is tied to the main feature of the school as a specific organization. Compared to the administrative-technical function, it is much more complex, and the participation of the principal is expected to be more pronounced. It involves developmental and pedagogical tasks related to: planning and programming, organizing, introducing innovations, monitoring and improving teaching, working with children with disabilities, professional orientation, professional development, analysis of educational results of the school, etc.

Everard, Morris and Wilson (2004) divide the tasks of the school principal into three large groups: 1. people management (which includes employee motivation, decision making, conflict management, candidate selection and recruitment, employee
promotion), 2. organization management (which includes school goals, creating teams, planning and programming, curriculum adaptation, quality management, resource management) and 3. change management (defining goals, deciding on strategies, gaining trust, monitoring and evaluating changes).

Referring to the OECD (Organization for Economic Co-Operation and Development) annual analysis of educational parameters from 2007 (OECD 2007b) and the Analysis of performance in the 2006 PISA tests (OECD 2007a), Pont, Nusche and Moorman (2008) point to an indirect responsibility of school principals to improve educational outcomes. In order to achieve optimal results, principals should conceptualize their leadership into four tasks: 1. providing conditions and support for professional development of teachers, and their evaluation, 2. goal setting, assessment and accountability, 3 . financial and human resource management, 4 . creating conditions for improving school practice.

There is no doubt that the role of the principal in an elementary school is complex and multidimensional. As a manager, the principal acts as an intermediary between the (educational) authorities, partially represented through the school board, and the teachers, or, indirectly, the students. The principal is responsible for creating material, technical and staffing conditions for the functioning of the school, creating a vision and mission of the school and its progress.

## Transactional, transformational and laissez faire school management

The theoretical framework in this paper is comprised of the three leadership styles described by Bass (1985 according to Avolio and Bass 2010): transformational, transactional, and laissez faire leadership. Transformational leadership is, according to Avolio and Bass (2002), a type of leadership that leads to changes within individuals and social systems in terms of motivation, moral shaping, and work performance. This is accomplished through the following mechanisms: creating a common identity between group members and in the group as a whole; the leader is a role model personal identification for employees; the leader understands the needs, strengths and weaknesses of employees, according to which he gives them appropriate tasks.

The dimensions of transformational leadership (Bass 1990) are: 1. individualized consideration (refers to the attention the manager pays to the employee and his understanding of the employee's needs), 2. Intellectual stimulation (the degree to which the manager accepts employee ideas and encourages his creative thinking), 3. Inspi-
rational motivation (manager's ability to articulate goals and get the employees to achieve them), 4. model of identification - attributed and behavior (the degree to which the manager represents a moral ideal for the employee, gains his respect and trust).

Transactional leadership is based on the take-give principle. In this case, the leader gives employees guidance, recognition and a value system, and in return he takes/receives respect and obedience. It consists of: 1. contingent reward, 2. active management by exception and 3. passive management by exception. Transactional management is most obvious in cases when the leader relies on passive management mechanisms, i.e. intervenes only when the work procedure has been violated or the set goal has not been achieved. He then threatens or punishes (Bass 1990). According to Burns (1978), transactional leadership is the most common style, but also a style that provides neither the manager nor the employee a high level of motivation or intellectual stimulation.

Laissez faire (let it be) leadership style, as described by Lewin, Lippitt, and White (1939) implies minimal involvement of the leader. Decisions are made by group members, taking responsibility for their outcomes. Avolio and Bass (2011) paid the least attention to this leadership style. In their instrument, they described it through only one leadership component - passive/avoidant leadership (this is also another name that Avolio and Bass use for this leadership style). This is perhaps because in most cases where conscious, deliberate and planned activity is expected from the leader, this leadership style is not desirable.

In practice, we almost never encounter pure leadership styles. Usually, a leader will show elements of two, or even three leadership styles, with one of them being the dominant one. This is why we commonly hear the phrase'dominant leadership style'.

## Teacher motivation

The notion of motivation is one of the fundamental constructs in psychology. It denotes psychological processes that move people to perform a certain activity and exhibit certain behavior (Zvonarević 1978; Rot 2004). Most modern theories of motivation agree that the initial link in the chain of motivation is represented by needs. A need is defined as the lack of something (Rot 2004). Literature also mentions extrinsic and intrinsic motivation. According to the Psychological Dictionary (Petz et
al. 2005), external or extrinsic motivation is motivation that originates in factors outside the individual (reward or punishment) and not in internal impulses. In contrast to the extrinsic, there is also internal or intrinsic motivation in which the need stems from internal impulses, and satisfaction arises from performing the activity itself or its meaning, instead of external factors.

In the mid-1980s, Ryan and Deci have moved away from attempts to explain human behavior through a disturbed balance of needs and instrumental conditioning, setting the Self-determination theory. Overall human motivation, according to the Self-determination theory (Deci and Ryan 1985), is the result of a complex interactive process between external and internal control. External control denotes extrinstic, and internal denotes autonomous or intrinsic processes. The prevalence of intrinsic over extrinsic processes means achieving a higher level of self-determination, i.e. moving away from extrinsic to intrinsic motivation. The theory of self-determination thus shows motivation on a continuum that begins with amotivation, goes through different levels of extrinsic motivation (external regulation, introjected regulation, identified regulation) and finally ends with intrinsic motivation (internal regulation).

- Amotivation is defined by Ryan and Deci (2000) as the absence of any will to act in relation to the physical and/or social environment.
- External regulation is the least autonomous form of extrinsic motivation. It refers to motivation by means of punishment and rewards.
- Introjected regulation is internal but still (externally) controlled regulation of behavior, in which a person resorts to a certain behavior in order to avoid feelings of guilt or anxiety, or to achieve a sense of satisfaction and empowerment of the personality.
- Identified regulation implies a higher level of autonomy and greater freedom of choice compared to introjected regulation, because this behavior is more in line with personal goals and identity.
- Intrinsic motivation is recognized in activities an individual performs for per sonal pleasure (he finds pleasure in performing the activity itself) without visible external benefit. Guay, Mageau, and Vallerand (2003) point to three types of intrinsic motivation: motivation towards knowledge, motivation towards accomplishment, and motivation towards stimulation.

Applying the Self-determination theory to work organizations implies setting selfdetermination of each employee as the main goal. Numerous studies (according to Deci and Ryan, 1985) show that the qualities associated with self-determination -
creativity, self-regulation and adaptability (which members value the most, both in their subordinates, those who are equal to them, and in their superiors) increase organizational efficiency. Furthermore, factors that encourage self-determination, including personal independence and constructive feedback, are indicators of perceived quality of the employee's job. This implies that self-determination, as a goal of the work organization, could consequently contribute to job satisfaction and the quality of life of employees.

## Teacher motivation factors

Human (in)action is generally determined by numerous factors of external and internal regulation. The same applies to the motivation of teachers to perform work tasks. This is confirmed by numerous studies (Pelletier, Seguin-Levesque and Legault 2002; Judge and Ilies 2002; Mihaliček and Rijavec 2009; Rasheed, Aslam and Sarwar 2010; Nyakund 2012; Ud Din et al. 2012; Gatsinzi, Jesse and Makewa 2014), and each one of them found a large number of individual factors. The sublimation of their findings could prove that work motivation of teachers is determined by: 1. effort, 2. individual abilities and perception, 3. goal-directed behavior, 4. intrinsic and extrinsic rewards, 5. satisfaction and 6. equity.

Studies indicate the potential existence of gender-based differences in motivation factors (Ghenghes 2013), where male teachers value job security the most, while the primary factors for female teachers are opportunity for professional growth and advancement and receiving praise from their boss/colleagues. Furthermore, extrinsic motivation factors grow stronger when teachers, regardless of gender, rate their teaching salary as too low (Rasheed, Aslam, \& Sarwar 2010).

## RESEARCH METHODOLOGY

## Research aim

The aim of this paper is to analyze the relation between principal leadership styles, as perceived by teachers and different work motivations of elementary school teachers.

## Research hypothesis

It is assumed that there is a connection between the perceived leadership styles of school principals and teacher motivation. It is also assumed that the perceived transformational traits of principals significantly and positively contribute to intrinsic motivation of teachers, that the perceived transactional skills significantly and positively contribute to aspects of extrinsic teacher motivation (identified, introjected and external regulation) and, finally, that the observed laissez-faire traits positively contribute to teacher amotivation.

## Respondents

The sample, characterized as convenient, consisted of 467 teachers from 26 elementary schools in the wider city area of Tuzla. According to the data collected in schools, the total number of teachers in 2015/2016 school year, when the survey was conducted, was 744 which corresponds to the number of printed and distributed sets of instruments. However, it should be emphasized that the actual number of teachers was less than 744 (it was impossible to obtain accurate information by looking at individual school databases), because, in order to accumulate work hours for their job to be considered full-time, some individuals were employed in more than one school. In such cases, teachers were advised to fill in the questionnaires in the school in which they have the largest number of working hours.

The return of valid questionnaires was slightly less than $63 \%$. The gender distribution of respondents in the sample was asymmetric, which is a reflection of a population imbalance: 307 ( $65.7 \%$ ) female teachers and 89 (19.1\%) male teachers, while $71(15.2 \%)$ respondents did not state their gender in the questionnaire. The age of the respondents ranged from 24 to 64 years $(\mathrm{M}=43.12 ; \mathrm{s}=9.15 ; \mathrm{Sk}=0.18 ; \mathrm{K}=-0.55)$. No statistically significant differences in age were found between the male and female subsamples, and neither were they found in length of service.

## Research methods and procedures

The method of theoretical analysis was applied in this research to compose the theoretical part of the paper. Elements of analytical-descriptive method were used in order
to show the specifics of management and leadership in elementary schools of Tuzla Canton. The main pillar of the empirical part of the paper is the survey method, represented through survey and scaling techniques. Methods of descriptive statistical procedures and multiple regression (OLS) were also utilized.

## Instruments

The Multifactor Leadership Questionnaire (MLQ) and the Work Tasks Motivation Scale for Teachers (WTMST) were used to collect data in the research. The Multifactor Leadership Questionnaire (Avolio and Bass 2010) consists of 36 statements arranged in eight subscales (idealized influence - attributed, idealized influence - behavioral, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, management by exception and laissez-faire). Respondents completed their assessment of the frequency of forms of leader behavior expressed through statements on a five-point scale, where the answers range from $0=$ not at all, over $1=$ rarely, $2=$ sometimes, $3=$ often to $4=$ almost always.

The Work Tasks Motivation Scale for Teachers (WTMST) (Fernet, Senecal, Guay, March and Dowson 2008) consists of 90 statements, divided into six subscales, where each subscale corresponds to one group of teacher work tasks (class preparation, teaching, evaluation of students, classroom management, administrative tasks and complementary tasks). Each subscale lists three statements for each of the five types of motivation (intrinsic motivation, identified regulation, introjected regulation, external regulation and amotivation). Respondents express their agreement with the statements on a seven-point scale, where the answers range from $1=$ completely disagree, $2=$ somewhat agree, $3=$ slightly agree, $4=$ moderately agree, $5=$ strongly agree, $6=$ very strongly agree, up to $7=$ completely agree.

An evaluation of Multifactor Leadership Questionnaire and the WTMST was conducted after a review of the relevant literature showed that no major study on a sample of teachers using these methods was conducted in our country. After checking the factor validity through confirmatory factor analysis and a detailed review of other relevant measurement properties, it was determined that the utilized instruments have satisfactory measurement properties, which can be evaluated on a qualitative scale in the range from good to exceptional. This especially refers to the internal measuring properties, while the factor validity of the constructs is in the range from acceptable to very good. Indicators of reliability, representativeness and homogeneity for the scales of teaching motivation and leadership style are shown in Tables 1 and 2.

Table 1. Indicators of reliability, representativeness and homogeneity for the Work Tasks Motivation Scale for Teachers

| Subscales | $\boldsymbol{\alpha}$ | $\boldsymbol{\beta}$ | $\boldsymbol{\lambda 1}$ | $\boldsymbol{2 6}$ | MSA | $\boldsymbol{H 2}$ | $\mathbf{N}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Intrinsic motivation | .92 | .92 | .87 | .95 | .89 | .60 | 18 |
| Identified regulation | .92 | .92 | .87 | .94 | .89 | .67 | 18 |
| Introjected regulation | .95 | .95 | .90 | .96 | .95 | .83 | 18 |
| External regulation | .93 | .93 | .88 | .94 | .93 | .78 | 18 |
| Amotivation | .94 | .94 | .88 | .95 | .94 | .79 | 18 |

Table 2. Indicators of reliability, representativeness and homogeneity for the Multifactor Leadership Questionnaire (MLQ)

| Subscales | $\boldsymbol{\alpha}$ | $\boldsymbol{\beta}$ | $\boldsymbol{\lambda 1}$ | $\boldsymbol{\lambda 6}$ | MSA | $\mathbf{H 2}$ | $\mathbf{N}$ |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Idealized influence (attributed) (IA) | .77 | .78 | .58 | .74 | .75 | .92 | 4 |
| Idealized influence (behavior) (IB) | .88 | .88 | .59 | .83 | .74 | .94 | 3 |
| Inspirational motivation (IM) | .91 | .91 | .68 | .85 | .85 | .97 | 4 |
| Intellectual stimulation (IS) | .85 | .85 | .64 | .82 | .79 | .95 | 4 |
| Individualized consideration (IC) | .88 | .88 | .65 | .84 | .82 | .96 | 4 |
| Contingent reward (CR) | .84 | .84 | .63 | .80 | .80 | .94 | 4 |
| Active management by exception (AME) | .80 | .80 | .60 | .76 | .78 | .93 | 4 |
| Laissez faire (LF) | .83 | .80 | .63 | .80 | .80 | .93 | 4 |

Note. $\alpha$ - Cronbach - reliability coefficient; $\beta$ - Lord - Kaiser - Caffrey reliability coefficient of the first principal component; $\lambda 1$ - Gutman - absolute lower limit of reliability, $\lambda 6$ - Gutman - absolute upper limit of reliability; MSA - normalized Kaiser - Meyer - Olkin representativeness coefficient; H2 - Momirovic - relative size of the variance of the first principle image component; N - number of scale items.

As stated in the sample description, 744 sets of questionnaires were printed and distributed. The questionnaires were delivered to schools in open envelopes in a number that corresponded to the number of engaged teachers, after which they were handed to the teachers by expert associates pedagogues-psychologists. After filling in the questionnaires, the teachers returned them to the pedagogues-psychologists in closed envelopes. The process took an average of five working days in each school. Data collection was completed in February 2016.

## RESULTS

Table 3 shows the basic descriptive statistics for leadership dimensions, as well as for the teacher motivation dimensions, which are presented through summative scores
and average scale values. The table also shows that the total score included idealized influence - attributed (IA), idealized influence - behavior (IB), inspirational motivation (IM), intellectual stimulation (IS) and individualized consideration (IC) as factors of transformational leadership. Conclusively, transactional leadership has been described by two factors: Contingent Reward (CR) and Active Management by Exceptions (AME). The factor of Passive Management by Exceptions (PME) was not included in the final analysis because it did not make any significant contributions to the model. Laissez-faire leadership was represented by one factor.

Table 3. Average values and standard deviations for the subscales of the Leadership style questionnaire and Teacher motivation questionnaire

|  | M |  |  | $\boldsymbol{\sigma}$ |
| :--- | :---: | :---: | :---: | :---: |
| Subscales | jlk | asv | jlk | asv |
| Idealized influence <br> (attributed) | 10.77 |  |  |  |
| Idealized influence (behavior) | 9.01 |  | 4.10 | 1.02 |
| Inspirational motivation | 11.99 | 2.73 | 3.07 | 0.81 |
| Intellectual stimulation | 11.40 | 2.99 | 3.97 | 0.99 |
| Individualized consideration | 11.92 | 2.85 | 3.90 | 0.97 |
| Contingent reward | 11.31 | 2.98 | 4.02 | 1.05 |
| Active management | 11.38 | 2.82 | 4.01 | 1.00 |
| Laissez faire style | 4.06 | 2.84 | 3.64 | 0.91 |
| Intrinsic motivation | 85.02 | 1.01 | 4.22 | 1.05 |
| Identified regulation | 100.92 | 4.72 | 20.58 | 1.14 |
| Introjected regulation | 87.20 | 5.60 | 17.92 | 0.99 |
| External regulation | 94.85 | 4.84 | 25.15 | 1.40 |
| Amotivation | 45.13 | 5.27 | 21.94 | 1.22 |

Note. $\boldsymbol{M}$ - arithmetic mean; $\sigma$ - standard deviation; $\boldsymbol{j l k}$ - summative score created as a simple summation; asv-average scale value.

Based on the summative score and the average score value for all five factors of transformational leadership, two factors of transactional leadership and laissez-fair style which is represented by one factor, it is clear that teachers equally perceive transactional and transformational leadership styles in school principals, while laissez-fair leadership is perceived far less. On the other hand, when it comes to the dimensions of motivation, the results show that teachers are moderately to highly motivated to work, while the amotivation factor is very weak to weak. Identified regulation, as the highest degree of external regulation, almost close to intrinsic motivation, is slightly ahead of other types of motivation.

The relation between leadership styles and types of teacher motivation were evaluated through standard regression analysis. Factors and facets of leadership combined into three main leadership styles (transformational, transactional and laissez-faire style) form a set of a total of eight predictor variables (Idealized Influence - Attributed) (IA), Idealized Influence - Behavior) (IB), Inspirational Motivation (IM) ), Intellectual Stimulation (IS), Individualized Consideration (IC), Contingent Reward (CR), Active Management by Exceptions (AME), Laissez-faire (LFR)), while the criterion variables are represented by five dimensions of teacher motivation: Intrinsic Motivation, Identified Regulation, Introjected Regulation, External Regulation and Amotivation. A separate regression model was tested for each dimension, and all variables were projected over the first principle component, which is presented in the form of regression scores.

The average correlation of predictor variables with teacher motivation ranges from 0.10 to 0.30 , indicating the independence of the two sets of variables. The potential of leadership dimensions in explaining aspects of teacher motivation is thus modest. An overview of all general indicators of the model efficiency is shown in Table 4.

Table 4. Multiple correlation coefficient and determination coefficients for teacher motivation assessment models

| Model | $R$ | $R^{2}$ | $\Delta R^{2}$ | Standard error |
| :--- | :---: | :---: | :---: | :---: |
| Intrinsic motivation | 0.31 | 0.10 | 0.08 | 0.93 |
| Identified regulation | 0.35 | 0.13 | 0.11 | 0.92 |
| Introjected regulation | 0.22 | 0.05 | 0.03 | 0.97 |
| External regulation | 0.22 | 0.05 | 0.03 | 0.96 |
| Amotivation | 0.30 | 0.09 | 0.07 | 0.94 |

Note. $\boldsymbol{R}$ - multiple correlation coefficient; $\boldsymbol{R}^{2}$ - multiple determination coefficient; $\Delta \boldsymbol{R}^{2}-$ corrected $\boldsymbol{R}^{2}$

As it can be concluded from the table, regression solution proved to be most effective for the score prediction model on the Identified Regulation dimension, where about $13 \%$ of the teacher motivation variance was explained ( $\mathrm{R}=0.35 ; \mathrm{R}^{2}=0.13,95 \%$ IP from 0.05 to 0.15 ; Cohen's $\mathrm{f}^{2}=0.15, \mathrm{p}<0.001$ ). The regression solution for the prediction of Intrinsic Motivation covered about $8 \%$ of the variance across different aspects of leadership $(\mathrm{R}=0.31 ; \mathrm{R} 2=0.10,95 \%$ IP from 0.03 to $0.12 ;$ Cohen's $\mathfrak{f} 2=$
$0.11, \mathrm{p}<0.001$ ). An almost identical regression solution was obtained in the case of Amotivation prediction, where $7 \%$ variance was explained ( $\mathrm{R}=0.30 ; \mathrm{R} 2=0.09,95 \%$ IP from 0.02 to 0.10 ; Cohen's $f 2=0.10, \mathrm{p}<0.001$ ). The remaining two solutions, for Introjected and External Motivation, gave a far more modest scope of prediction; in both cases - $3 \%$ of the explained variance of teacher motivation ( $\mathrm{R}=0.22 ; \mathrm{R} 2=0.05$, $95 \%$ IP from 0.00 to 0.05 ; Cohen's $\mathrm{f} 2=0.05, \mathrm{p}<0.01$ ). Apart from the case of Identified Regulation, which has a moderate effect size, all remaining models displayed small magnitudes of the effect, expressed over the Cohen scale. When assessing the significance of prediction, it is important to note that all predictor variables represent only eleven pieces of information, or in other words, the system of perceived leadership. On that note, the perceived leadership style as a predictor should not be underestimated, especially in situations where it is combined with other relevant predictors.

Table 5 shows data on significance of regression models tested through analysis of variance. All five models of analysis of variance are statistically significant at $p$ $<0.01$ or higher level of significance. This once again confirms that the models have their own existence, even though their contribution is modest because the predictor variables are significantly homogeneous.

Table 5. Summative indicators of analysis of variance for testing regression models

| Model |  | SS | df | MS | F | p |
| :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Intrinsic motivation | Regression | 42.619 | 8 | 5.32 | 6.10 | 0.001 |
|  | Residual | 392.98 | 450 | 0.87 |  |  |
|  | total | 435.59 | 458 |  |  |  |
|  | Regression | 55.11 | 8 | 6.88 | 8.10 | 0.001 |
|  | Residual | 382.31 | 450 | 0.85 |  |  |
|  | total | 437.41 | 458 |  |  |  |
|  | Regression | 21.46 | 8 | 2.68 | 2.87 | 0.005 |
|  | Residual | 420.00 | 450 | 0.93 |  |  |
|  | total | 441.46 | 458 |  |  |  |
|  | Regression | 20.55 | 8 | 2.57 | 2.76 | 0.01 |
|  | Residual | 419.12 | 450 | 0.93 |  |  |
|  | total | 439.68 | 458 |  |  |  |
|  | Regression | 40.44 | 8 | 5.05 | 5.69 | 0.001 |
|  | Residual | 399.54 | 450 | 0.89 |  |  |
|  | total | 439.98 | 458 |  |  |  |

Note. $\boldsymbol{S} \boldsymbol{S}$ - sum of squares; $\boldsymbol{d} \boldsymbol{f}-$ degrees of freedom; $\boldsymbol{M} \boldsymbol{S}$ - mean squares; $\boldsymbol{F}-$ Fisher F ratio

The predictor Inspirational motivation $((\beta=0.28, \mathrm{t}=2.39, \mathrm{p}<0.05)$ and Laissez-fair leadership ( $\beta=-0.15, \mathrm{t}=2.57, \mathrm{p}<0.01$ ) statistically contribute to the first regression model (Intrinsic Motivation)to a great extent. No predictor contributes significantly to the regression model for the solution of the prediction Identified Regulation. The predictors Individualized Consideration ( $\beta=-0.33, \mathrm{t}=-2.32, \mathrm{p}<0.05$ ) and Contingent Reward ( $\beta=0.28, \mathrm{t}=2.39, \mathrm{p}<0.05$ ) statistically contribute to the explanation of Introjected Regulation. External regulation individually makes a significant association with the predictors Individual Consideration ( $\beta=-0.31, \mathrm{t}=-2.22, \mathrm{p}<0.05$ ), Contingent Reward ( $\beta=0.29, \mathrm{t}=2.68, \mathrm{p}<0.01$ ) and Active management by exceptions $\beta=0.22), t=2.27, p<0.05)$. The Amotivation prediction model is statistically determined solely by the Laissez-Fair leadership predictor $((\beta=0.33, \mathrm{t}=5.56, \mathrm{p}<0.001)$. The individual contribution of the predictors, with Laissez-faire leadership as an exception in the case of the regression model of Amotivation, does not exceed $1 \%$ of the variance in the prediction. Data on the partial contribution of (significant) predictor variables expressed through standardized and unstandardized coefficients are shown in Table 6.

Table 6. Partial contributions of predictor variables from the set of perceived leadership style to the prediction of teacher motivation

| Model |  | $\mathbf{B}$ | Std. error | $\boldsymbol{\beta}$ | $\mathbf{s r}^{2}$ | $\mathbf{t}$ | $\mathbf{p}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | Constant | -0.001 | 0.044 |  |  | -0.023 | 0.98 |
| Intrinsic <br> motivation | Inspirational motivation | 0.277 | 0.116 | 0.285 | 0.01 | 2.395 | 0.01 |
|  | Laissez faire leadership | 0.151 | 0.059 | 0.154 | 0.01 | 2.574 | 0.01 |
|  | Constant | 0.016 | 0.045 |  |  | 0.354 | 0.72 |
| Introjected | Individualized consideration | -0.322 | 0.138 | -0.329 | 0.01 | -2.323 | 0.02 |
| regulation | Contingent reward | 0.214 | 0.106 | 0.218 | $>0.01$ | 2.016 | 0.04 |
|  | Constant | 0.008 | 0.045 |  |  | 0.187 | 0.85 |
|  | Individualized consideration | -0.308 | 0.138 | -0.315 | 0.01 | -2.225 | 0.05 |
|  | Contingent reward | 0.284 | 0.106 | 0.290 | 0.01 | 2.685 | 0.01 |
| External | Active management | 0.215 | 0.095 | 0.221 | 0.01 | 2.275 | 0.02 |
| regulation | Constant | -0.005 | 0.044 |  |  | -0.118 | 0.90 |
|  | Laissez faire leadership | 0.329 | 0.059 | 0.334 | 0.06 | 5.565 | 0.01 |

Note. $\boldsymbol{B}$ - unstandardized regression coefficient; $\beta$ - standardized beta coefficient; $\boldsymbol{r l}^{\boldsymbol{2}}$ squared semi-partial correlation coefficient; $\boldsymbol{t}$ - Student's t test.

## DISCUSSION

The analysis of the obtained data confirmed the research hypothesis. Thus, the connection between the perceived style of principal leadership and teacher motivation has been established, in such a way that transformational leadership primarily contributes to intrinsic motivation, transactional leadership contributes to types of extrinsic motivation (introjected, identified and external regulation), and laissez faire leadership leads to amotivation. At most $13 \%$ of the variance in teacher motivation can be explained by the principal's leadership style. Taking into account the obtained predictor value of variables, the preferred leadership style is transformational, with elements of transactional.

Although the research hypothesis did not clearly articulate the assumption about which leadership style will dominate in principal behavior, nor which type of motivation will be predominantly present in teachers, it would be correct to assume that teachers will perceive principal leadership mostly as transactional, while the teachers themselves will mostly be motivated by extrinsic factors. The basis for such an assumption could be found in the fact that the school system in Bosnia and Herzegovina is largely influenced by the political and administrative apparatus, which is highly bureaucratic and inherits the legacy of the previous state system. In addition, their activities and expected outcomes distinguish the school from manufacturing companies, where significant funds are invested in indirectly increasing labor productivity through education and profiling of transformational leaders. However, the results show that teachers perceived transformational and transactional leadership almost equally among their principals, and that, despite relatively low salaries, poor working conditions and often unsatisfactory employment status, they have moderate to very high motivation to perform work tasks.

The reasons for such results can perhaps be found in the specifics of the teacher profession. In most societies, teaching positions are not among the highest paid, and candidates, even when choosing the course of their higher education, are more guided by their humanistic orientation and the expectation of satisfaction that will arise from performing the job itself. This is why they have the prerequisites to remain highly motivated even in conditions of partially fulfilled hygiene factors, which would in other professions be rated as demotivating.

It is in this humanistic orientation of teachers, from which the school principals are recruited as well, where it is possible to look for the generic tendency of principals towards intellectual stimulation, inspirational motivation, care for employees and
other factors of transformational leadership, regardless of the absence of a systematic insight into the effects of this leadership style or a systematic training of transformational leaders. In addition, the teaching population is predominantly made up of women, who are generally found to have a greater tendency to perceive and manifest transformational leadership traits.

In accordance with the assumptions this research initially made, it appears there is a positive relation between transformational leadership style and intrinsic motivation. Such results are in line with theoretical descriptions of constructs which are the subject of this research, but they also correlate to the knowledge gained in other, earlier studies. The relation between transformational leadership and intrinsic motivation in a specific school setting can be explained by the size of the staff and the close relationships that are formed in small groups. The largest staff in this research consisted of the principal and 47 teachers, while the smallest included the principal and 16 teachers. In such circumstances, the inspirational motivation of principals is much more easily perceived. The motivation is achieved through daily contact with the staff and provides more opportunities for principals to share an attractive vision of the future, as well as the optimism, enthusiasm and zeal they display in running the school. The negative correlation between intrinsic motivation and laissez faire leadership can also be explained by the specifics of the school system. Through laws, bylaws and curricula developed in the centers of education authorities, the school system has set clear requirements and frameworks for teachers to perform their tasks. In a situation where teachers' expectations are set accordingly, where they expect clear instructions and procedures for doing most of their tasks, free leadership will be more likely perceived as a potential threat to safety rather than an opportunity for independence and creativity in work. For this reason, it would be worthwhile to conduct a similar research in a team of university teachers, and to compare the predictor value of laissez faire leadership in relation to intrinsic motivation.

The general dominance of identified regulation in relation to introjected and external, is consistent with the effect of the transformational leadership style on intrinsic motivation, and the explanation given above is applicable here as well. Even though this regulation belongs to the external spectrum, on the continuum, the identified regulation is closest to the intrinsic motivation. What is interesting, however, is that no single leadership style factor individually has a predictor value in this model. This means that teachers, depending on the perceived leadership style in general, will be more or less motivated to perform their tasks, they will more or less feel that the tasks themselves are important, that performing those tasks allows them to achieve impor-
tant goals in their work, and that it is important for a successful performance of their students. The absence of the predictive value of any single leadership factor on the identified regulation prevents the direct connection between this type of motivation and, in accordance with the hypothesis, the transactional leadership style. This is, however, compensated by the positive predictor connection between introjected regulation and the negative predictor relationship of individualized consideration to introjected regulation. In practice, this means that the more teachers notice that principals devote time to teaching and guiding their people, treat them as individuals instead of just group members, take into account the moral and ethical consequences of decisions, and consider the fact that each individual has different needs, abilities and aspirations, the less they will be guided by a sense of guilt in case they do not perform their tasks. On the other hand, the more teachers see principals providing them with help in return for their efforts, pinpointing who is accountable for achieving the set goals, making it clear what they will get when they achieve the set goals, and expressing satisfaction when they meet the goals, the more they will be guided in their work by a sense of guilt if they do not complete the task, that is, they will perform the tasks to avoid feeling bad.

Although they provide explanation for only a small percentage of variance, contingent rewarding and active management by exception also have statistical significance and promote extrinsic motivation. Situations in which principals punish and reward for (un)performed work, create an environment where teachers perform tasks in order to avoid punishment or receive a reward. It is encouraging, however, that such situations are few and that they, just like the amotivation conditioned by the perceived laissez faire leadership style, play a far less important role in the overall motivation of teachers.

The results obtained in other studies of school leadership and motivation are similar, but not completely consistent. However, we can also look for support in research conducted outside of school organizations. Thus, Baard, Deci, and Ryan (2004) and Gange and Deci (2005) have discovered a connection between leadership style and motivation, while Bono and Judge (2003) pointed to a connection between transformational leadership style and intrinsic motivation. On the other hand, Avolio and Bass (2002) and Judge and Piccolo (2004) found a correlation between transformational leadership style and extrinsic motivation. Deci and Ryan (2000) explain this by reinforcing an initially primarily intrinsic motivation with factors of positive extrinsic rewards.

Alasad (2017) also pointed out the connection between the transformational style of leadership and extrinsic motivation, in addition to the correlation with intrinsic motivation, in the school environment. Eyal and Roth (2011) have established a pos-
itive association between transformational leadership style and intrinsic motivation, as well as between transactional leadership and extrinsic motivation. The link between leadership style and motivation in the Eres (2011) study was insignificant.

After reviewing the relevant literature, no similar research was found in Bosnia and Herzegovina, which is why this research represents a pioneering step. Apart from the general theoretical contribution, the importance of this research lies in the fact that it can encourage future similar studies of the role of elementary school principals in developing teacher motivation, thus broadening the theoretical knowledge in this field.

One limiting factor to the research is the fact that, although it has been used in educational institutions before, the Multifactor Leadership Questionnaire is not specifically designed for school principals, and the position of a school principal differs from a position of a leader of market-oriented work organizations, with principals having much fewer rights and obligations. Additionally, primary education in Bosnia and Herzegovina is under the jurisdiction of 12 different levels of government (10 cantons in the Federation of Bosnia and Herzegovina, Republika Srpska and Brčko District), and any similar future study should be based on a sample that will be regionally representative.

Practically, the results of this research can encourage activities in terms of designing and implementing formal or informal training programs for future school leaders, all with the aim of creating a more stimulating environment and, ultimately, promoting student performance, i.e. expected educational outcomes in general. Currently, in the Tuzla Canton, the requirements for being hired as a school principal is having a teaching or professional associate position in a school and having five years of work experience. Leadership competencies are not imperative.

## CONCLUSION

The hypothesis set at the beginning of the research was confirmed. The relation between the perceived style of principal leadership and teacher motivation has been established, in a way that transformational leadership primarily contributes to intrinsic motivation, transactional leadership contributes to aspects of extrinsic motivation (introjected, identified and external regulation), and laissez faire leads to amotivation. At most $13 \%$ of the variance in teacher motivation can be explained by the principal's leadership style. The probable reason for such results is the complexity of teacher motivation, which is influenced by numerous both hygiene and motivating factors.

## REFERENCES

1. Alasad, Salih (2017), "The leadership styles of principals in bedouin secondary School and teachers motivation", Philosophy Study, Vol. 7, No. 3, 153-168.
2. Avolio, Bruce J., Bernard M. Bass (2002), Developing potential across a full range of leadership: Cases on transactional and transformational leadership, Lawrence Erlbaum associates, New Jersey
3. Avolio, Bruce J., Bernard M. Bass (2010), Višefaktorski upitnik rukovođenja [Multifactor Leadership Questionnaire], priručnik, Naklada Slap, Jastrebarsko
4. Baard, Paul P., Edward L. Deci, Richaed M. Ryan (2004), "The relation of in trinsic need satisfaction to performance and well-being in two work settings", Journal of applies psychology, 34, 92-98.
5. Bass, Bernard M. (1985), Leadership and performance beyond expectations, Free Press, New York
6. Bass, Bernard M. (1990), "From transactional to transformational leadership: Learning to share the vision", Organization dynamics, 18(3), 19-36.
7. Bass, Bernard M, Ronald E. Riggio (2006), Transformational leadership, Second edition, Lawrence erlbaum associates, New Jersey
8. Biggerstaff, Joseph K. (2012), The relationship between teacher perceptions of elementary school principal leadership style and teacher job satisfaction, PhD Thesis, Western Kentucky University
9. Bojanović, Radojica (2004), Psihologija međuljudskih odnosa, peto izdanje, Centar za primenjenu psihologiju, Beograd
10. Bono, Joyce E., Timothy A. Judge (2003), "Self-concordance at work: Towards understanding the motivational effects of transformational leaders", Academy of management journal, Vol. 46, No. 5, 554-571.
11. Burns, James M. (1978), Leadership, Open road integrated media, New York
12. Deci, Edward L., Richard M. Ryan (1985), Intrinsic motivation and self-determination in human behavior, Springer science+business media, New York
13. Deci, Edward L., Richard M. Ryan (2000), "The „what" and „why" of goal pursuits: Human needs and the self-determination of behavior", Psychological inquiry, Vol. 11, No. 4, 227-268.
14. Ereş, Figen (2011), "Relationship between teacher motivation and transformational leadership characteristics of school principals", International journal od education, Vol. 3, No. 2, 1-17.
15. Everard, K. Bertie, Geoffrey Morris, Ian Wilson (2004), Effective school management, Fourth edition, A Sage publications company, London
16. Eyal, Ori, Guy Roth (2011), "Principals' leadership and teacher's motivation: Self-determination theory analysis", Journal of educational administration, Vol. 42, No. 3, 256-275.
17. Fernet, Claude, Caroline Senécal, Frédéric Guay, Herbert Marsh, Martin Dowson (2008), "The work task motivation scale for teachers (WTMST)", Journal of career assessment, Vol. 16 No. 2, 256-279.
18. Gagné, Marylène, Edward L. Deci (2005), "Self-determination theory and work motivation", Journal of organizational behavior, 26, 331-362.
19. Gatsinzi, Patrick, Jesse Role, Lazarus Ndiku Makewa (2014), "Work and school related variables in teacher motivation in Gasbo District, Rwanda", Journal of education and training, Vol. 1, No. 2, 262-275.
20. Gilbar, Charlotte Rognmoe (2014), Principals 'Leadership and Teachers 'Motivation: A Study of the Relationship in the School Reform Era, PhD Thesis, Lynchburg College
21. Gorozidis, Georgios, Athanasios G. Papaioannou (2014), "Teachers' motivation to participate in training and to implement innovations", Teaching and teacher education, No. 39, 1-11.
22. Guay, Frederic, Geneviève A. Mageau, Robert J. Vallerand (2003), "On the hierarchical structure of self- determined motivation: A test of top-down, bo-ttom-up, reciprocal, and horizontal effects", Personal and social psychology bulettin, Vol. 29, No. 8, 992-1004.
23. Jesus, Saul Neves de, Willy Lens (2005), "An integrated model for the study of teacher motivation", Applied psychology: An international review, 54(1), 119-134.
24. Judge, Timothy A., Remus Ilies (2002), "Relationship of personality to performance motivation: A meta-analytic review", Journal of applied psychology, Vol. 87, No. 4, 797-807.
25. Judge, Timothy A., Ronald F. Piccolo (2004), "Transformational and transactional leadership: A meta-analytic test of their relative validity", Journal of applied psychology, Vol. 89, No. 5, 755-768.
26. Karabenick, Stuart A., Anne Marie Conley (2011), Teacher motivation for professional development, National science foundation, Michigan
27. Krech, David, Richard S. Crutchfield (1969), Elementi psihologije [Elements of Psychology], Naučna knjiga, Beograd
28. Lewin, Kurt, Ronald Lippitt, Ralph K. White (1939), "Patterns of aggressive behaviour in experimentally created „social climates"", Journal of social psychology, 10, 271-301.
29. Mihaliček, Sanja, Majda Rijavec (2009), "Motivacija učitelja engleskog jezika za rad", Napredak, 150(1), 39-53.
30. Nyakundi, Teresa Kemunto (2012), "Factors affecting teacher motivation in public secondary schools in Thika West District, Kiambu County", MA Thesis, Kenyatta University
31. OECD (2007a), Education at a Glance: OECD Indicators 2007, OECD, Paris
32. OECD (2007b) PISA 2006: Science Competencies for Tomorrow's World, OECD, Paris
33. Pelletier, Luc G., Chantal Séguin-Lévesque, Louise Legault (2002), "Pressure from above and pressure from below as determinants of teachers' motivation and teaching behaviors", Journal of educational psychology, Vol. 94, No. 1, 186-196.
34. Perlman, Dana J. (2013), "Effective teaching and motivation: Application of self - determination theory", Journal of research, policy and practice of teachers \& teacher education, Vol. 3, No. 2, 31-37.
35. Petz, Boris, Ivan Furlan, Slavko Kljajić, Vladimir Kolesarić, Mirjana Krizmanić, Silvija Szabo, Branimir Šverko (2005), Psihologijski rječnik, Naklada Slap, Jastrebarsko
36. Pont, Beatriz, Deborah Nusche, Hunter Moorman (2008a), Improving School Leadership, Volume 1: Policy and Practice, Paris, OECD
37. Rasheed, Muhammad Imran, Hassan Danyal Aslam, Shakeel Sarwar (2010), "Motivational issues for teachers in higher education: A critical case of IUB", Journal of management research, Vol. 2, No. 2, 1-23.
38. Rot, Nikola (2004), Opšta psihologija, Zavod za udžbenike i nastavna sredstva, Beograd
39. Ryan, Richard M., Edward L. Deci (2000), "Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions", Contemporary Educational Psychology, 25, 54-77.
40. Shepherd-Jones, Anna R., Jill D. Salisbury-Glennon (2018), "Perceptions matter: The correlation between teacher motivation and principal leadership style", Journal of Research in Education, Vol. 28, No. 2, 93-131.
41. Staničić, Stjepan (2011), Menadžment u obrazovanju, Centar za marketing u obrazovanju, Gornji Milanovac
42. Ud Din, Muhammad Naseer, Humaira Tufail, Shabnam Shereen, Allah Nawaz, Anjum Shahbaz (2012), "Factors affecting teacher motivation at secondary school level in Kohat City", Interdisciplinary journal of contemporary research in business, Vol. 3, No. 10, 442-449.
43. Walker, Kristin Marquette (2015), "Perceptions of leadership: Impact of leadership style and gender on employee motivation", PhD Thesis, Walden university
44. Wasserman, Egoza, Sigal Ben-eli, Ortal Yehoshua, Ravit Gal (2016), "Relationship between the Principal's Leadership Style and Teacher Motivation", International Journal of Learning, Teaching and Educational Research, Vol. 15, No. 10, 180-192.
45. Zvonarević, Mladen (1978), Socijalna psihologija, Drugo izdanje, Školska knjiga, Zagreb

# PERCIPIRANI STIL RUKOVOĐENJA DIREKTORA KAO FAKTOR RADNE MOTIVACIJE NASTAVNIKA U OSNOVNIM ŠKOLAMA 

## Sažetak:

U radu su predstavljeni rezultati istraživanja provedenog na 467 nastavnika iz 25 osnovnih škola na širem gradskom području Tuzle. Predmet istraživanja bio je odnos rukovoditeljskog stila direktora, kako ga percipiraju nastavnici, i radne motivacije nastavnika. Za prikupljanje podataka korišteni su Višefaktorski upitnik rukovođenja (MLQ) i Skala nastavničke motivacije (WTMST). Dobijeni rezultati ukazuju na povezanost opaženog stila rukovođenja direktora i motivacije nastavnika, i to na način da transformacijsko rukovođenje primarno doprinosi unutarnjoj motivaciji, transakcijsko vidovima vanjske motivacije (introjicirana, identificirajuća i vanjska regulacija), te laissez faire amotivaciji. Najviše 13\% varijance motivacije nastavnika moguće je objasniti stilom rukovođenja direktora. Vjerovatni razlog ovakvih rezultata je složenost motivacije nastavnika na koju utječu brojni kako higijenski tako i faktori motivacije.

Ključne riječi: školski direktori; transformacijsko, transakcijsko, laissez faire rukovođenje; nastavnici; radna motivacija; SD teorija

## Adresa autora

Authors' address

Gabriel Pinkas
Univerzitet u Tuzli
Filozofski fakultet
gabriel.pinkas@untz.ba

