Systematic Literature Review

Relationship Between Teacher Motivation and Organizational Variables: A Literature Review¹

João Viseu² Universidade do Algarve, Faro, Portugal Saul Neves de Jesus Universidade do Algarve, Faro, Portugal Claudia Rus Universidade de Babeş-Bolyai, Cluj-Napoca, Romania

José Manuel Canavarro Universidade de Coimbra, Coimbra, Portugal Joana Pereira Universidade do Algarve, Faro, Portugal

Abstract: Teacher motivation plays a central role in education because of its impact on student motivation. Previous reviews of teacher motivation have focused on individual variables and psychopathology indicators. However, it is also important to understand the effect of organizational variables on teacher motivation because these highlight the context that the teacher is a part of (i.e., the school). The literature review in this paper analysed studies related to teacher motivation and a pre-defined group of organizational variables that were published between 1990 and 2014 in several electronic databases. The study found that organizational culture was the most studied variable associated with teacher motivation and most studies in this area were published between 2010 and 2014. Further, there was a prevalence of quantitative studies. This paper concludes with the theoretical and practical implications of the results, as well as suggestions for future research directions.

Keywords: school environment, employee motivation, literature review, organizational behavior, teaching work

A Relação Entre a Motivação Docente e Variáveis Organizacionais: Revisão da Literatura

Resumo: A motivação docente ocupa um papel central na área da educação, especialmente pelo seu impacto na motivação dos alunos. Revisões anteriores sobre este tema focaram-se, maioritariamente, em variáveis individuais e indicadores de psicopatologia. Todavia, é importante analisar as variáveis organizacionais associadas à motivação docente, uma vez que estas salientam a importância do contexto onde o docente está inserido (i.e., a escola). Desta forma, a presente revisão da literatura procurou efetuar um levantamento dos estudos, publicados entre 1990-2014 e disponíveis em várias bases de dados eletrónicas, que relacionam a motivação docente e um conjunto pré-definido de variáveis organizacionais. Os resultados obtidos demonstraram que a cultura organizacional foi a variável mais estudada em conjunto com a motivação docente, a maioria dos estudos foi publicado entre 2010-2014 e que existiu um domínio de metodologias quantitativas. São apresentadas as implicações teórico-práticas dos resultados obtidos, bem como se indicam sugestões para futuras investigações.

Palavras-chave: ambiente escolar, motivação do empregado, revisão de literatura, comportamento organizacional, trabalho docente

La Relación Entre la Motivación Docente y Variables de la Organización: Revisión de la Literatura

Resumen: La motivación docente ocupa un papel central en el área de la educación, sobre todo por su impacto en la motivación de los alumnos. La mayoría de las revisiones anteriores sobre este tema se han centrado en variables individuales e indicadores de psicopatología. Es importante analizar las variables de la organización asociadas a la motivación docente, ya que estas subrayan la importancia del contexto donde está el docente. Esta revisión de la literatura ha procurado recoger los estudios, publicados entre 1990-2014 y disponibles en varias bases de datos, que relacionan la motivación docente y una serie predefinida de variables de la organización. Los resultados muestran que la cultura de la organización ha sido la variable más estudiada, que la mayoría de los estudios se publicó entre 2010-2014 y que los métodos cuantitativos fueron predominantes. Se presentan las implicaciones teórico-prácticas de los hallazgos y se realizan sugerencias para investigaciones futuras.

Palabras clave: ambiente escolar, motivación del empleados, revisión de la literatura, conducta organizacional, trabajo docente

Work motivation is one of the most influential constructs in organizational psychology, and it has been analysed in many work contexts (Gomes & Borba, 2011). In education, teacher motivation is considered to be a key construct due to its impact on student motivation and effective school functioning (Rufini, Bzuneck, & Oliveira, 2012; Zenorini, Santos, & Monteiro, 2011). According to Jesus (2003), studies in this area increased significantly during the 1980s, but they focused solely on the impact of salary incentives.

¹ This paper was derived from the doctoral dissertation of the first author under the supervision of the second author and was included in the Doctoral Program in Psychology at the University of Algarve - Faculty of Human and Social Sciences.

Support: Fundação para a Ciência e a Tecnologia (FCT, doctoral scholarship - SFRH/BD/89588/2012).

² Correspondence address:

João Viseu. Research Centre for Spatial and Organizational Dynamics (CIEO), University of Algarve, Campus de Gambelas, Building 9, 8005-139. Faro, Portugal. E-mail: joaonrviseu@gmail.com

In the opinion of Müller and Hanfstingl (2010), additional research on teacher motivation is needed to develop a consistent field of study, clarify contradictory findings, and develop new research guidelines.

However, teacher motivation should be considered extremely important. Teachers are fundamental to student motivation through their teaching quality and the development of the teacher-student relationship (Santisi, Magnano, Hichy, & Ramaci, 2014). Since the foundation of the European Higher Education Area, numerous studies (e.g., Ariza, Quevedo-Blasco, & Buela-Casal, 2014) have addressed the professional motivation of university teachers and the impact of performance appraisals. Jesus (1996) remarked that in addition to the importance of the role of teachers in the classroom, they are very important in the implementation of educational policies. In short, teacher motivation is important due to its impact on the classroom and the school because it influences both the organization and individuals (Bentea & Anghelache, 2012; Müller & Hanfstingl, 2010). Therefore, it is imperative to understand which aspects influence this construct.

Aloe, Shisler, Norris, Nickerson, and Rinker (2014) and Jesus (2010) observed that teachers had higher levels of distress and burnout compared with individuals in other human service professions. Several studies (e.g., Aloe et al., 2014; Bascia & Rottmann, 2011; Guglielmi, Panari, Simbula, & Mazzetti, 2014; Roness & Smith, 2010) concluded that workrelated variables such as (a) monetary incentives; (b) large class sizes; (c) poor working conditions; (d) few promotion opportunities; (e) student misbehaviour; and (f) high workloads contributed significantly to teacher demotivation and could induce teacher turnover. A study realized in Portugal (Jesus, 1996) demonstrated that in a sample of 576 teachers, over 50% wanted to leave teaching. Another study that examined Portuguese and Brazilian teachers showed similar results (Jesus et al., 2011). In conclusion, teachers are exposed to difficult working conditions that influence their motivation and may result in negative psychological outcomes, leading to teacher turnover.

Given the above-mentioned aspects, it is important to synthesize teacher motivation studies to fully understand the present state of the art. Müller and Hanfstingl (2010) noted that teacher motivation studies have tended to focus on variables related to the teachers themselves (Jesus, 2003), and few studies have addressed teacher motivation from an organizational perspective. As a result, this study seeks to examine teacher motivation studies that have focused on organizational variables because they are crucial to gaining an understanding of these influences (Bentea & Anghelache, 2012; Müller & Hanfstingl, 2010). To achieve this goal, a set of organizational variables was selected: (a) organizational climate; (b) organizational culture; (c) organizational health; (d) organizational justice; and (e) performance appraisal.

Organizational climate is an organizational attribute that refers to working experiences (Schneider, Ehrhart, & Macey, 2013). According to Kohl, Recchia, and Steffgen (2013) and Schneider et al. (2013), an organization is heterogeneous because it tends to have several climates. Despite this, Bocchi,

Dozza, Chianese, and Cavrini (2014) felt that interpersonal relationships and social interactions were the most important dimensions of a school's organizational climate.

Organizational culture refers to the set of shared values and assumptions that determine a teacher's behaviour (Ipek, 2010; Schneider et al., 2013). Negis-Isik and Gursel (2013) found that organizational culture was fundamental to a school's success and that it significantly affected teacher satisfaction and motivation.

Organizational health refers to the need to respond to constant changes and the ability to give an effective response to external demands (Bennis, 2002). An organization is healthy when it can effectively adapt to external demands while promoting the integration of its members (Fernandes, Gomide Júnior, & Oliveira, 2011). The stability between these parameters and when stability between these parameters (i.e., response to external demands and employee integration) contributes to teacher motivation (Roness & Smith, 2010).

Organizational justice has a central role in educational establishments because perceptions injustice affect teachers' work motivation, well-being, and performance, which may lead to negative work attitudes (e.g., absenteeism and turnover; Elma, 2013). Aguinis, Joo, and Gottfredson (2011) found that while performance appraisal was utilized in the majority of organizations, 70% of employees felt that these appraisals did not contribute to their professional development. Darling-Hammond, Newton, and Wei (2013) and Firestone (2014) believed that though modest progress has been made in this field, teacher performance appraisal is essential in estimating the quality of teaching and students' learning (Tuytens & Devos, 2012; Wang, Tseng, Yen, & Huang, 2011). Due to the inconsistencies in many current teacher appraisal processes, teachers tend to view them negatively (O'Pry & Schumacher, 2012).

The literature review in this paper aimed to analyse the organizational variables associated with teacher motivation. To this end, an assessment of the studies about teacher motivation and the above-mentioned variables was conducted. We believe this work is valuable for future research developments in this area because it integrates different organizational variables related to teacher motivation rather than focusing on the more commonly used individual variables.

Method

A systematic review of studies published between January 1990 and September 2014 was performed. An electronic search was conducted using the Web of Science (Web of Knowledge), PsychInfo (EBSCOhost), Psychology and Behavioral Sciences (EBSCOhost), Education Resources Information Center (ERIC; EBSCOhost), ProQuest, ScienceDirect, and the Wiley Online Library. The keywords used were teacher motivation, organizational climate or school climate, organizational culture or school culture, organizational health or school health, organizational justice or school justice, and performance appraisal. The

search period occurred between June 2014 and September 2014. In the selected databases, the month and year of the time limit (i.e., January 1990-September 2014) were entered when possible (ERIC; Psychology and Behavioral Sciences; and ProQuest). When this was not possible (Web of Science, PsychInfo, ScienceDirect and Wiley Online Library), only the defined years (i.e., 1990-2014) were entered in the respective search fields. The keyword *teacher motivation* was used in all searches and was combined individually with the keywords related to each of the chosen organizational variables (e.g., *teacher motivation* and *organizational climate* or *school climate*; *teacher motivation* and *organizational culture* or *school culture*).

The following inclusion criteria were defined: (a) empirical paper; (b) publication in a peer-reviewed journal between 1990 and 2014; (c) teacher motivation related with the specified organizational variables; (d) inclusion of the above-mentioned keywords; and (e) Portuguese, English, and Spanish as languages of publication. If the studies failed to meet these criteria, they were excluded from the review. Two researchers were responsible for the selection process, which was divided into four stages. First, the articles were analysed concerning the inclusion criteria. In the second stage, papers were assessed in terms of title and abstract. Subsequently, the

full text was examined. Finally, a search for identical papers was performed. For excluded papers, explanations for the decisions were documented. An agreement level of 96% was registered between the researchers regarding the selected studies. In case of doubt, two independent researchers were consulted. A database was created with Microsoft Excel to document the main characteristics of each study: (a) allocation of the study to the respective organizational concept; (b) year of publication (i.e., 1990-2014); (c) author(s); (d) sample composition (i.e., total participants, gender, and type of education provided); (e) methodology employed (i.e., quantitative, qualitative, or mixed); (f) type of instruments administered; and (g) synthesis of the main results.

Results

In all, 94 articles were included in the literature review. After evaluation, 43 were excluded, of which 39 did not meet the inclusion criteria and four referred to repeated documents. Therefore, 51 documents composed the final sample in this review. In Table 1, a summary of the global results for the sample of studies is presented.

With regard to the research related to teacher motivation and defined organizational variables, it was found that

Table 1 Summary of the Global Results for the Sample of Studies (N = 51)

Analyzed characteristics	Obtained results			
Publication flow (per year)				
Highest number of studies	2012 (<i>n</i> = 11; 21.57%)			
Fewest number of studies	1990-1998, 2001-2002, and 2005 ($n = 0$; 0%)			
Methodological approach				
Quantitative	41 (80.39%)			
Qualitative	5 (9.80%)			
Mixed	5 (9.80%)			
Type of samples				
Sample composition (gender)	Male and female teachers ($n = 51$; 100%)			
Education level provided	Different education levels ($n = 28$; 54.9%) and same education level ($n = 23$; 45.1%)			
Type of instruments used ^a				
Self-report questionnaire	46 (76.67%)			
Interview	9 (15%)			
Document analysis	4 (6.67%)			
Critical incident analysis	1 (1.67%)			
Number of participants				
Mean	$\approx 1840 \ (M = 1839.76; SD = 5195.47)$			
Median	391			
Maximum	26257			
Minimum	12			

Note. a The number of instruments used exceeded the total number of studies (N = 51) because some studies employed more than one type of instrument.

organizational culture was the construct most frequently studied along with teacher motivation (n = 16; 31.37%), followed by organizational climate (n = 11; 21.57%), organizational justice (n = 11; 21.57%), performance appraisal (n = 11; 21.57%), and organizational health (n = 2; 3.92%).

A synthesis of the main findings of each study and data related to the methodological aspects, namely the methodological approach used (i.e., quantitative, qualitative, or mixed), the number of participants, the names of the authors, and the year of publication, are summarized in Table 2.

Table 2 Synthesis of the Key Findings of the Sample of Studies (N = 51)

Author (year)	N	Methodology	Main results	
	Organizatio	nal climate		
Jaafari, Karami, & Soleimani (2012)	117	Quantitative	Organizational climate and teacher motivati	
Thomas (2008)	957	Quantitative	established a negative and statistically significant correlation.	
Meristo & Eisenschmidt (2014)	112	Quantitative	Organizational climate and teacher motivation had a positive and statistically significant correlation.	
Bentea (2013)	201	Quantitative	Different perceptions of organizational clima led to a distinct impact on teacher motivation	
Hart, Wearing, Conn, Carter, & Dingle (2000)	1520	Quantitative		
Klusmann, Kunter, Ludtke, & Baumert (2008)	1939	Quantitative	red to a distinct impact on teacher motivation	
Collie, Shapka, & Perry (2011, 2012)	664	Quantitative	School leadership and interpersonal relation-	
Klassen et al. (2008)	526	Mixed	ships were significant predictors of teacher	
Liu (2012)	510	Quantitative	motivation.	
Buka & Bilgic (2010)	429	Quantitative	Teacher motivation was higher in private insti- tutions, due to differences at the organizationa climate level.	
	Organizatio	nal culture		
Aelterman, Engels, Petegem, & Verhaeghe (2007)	2000	Quantitative	Organizational culture was a significant	
Marcone, Trigo, & Martín del Buey (2003)	436	Quantitative	predictor of teacher motivation.	
Karadag, Baloglu, & Çakir (2011)	228	Quantitative	Organizational culture and teacher motivatio were positively correlated; however, this correlation was not statistically significant.	
Dumay & Galand (2012)	660	Quantitative		
Troman (2008)	42	Qualitative	Changes in organizational culture influenced teacher motivation.	
Shaw & Reyes (1992)	104	Quantitative	Perceptions of organizational culture were different between distinct schools levels (elementary and high school), as a result teacher motivation also varied.	
Abd Razak, Darmawan, & Keeves (2010)	1154	Quantitative	Organizational culture differed in schools fror different countries, leading to divergent result in teacher motivation.	
Ware & Kitsantas (2007, 2011)	26257	Quantitative	School culture management was crucial to maintaining the teachers' motivation.	
Zhu, Devos, & Li (2011)	181	Quantitative	A goal-oriented culture was a significant predictor of teacher motivation.	
Devos, Dupriez, & Paquay (2012)	295	Quantitative		
Lam, Cheng, & Choy (2010)	182	Quantitative	A supportive culture contributed to an increase in teacher motivation.	
Sezgin (2010)	270	Quantitative		
Weiss (1999)	5088	Quantitative		
Ha & Sung (2011)	48	Qualitative	A competition-based culture had a detrimen	
Rots, Kelchtermans, & Aelterman (2012)	12	Qualitative	impact on teacher motivation.	

...continuation

Author (year)	N	Methodology	Main results	
	Organizatio	onal health		
Mehta, Atkins, & Frazier (2013)	203	Quantitative	Positive learning environment and material resources established a positive and statistically significant correlation with teacher motivation.	
Pas, Bradshaw, & Hershfeldt (2012)	600	Quantitative	School leadership, teacher affiliation, and academic emphasis significantly predicted teacher motivation. However, student mobility contributed negatively to this aspect.	
	Organizatio	onal justice		
Boudrias et al. (2011)	391	Quantitative		
Cheng (2014)	2180	Quantitative	The relationship between organizational justice	
Cohen & Keren (2008)	539	Quantitative	and teacher motivation could either be direct or indirect.	
Sousa & Mendonça (2009)	233	Quantitative		
Babaoglan & Erturk (2013)	1463	Quantitative		
Mohammadtaheri (2011)	2800	Quantitative	A positive and statistically significant correla-	
Ozgan (2011)	212	Quantitative	tion between organizational justice and teacher	
Oztug & Bastas (2012)	225	Quantitative	motivation was obtained.	
Yavuz (2010)	445	Quantitative		
Shapira & Lishchinsky (2007)	1016	Quantitative	The relationship between organizational justice and teacher motivation differed in terms of gender.	
Ugurlu & Ustuner (2011)	9004	Quantitative	Justice behaviours, adopted by schools' administrators, had a positive impact on teacher motivation.	
	Performanc	e appraisal		
Collins (2004)	44	Qualitative	Performance appraisal processes focused solely on results had a detrimental influence of teacher motivation.	
Rahman (2006)	232	Quantitative		
Ortner (2012)	103	Quantitative		
Harris & Sass (2014)	30	Mixed	High workloads, that cause teacher	
Kowai-Bell, Guadagno, Little, & Ballew (2012)	44	Mixed	demotivation, led to poor work performance, one of the aspects measured on teachers' performance appraisal.	
Rasheed, Aslam, Yousaf, & Noor (2011)	100	Mixed		
Delvaux et al. (2013)	1983	Quantitative		
Blaskova & Blasko (2014)	655	Quantitative	Feedback, supervisors' training, and evaluation criteria were key features in	
Kelly, Ang, Chong, & Hu (2008)	85	Quantitative	performance appraisal and influenced teacher motivation. On the one hand, negative	
Runhaar, Sanders, & Konermann (2013)	365	Mixed	feedback, poor supervisor training, and vague criteria caused teacher demotivation. On the other hand, the existence of: (a) a constructive	
Lundstrom (2012)	23	Qualitative	relationship between supervisor and teacher; (b) positive feedback; and (c) clear criteria, increased teacher motivation.	

Note. For each study we presented the author(s), year of publication, and methodology employed. However, because some studies had similar results, the main results were aggregated in those situations.

Discussion

The present review examined studies published between 1990 and 2014 that addressed the relationship between teacher motivation and organizational variables. A majority

of the studies (58.82%) was published in 2010-2014. Also, most of the studies employed a quantitative methodology likely because quantitative methods allow the collection of larger samples and the inference of causal relationships (Gelo, Braakmann, & Benetka, 2008). According to Spector

(1994), the use of self-report questionnaires facilitates the analysis of several variables and provides an accurate picture of an individuals' work environment.

Organizational culture has a critical relationship with teacher motivation because it determines the way in which teachers behave and perform (Ipek, 2010). However, the analysis of the relationship between school organizational culture and teacher motivation must be addressed meticulously, because different cultures have distinct effects on teacher motivation. These assumptions may explain why different cultures (i.e., goal-oriented, supportive, and competition-based) had different effects on teacher motivation in the analysed studies. Educational leaders must be aware of the effects of each type of organizational culture not only for the motivation of teachers but also for the functioning of the school as a whole. Moreover, these results emphasized the need to conduct more studies, which could clarify the type of culture that best elevates teacher motivation.

The divergent results in some of the studies that evaluated the relationship between teacher motivation and organizational climate might have occurred because of this concepts' heterogeneity. Therefore, it could be concluded that different organizational climate perceptions can have a distinct effect on motivation. Bocchi et al. (2014) felt that school leadership and interpersonal relations, which are organizational climate dimensions, were the most important predictors for teacher motivation, which was supported by the results of the analysed studies. However, differences in teacher motivation levels due to organizational climate may occur not only because of the different leadership styles employed by school directors and relationships with other teachers, but also due to interactions with the school staff and student parents, which were not addressed in the sample of studies. Further, class climate may also be affected by poor student discipline, subsequently causing teacher demotivation.

O'Brien-Pallas, Murphy, Shamian, Li, and Hayes (2010) stressed that leadership styles, adequate working conditions (e.g., access to recent materials), and cooperation between different organizational actors were crucial to professional motivation. These organizational health dimensions were congruent with those presented in the examined studies. Nevertheless, despite the relevance of organizational health, few studies have been conducted on the relationship between this concept and teacher motivation. This situation needs to be examined in future works because of the increase, in the last few years, of a focus on the psychosocial risk factors.

In a systematic review, Colquitt, Conlon, Wesson, Porter, and Ng (2001) found that different types of organizational justice were positively and significantly associated with motivation, and Cohen-Charash and Spector (2001) reported that demographic variables had little effect on justice perceptions. School leaders and other organizational members. must employ fair, clear justice criteria to increase teacher motivation and, consequently, student motivation and to reduce teacher turnover rates, which are a preoccupying factor in the teaching profession.

Performance appraisal was found to be significantly influenced by the type of feedback and the supervisors' role (O'Pry & Schumacher, 2012). Firestone (2014) noted that

feedback has been undervalued but is fundamental because it relates to teachers' intrinsic motivation. Supervisors are responsible for feedback that may help teachers' career development; thus, when supervisors promote support, they generate satisfaction and motivation (Pichler, 2012). Nevertheless, supervisors' control attitudes were also found to prejudice teacher motivation (O'Pry & Schumacher, 2012). Goal clarification also potentiates satisfaction and motivation (Wang et al., 2011). Another aspect worth mentioning is the scope of the performance appraisal, because it was found that this process should not only focus on outcomes but also on processes and employee behaviours (Firestone, 2014). Schools must create appraisal systems that teachers consider fair, and teachers should be included in the development of these systems because they are active actors in the education process and they know which work characteristics prejudice or improve teaching. This situation would make teachers feel that they are a part of the educational process and not only instruments to achieve educational goals. In addition to these concerns, supervisors must also receive adequate training to deliver useful feedback and promote a supportive environment for the teachers, which would help them develop their professional skills.

In general, the analysed studies were congruent with the premises mentioned above. Therefore, we can conclude that teacher motivation is affected not only by variables related to the teacher, as reported in past literature reviews (Jesus, 2003), but also by organizational variables, which refer to the relationship established between the teacher and the school. This approach emphasizes the importance of the context in which the teacher works and the relationships established within this context.

The present literature review possesses some limitations. The time period analysed could have been extended because teacher motivation has been a serious problem in schools for several decades. In addition, other organizational (e.g., organizational citizenship behaviours) and individual (e.g., positive psychological capital) variables could have been assessed along with job satisfaction, the most studied work attitude in the literature. This would have allowed a comparison between the studies that related teacher motivation to organizational and individual variables, and to work attitudes to determine which of these variables was the most studied within the above-mentioned construct. Future reviews could focus on work attitudes and the individual variables related to teacher motivation to update past works. In addition, researchers could develop theoretical models that address the effect of organizational and individual variables, and work attitudes on teacher motivation, which could lead to the development of an integrative model for the study of teacher motivation, as in Jesus and Lens (2005), but would consider several more aspects. Further, intervention programs should understand the influence of the school environment to consider its effects on teacher motivation because it is important to not only ensure high levels of motivation and well-being, but also ensure that the environment in which the teachers are working is healthy and has good working conditions so they can perform their duties.

References

- Abd Razak, N., Darmawan, I., & Keeves, J. (2010). The influence of culture on teacher commitment. *Social Psychology of Education*, *13*(2), 185-205. doi:10.1007/s11218-009-9109-z
- Aelterman, A., Engels, N., Van Petegem, K., & Verhaeghe, J. P. (2007). The well-being of teachers in Flanders: The importance of a supportive school culture. *Educational Studies*, 33(3), 285-297. doi:10.1080/03055690701423085
- Aguinis, H., Joo, H., & Gottfredson, R. K. (2011). Why we hate performance management And why we should love it. *Business Horizons*, *54*(6), 503-507. doi:10.1016/j. bushor.2011.06.001
- Aloe, A. M., Shisler, S. M., Norris, B. D., Nickerson, A. B., & Rinker, T. W. (2014). A multivariate metaanalysis of student misbehavior and teacher burnout. *Educational Research Review*, 12, 30-44. doi:10.1016/j. edurev.2014.05.003
- Ariza, T., Quevedo-Blasco, R., & Buela-Casal, G. (2014). Satisfaction of social and legal sciences teachers with the introduction of the European higher education area. *European Journal of Psychology Applied to Legal Context*, 6(1), 9-16. doi:10.5093/ejpalc2014a2
- Babaoglan, E., & Erturk, E. (2013). The relationship between teachers' organizational justice perception and organizational commitment. *Hacettepe University Journal of Education*, 28(2), 87-101.
- Bascia, N., & Rottmann, C. (2011). What's so important about teachers' working conditions? The fatal flaw in North American educational reform. *Journal of Education Policy*, 26(6), 787-802. doi:10.1080/026809 39.2010.543156
- Bennis, W.G. (2002). Towards a "truly" scientific management: The concept of organization health. Reflections, 4(1), 4-13. doi:10.1162/152417302320467508
- Bentea, C. C. (2013). Investigation of the organizational school climate and attitudes towards change: A study on a sample of in-service Romanian teachers. *Procedia Social and Behavioral Sciences*, 76, 100-104. doi:10.1016/j.sbspro.2013.04.081
- Bentea, C.-C., & Anghelache, V. (2012). Teachers' motivation and satisfaction for professional activity. *Procedia Social and Behavioral Sciences*, *33*, 563-567. doi:10.1016/j.sbspro.2012.01.184
- Blaskova, M., & Blasko, R. (2014). Motivating university teachers through the prism of their remuneration. *Procedia Social and Behavioral Sciences*, *110*, 595-606. doi:10.1016/j.sbspro.2013.12.904
- Bocchi, B., Dozza, L., Chianese, G., & Cavrini, G. (2014). School climate: Comparison between parents' and teachers' perception. *Procedia Social and Behavioral Sciences*, 116, 4643-4649. doi:10.1016/j. sbspro.2014.01.1000
- Boudrias, J.-S., Desrumaux, P., Gaudreau, P., Nelson, K.,

- Brunet, L., & Savoie, A. (2011). Modeling experience of psychological health at work: The role of personal resources, social-organizational resources, and job demands. *International Journal of Stress Management*, 18(4), 372-395. doi:10.1037/a0025353
- Buka, M., & Bilgiç, R. (2010). Public and private schoolteachers' differences in terms of job attitudes in Albania. *International Journal of Psychology, 45*(3), 232-239. doi:10.1080/00207590903452291
- Cheng, J.-N. (2014). Attitudes of principals and teachers towards approaches used to deal with teacher incompetence. *Social Behavior and Personality*, 42(1), 155-176. doi:10.2224/sbp.2014.42.1.155
- Cohen, A., & Keren, D. (2008). Individual values and social exchange variables: Examining their relationship to mutual effect on in-role performance and organizational citizenship behavior. *Group & Organization Management*, 33(4), 425-452. doi:10.1177/1059601108321823
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2011). Predicting teacher commitment: The impact of school climate and social-emotional learning. *Psychology in the Schools*, 48(10), 1034-1048. doi:10.1002/pits.20611
- Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social-emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology, 104*(4), 1189-1204. doi:10.1037/a0029356
- Collins, A. B. (2004). Teacher performance evaluation: A stressful experience from a private secondary school. *Educational Research*, 46(1), 43-54. doi:10.1080/0013188042000178818
- Cohen-Charash, Y., & Spector, P. E. (2001). The role of justice in organizations: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 86(2), 278-321. doi:10.1006/obhd.2001.2958
- Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C. O. L. H., & Ng, K. Y. (2001). Justice at the millennium: A meta-analytic review of 25 years of organizational justice research. *Journal of Applied Psychology*, 86(3), 425-445. doi:10.1037/0021-9010.86.3.425
- Darling-Hammond, L., Newton, S. P., & Wei, R. C. (2013). Developing and assessing teacher effectiveness: The potential of performance assessments. *Educational Assessment, Evaluation and Accountability, 25*(3), 179-204. doi:10.1007/s11092-013-9163-0
- Delvaux, E., Vanhoof, J., Tuytens, M., Vekeman, E., Devos, G., & Van Petegem, P. (2013). How may teacher evaluation have an impact on professional development? A multilevel analysis. *Teaching and Teacher Education*, *36*, 1-11. doi:10-1016/j.tate.2013.06.011
- Devos, C., Dupriez, V., & Paquay, L. (2012). Does the social working environment predict beginning teachers' self-efficacy and feelings of depression? *Teaching and Teacher Education*, 28(2), 206-217. doi:10.1016/j. tate.2011.09.008
- Dumay, X., & Galand, B. (2012). The multilevel impact of transformational leadership on teacher commitment:

- Cognitive and motivational pathways. *British Educational Research Journal*, 38(5), 703-729. doi:10.1080/01411926.2011.577889
- Elma, C. (2013). The predictive value of teachers' perception of organizational justice on job satisfaction. *Eurasian Journal of Educational Research*, 51, 157-176.
- Fernandes, M. N., Gomide Júnior, S., & Oliveira, A. F. (2011). Saúde organizacional: Uma proposta de modelo de análise [Organizational health: A proposed analysis model]. *Revista Psicologia: Organizações e Trabalho, 11*(1), 54-65.
- Firestone, W. A. (2014). Teacher evaluation policy and conflicting theories of motivation. *Educational Researcher*, 43(2), 100-107. doi:10.3102/00131189X14521864
- Gelo, O., Braakmann, D., & Benetka, G. (2008). Quantitative and qualitative research: Beyond the debate. *Integrative Psychological & Behavioral Science*, 42(3), 266-290. doi:10.1007/s12124-008-9078-3
- Gomes, D., & Borba, D. (2011). Motivação no trabalho [Work motivation]. In D. Gomes (Coord.), *Psicologia das organizações, do trabalho e dos recursos humanos [Organizational psychology, work, and human resources]* (pp. 241-320). Coimbra, Portugal: Imprensa da Universidade de Coimbra.
- Guglielmi, D., Panari, C., Simbula, S., & Mazzetti, G. (2014). Is it possible to motivate teachers? The role of organizational identification. *Procedia - Social and Behavioral Sciences*, 116, 1842-1847. doi:10.1016/j. sbspro.2014.01.481
- Ha, B.-W., & Sung, Y.-K. (2011). Teacher reactions to the performance-based bonus program: How the expectancy theory works in South Korean school culture. *Asia Pacific Education Review*, 12(1), 129-141. doi:10.1007/s12564-010-9131-z
- Harris, D. N., & Sass, T. R. (2014). Skills, productivity and the evaluation of teacher performance. *Economics of Education Review*, 40(C), 183-204. doi:10.1016/j. econedurev.2014.03.002
- Hart, P. M., Wearing, A. J., Conn, M., Carter, N. L., & Dingle, R. K. (2000). Development of the school organisational health questionnaire: A measure for assessing teacher morale and school organisational climate. *British Journal of Educational Psychology*, 70(2), 211-228. doi:10.1348/000709900158065
- Ipek, C. (2010). Predicting organizational commitment from organizational culture in Turkish primary schools. *Asia Pacific Education Review*, 11(3), 371-385. doi:10.1007/s12564-010-09097-x
- Jaafari, P., Karami, S., & Soleimani, N. (2012). The relationship among organizational climate, organizational learning and teachers' self efficacy. *Procedia - Social* and Behavioral Sciences, 47, 2212-2218. doi:10.1016/j. sbspro.2012.06.974
- Jesus, S. N. (1996). A motivação para a profissão docente: Contributo para a clarificação de situações de mal-estar e para a fundamentação de estratégias de formação de professores [Motivation for the teaching profession:

- Contribution for the clarification of malaise situations and theoretical grounding for training strategies for teachers]. Aveiro, Portugal: Estante.
- Jesus, S. N. (2003). La motivación de los profesores: Una revisión de la literatura [Teacher motivation: A literature review]. In D. García-Villamisar & T. Freixas Guinjoan (Eds.), El estrés del profesorado: Una perspectiva internacional [Teacher stress: An international perspective] (pp. 117-139). Valencia, España: Promolibro.
- Jesus, S. N. (2010). Teacher stress management by training motivation and skills: A resume. In P. Buchwald, K. A. Moore, & T. Ringeisen (Eds.), Stress and anxiety: Application to education and health (pp. 55-60). Berlin, Germany: Logos.
- Jesus, S. N., & Lens, W. (2005). An integrated model for the study of teacher motivation. *Applied Psychology: An International Review*, 54(1), 119-134. doi:10.1111/ j.1464-0597.2005.00199.x
- Jesus, S. N., Mosquera, J., Stobaus, C., Sampaio, A., Rezende, M., & Mascarenhas, S. (2011). Avaliação da motivação e do bem/mal-estar dos professores: Estudo comparativo entre Portugal e Brasil [Assessment of the motivation and well-being/ill-being of teachers: A comparative study between Portugal and Brazil]. AMAzônica: Revista de Psicopedagogia, Psicologia Escolar e Educação, 7(2), 7-18.
- Karadag, E., Baloglu, N., & Çakir, A. (2011). A path analysis study of school culture and teachers' organisational commitment. *Policy Futures in Education*, *9*(5), 573-584. doi:10.2304/pfie.2011.9.5.573
- Kelly, K. O., Ang, S. Y. A., Chong, W. L., & Hu, W. S. (2008). Teacher appraisal and its outcomes in Singapore primary schools. *Journal of Educational Administration*, 46(1), 39-54. doi:10.1108/09578230810849808
- Klassen, R. M., Chong, W. H., Huan, V. S., Wong, I., Kates, A., & Hannok, W. (2008). Motivation beliefs of secondary school teachers in Canada and Singapore: A mixed methods study. *Teaching and Teacher Education*, 24(7), 1919-1934. doi:10.1016/j.tate.2008.01.005
- Klusmann, U., Kunter, M., Trautwein, U., Ludtke, O., & Baumert, J. (2008). Engagement and emotional exhaustion in teachers: Does the school context make a difference? *Applied Psychology: An International Review, 57*(Suppl 1), 127-151. doi:10.1111/j.1464-0587.00358.x
- Kohl, D., Recchia, S., & Steffgen, G. (2013). Measuring school climate: An overview of measurement scales. *Educational Research*, 55(4), 411-426. doi:10.1080/0013 1881.2013.844944
- Kowai-Bell, N., Guadagno, R. E., Little, T. E., & Ballew, J. L. (2012). Professors are people too: The impact of informal evaluations of professors on students and professors. *Social Psychology of Education*, *15*(3), 337-351. doi:10.1007/s11218-012-9181-7
- Lam, S.-F., Cheng, R.W.-I., & Choy, H. C. (2010). School support and teacher motivation to implement project-based learning. *Learning and Instruction*, 20(6), 487-497. doi:10.1016/j.learninstruc.2009.07.003

- Liu, S. (2012). The influences of school climate and teacher compensation on teachers' turnover intention in China. Educational Psychology: An International Journal of Experimental Educational Psychology, 32(5), 553-569. doi:10.1080/01443410.2012.691074
- Lundström, U. (2012). Teachers' perceptions of individual performance-related pay in practice: A picture of a counterproductive pay system. *Educational Management Administration* & *Leadership*, 40(3), 376-391. doi:10.1177/1741143212436954
- Marcone Trigo, R., & Martín del Buey, F. (2003). Construcción y validación de un inventario de cultura organizacional educativa (ICOE) [Development and validation of a school organizational culture inventory (ICOE)]. *Psicothema*, 15(2), 292-299.
- Mehta, T. G., Atkins, M. S., & Frazier, S. L. (2013). The organizational health of urban elementary schools: School health and teacher functioning. *School Mental Health*, *5*(3), 144-154. doi:10.1007/s12310-012-9099-4
- Meristo, M., & Eisenschmidt, E. (2014). Novice teachers' perceptions of school climate and self-efficacy. *International Journal of Educational Research*, 67, 1-10. doi:10.1016/j.ijer.2014.04.003
- Mohammadtaheri, N. (2011). The study of effective factors on the teachers' work commitment in high schools. *Procedia - Social and Behavioral Sciences*, 29, 1524-1530. doi:10.1016/j.sbspro.2011.11.393
- Müller, F. H., & Hanfstingl, B. (2010). Teacher motivation [Special issue editorial]. *Journal of Educational Research Online*, 2(2), 5-8.
- Negis-Isik, A., & Gursel, M. (2013). Organizational culture in a successful primary school: An ethnographic case study. *Educational Sciences: Theory & Practice, 13*(1), 221-228.
- O'Brien-Pallas, L., Murphy, G. T., Shamian, J., Li, X., & Hayes, L. J. (2010). Impact and determinants of nurse turnover: A pan-Canadian study. *Journal of Nursing Management*, 18(8), 1073-1086. doi:10.1111/j.1365-2834.2010.01167.x
- O'Pry, S. C., & Schumacher, G. (2012). New teachers' perceptions of a standards-based performance appraisal system. *Educational Assessment, Evaluation and Accountability*, 24(4), 325-350. doi:10.1007/s11092-012-9148-4
- Ortner, T. M. (2012). Teachers' burnout is related to lowered speed and lowered quality for demanding short-term tasks. *Psychological Test and Assessment Modeling*, 54(1), 20-35.
- Ozgan, H. (2011). The relationships between organizational justice, confidence, commitment, and evaluating the manager and the perceptions of conflict management at the context of organizational behavior. *Educational Sciences: Theory & Practice*, 11(1), 241-247.
- Oztug, O., & Bastas, M. (2012). The effects of teachers' organizational justice perceptions on organizational commitment [Special issue]. *Hacettepe University*

- Journal of Education, 2, 125-133.
- Pas, E. T., Bradshaw, C. P., & Hershfeldt, P. A. (2012). Teacherand school-level predictors of teacher efficacy and burnout: Identifying potential areas for support. *Journal of School Psychology*, 50(1), 129-145. doi:10.1016/j. jsp.2011.07.003
- Pichler, S. (2012). The social context of performance appraisal and appraisal reactions: A meta-analysis. *Human Resource Management*, *51*(5), 709-732. doi:10.1002/hrm.21499
- Rahman, S. A. (2006). Attitudes of Malaysian teachers toward a performance-appraisal system. *Journal of Applied Social Psychology*, 36(12), 3031-3042. doi:10.1111/i.0021-9029.2006.00141.x
- Rasheed, M. I., Aslam, H. D., Yousaf, S., & Noor, A. (2011). A critical analysis of performance appraisal system for teachers in public sector universities of Pakistan: A case study of the Islamia University of Bahawalpur (IUB). African Journal of Business Management, 5(9), 3735-3744. doi:10.5897/AJBM10.1157
- Roness, D., & Smith, K. (2010). Stability in motivation during teacher education. *Journal of Education for Teaching: International Research and Pedagogy, 36*(2), 169-195. doi:10.1080/02607471003651706
- Rots, I., Kelchtermans, G., & Aelterman, A. (2012). Learning (not) to become teacher: A qualitative analysis of the job entrance issue. *Teaching and Teacher Education*, 28(1), 1-10. doi:10.1016/j.tate.2011.08.008
- Rufini, S. E., Bzuneck, J. A., & Oliveira, K. L. (2012). The quality of motivation among elementary school students. *Paidéia (Ribeirão Preto)*, *22*(51), 53-62. doi:10.1590/S0103-863X2012000100007
- Runhaar, P., Sanders, K., & Konermann, J. (2013). Teachers' work engagement: Considering interaction with pupils and human resources practices as job resources. *Journal of Applied Social Psychology*, 43(10), 2017-2030. doi:10.1111/jasp.12155
- Santisi, G., Magnano, P., Hichy, Z., & Ramaci, T. (2014). Metacognitive strategies and work motivation in teachers: An empirical study. *Procedia - Social and Behavioral Sciences*, 116, 1227-1231. doi:10.1016/j. sbspro.2014.01.373
- Sezgin, F. (2010). School culture as a predictor of teachers' organizational commitment. *Education and Science*, 35(156), 142-159.
- Schneider, B., Ehrhart, M. G., & Macey, W. H. (2013). Organizational climate and culture. *Annual Review of Psychology*, 64, 361-388. doi:10.1146/annurev-psych-113011-143809
- Shapira-Lishchinsky, O. (2007). Israeli teachers' perceptions of lateness: A gender comparison. *Sex Roles*, 57(3-4), 187-199. doi:10.1007/s11199-007-9249-9
- Shaw, J., & Reyes, P. (1992). School cultures: Organizational value orientation and commitment. *The Journal of Educational Research*, *85*(5), 295-302. doi:10.1080/002 20671.1992.9941129

- Sousa, I. F., & Mendonça, H. (2009). Burnout em professores universitários: Impacto de percepções de justiça e comprometimento afetivo [Burnout among university professors: Impact of justice perceptions and affective commitment]. *Psicologia: Teoria e Pesquisa, 25*(4), 499-508. doi:10.1590/S0102-37722009000400005
- Spector, P. E. (1994). Using self-report questionnaires in OB research: A comment on the use of a controversial method. *Journal of Organizational Behavior*, *15*(5), 385-392. doi:10.1002/job.4030150503
- Thomas, J. C. (2008). Administrative, faculty, and staff perceptions of organizational climate and commitment in Christian Higher Education. *Christian Higher Education*, 7(3), 226-252. doi:10.1080/15363750701818428
- Troman, G. (2008). Primary teacher identity, commitment and career in performative school cultures. *British Educational Research Journal*, 34(5), 619-633. doi:10.1080/01411920802223925
- Tuytens, M., & Devos, G. (2012). Importance of system and leadership in performance appraisal. *Personnel Review*, 41(6), 756-776. doi:10.1108/00483481211263692
- Ugurlu, C. T., & Ustuner, M. (2011). Effects of administrators' ethical leadership and organizational justice behavior on teachers' organizational commitment level. *Hacettepe University Journal of Education*, (41), 434-448.
- Wang, H.-K., Tseng, J.-F., Yen, Y.-F., & Huang, I.-C. (2011). University staff performance evaluation systems, organizational learning, and organizational identification in Taiwan. *Social Behavior and Personality*, *39*(1), 43-54. doi:10.2224/sbp.2011.39.1.43
- Ware, H. W., & Kitsantas, A. (2007). Teacher and collective efficacy beliefs as predictors of professional commitment. *The Journal of Educational Research*, 100(5), 303-310. doi:10.3200/JOER.100.5.303-310
- Ware, H. W., & Kitsantas, A. (2011). Predicting teacher commitment using principal and teacher efficacy variables: An HLM approach. *The Journal of Educational Research*, 104(3), 183-193. doi:10.1080/00220671003638543
- Weiss, E. M. (1999). Perceived workplace conditions and first-year teachers' morale, career choice commitment, and planned retention: A secondary analysis. *Teaching* and *Teacher Education*, 15(8), 861-879. doi:10.1016/ S0742-051X(99)00040-2
- Yavuz, M. (2010). The effects of teachers' perception of organizational justice and culture on organizational commitment. *African Journal of Business Management*, 4(5), 695-701.
- Zenorini, R. P. C., Santos, A. A. A., & Monteiro, R. M. (2011). Motivação para aprender: Relação com o desempenho de estudantes [Motivation for learning: The relation with students performance]. *Paidéia (Ribeirão Preto)*, *21*(49), 157-164. doi:10.1590/S0103-863X2011000200003
- Zhu, C., Devos, G., & Li, Y. (2011). Teacher perceptions of school culture and their organizational commitment and well-being in a Chinese school. *Asia Pacific Education Review*, 12(2), 319-328. doi:10.1007/s12564-011-9146-0

João Viseu is a Ph.D. researcher at the Research Centre for Spatial and Organizational Dynamics (CIEO) of the Universidade do Algarve.

Saul Neves de Jesus is a Full Professor at the Universidade do Algarve.

Claudia Rus is a Lecturer at the Babes-Bolyai University.

José Manuel Canavarro is an Assistant Professor in the Faculty of Psychology and Education Sciences at the Universidade de Coimbra.

Joana Pereira is a Researcher at the Research Centre for Spatial and Organizational Dynamics (CIEO) of the Universidade do Algarve.

Received: Dec. 11, 2014 1st Revision: May 12, 2015 Approved: May 20, 2015

How to cite this article:

Viseu, J., Jesus, S. N., Rus, C., Canavarro, J. M., & Pereira, J. (2016). Relationship between teacher motivation and organizational variables: A literature review. *Paidéia* (*Ribeirão Preto*), 26(63), 111-120. doi:10.1590/1982-43272663201613