Work satisfaction or burnout and their impact on innovative work behavior of Greek teachers

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Abstract: *Innovation is a lever for growth and prosperity in business and society as a whole. Innovations lead to the industrial revolutions which are transforming our world. Innovation is the solution to many of the side effects of industrial revolutions. We can prepare the future world citizens to face the challenges of the new world only by education. The purpose of this study was to investigate work satisfaction, work engagement, burnout and innovative work behavior of Greek teachers. From the investigation the relationships between the above concepts emerged and the demographic elements associated with them were identified. The applied statistical survey of this study was conducted from December 2018 to January 2019 and 324 primary and secondary school teachers participated in it. Survey data were collected using an online questionnaire that included demographic questions, the Oldenburg Burnout Inventory (OLBI) and a Kleysen & Street innovative behavioral questionnaire adapted to Greek reality. The results of the survey showed a very low rate of burned-out and a high rate of work-engaged teachers. Because previous surveys have reported high rates of burnout for Greek teachers, we conclude that work engagement, as well as burnout, are time dependent on environmental factors related to the socio-economic changes of recent decades. Our research results also showed that establishing and supporting innovative work behavior by leadership and co-workers has the effect of demonstrating a high level of innovative work behavior by Greek educators. In addition, it was found a fluctuation of work engagement with age and an enhancement of innovative work behavior due to post-graduate studies. Moreover, it emerged that work engagement positively correlates with innovative work behavior, creating a virtuous circle, where one feeds the other.*

Keywords: *work satisfaction, work engagement, burnout, innovative work behavior, education*

JEL Classification: *I12, I20, I28*

1　INTRODUCTION

While today we are trying to deal with effects of the 1st Industrial Revolution, such as climate change, the fast-paced 4th Industrial Revolution drastically transforms societies and the world economy. This transformation, in its scale, scope and complexity, will be unlike anything humankind has experienced before (Schwab, 2017). How will we prepare 21st century citizens to meet the challenges of the new interconnected world that emerges? One of the biggest precariousness of the 4th Industrial Revolution is the reluctance or inability of individuals, organizations, governments and societies to adapt to the new reality it shapes (Schwab, 2017). That is why, as early as March 2000 in Lisbon, the leaders of the Member States of the European Union have decided to promote an ambitious project for Europe. The plan, known as the "Lisbon Strategy", highlights the goal of "making Europe the most competitive and knowledge-based economy in the world capable of sustaining its economic growth".

The Lisbon strategy calls for a radical transformation of the European economy while protecting the environment and upgrading social welfare and education systems. In particular, it seeks to support: (a) employment, (b) economic reform, and (c) European economic cohesion in the context of a knowledge-based economy. The aim is to "develop human capital for social cohesion and competitiveness in the knowledge society" through education and training (2003 / C 295/05, 2003).

In the framework of the Lisbon Strategy, the Education and Training 2020 program was decided and implemented with the strategic objective of encouraging creativity and innovation as well as entrepreneurship at all levels of education and training. In particular, individuals need to be helped to develop competences in the digital environment, initiative spirit, entrepreneurship and cultural consciousness. However, in which ways creativity and innovation are encouraged in the Greek educational system? In particular, what is the role of work satisfaction, engagement and exhaustion in the innovative work behavior of Greek teachers?

2 THEORETICAL FRAMEFORK

The degree to which a person is satisfied with his job is considered to be a key factor in his mental health and may affect his work performance, his commitment to the organization in which he works and his relationships with internal or external organization's clients. Consequently, in the modern world economy, mental health of workers is a key factor in the effectiveness and well-being of businesses and organizations.

Work satisfaction, work engagement and burnout are three different kinds of job-related well-being (Schaufeli, Taris, & Van Rhenen, 2008). According to Locke (1976), work satisfaction is defined as the positive emotional response of the individual to the particular work he performs, provided that his professional values are fulfilled.

In the 1990s it was proposed (Wegge, Schmidt, Parkes, & Dick, 2007) to bridge the pre-existing concept of work satisfaction with the concept of work engagement. Specifically, the definition given for work engagement was "participation, dedication and satisfaction of an employee at work". The above definition incorporates the classic notions of work satisfaction and commitment to the organization.

According to MacLeod & Clarke (2009) it is the measurement of work engagement that explains how employees behave rather than the measurement of work satisfaction. The two concepts are mutually linked, but work satisfaction does not imply exceeding a standard level of performance, which is implied by work engagement. Therefore, an employee can be satisfied without being engaged. Work satisfaction, however, is the foundation upon which work engagement can be developed.

Robinson, Perryman & Hayday (2004) realize work engagement as "a step ahead of work satisfaction". Therefore, work engagement is emerging as a new trend, with older roots and a different "brand", based on modern needs.

Indeed, modern organizations need engaged workers who will give them a competitive advantage. Engaged employees have high levels of energy, are excited and often so absorbed in their work that time goes by very quickly (Macey & Schneider, 2008). Also, instead of considering their work as demanding and stressful, they consider it as a daily challenge (Bakker, Schaufeli, Leiter, & Taris, 2008; Valachis et al., 2008; Nikolaou, 2018). These characteristics of engaged employees have a significant influence on their innovative work behavior (Guzmán, Blanco-Mesa, & Gaviria, 2016).

Since in this study we are interested in factors affecting the innovative work behavior of Greek teachers and because the concept of work satisfaction is incorporated in the concept of work engagement, we will measure the work engagement instead of the work satisfaction of Greek teachers.

By burnout, we mean a state of emotional exhaustion, which is the result of chronic stress and occurs mainly in the humanitarian and social work professions. Burnout comprises three elements: emotional exhaustion, depersonalisation, and lack of personal fulfillment (Barron & Watson, 2007; Antoniou, Ploumpi, & Ntalla, 2013; Kapiki & Tsakiridou, 2018).

According to Maslach & Leiter (1997), burnout is characterized by the exactly three opposite dimensions of work engagement. In the case of burnout, energy is converted into exhaustion, involvement into cynicism / depersonalization, and efficiency into inefficiency and mental fatigue.

In the modern globalized world, an organisation's capability to innovate is particularly important in order to gain a sustainable competitive advantage (Tidd & Bessant, 2013; Mokias, 2019). Schumpeter's (1947) observation that innovation is a lever for growth and prosperity in business and society as a whole is rarely disputed.

The concepts of innovative work behavior, innovation, invention and creativity are often used without distinction (Scott & Bruce, 1994; Sigala & Christou, 2009). The above concepts, though related, differ from one another. Creativity refers mainly to the production of useful new ideas or objects (Mumford, 2003). An invention is the first appearance of an idea, product, or process (Epstein, 2017). The invention becomes an innovation when it begins to be used. Therefore, innovation refers to the successful implementation of creativity with the potential, in some cases, of financial result (Scott & Bruce, 1994). Innovation consists of the production, assimilation and exploitation of new achievements or ideas in the economic and social field (Christou, 1999; Frankelius, 2009; Boza, 2019). More specifically, the concept of educational innovation is defined as "... any dynamic change intended to add value to the educational process and resulting in measurable outcomes in terms of stakeholders satisfaction or educational performance" (OECD / CERI) , 2010).

Farr & Ford (1990) define Innovative Work Behavior (IWB) as work behavior aimed at the purposeful production and implementation - through the work role of everyone - of new and useful ideas, processes and products/services. At the employee level, the concept of innovative work behavior can be described as the behavior that one manifests when "… taking initiatives to improve the prevailing conditions or to create new ones that will disturb the status quo..." (Crant, 2000). An innovative worker seeks new opportunities, adapts to his goals in a creative way, takes proactive behavior and

creatively tackles problems that arise trying to implement alternative solutions (Bateman & Crant, 1999).

3   METHODOLOGY AND SAMPLE

The applied statistical survey of this study was conducted from December 2018 to January 2019. Survey data were collected using an online questionnaire that included demographic questions, the Oldenburg Burnout Inventory (OLBI) and a Kleysen & Street innovative behavioral questionnaire adapted to Greek reality.

The Oldenburg Burnout Inventory (OLBI) was preferred over other work engagement and burnout questionnaires, such as the Maslach Burnout Inventory (MBI) or the Utrecht Work Engagement Scale (UWES), because OLBI consists of sixteen (16) sentences, both positive and negative phrased. From a psychometric point of view, questionnaires that have positive and negative statements are considered more reliable than those that have only one type of question (Demerouti & Bakker, 2008). OLBI evaluates two dimensions of work engagement or burnout, exhaustion and disengagement (from work), because the professional efficacy dimension is considered to be a consequence of the two preceding ones.

The Kleysen & Street (2001) questionnaire was used to measure innovative work behavior, because in this questionnaire, innovative work behavior is treated as a multidimensional concept (Eaton & Christou, 1997; Lyons & Branston, 2006; Jong & Hartog, 2010; Nair & George, 2016; Fu & Kapiki, 2016; Koutsiai & Ioannidou, 2018). This questionnaire measures five (5) dimensions of innovative work behavior through five (5) closed-ended questions. This questionnaire was also adapted to estimate the support of innovative work behavior by leadership and co-workers, the implementation of innovative educational programs and the application of innovative teaching methods.

The sample consisted of 324 (25% males and 75% females) primary and secondary Greek school teachers. The participants were grouped into four age categories: the younger group (up to 30 years) represented just 5.6% of the sample, the group of teachers aged from 31 to 40 years represented 31.5% of the sample, the group of teachers aged between 41 to 50 years represented 39.8% of the sample, and the older group (51 and above) represented 23.1% of the sample. Four categories were also formed in reference to participants' studies: teachers who hold one degree (51.9% of the sample), two degree teachers (12.0% of the sample), postgraduate degree teachers (33.3% of the sample) and teachers who hold doctoral degree (2.8% of the sample). Four categories were also formed in reference to participants' years of teaching experience: up to 10 years of teaching (18.5% of the sample), 11 to 20 years of teaching (56.5% of the sample), 21 to 30 years of teaching (20.4% of the sample) and 31 and above years of teaching (4.6% of the sample).

Initially, descriptive analyses were conducted for the two work engagement or burnout dimensions and the five dimensions of innovative work behavior. Participants were then classified into three groups for each of the two work engagement or burnout dimensions. The participants were also classified into three groups (low, moderate, high) for their total innovative work behavior.

Correlations between the two work engagement dimensions and the demographics of the participants were computed. The correlations were measured with a Chi-Square test. The same test was used to measure the correlations between the overall innovative work behavior of the participants and their demographics. Finally, a Chi-Square test was run to examine the correlations between each of the two work engagement dimensions and the overall innovative work behavior.

4   RESULTS AND DISCUSSION

The first aim of the study was to assess the perceived level of burnout in Greek teachers. The descriptive analysis revealed that only 1.9% of the participants were exhausted (Table 1) and merely 0.9% of the participants experienced depersonalisation or cynicism (Table 2). Contrary, about one third of the participants were work-engaged, since 30.6% of the participants showed high energy (Table 1) and 37% of the participants were actively involved (emotionally) in their work (Table 2).

Table 1: Exhaustion/Energy dimension of work engagement or burnout

	Frequency	Percent (%)
High Energy	99	30,6
Medium Energy	219	67,6
Exhaustion	6	1,9
Total	324	100,0

Table 2: Disengagement dimension of work engagement or burnout

	Frequency	Percent (%)
Involvement	120	37,0
Neutrality	201	62,0
Depersonalisation	3	0,9
Total	324	100,0

Regarding the Greek teachers' innovative work behavior the descriptive analysis presented that 62% of the participants reported high innovative work behavior and 38% of the participants reported moderate innovative work behavior (Table 3). It is remarkable that none of the participants reported low innovative work behavior.

Table 3: Innovative Work Behavior

	Frequency	Percent (%)
Low	0	0,0
Moderate	123	38,0
High	201	62,0
Total	324	100,0

Because very few of the participants were burned-out, at Chi-Square test, the percentage of cells in the table with an

expected count less than or equal to five exceeded 20%. Hence, in order to acquire a valid p-value, the participants were classified again into two groups for each of the two work engagement dimensions. In this new classification none of the participants was considered burned-out.

Inductive analysis revealed, regarding the correlation of age with the dimension of disengagement, that at younger ages (up to 30 years) high involvement/engagement is dominant, at the following age group (31 to 40 years) neutrality prevails, next, at ages from 41 to 50 years engagement again is higher than expected and finally, at ages over 51 years the count of neutrality is higher than expected (Table 4). In addition, the p-value of 0.008 is less than 0.05, so we can say that there is a strong correlation between age and disengagement. Along with the previous dimension of work engagement, energy (the opposite of exhaustion) is higher than expected at younger ages (up to 30 years), declines at the age group of 31 to 40 years, increases once again at ages from 41 to 50 years, and finally declines yet again at ages over 51 years (Table 5). A p-value of 0.031 is less than 0.05 and demonstrates the correlation between age and energy (or exhaustion).

Table 4: Correlation of Age with the dimension of Disengagement

Age			Disengagement		Total
			Involvement	Neutrality	
Age	Up to 30	Count	9	9	18
		Expected Count	6,7	11,3	18,0
	31 - 40	Count	27	75	102
		Expected Count	37,8	64,2	102,0
	41 - 50	Count	60	69	129
		Expected Count	47,8	81,2	129,0
	51 and above	Count	24	51	75
		Expected Count	27,8	47,2	75,0
Total		Count	120	204	324

Table 5: Correlation of Age with the dimension of Energy

Age			Energy		Total
			High Energy	Medium Energy	
Age	Up to 30	Count	6	12	18
		Expected Count	5,5	12,5	18,0
	31 - 40	Count	24	78	102
		Expected Count	31,2	70,8	102,0
	41 - 50	Count	51	78	129
		Expected Count	39,4	89,6	129,0
	51 and above	Count	18	57	75
		Expected Count	22,9	52,1	75,0
Total		Count	99	225	324

With regard to the relationship between innovative work behavior and the participants' studies, it became evident that high innovative work behavior has count higher than expected at participants with more studies than their basic degree (Table 6). And since the p-value is 0.001 (less than 0.05), we can conclude that there is a significant correlation between the level of study and the innovative work behavior.

Table 6: Correlation of Studies with Innovative Work Behavior

Studies			Innovative Work Behavior		Total
			Moderate	High	
Studies	One degree	Count	81	87	168
		Expected Count	63,8	104,2	168,0
	Two degrees	Count	9	30	39
		Expected Count	14,8	24,2	39,0
	Postgraduate degree	Count	30	78	108
		Expected Count	41,0	67,0	108,0
	Doctoral degree	Count	3	6	9
		Expected Count	3,4	5,6	9,0
Total		Count	123	201	324

Finally, in respect of the relationship between innovative work behavior and each of the dimensions of disengagement and exhaustion it became apparent that the count of high innovative work behavior is higher than expected in high engagement (Table 7) and high energy groups of participants (Table 8). Furthermore, since the p-value is 0.000 in both cases we conclude that there is an important correlation between work engagement and innovative work behavior.

Table 7: Correlation of Disengagement with Innovative Work Behavior

Disengagement			Innovative Work Behavior		Total
			Moderate	High	
Disengagement	Involvement	Count	27	93	120
		Expected Count	45,6	74,4	120,0
	Neutrality	Count	96	108	204
		Expected Count	77,4	126,6	204,0
Total		Count	123	201	324

Table 8: Correlation of Energy with Innovative Work Behavior

Energy			Innovative Work Behavior		Total
			Moderate	High	
Energy	High Energy	Count	21	78	99
		Expected Count	37,6	61,4	99,0
	Medium Energy	Count	102	123	225
		Expected Count	85,4	139,6	225,0
Total		Count	123	201	324

The present study revealed a very low rate of burned-out and a high rate of work-engaged teachers. Since previous surveys have reported high rates of burnout for Greek teachers, we conclude that work engagement, as well as burnout, are time dependent on environmental factors (Brouwers, Evers, & Tomic, 1999) related to the socio-economic changes of recent decades (Sennett, 1998).

Another issue worthy of discussion concerns the finding that establishing and supporting innovative work behavior by leadership and co-workers has the effect of demonstrating a high level of innovative work behavior by Greek educators. The outcome of the high level of innovative work behavior is that the overwhelming majority of our research teachers are implementing innovative programs and applying innovative teaching methods.

Concerning the role of demographic variables in teachers' perceived levels of work engagement, this study revealed that the age groups of teachers with the highest work engagement and therefore participation, dedication and job satisfaction are those of young people up to 30 years of age and those aged 41 to 50 years old. These findings can be explained by the enthusiasm and appetite for work of new teachers and the maturity of teachers from 41 to 50 years of age to focus on their work (mental commitment), to exercise it with dedication (emotional commitment) and to take a step further in order to evolve professionally (physical commitment). For teachers aged over 30 enthusiasm subsides, whereas for teachers aged over 51 maturity is overwhelmed by monotony, lack of motivation, and the fact that they still have many years of working life ahead, because of the increase in retirement age, so they resort to economy of force.

Regarding the role of demographic variables in teachers' perceived levels of innovative work behavior, our research results showed that post-graduate studies promote innovative work behavior and that is why we have seen a strong correlation of the educational level of teachers with their

innovative work behavior. Thus, innovative work behavior is an acquired property.

Finally, from this study emerged that work engagement positively correlates with innovative work behavior, creating a virtuous circle, where one feeds the other. Expectantly, this study promotes an understanding of the factors that affect work engagement and innovative work behavior. In this way, optimistically it will contribute to the development of an educational policy aiming at providing effective support to teachers in the performance of their duties, the enhancement of their professional skills and their upgrading. Consequence of this educational policy will be the "development of human capital for the purpose of social cohesion and competitiveness in the knowledge society".

REFERENCES

Anderson, N., Potočnik, K., & Zhou, J. (2014). Innovation and Creativity in Organizations: A State-of-the-Science Review, Prospective Commentary, and Guiding Framework. *Journal of Management*, 40(5), pp. 1297–1333.

Antoniou, A.-S., Ploumpi, A., & Ntalla, M. (2013). Occupational Stress and Professional Burnout in Teachers of Primary and Secondary Education: The Role of Coping Strategies. *Psychology*, 4(3), pp. 349–355.

Antoniou, A. S., Polychroni, F., & Vlachakis, A. N. (2006). Gender and age differences in occupational stress and professional burnout between primary and high-school teachers in Greece. *Journal of Managerial Psychology*, 21(7), pp. 682–690.

Arnolds, C. A., & Boshoff, C. (2002). Compensation, esteem valence and job performance: an empirical assessment of Alderfer's ERG theory. *The International Journal of Human Resource Management*, 13(4), pp. 697–719.

Bakker, A. B., Schaufeli, W. B., Leiter, M. P., & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), pp. 187–200.

Barron, P.E. and Watson, S. (2007). Hospitality student's learning styles: the impact of gender and nationality. *Tourism*, Vol. 54 No. 4, pp. 367-74.

Bateman, T., & Crant, J. M. (1999). Proactive behavior: Meaning, impact, recommendations. *Business Horizons*, 42, pp. 63–70.

Boza, G. (2019). Evaluation as instrument for improvement of teachers to provide qualitative training: Views of teachers. *Journal of Contemporary Education, Theory & Research*, 3(1), 9–14. http://doi.org/10.5281/zenodo.3598674

Brouwers, A., Evers, W. J. G., & Tomic, W. (1999). Teacher Burnout and Self-Efficacy in Eliciting Social Support. https://eric.ed.gov/?id=ED437342. Accessed the 12th of November 2018, at 14:55.

Brouwers, A., Evers, W. J. G., & Tomic, W. (2002). Burnout and Self-Efficacy: A study on teachers' beliefs when implementing an innovative educational system in the Netherlands. *British Journal of Educational Psychology*, 72, pp. 227–243.

Burke, R. J., Greenglass, E. R., & Schwarzer, R. (1996). Predicting teacher burnout over time: Effects of work stress, social support, and self-doubts on burnout and its consequences. *Anxiety, Stress and Coping*, 9(3), 261–275.

Buunk, B. P., & Schaufeli, W. B. (1993). Burnout: A perspective from social comparison theory (pp. 53–69). In W. B. Schaufeli, C. Maslach, & T. Marek (Eds.), *Professional burnout: Recent developments in theory and research*, Washington, DC: Taylor & Francis.

Byrne, B. M. (1991). Burnout: Investigating the impact of background variables for elementary, intermediate, secondary, and university educators. *Teaching and Teacher Education*, 7(2), pp. 197–209.

Capel, S. A. (1992). Stress and Burnout in Teachers. *European Journal of Teacher Education*, 15(3), pp. 197–211.

Carson, C. M. (2005). A historical view of Douglas McGregor's Theory Y. *Management Decision*, 43(3), pp. 450–460.

Chan, K. B., Lai, G., Ko, Y. C., & Boey, K. W. (2000). Work stress among six professional groups: the Singapore experience. *Social Science & Medicine*, 50(10), pp. 1415–1432.

Chan, T. L., & Rasli, A. (2014). The Relationship between Innovative Work Behavior on Work Role Performance: An Empirical Study. *International Conference on Innovation, Management and Technology Research,* Malaysia, 22-23 September 2013. Malaysia, 2, pp. 592–600.

Chang, M. L. (2009). An Appraisal Perspective of Teacher Burnout: Examining the Emotional Work of Teachers. *Educational Psychology Review*, 21(3), pp. 193–218.

Cherniss, C. (1989). Burnout In New Professionals: A Long-Term Follow-Up Study. *Journal of Health and Human Resources Administration*, 12(1), pp. 11–24.

Cherniss, C. (1992). Long-term consequences of burnout: An exploratory study. *Journal of Organizational Behavior*, 13(1), pp. 1–11.

Christou, E. (1999). Hospitality management education in Greece: overview and qualitative assessment. Tourism Management, Vol. 20 No. 6, pp. 683-91.

Cole, G. (2002). *Personnel and Human Resource Management* (5 edition). London: Thomson Learning.

Cook, S. (2008). *The Essential Guide to Employee Engagement: Better Business Performance Through Staff Satisfaction*. Kogan Page Publishers.

Cooper, C. L., & Dewe, P. J. (2008). *Stress: A Brief History*. John Wiley & Sons.

Crant, J. M. (2000). Proactive Behavior in Organizations. *Journal of Management*, 26(3), pp. 435–462.

Damanpour, F., & Schneider, M. (2009). Characteristics of Innovation and Innovation Adoption in Public Organizations: Assessing the Role of Managers. *Journal of Public Administration Research and Theory*, 19(3), pp. 495–522.

Demerouti, E., & Bakker, A. (2008). The Oldenburg Burnout Inventory: A good alternative to measure burnout and engagement (pp. 65-78). In J. Halbesleben (Ed.), *Handbook of Stress and Burnout in Health Care,* New York: Nova Science Publishers.

Eaton, J. & Christou, E. (1997) Hospitality management competencies for graduate trainees: employers' views. *Journal of European Business Education*, 7(1), 60-68.

Epstein, M. (2017). Inventive Thinking In The Humanities. *Common Knowledge*, 23(1), pp. 1–18.

Farber, B. A. (1991). *Crisis in education: Stress and burnout in the American teacher.* San Francisco: Jossey-Bass.

Farr, J., & Ford, C. (1990). Individual innovation. In *Innovation and Creativity at Work*. Chichester: Wiley.

Francis, L., & Barling, J. (2005). Organizational injustice and psychological strain. *Canadian Journal of Behavioural Science*, 37(4), pp. 250–261.

Frankelius, P. (2009). Questioning two myths in innovation literature. *The Journal of High Technology Management Research*, 20(1), pp. 40–51.

Freudenberger, H. J., & Richelson, G. (1980). *Burnout: The High Cost of High Achievement* (1st ed., Anchor Press ed edition). Garden City, N.Y: Anchor Press.

Fu, J. & Kapiki, S.T. (2016). Reengineering knowledge for e-tourism and hospitality curricula. *Journal of Tourism,*

Heritage & Services Marketing, 2(2), 23–32. http://doi.org/10.5281/zenodo.376345.

González-Morales, M. G., Peiró, J. M., Rodríguez, I., & Bliese, P. D. (2012). Perceived collective burnout: a multilevel explanation of burnout. *Anxiety, Stress, & Coping*, 25(1), pp. 43–61.

González-Romá, V., Schaufeli, W. B., Bakker, A. B., & Lloret, S. (2006). Burnout and work engagement: Independent factors or opposite poles? *Journal of Vocational Behavior*, 68(1), pp. 165–174.

Guglielmi, R. S., & Tatrow, K. (1998). Occupational Stress, Burnout, and Health in Teachers: A Methodological and Theoretical Analysis. *Review of Educational Research*, 68(1), pp. 61–99.

Guzmán, C., Blanco-Mesa, F., & Gaviria, M. (2016). Innovative Behaviour and Employee Engagement: A Case Study in a Family Business. *European Conference on Innovation and Entrepreneurship*, Jyväskyla - Finland, 15-16 September 2016. Jyväskyla - Finland, 11, pp. 1013-1016.

Hargreaves, A. (1994). *Changing Teachers, Changing Times: Teachers' Work and Culture in the Postmodern Age*. New York: Teachers College Press.

Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: a meta-analysis. *The Journal of Applied Psychology*, 87(2), pp. 268–279.

Hassard, J., Teoh, K., & Cox, T. (2017). Organizational uncertainty and stress among teachers in Hong Kong: Work characteristics and organizational justice. *Health Promotion International*, 32(5), pp. 860–870.

Herzberg, F. (1968). *One more time: how do you motivate employees*. Boston: Harvard Business Review.

Ho, C.-L., & Au, W.-T. (2006). Teaching Satisfaction Scale: Measuring Job Satisfaction of Teachers. *Educational and Psychological Measurement*, 66(1), pp. 172–185.

Holland, J. L. (1996). Exploring careers with a typology: What we have learned and some new directions. *American Psychologist*, 51(4), pp. 397–406.

Hoppock, R. (1935). *Job Satisfaction*. New York: Harper and Brothers.

Hughes, R. E. (2001). Deciding to leave but staying: teacher burnout, precursors and turnover. *The International Journal of Human Resource Management*, 12(2), pp. 288–298.

Hulin, C. L., & Smith, P. C. (1965). A linear model of job satisfaction. *Journal of Applied Psychology*, 49(3), pp. 209–216.

Iacovides, A., Fountoulakis, K. N., Kaprinis, S., & Kaprinis, G. (2003). The relationship between job stress, burnout and clinical depression. *Journal of Affective Disorders*, 75(3), pp. 209–221.

Inceoglu, I., & Warr, P. (2011). Personality and Job Engagement. *Journal of Personnel Psychology*, 10(4), pp. 177–181.

Ironson, G., Smith, P., Brannick, M., Gibson, W., & Paul, K. (1989). Construction of a Job in General Scale: A Comparison of Global, Composite, and Specific Measures. *Journal of Applied Psychology*, 74, pp. 193–200.

Janssen, O. (2003). Innovative behaviour and job involvement at the price of conflict and less satisfactory relations with co-workers. *Journal of Occupational and Organizational Psychology*, 76(3), pp. 347–364.

Janssen, O. (2005). The joint impact of perceived influence and supervisor supportiveness on employee innovative behaviour. *Journal of Occupational and Organizational Psychology*, 78(4), pp. 573–579.

Jong, J. D., & Hartog, D. D. (2010). Measuring Innovative Work Behaviour. *Creativity and Innovation Management*, 19(1), pp. 23–36.

Kahn, W. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. *Academy of Management Journal*, 33(4), pp. 692–724.

Kapiki, S.T. & Tsakiridou, G. (2018). Exploring the views on total quality human resources management between public and private educational units. *Journal of Contemporary Education, Theory & Research*, 2(2), 22–29. http://doi.org/10.5281/zenodo.3598635

Karger, H. J. (1981). Burnout as Alienation. *Social Service Review*, 55(2), pp. 270–283.

Kourmousi, N., Darviri, C., Varvogli, L., & Alexopoulos, E. C. (2015). Teacher stress inventory: Validation of the Greek version and perceived stress levels among 3,447 educators. *Psychology Research and Behavior Management*, 8, pp. 81–88.

Koustelios, A. D. (2001). Personal characteristics and job satisfaction of Greek teachers. *International Journal of Educational Management*, 15(7), pp. 354–358.

Koutsiai, G. & Ioannidou, I. (2018). Participatory - collaborative administration of a school unit – the role of the Teachers' Council. *Journal of Contemporary Education, Theory & Research*, 2(1), 15–20. http://doi.org/10.5281/zenodo.3598446

Kremer-Hayon, L., & Kurtz, H. (1985). The relation of personal and environmental variables to teacher burnout. *Teaching and Teacher Education*, 1(3), pp. 243–249.

Kyriacou, C. (2001). Teacher Stress: Directions for future research. *Educational Review*, 53(1), pp. 27–35.

Lafontaine, O., & Muller, C. (2000). *No Fear Of Globalization*. Verso Press USA.

Lambert, R., & McCarthy, C. (2006). *Understanding Teacher Stress in an Age of Accountability*. IAP.

Lambert, R., McCarthy, C., O'Donnell, M., & Wang, C. (2009). Measuring elementary teacher stress and coping in the classroom: Validity evidence for the classroom appraisal of resources and demands. *Psychology in the Schools*, 46(10), pp. 973–988.

Lazarus, R., & Folkman, S. (1984). *Stress, Appraisal, and Coping*. New York: Springer Publishing Company.

Lippman, L., Burns, S., & McArthur, E. (1996). *Urban Schools: The Challenge of Location and Poverty*. DIANE Publishing.

Lisbon European Council 23 and 24 march 2000. *Presidency Conclusions*. http://www.europarl.europa.eu/summits/lis1_en.htm. Accessed the 2nd of November, 2018, at 18:35.

Locke, E. (1976). The Nature and Causes of Job Satisfaction (pp. 1297-1343). In M. Dunnette (Ed.), *Handbook of Industrial and Organizational Psychology*, Chicago, IL: Rand McNally & Co.

Locke, E. A., & Latham, G. P. (1990). Work Motivation and Satisfaction: Light at the End of the Tunnel. *Psychological Science*, 1(4), pp. 240–246.

Lyons, A. & Branston, C. (2006). Cross cultural change, adjustment and culture shock: UK to USA. Tourism: An International Interdisciplinary Journal, 54(4), 355-365. Available at: https://hrcak.srce.hr/161568.

Ma, X., & MacMillan, R. B. (1999). Influences of Workplace Conditions on Teachers' Job Satisfaction. *The Journal of Educational Research*, 93(1), pp. 39–47.

Macey, W. H., & Schneider, B. (2008). The Meaning of Employee Engagement. *Industrial and Organizational Psychology*, 1, pp. 3–30.

MacLeod, D., & Clarke, N. (2009). *Engaging for success: enhancing performance through employee engagement*. London: Office of Public Sector Information.

Mangione, T. W. (1995). *Mail Surveys: Improving the Quality*. Thousand Oaks, California: Sage.

Martin, C. A., & Julian, R. A. (1987). Causes of Stress and Burnout in Physicians Caring for the Chronically and Terminally Ill. *The Hospice Journal*, 3(2–3), pp. 121–146.

Maslach, C., & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it.* San Francisco, CA, US: Jossey-Bass.

Maslach, C., Schaufeli, W. B., & Leiter, M. P. (2001). Job Burnout. *Annual Review of Psychology*, 52(1), pp. 397–422.

Maslachi, C., Jackson, S. E., & Leiter, M. P. (1996). *MBI Maslach Burnout Inventory*. CPP, Incorporated.

Maslow, A. H. (1995). *Toward a psychology of being*. Athens: Diodos.

McGee-Cooper, A., Trammell, D., & Lau, B. (1990). *You Don't Have To Go Home From Work Exhausted!* Bowen & Rogers Publishing Company.

Merton, R. K. (1948). The Self-Fulfilling Prophecy. *The Antioch Review*, 8(2), pp. 193–210.

Mokias, A.J. (2019). Comparative approach of educational policy of Greece to intercultural education with other European countries. *Journal of Contemporary Education, Theory & Research*, 3(1), 21–24. http://doi.org/10.5281/zenodo.3598695

Montana, P. J., & Charnov, B. H. (2008). *Management*. Barrons Educational Series.

Mumford, M. D. (2003). Where Have We Been, Where Are We Going? Taking Stock in Creativity Research. *Creativity Research Journal*, 15(2–3), pp. 107–120.

Nair, R. & George, B.P. (2016). E-learning adoption in hospitality education: An analysis with special focus on Singapore. *Journal of Tourism, Heritage & Services Marketing*, 2(1), 3–13. http://doi.org/10.5281/zenodo.376329.

Nias, J. (1996). Thinking about Feeling: the emotions in teaching. *Cambridge Journal of Education*, 26(3), pp. 293–306.

Nikolaou, P. (2018). Effective Strategies for Human Resource Management in Educational Organizations. Conflict Management Case Studies. *Journal of Contemporary Education, Theory & Research*, 2(2), 30–34. http://doi.org/10.5281/zenodo.3598645.

OECD / CERI. (2010). *The Nature of Learning*. Paris: OECD Publishing. https://www.oecd-ilibrary.org/content/publication/9789264086487-en. Accessed the 30th of November 2018, at 12:35.

Ongore, O. (2014). A Study of Relationship between Personality Traits and Job Engagement. *Procedia - Social and Behavioral Sciences*, 141, pp. 1315–1319.

Oranje, A. H. (2001). *Van ouderenbeleid tot lerarentekort : taken, taakverdeling en arbeidstevredenheid in het onderwijs*. Universiteit van Amsterdam, Amsterdam.

Perie, M., Baker, D., & Whitener, S. (1997). *Job satisfaction among America's teachers : effects of workplace conditions, background characteristics and teacher compensation*. Washington, D.C.: U.S. Dept. of Education, Office of Educational Research and Improvement.

Pines, A., & Aronson, E. (1988). *Career burnout: Causes and cures.* New York, NY, US: Free Press.

Pines, A. M., Aronson, E., & Kafry, D. (1981). *Burn Out: From Tedium to Personal Growth*. New York: Free Press.

Platsidou, M., & Agaliotis, I. (2008). Burnout, Job Satisfaction and Instructional Assignment-Related Sources of Stress in Greek Special Education Teachers. *International Journal of Disability, Development and Education*, 55(1), pp. 61–76.

Polsani, P. R. (2003). Use and Abuse of Reusable Learning Objects. *Journal of Digital Information*, 3(4). https://journals.tdl.org/jodi/index.php/jodi/article/view/89/88. Accessed the 15th of January, 2019, at 19:35.

Prieto, I., & Pérez-Santana, P. (2014). Managing innovative work behavior: the role of human resource practices. *Personnel Review*, 43(2), pp. 184–208.

Quick, J. C., & Tetrick, L. E. (2003). *Handbook of occupational health psychology.* Washington, DC, US: American Psychological Association.

Rainey, H. G. (1999). Using Comparisons of Public and Private Organizations to Assess Innovative Attitudes among Members of Organizations. *Public Productivity & Management Review*, 23(2), pp. 130–149.

Riaz, S., Xu, Y., & Hussain, S. (2018). Understanding Employee Innovative Behavior and Thriving at Work: A Chinese Perspective. *Administrative Sciences*, 8(3), pp. 1-14.

Rich, B., Lepine, J., & Crawford, E. (2010). Job Engagement: Antecedents and Effects on Job Performance. *Academy of Management Journal*, 53, pp. 617–635.

Robinson, D., Perryman, S., & Hayday, S. (2004). *The Drivers of Employee Engagement Report 408*. UK: Institute for Employment Studies.

Rogers, E. M. (2003). *Diffusion of Innovations, 5th Edition* (5th edition). New York: Free Press.

Rollinson, D. (2008). *Organisational Behaviour and Analysis: An Integrated Approach*. Pearson Education.

Saiti, A., & Papadopoulos, Y. (2015). School teachers' job satisfaction and personal characteristics: A quantitative research study in Greece. *International Journal of Educational Management*, 29(1), pp. 73–97.

Saiti, Anna. (2007). Main factors of job satisfaction among primary school educators: Factor analysis of the Greek reality. *Management in Education*, 21, pp. 28–32.

Sarafino, E. P., & Smith, T. W. (2014). *Health Psychology: Biopsychosocial Interactions* (8 edition). Hoboken, NJ: Wiley.

Saunders, M. N. K., Lewis, P., & Thornhill, A. (2015). *Research Methods for Business Students* (7 edition). New York: Pearson.

Schaufeli, W. B., Taris, T.W., & Van Rhenen, W. (2008). Workaholism, Burnout, and Work Engagement: Three of a Kind or Three Different Kinds of Employee Well-being? *Applied Psychology: An International Review*, 57, pp. 173–203.

Schaufeli, W. B., & Bakker, A. B. (2003). *Utrecht work engagement scale: Preliminary manual.* Utrecht: Occupational Health Psychology Unit, Utrecht University.

Schaufeli, W. B., Salanova, M., González-romá, V., & Bakker, A. B. (2002). The Measurement of Engagement and Burnout: A Two Sample Confirmatory Factor Analytic Approach. *Journal of Happiness Studies*, 3(1), pp. 71–92.

Schaufeli, W., Daamen, J., & Van Mierlo, H. (1994). Burnout among Dutch Teachers: An Mbi-Validity Study. *Educational and Psychological Measurement*, 54, pp. 803–812.

Schultz, D. (1988). On changes and changing. *Journal of Direct Marketing*, 2(2), pp. 4–5.

Schumpeter, J. A. (1947). The Creative Response in Economic History. *The Journal of Economic History*, 7(2), pp. 149–159.

Schwab, K. (2017). *The Fourth Industrial Revolution*. Crown Publishing Group.

Schwarzer, R., & Hallum, S. (2008). Perceived Teacher Self-Efficacy as a Predictor of Job Stress and Burnout: Mediation Analyses. *Applied Psychology*, 57(s1), pp. 152–171.

Schwarzkopf, K., Straus, D., Porschke, H., Znoj, H., Conrad, N., Schmidt-Trucksäss, A., & Känel, R. von. (2016). Empirical evidence for a relationship between narcissistic personality traits and job burnout. *Burnout Research*, 3(2), pp. 25–33.

Scott, S. G., & Bruce, R. A. (1994). Determinants of Innovative Behavior: A Path Model of Individual Innovation in the Workplace. *Academy of Management Journal*, 37(3), pp. 580–607.

Selye, H. (1956). *The stress of life*. New York: McGraw-Hill.

10

Sennett, R. (1998). *The Corrosion of Character: The Personal Consequences of Work in the New Capitalism*. New York: W. W. Norton & Company, Inc.

Shalley, C. E., & Gilson, L. L. (2004). What leaders need to know: A review of social and contextual factors that can foster or hinder creativity. *The Leadership Quarterly*, 15(1), pp. 33–53.

Shimazu, A., Schaufeli, W. B., Kosugi, S., Suzuki, A., Nashiwa, H., Kato, A., Sakamoto, M., Irimajiri, H., Amano, S., Hirohata, K., Goto, R., Kitaoka-Higashiguchi, K. (2008). Work Engagement in Japan: Validation of the Japanese Version of the Utrecht Work Engagement Scale. *Applied Psychology*, 57(3), pp. 510–523.

Shirom, A. (1989). Burnout in work organizations (pp. 25–48). In *International review of industrial and organizational psychology 1989,* Oxford, England: John Wiley & Sons.

Shukla, A., & Trivedi, T. (2008). Burnout in Indian Teachers. *Asia Pacific Education Review*, 9(3), pp. 320–334.

Sigala, M. & Christou, E. (2007). Exploiting Web 2.0 in open and distance education: Developing personalised and collaborative learning environments. In A. Lionarakis (ed.), Proceedings of the 4th International Conference on Open and Distance Learning-ICODL 2007 (pp.181-195). Athens: Propombos.

Sørensen, E., & Torfing, J. (2011). Enhancing Collaborative Innovation in the Public Sector. *Administration & Society*, 43(8), pp. 842–868.

Spear, M., Gould, K., & Lee, B. (2000). *Who would be a teacher? A review of factors motivating and demotivating prospective and practicing teachers*. Slough, UK: National Foundation for Educational Research.

Spector, P. E. (1997). *Job Satisfaction: Application, Assessment, Causes, and Consequences* (1st ed.). Thousand Oaks, California: SAGE Publications, Inc.

Street, C. T., & Kleysen, R. F. (2001). Toward a multi-dimensional measure of individual innovative behavior. *Journal of Intellectual Capital*, 2(3), pp. 284–296.

Swetnam, L. A. (1992). Media Distortion of the Teacher Image. *The Clearing House*, 66(1), pp. 30–32.

Teigen, K. H. (1994). Yerkes-Dodson: A Law for all Seasons. *Theory & Psychology*, 4(4), pp. 525–547.

Tidd, J., & Bessant, J. (2013). *Managing Innovation: Integrating Technological, Market and Organizational Change* (5th edition). Chichester, West Sussex, United Kingdom: John Wiley & Sons.

Timms, C., Cottrell, D., & Graham, D. (2007). "I just want to teach": Queensland independent school teachers and their workload. *Journal of Educational Administration*, 45(5), pp. 569–586.

Tsounis, A., & Sarafis, P. (2016). The Concept of Work Satisfaction: Theoretical Approaches and Results in Work Performance. *Interdisciplinary Health Care*, 8(2), pp. 36–47.

Valachis, I., Christou, E., Maroudas, L., & Sigala, M. (2008). Assessment of training quality in hospitality industry: an exploratory model. In 26th EUROCHRIE Congress "Building a Legacy, Living the Dream (Vol. 2020).

van Horn, J. E., Schaufeli, W. B., Greenglass, E. R., & Burke, R. J. (1997). A Canadian-Dutch Comparison of Teachers' Burnout. *Psychological Reports*, 81(2), pp. 371–382.

Vroom, V. H. (1995). *Work and motivation* (1st ed). San Francisco: Jossey-Bass Publishers.

Wanous, J. P., & Lawler, E. E. (1972). Measurement and meaning of job satisfaction. *Journal of Applied Psychology*, 56(2), pp. 95–105.

Wegge, J., Schmidt, K.-H., Parkes, C., & Dick, R. V. (2007). Taking a sickie: Job satisfaction and job involvement as interactive predictors of absenteeism in a public organization. *Journal of Occupational and Organizational Psychology*, 80(1), pp. 77–89.

WHO. *Stress at the workplace.* http://www.who.int/occupational_health/topics/stressatwp/en. Accessed the 19th of November 2018, at 16:35.

Wright, M., & Custer, R. (1998). Why They Enjoy Teaching: The Motivation of Outstanding Technology Teachers. *Journal of Technology Education*, 9(2), pp. 60–77.

Yesil, S., & Sozbilir, F. (2013). An Empirical Investigation into the Impact of Personality on Individual Innovation Behaviour in the Workplace. *Procedia - Social and Behavioral Sciences*, 81, pp. 540–551.

Airline Ratings	Airline of the year	Worldwide
	Best first class	Americas
	Best business class	Middle East/Africa
	Best premium economy	
	Best economy class	Asia/Pacific
	Best low fare/region	Chinese
	Best regional airline	
	Long haul - region	
	In flight entertainment	
	Best catering award	
	Best cabin crew	
	Best domestic service	
	Best ultra low cost airline	
Canstar Blue	Domestic airlines	Australia
	Domestic international	
	Best small business	
Air Help	Top airlines worldwide rankings	Worldwide

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