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Work engagement and job satisfaction in the medical sector: Two aspects of psychological well-being among medical staff

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Abstract--Work engagement and job satisfaction are among the aspects of psychological well-being. This study is an empirical investigation regarding the levels of work engagement and job satisfaction among doctors who work in Greek public hospitals. Moreover, the purpose of the paper is to examine the relationship between these two concepts. Results revealed that the concepts of work engagement and job satisfaction are strongly positively correlated, while work engagement appears to be a very important predictor of intrinsic satisfaction but it can also predict extrinsic satisfaction to some extent.

Keywords--psychological well-being, job satisfaction, medical sector, work engagement.

Introduction and aims of the study

Psychological well-being is significant for job performance in the healthcare sector [10] while the promotion of psychological health and job satisfaction is extremely important for the improvement of service quality [1]. Work engagement and job satisfaction are among the aspects of psychological well-being that have adverse effects on organisations. In general, the services sector includes challenges that make work engagement harder to achieve [10], [18]. However, there are relatively few studies that address questions about healthcare professionals' engagement, even though there are findings that link physicians' engagement with the quality of healthcare services [14]. Furthermore, job satisfaction in the healthcare sector is also linked to the quality of patient care [10], [13] and other positive outcomes. With regard to the relationship between work engagement and job satisfaction,

research suggests this relationship is positive [2], [30] but there are controversial findings about the direction of this relationship [6], [24]. Based on the previously-mentioned research, this study aims to determine whether doctors working in public sector hospitals in Greece are engaged in their jobs and satisfied with them. Moreover, this study investigates the relationship between work engagement and job satisfaction and aims to determine the direction of their relationship.

Literature Review

Based on the literature, engaged employees tend to be more energetic and enthusiastic [10], [17] while there is a significant relationship between engagement, work performance [4], [10] and the financial well-being of the organization [28]. Research regarding work engagement has been conducted in various sectors and the healthcare sector is not an exception. Indeed, there has been a growing awareness of work engagement in the healthcare sector recently [16]. Research on job satisfaction converged on a number of factors (under two main categories: intrinsic and extrinsic factors) that contribute to job satisfaction. In the medical sector, research suggests that both individual and organizational factors are associated with job satisfaction. Job satisfaction is related to the levels of job stress and work engagement [7] while job satisfaction in the medical sector is a result of autonomy levels, cooperation between doctors and nurses, and stress levels [29]. Nowadays, doctors are confronted with various challenges and changes while their dissatisfaction with their job is linked to burnout, stress, mistakes during work and a reduction in the quality of healthcare services ([10].

Both work engagement and job satisfaction are positive aspects of working life that have attracted the interest of researchers [26] as they are both associated with positive outcomes for employees and organizations. Researchers concur that there is no clear direction regarding the relationship between these two [6], [24] since the association between work engagement and job satisfaction has not been investigated extensively [16]. Some research [3], [11], [15], [20] presents job satisfaction as an outcome of work engagement. This is reinforced by other research [12] that suggests engagement is an important determinant of job satisfaction. In contrast, other findings [21], [25] present job satisfaction as a predictor of work engagement. According to the relevant research, a positive relationship between the two concepts has been confirmed but there is significant room for explaining how they interact. That said, it is clear that engaged employees tend to have higher levels of job satisfaction [19].

Methodology

This quantitative research employed primary source data by administering anonymous questionnaires to doctors in Greek public hospitals. The questionnaires were sent to 7 healthcare regions of the country. In order to measure job satisfaction, a version of the Minnesota Satisfaction Questionnaire (MSQ) developed by [27] was employed while the Greek version of the Utrecht Work Engagement Scale [22], [23] was adopted for measuring work engagement. Pearson correlations and hierarchical regression analyses were performed in order to investigate the relationship between the dimensions of work engagement and

job satisfaction. The questionnaire was sent to 45 Greek public hospitals where 5% of the doctors' population was randomly selected. There were 458 returned questionnaires that were completed sufficiently for analysis (from 21 public hospitals) out of 1,388, which corresponds to a 33% response rate. The study's confidentiality and anonymity were clearly stated. The questionnaire consisted of three parts. The first part concerned the personal and professional characteristics of the participants such as age, work experience, etc. The second part related to the measurement of job satisfaction and included 20 items which were rated on a scale ranging from 1 (very dissatisfied) to 5 (very satisfied). The third part was related to the measurement of work engagement and assessed the three core dimensions of engagement: vigor, absorption and dedication. The research hypotheses, based on the relevant literature, were the following:

- *Hypothesis 1:* Doctors in the Greek public sector are engaged in their jobs.
- *Hypothesis 2:* Doctors in the Greek public sector are satisfied with their jobs.
- *Hypothesis 3:* There is a strong positive relationship between job satisfaction and work engagement
- *Hypothesis 4:* Work engagement is an important predictor of job satisfaction

Results

Based on the aims of the study, the levels of work engagement among doctors were estimated. Overall, doctors appeared to be engaged in their jobs and the mean of their responses was 3.47 (SD=.33). Respectively, doctors noticed relatively high scores on each sub-scale of work engagement as the mean of vigor was 3.36 (SD=.34), the mean of dedication was 3.78 (SD=.40) and the mean of absorption was 3.26 (SD=.36). Based on these results, the first hypothesis of this study was confirmed. The current study examined the levels of doctors' job satisfaction. Based on the results, doctors working in the public hospitals of Greece seem satisfied with their jobs as the mean of their responses was 3.30 (SD=.55). However, while they were satisfied with the aspect of intrinsic satisfaction (M= 3.62, SD= .33), they were dissatisfied with the sub-scale of extrinsic satisfaction (M=2.80, SD= .30). Therefore, the hypothesis that doctors are satisfied with their jobs was confirmed with regard to general and intrinsic satisfaction. The Pearson correlation analysis revealed positive correlations between all sub-scales of job satisfaction and work engagement, so the third hypothesis of the study was also confirmed (see table 1).

Table 1
Correlations between work engagement and job satisfaction

Variable	Vigor	Dedication	Absorption	Work engagem.	Intrinsic satisf.	Extrinsic satisf.	General satisf.
Vigor	1						
Dedication	.73***	1					
Absorption	.75***	.67***	1				
Work engagem.	.91***	.90***	.89***	1			

Intrinsic satisf.	.55***	.61***	.50***	.61***	1		
Extrinsic satisf.	.36***	.38***	.36***	.40***	.53***	1	
General satisf.	.54***	.58***	.49***	.58***	.93***	.79***	1

***p<0.001

Three hierarchical regression models were executed so as to examine a) the potential relationship between job satisfaction and work engagement b) the effect of work engagement on general job satisfaction and c) the effect of work engagement on intrinsic job satisfaction. In the three regression models the independent variables were the same, namely, the three dimensions of work engagement, while the regression models employed a different dependent variable. In the first regression model, the dependent variable was general job satisfaction. The effect of the independent variables on the dependent variable of job satisfaction showed that there is a statistically significant correlation between work engagement and job satisfaction. In particular, the dimensions of work engagement accounted for 35% of job satisfaction variance ($R^2=.35$, $F(3.40)=71.67$, $p<.001$). Multiple regression revealed that vigor significantly predicted job satisfaction ($\beta=0.19$, $p<.01$), as well as dedication ($\beta=0.23$, $p<.001$)

Table 2
Regression analysis of work engagement on general job satisfaction

	Adjusted R Square (R^2)	<i>F test statistics</i>	
		F	p
Vigor Dedication Absorption	0.347***	118.97	.000
	β	<i>t test statistics</i>	
		t	p
Vigor	0.19**	3.34	.001
Dedication	0.23***	5.79	.000
Absorption	0.05	0.05	.281

p<0.01, *p<0.001

The dependent variable of the second regression model was intrinsic job satisfaction. The effect of the independent variables on the dependent variable of intrinsic job satisfaction showed that there is a statistically significant correlation between work engagement and intrinsic job satisfaction. In particular, the dimensions of work engagement accounted for 38% of intrinsic job satisfaction ($R^2=.38$, $F(3.40)=83.70$, $p<.001$). Multiple regression showed that both vigor ($\beta=0.18$, $p<.01$) and dedication ($\beta=0.33$, $p<.001$) significantly predicted intrinsic job satisfaction.

Table 3
Regression analysis of work engagement on intrinsic job satisfaction

	Adjusted R Square (R ²)	<i>F test statistics</i>	
		F	p
Vigor Dedication Absorption	0.381***	176.04	.000
	β	<i>t test statistics</i>	
		t	p
Vigor	0.18**	2.81	.005
Dedication	0.33***	7.01	.000
Absorption	0.07	1.25	.214

p<0.01, *p<0.001

Finally, in the third model, the dependent variable was extrinsic job satisfaction. The effect of the independent variables on the dependent variable of extrinsic job satisfaction showed that there is a statistically significant correlation between work engagement and extrinsic job satisfaction. In particular, the dimensions of work engagement accounted for 16% of extrinsic job satisfaction ($R^2=.16$, $F(3.41)=26.46$, $p<.001$). However only dedication ($\beta=0.12$, $p<.05$) significantly predicted extrinsic job satisfaction. All things considered, work engagement was shown to be an important predictor of general and intrinsic satisfaction while it could also explain, to a certain extent, extrinsic satisfaction. Hence, the last hypothesis of the study was also confirmed.

Table 4
Regression analysis of work engagement on extrinsic job satisfaction

	Adjusted R Square (R ²)	<i>F test statistics</i>	
		F	p
Vigor Dedication Absorption	0.156***	151.52	.000
	β	<i>t test statistics</i>	
		t	p
Vigor	0.13	1.85	.066
Dedication	0.12*	2.46	.014
Absorption	0.11	1.89	.059

*p<0.05

Discussion and Conclusion

The empirical results of this research revealed that doctors working in Greek public hospitals tend to be engaged in their jobs. Hence, the first hypothesis of the study was confirmed. These results related to all dimensions of work engagement while the highest scores were noticed in the dimension of dedication. There are many studies that confirm the positive outcomes of employees engaged in their work at their organization such as [10]. Work engagement is linked with

performance-based outcomes [4] and client satisfaction [21]. In general, higher engagement of healthcare professionals is linked with safer patient outcomes [14]. According to the results, doctors working in Greek public hospitals tend to be satisfied with their jobs, to a degree. In particular, doctors tend to be slightly intrinsically satisfied but dissatisfied with extrinsic aspects of their job. Intrinsic satisfaction involves ability utilization, advancement, creativity, independence and recognition while typical elements of extrinsic motivation are working conditions, organization policies, compensation and security.

Literature confirms that intrinsic factors are important for the development of job satisfaction. For example, autonomy is one of the most important factors regarding job satisfaction [9]. Respectively, recognition is another extremely important factor for job satisfaction [10]. Therefore, the nature of doctors' work itself may explain the levels of their satisfaction. On the other hand, the finding that doctors' extrinsic satisfaction was low in comparison with intrinsic and general satisfaction might be predictable, given the era in which this study was conducted. Due to the financial crisis, the government in Greece has reduced doctors' salaries while the whole healthcare system has been reconstructed. The relevant literature, however, revealed that doctors appeared to have small differences in job satisfaction levels in comparison with the period before the financial recession, mainly in terms of compensation and the sense of safety. Based on the empirical results, a positive significant relationship was identified between job satisfaction and work engagement. Hence, the hypothesis regarding the positive relationship between job satisfaction and work engagement was confirmed. This result is consistent with other researchers' findings [2], [30]. Moreover, the analysis indicated that engagement is an important predictor of both intrinsic and extrinsic job satisfaction. Many relevant studies have concurred that engagement may be a predictor of job satisfaction [2], [8], [20], [24], [25].

Furthermore, work engagement was examined as a predictor of job satisfaction, not only in terms of general satisfaction but also in terms of intrinsic and extrinsic satisfaction. Work engagement appeared to be a very important predictor of intrinsic satisfaction but could also predict extrinsic satisfaction to some extent. We expected intrinsic satisfaction to be predicted by work engagement. Intrinsic satisfaction, based on the Minnesota Satisfaction Questionnaire, covers the aspects of ability utilization, achievement, activity, advancement etc. Undoubtedly, work engagement is a motivational concept that can be predicted from job resources and personal resources [5]. Therefore, the aspects covered within intrinsic satisfaction are linked to work engagement. On the other hand, extrinsic satisfaction derives from aspects that do not relate to the employee, for example the policies governing human resources and the working conditions. While no study could be found that directly assesses work engagement as a predictor of extrinsic satisfaction, previous research does indeed indicate a positive relationship between work engagement and extrinsic motivation. In particular, intrinsically-motivated employees have higher levels of engagement through the involvement of extrinsic factors. Literature presents controversial results with regard to the aspect of pay (which is important for the job satisfaction) and its link to work engagement; however, there is research suggesting that financial rewards are positively linked to work engagement. More

research regarding work engagement and extrinsic facets of job satisfaction is considered essential for a deeper understanding of this relationship.

References

1. Al-Abri, R., and Al-Balushi, A. (2014) "Patient satisfaction survey as a tool towards quality improvement" *Oman Medical Journal*, Vol. 29, No 1, pp. 3–7.
2. Alarcon, G.M. and Lyons, J.B. (2011) "The relationship of engagement and job satisfaction in working samples", *The Journal of Psychology*, Vol. 145, No 5, pp. 463-480.
3. Avery, D.R., McKay, P.F., and Wilson, D.C. (2007) "Engaging the Aging Workforce: The Relationship Between Perceived Age Similarity, Satisfaction with Coworkers, and Employee Engagement" *Journal of Applied Psychology*, vol. 92, No 6, pp. 1542-1556.
4. Bakker, A.B., Demerouti, E., and Verbeke, W. (2004) "Using the job demands: resources model to predict burnout and performance", *Human Resource Management*, Vol. 43, pp. 83-104.
5. Bakker, A.B., Hakanen, J.J., Demerouti, E, and Xanthopoulou, D. (2007) "Job resources boost work engagement particularly when job demands are high", *Journal of Educational Psychology* Vol. 99, No 2, pp. 274–284.
6. Bakker, A.B., Schaufeli, W.B., Leiter, M.P., and Taris, T.W. (2008) "Work Engagement: An Emerging Concept in Occupational Health Psychology" *Work & Stress*, Vol. 22, No 3, pp. 187-200.
7. Blegen, M. (1993) "Nurse's job satisfaction: A meta-analysis of related variables" *Nursing research*, Vol. 42, No 1, pp. 36-41.
8. Demerouti, E., and Bakker, A.B. (2011) "The Job Demands–Resources model: Challenges for future research" *South African Journal of Industrial Psychology*, Vol. 37, pp. 1–9.
9. Finn, C.P. (2001) "Autonomy: an important component for nurses' job satisfaction" *International Journal of Nursing Studies*, Vol. 38, pp. 349–357.
10. Gkliati, A. and Saiti, A. (2022) "Job Satisfaction and Support in the Medical Profession. The foundations of efficient organization health care performance" *International Journal of Workplace Health Management*, Vol. 15, No 2, pp. 131-153
11. Karatepe, O. M. (2013) "High-performance work practices and hotel employee performance: The mediation of work engagement" *International Journal of Hospitality Management*, Vol. 32, pp. 132-140.
12. Karatepe, O.M. and Aga, M. (2012) "Work Engagement as a Mediator of the Effects of Personality Traits on Job Outcomes: A Study of Frontline Employees" *Services Marketing Quarterly*, Vol. 33, No 4, pp. 343-362.
13. Landon, B.E., Reschovsky, J.D., Pham, H.H., and Blumenthal, D. (2006) "Leaving medicine: the consequences of physician dissatisfaction" *MedCare* Vol. 44, pp. 234–242
14. Laschinger, H.,K.,S. and Leiter, M.,P. (2006). "The impact of nursing work environments on patient safety outcomes: the mediating role of burnout/engagement" *Journal of Nursing Administration*, Vol. 5, pp. 259–67.
15. Lu, L., Lu, A. C. C., Gursoy, D., and Neale, N. R. (2016) "Work engagement, job satisfaction, and turnover intentions: A comparison between supervisors and line-level employees" *International Journal of Contemporary Hospitality Management*, Vol. 28, pp. 737-761.

16. Mache, S., Vitzthum, K., Klapp, B. F., and Danzer, G. (2014) "Surgeons' work engagement: influencing factors and relations to job and life satisfaction" *The Surgeon*, Vol. 12, pp. 181-190.
17. May, D.R., Gilson, R.L., and Harter, L.M. (2004) "The psychological conditions of meaningfulness, safety and availability and the engagement of the human spirit at work" *Journal of Occupational and Organizational Psychology*, Vol. 77, pp. 11-37.
18. Menguc, B., Auh, S., Fisher, M. and Haddad, A. (2013) "To be engaged or not to be engaged: the antecedents and consequences of service employee engagement" *Journal of Business Research*, Vol. 66, No 11, pp. 2163-2170
19. Radosevich, D.J., Radosevich, D.M., Riddle, M.R., and Hughes, P.A. (2008) "Goal orientation as a predictor of cognitive engagement, performance, and satisfaction" *Journal of Academy of Business and Economics*, Vol. 8, pp. 46-55.
20. Saks, A.M. (2006) "Antecedents and Consequences of Employee Engagement" *Journal of Managerial Psychology*, Vol. 21, pp. 600-619.
21. Salanova, M., Llorens, S., and Schaufeli, W.B. (2011) "Yes, I Can, I Feel Good, and I Just Do It On Gain Cycles and Spirals of Efficacy Beliefs, Affect, and Engagement" *Applied Psychology: An International Review*, Vol. 60, No 2, pp. 255-285.
22. Schaufeli, W.B., and Bakker, A.B. (2010) "Defining and Measuring Work Engagement: Bringing Clarity to the Concept", In A. B. Bakker and M. P. Leiter, (Eds), *Work Engagement: A Handbook of Essential Theory and Research*, Psychology Press, Taylor & Francis Group, New York, NY (pp.10-24)
23. Schaufeli, W.B., Martinez, I., Marques Pinto, A., Salanova, M., and Bakker, A.B. (2002a) "Burnout and engagement in university students: A cross-national study" *Journal of Cross- Cultural Psychology*, Vol. 33, pp. 464-81.
24. Schaufeli, W.B., Salanova, M., Gonzalez-Roma, V., and Bakker, A.B. (2002b) "The measurement of engagement and burnout: A confirmative analytic approach" *Journal of Happiness studies*, Vol. 3, pp. 71-92.
25. Simpson, M.R. (2009) "Engagement at Work: A Review of the Literature" *International Journal of Nursing Studies*, Vol. 46, No 7, pp. 1012-1024.
26. Sonnentag, S. (2011) "Research on work engagement is well and alive" *European Journal of Work and Organizational Psychology*, Vol. 20, pp.29-38.
27. Subagiyo, A., Afdhal, A. F., & Derriawan, D. (2020). The influence of product upgrading and quality on customer satisfaction and its impact on consumer loyalty standardized herbal medicine: Research on Tolak Angin Sido Muncul Product in DKI Jakarta. *International Journal of Health & Medical Sciences*, 3(1), 136-145. <https://doi.org/10.31295/ijhms.v3n1.330>
28. Weiss, D.J., Dawis, R.V. England, G.W. and Lofquist, L.H. (1967) *Manual for the Minnesota Satisfaction Questionnaire*. Vol. 22, Minnesota Studies in Vocational Rehabilitation, Minneapolis: University of Minnesota, Industrial Relations Center.
29. Widana, I.K., Sumetri, N.W., Sutapa, I.K., Suryasa, W. (2021). Anthropometric measures for better cardiovascular and musculoskeletal health. *Computer Applications in Engineering Education*, 29(3), 550-561. <https://doi.org/10.1002/cae.22202>
30. Xanthopoulou, D., Bakker, A.B., Demerouti, E., and Schaufeli, W.B. (2009) "Work engagement and financial returns: A diary study on the role of job and

- personal resources” *Journal of Occupational and Organizational Psychology*, Vol. 82, pp. 183–200.
31. Zangaro, G.A. and Soeken, K.L. (2007) “A meta-analysis of studies of nurses' job satisfaction” *Research in nursing & health*, Vol. 30, No 4, pp. 445-458
 32. Zhu, Y. (2013) “A review of job satisfaction” *Asian Social Science*, Vol. 9, No 1, pp. 293-298.