How do organizational justice and health influence teachers' work engagement?

The mediating role of positive psychological capital and job satisfaction

João Viseu
University of Algarve

Claudia L. Rus
Babe - Bolyai University

Saul Neves de Jesus
University of Algarve

Organizational justice has emerged as a vital construct in organizations (Cropanzano & Ambrose, 2015). Low organiza-tional justice perce-ptions have long been considered an occupational health risk (Robbins, Ford, & Tetrick, 2012). This concept refers to people's " perceptions of fairness in organizations along with their associated behavioral, cognitive, and emotional reactions" (Greenberg, 2011, p. 271). Although there are definitions of overall organizational justice (Fortin, 2008), this concept is often considered as multidimensional including distributive, procedural, interpersonal, and informational justice (Adams, 1965: Bies & Moag, 1986: Greenberg, 1993: Leventhal, 1980).

Considerable research has focused on organizational justice benefits for organizations and employees (Cropanzano, Bowen, & Gilliland, 2007). One of the individual-level outcomes that has recently drawn researchers' attention is positive psychological capital (PsyCap) which results from the combination of self-efficacy, optimism, hope, and resilience (Luthans, Youssef, & Avolio, 2007). Strong perceptions of organizational justice communicate that employees are valued as members of the organization and they have control over their jobs, and these, in turn, increase employees' flexible optimism, positive expectations of success, and resilience under job challenges (Hur, Rhee, & Ahn, 2015: Rego & Pinha e Cunha, 2008). PsyCap can mediate the influence of organi-zational justice (mainly distributive and procedural justice) on job-related outcomes, such as job satisfaction (Totawar & Nambudiri, 2014). Although PsyCap has been linked to several employees' behavioral, attitudinal, affective, and health outcomes (Avey, Reichard, Luthans, & Mhatre, 2011: Rus & Jesus, 2010), some authors have suggested the need to expand the range of these variables by including work engagement (Sweetman & Luthans, 2010). Work engagement is a positive psychological state characterized by the association of vigor, dedication, and absorption (Bakker, Schaufeli, Leiter, & Taris, 2008). Employees competently able to accomplish their job tasks, that have expectations of positive outcomes, willpower and pathways to achieve their tasks, and are able to bounce back and beyond in face of job challenges can become absorbed, perseverant, and have more energy available to devote to their work (Sweetman & Luthans, 2010).

Another benefit of organizational justice is job satisfaction (Colquitt, Conlon, Wesson, Porter, & Ng, 2001). It consists in employees' evaluation of their work context and profession (Lease, 1998). Satisfied employees report high PsyCap (Avey et al., 2011) and work engagement (Yalabik, Popaitoon, Chowne, & Rayton, 2013).

In terms of factors that shape perceptions of fairness in organizations, various authors have called for an exhaustive exploration of the organizational level-related factors (James, 2015). One of these factors is organizational health (Bennis, 2002). Gomide-Júnior and Fernandes (2008) proposed that organizational health refers to the organizational integration of individuals
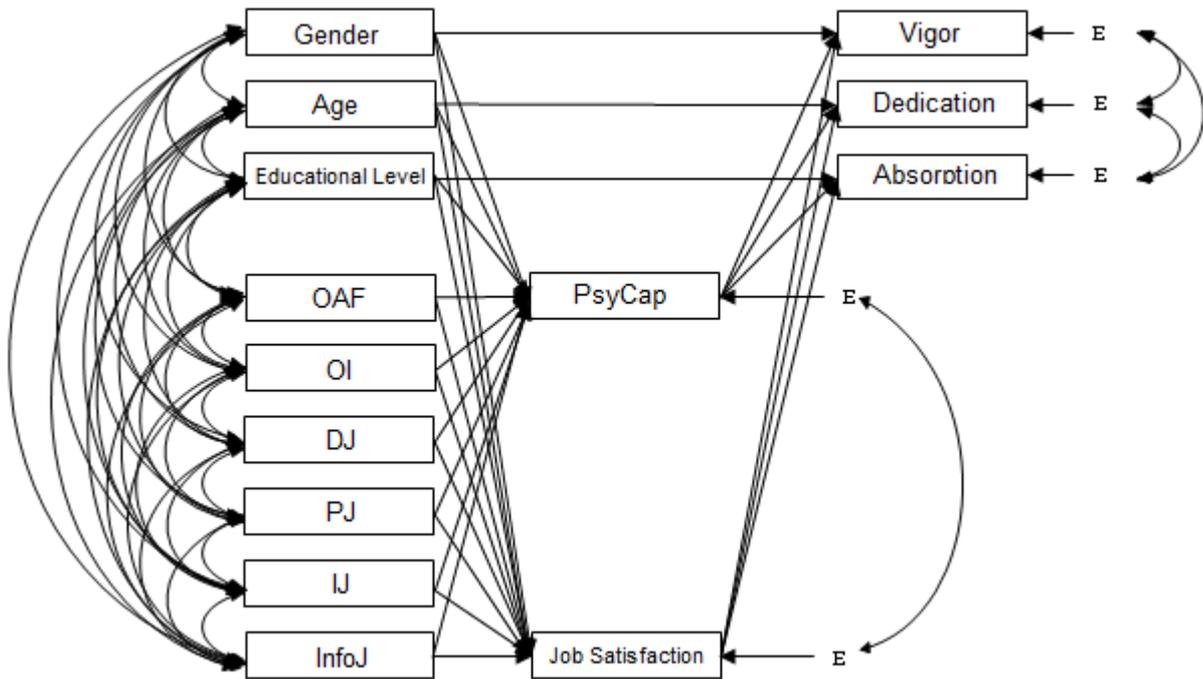
Figure 1. Tested model in EQS v.6.1 using maximum the likelihood estimation method. OAF = organizational adaptation and flexibility: OI = organizational integration of individuals and groups: DJ = distributive justice: PJ = procedural justice: IJ = interpersonal justice: InfoJ = informational justice.

and groups (internal dimension) and the organization adaptability/flexibility to external demands (external dimension). Perceptions of organizational health were positively correlated with job satisfaction (Koh & Boo, 2001). Also, these perceptions can increase employees' confidence in their abilities, their expectations of positive outcomes, willpower, pathways to achieve goals, and their ability to bounce back and beyond in face of job demands and obstacles.

The present study investigates the mediator role of psychological capital and job satisfaction in the relationship between organizational justice and health facets, and work engagement. We expect that:

H1: PsyCap will mediate the relationship between organizational health and organizational justice dimensions, and work engagement

H2: Job satisfaction will mediate the relationship between organizational health and organizational justice dimensions, and work engagement

Method

Participants

The paper-and-pencil format of the questionnaire was distributed to 1129 public school teachers. The response rate was 50.84%. The final sample included 574 Portuguese teachers (74.39% females: 95.82% held at least a bachelor's degree). Almost half of the participants (47.74%) were aged less than 45 years old.

Table 1
Means, standard deviations, and correlations among variables (N = 574)

Variables	M	SD	1	2	3	4	5	6	7	8	9	10	11
1. Organizational flexibility	2.97	.81	(.92)										
2. Organizational integration	3.13	.79	.85***	(.96)									
3. Distributive justice	2.34	1.10	.39***	.42***	(.83)								
4. Procedural justice	3.07	1.17	.72***	.67***	.52***	(.78)							
5. Interpersonal justice	4.05	1.43	.76***	.72***	.43***	.78***	(.93)						
6. Informational justice	3.43	1.44	.77***	.72***	.47***	.80***	.88***	(.93)					
7. PsyCap	4.16	.80	.46***	.45***	.42***	.46***	.49***	.48***	(.86)				
8. Job satisfaction	3.63	1.11	.74***	.76***	.57***	.67***	.73***	.72***	.61***	(.83)			
9. Vigor	4.98	1.10	.39***	.38***	.37***	.35***	.36***	.36***	.57***	.54***	(.78)		
10. Dedication	5.32	1.49	.43***	.45***	.41***	.38***	.42***	.41***	.64***	.64***	.81***	(.94)	
11. Absorption	5.60	1.13	.32***	.33***	.29***	.28***	.28***	.29***	.50***	.45***	.73***	.77***	(.82)

Note. *** $p < .001$

Instruments

The Organizational Justice Scale (Colquitt, 2001) measured organizational distributive (5 items), procedural (4 items), informational (4 items), and interpersonal (4 items) justice. The Organizational Health Perception Scale (Gomide-Júnior & Fernandes, 2008) measured organizational integration of individuals and groups (18 items) and adaptability/flexibility to external demands (8 items). PsyCap was measured using the Psychological Capital Questionnaire–12 (Luthans et al., 2007). Job satisfaction was measured with seven items from the Job Satisfaction Scale (Lima, Vala, & Monteiro, 1994). Work engagement dimensions were measured with the Utrecht Work Engagement Scale for Teachers (Marques-Pinto, 2008): dedication (8 items), absorption (7 items), and vigor (9 items).

Procedure

The research protocol was approved by the Portuguese General Directorate of Education. Subsequently, schools were contacted to explain the research objectives and to inform teachers about this study. All the teachers signed an informed consent statement and voluntarily participated in this study.

Results

The full mediation of PsyCap and job satisfaction between organizational justice and health facets, and work engagement dimensions (dedication, vigor, and absorption) was tested using path analysis (Figure 1). The influence of age, gender, and educational level on mediators and outcomes was controlled.

Furthermore, a competing path model was

Table 2
Fit indices of the tested models using path analysis (N = 574)

Model	χ²	df	CFI	SRMR	RMSEA	90% CI RMSEA
Model 1	25.799	18	.999	.016	.027	[.000; .050]
Model 2	520.199***	12	.910	.107	.272	[.252; .292]

Note. χ2 = Chi-square statistics; df = Degrees of freedom; CFI = Comparative Fit Index; SRMR = Standardized Root Mean Square Residual; RMSEA = Root Mean Square Error of Approximation; 90% CI RMSEA = Root Mean Square Error of Approximation with a 90 percent confidence interval. *** $p < .001$, ** $p < .01$, * $p < .05$

tested (Model 2). The mediators were the three dimensions of work engagement and the outcome variables were PsyCap and job satisfaction. The rest of the model was similar to Model 1.

The means, standard deviations, and the correlations among variables are presented in Table 1.

The fit indices of the tested models are presented in Table 2.

Model 1 presented a good fit, $χ^2(18)=25.799$, p > .05, RMSEA = .027, 90%CI RMSEA [.000; .050], SRMR = .016, CFI = .999. PsyCap was positively predicted by educational level, organizational

Table 3
Standardized regression estimates from path analysis for Model 1 (N = 574)

Variables	PsyCap	Job satisfaction	Vigor	Dedication	Absorption
1. Gender (0 = male, 1 = female)	.00	.01	.09**	.13***	.16***
2. Age	−.02	.03	.03	−.01	.02
3. Level of education	.14***	.02	−.01	.00	−.03
4. Organizational flexibility	.13***	.13**			
5. Organizational integration	.06	.35**			
6. Distributive justice	.23***	.25***			
7. Procedural justice	.02	.00			
8. Interpersonal justice	.25**	.24***			
9. Informational justice	.02	.04			
10. PsyCap			.40***	.36***	.36***
11. Job satisfaction			.29***	.41***	.23***

Note. *** $p < .001$, ** $p < .01$.

Table 4
Standardized correlation estimates among outcome variables results from path analysis (N = 574)

Variables	1	2	3
1. Vigor	1		
2. Dedication	.67***	1	
3. Absorption	.59***	.65***	1

Note. *** p < .001, ** p < .01.

integration, distributive, and interpersonal justice (Table 3).

The two dimensions of organizational health, distributive, and interpersonal justice positively predicted job satisfaction. PsyCap positively correlated with job satisfaction (r = .36, p < .001). Both positively predicted work engagement dimensions. High correlations between the three dimensions of work engagement were identified (Table 4).

Organizational health and justice facets positively correlated (Table 5). As the educational level increased, participants perceived low levels of organizational health and justice dimensions.

Path analysis revealed that PsyCap and job satisfaction did not mediate the influence of all organizational health and justice facets on work engagement dimensions, when controlling for the abovementioned demographics. However, PsyCap did mediate the influence of distributive and interpersonal justice on work engagement dimensions. Job satisfaction mediated the influence of both organizational health dimensions, distributive, and interpersonal justice on work engagement dimensions. Thus, our hypotheses received partial empirical support.

Table 5
Standardized correlation estimates among independent variables results from path analysis (N = 574)

Variables	1	2	3	4	5	6	7	8	9
1. Gender (0 = male, 1 = female)	1								
2. Age	−.05	1							
3. Level of education	−.01	−.10**	1						
4. Organizational flexibility	−.02	.05	−.12**	1					
5. Organizational integration	−.02	.06	−.13**	.85***	1				
6. Distributive justice	−.03	.11	−.09*	.39***	.42***	1			
7. Procedural justice	−.02	.06	−.13**	.72***	.67***	.52***	1		
8. Interpersonal justice	−.05	.03	−.16***	.76***	.72***	.43***	.78***	1	
9. Informational justice	−.04	.03	−.14***	.77***	.72***	.47***	.80***	.88***	1

Note. *** p < .001

Discussion

These findings advance knowledge on the role of social risk factors, such as organizational justice and health, on teachers' PsyCap and job attitudes (job satisfaction, work engagement). PsyCap and job satisfaction were identified as intervening variables between organizational context-related variables and work engagement. Although a number of studies have explored the PsyCap construct, little has been empirically tested regarding the antecedents of PsyCap (Luthans, Youssef-Morgan, & Avolio, 2015) and the impact it may have on work engagement (Sweetman & Luthans, 2010). This research takes a step forward by showing that that PsyCap and job satisfaction were positively associated with vigor, dedication, and absorption. These results are similar to others existing in the literature (Christian, Garza, & Slaughter, 2011; Hur et al., 2015; Penger & Cerne, 2014).

In this study, PsyCap and job satisfaction were linked to organizational health and justice facets. Teachers' perceptions of distributive and interpersonal justice facilitate their PsyCap and job satisfaction. These results represent an important addition to the literature on organizational justice and its relationship with PsyCap (Hur et al., 2015; Totawar & Nambudiri, 2014). We also included the interpersonal and informational justice dimensions. As shown by our results, teachers' perceptions of interpersonal justice can be a key resource to facilitate PsyCap in schools.

In terms of the relationships between organizational justice facets and satisfaction, our findings confirm past results (e.g., Colquitt et al., 2013). We found that distributive and interpersonal justice were related with job satisfaction (Loi, Yang, & Diefendorff, 2009; Martin & Bennett, 1996). Moreover, job satisfaction was positively related to the organizational health dimensions. Employees'

positive perceptions on how the organization deals with external demands generates satisfaction, since the adaptability to new circumstances will allow them to effectively perform their tasks (Shoaf, Genaidy, Karwowski, & Huang, 2003). Integration of individuals and groups generates positive work environments in which employees can experience high job satisfaction (DeJoy & Wilson, 2003).

By underlining the role of distributive and interpersonal justice in generating high levels of work engagement through PsyCap and job satisfaction, this study suggests that educational systems must pay attention to the fair amount of compensation, pay raises, promotions, and support offered to employees (Silva & Caetano, 2014). Organizational programs can be implemented to train leaders and managers on how to treat well employees.

This study has limitations. Data collected at a single time point limits the inference of causal relationships. The high correlations between independent variables (multicollinearity) might indicate the presence of the common method bias. Future research might attempt to avoid this problem by collecting data from different sources or by using longitudinal designs. These findings are relevant for Portuguese public schools, since they are embedded in a national system governed by political, economic, social, technological, and legal factors that may differ from country to country.

Funding

References

Adams, J. S. (1965). Inequity in social exchange. In L. Berkowitz (Ed.), Advances in experimental social psychology (Vol. 2, pp. 267-299). New York: Academic Press.

Avey, J., Reichard, R., Luthans, F., & Mhatre, K. (2011). Meta-analysis of the impact of positive psychological capital on employees attitudes, behaviors, and performance. Human Resource Development Quarterly, 22(2), 127-152. doi:10.1002/hrdq

Bakker, A., Schaufeli, W., Leiter, M., & Taris, T. (2008). Work engagement: An emerging concept in occupation health psychology. Work & Stress: An International Journal of Work, Health, & Organisations, 22(3), 187-200. doi:10.1080/02678370802393649

Bennis, W. (2002). Towards a "truly" scientific management: The concept of organization health. Reflections, 4(1), 4-13. doi:10.1162/152417302320467508

Bies, R., & Moag, J. (1986). Interactional justice: Communication criteria of fairness. In R. J. Lewicki, B. H. Sheppard, & M. H. Bazermann (Eds.), Research on negotiations in organizations (Vol. 1, pp. 43-55). Greenwich, CT: JAI Press.

Christian, M. S., Garza, A. S., & Slaughter, J. E. (2011). Work engagement: A quantitative review and test of its relations with task and contextual performance. Personnel Psychology, 64(1), 89–136. doi:10.1111/j.1744-6570.2010.01203.x

Colquitt, J. A. (2001). On the dimensionality of organizational justice: A construct validation of a measure. Journal of Applied Psychology, 86(3), 386-400. doi:10.1037//0021-9010.86.3.386

Colquitt, J. A., Conlon, D. E., Wesson, M. J., Porter, C., & 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

Colquitt, J. A., Scott, B. A., Rodell, J. B., Long, D. M., Zapata, C. P., Conlon, D. E., & Wesson, M. J. (2013). Justice at the millennium, a decade later: A meta-analytic test of social exchange and affect-based perspectives. Journal of Applied Psychology, 98(2), 199-236. doi:10.1037/a0031757

Cropanzano, R., Bowen, D. E., & Gilliland, S. V. (2007). The management of organizational justice. Academy of Management Perspectives, 21(4), 34-48. doi:10.5465/AMP.2007.27895338

Cropanzano, R. C., & Ambrose, M. L. (2015). Organizational justice: Where we have been and where we are going. In R. C. Cropanzano, & M. L. Ambrose (Eds.), The Oxford handbook of justice in the workplace (pp. 3-14). Oxford: Oxford University Press.

DeJoy, M., & Wilson, M. (2003). Organizational health promotion: Broadening the horizon of workplace health promotion. American Journal of Health Promotion, 17(5), 337-341. doi:10.4278/0890-1171-17.5.337

Fortin, M. (2008). Perspectives on organizational justice: Concept clarification, social context, integration, time and links with morality. International Journal of Management Reviews, 10(2), 93-126. doi:10.1111/j.1468-2370.2008.00231.x

Gomide-Júnior, S., & Fernandes M. (2008). Saúde Organizacional [Organizational health]. In M. Siqueira (ed.), Medidas do comportamento organizacional – ferramentas de diagnóstico e de gestão (pp. 275-282). Porto Alegre: Artmed.

Greenberg, J. (1993). The social side of fairness: Interpersonal and informational classes of organizational justice. In R. Cropanzano (Ed.), Justice in the workplace: Approaching fairness in human resource management (pp. 79–103). Hillsdale, NJ: Erlbaum.

Greenberg, J. (2011). Organizational justice: The dynamics of fairness in the workplace. In S. Zeldock (Ed.), APA Handbook of Industrial and Organizational Psychology (Vol. 3, pp. 271–327). Washington, DC, USA: American Psychological

Association.

Hur, W., Rhee, S., & Ahn, K. (2015). Positive psychological capital and emotional labor in Korea: The job demands-resources approach. The International Journal of Human Resource Management, Advance online publication. doi:10.1080/09585192.2015.1020445

James, K. (2015). Culture and organizational justice: State of the literature and suggestions for future directions. In R. C. Cropanzano & M. L. Ambrose (Eds.), The Oxford handbook of justice in the workplace (pp. 273-290). Oxford: Oxford University Press.

Koh, H., & Boo, E. (2001). The link between organizational ethics and job satisfaction: A study of managers in Singapore. Journal of Business Ethics, 29(4), 309-324. doi: 10.1023/A:1010741519818

Lease, S. (1998). Annual review, 1993-1997: Work attitudes and outcomes. Journal of Vocational Behavior, 53(2), 154-183. doi:10.1006/jvbe.1998.1662

Leventhal, G. S. (1980). What should be done with equity theory? New approaches to the study of fairness in social relationships. In K. Gergen, M. Greenberg, & R. Willis (Eds.), Social exchange: Advances in theory and research (pp. 27-55). New York: Plenum.

Lima, M. L., Vala, J., & Monteiro, M. B. (1995). A satisfação organizacional [Organizational satisfaction]. In J. Vala, M. B. Monteiro, L. Lima, & A. Caetano. Psicologia social das organizações: Estudos em empresas portuguesas (2nd ed.) (pp. 101-122). Oeiras: Celta Editora.

Loi, R., Yang, J., & Diefendorff, J. M. (2009). Four-factor justice and daily job satisfaction: A multi-level investigation. Journal of Applied Psychology, 94(3), 770-781. doi:10.1037/a0015714

Luthans, F., Youssef, C., & Avolio, B. (2007). Psychological capital. New York: Oxford University Press.

Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). Psychological capital and beyond. New York: Oxford University Press.

Marques Pinto, A. (2008). Questionário de engagement para professores [Utrecht Work Engagement Scale for Teachers]. (Tradução da autora). Lisboa: Universidade de Lisboa – Faculdade de Psicologia.

Martin, C. L., & Bennett, N. (1996). The role of justice judgments in explaining the relationship between job satisfaction and organizational commitment. Group & Organization Management, 21(1), 84–104. doi:10.1177/1059601196211005.

Penger, S. & Cerne, M. (2014). Authentic leadership, employees' job satisfaction, and work engagement: A hierarchical linear modelling approach. Economic Research-Ekonomska Istraživanja, 27(1), 508-526. doi:10.1080/1331677X.2014.974340

Rego, A., & Pinha e Cunha, M. (2008). Workplace spirituality and organizational commitment: An empirical study. Journal of Organizational Change Management, 21(1), 53-75. doi:10.1108/09534810810847039

Robbins, J. M., Ford, M. T., & Tetrick, L. E. (2012). Perceived unfairness and employee health: A meta-analytic integration. Journal of Applied Psychology, 97(2), 235–272. doi:10.1037/a0025408

Rus, C., & Jesus, S. N. (2010). Psychological capital in organizational context: A meta-analytic study. In M. Milcu (Ed.). Modern psychology research: Quantitative research vs. qualitative research? Conference proceedings (pp. 142-151). Sibiu: Editura Universitara.

Shoaf, C., Genaidy, A., Karwowski, W., & Huang, S. H. (2004). Improving performance and quality of working life: A model for organizational health assessment in emerging enterprises. Human Factors and Ergonomics in Manufacturing, 14(1), 81-95. doi:10.1002/hfm.10053

Silva, M. R., & Caetano, A. (2014). Organizational justice: What changes, what remains the same? Journal of Organizational Change

Management, 27(1), 23-40. doi:10.1108/JOCM-06-2013-0092

Sweetman, D., & Luthans, F. (2010). The power of positive psychology: Psychological capital and work engagement. In A. B. Bakker & M. P. Leiter (Eds), Work engagement: A Handbook of essential theory and research (pp. 54-68). New York: Psychology Press.

Totawar, A., & Nambudiri, R. (2014). How does organizational justice influence job satisfaction and organizational commitment? Explaining with psychological capital. Vikalpa, 39(2), 83-97.

Yalabik, Z., Popaitoon, P., Chowne, J., & Rayton, B. (2013). Work engagement as a mediator between employee attitudes and outcomes. The International Journal of Human Resource Management, 24(14), 2799-2823. doi:10.1080/09585192.2013.763844

João Viseu
Research Centre for Spatial and Organizational Dynamics (CIEO), University of Algarve, Campus de Gambelas, Faro, Portugal
joaonrviseu@gmail.com

Claudia L. Rus
Department of Psychology, Babes-Bolyai University, Cluj-Napoca, Romania
claudialenuta.rus@gmail.com

Saul Neves de Jesus
Research Centre for Spatial and Organizational Dynamics, University of Algarve, Faro, Portugal
snjesus@ualg.pt