In press in *Journal of Occupational and Environmental Medicine*

Perceived Organizational Support and Psychological Empowerment: A Multi-Sample Study

Gaëtane Caesens, Pierre Bouchat, and Florence Stinglhamber

Université catholique de Louvain, Belgium

Conflicts of interest: None Declared.

There is no funding for this work.

Acknowledgments

This research was conducted by the research team of the Chaire laboRH at the Université catholique de Louvain. In particular, the authors would like to thank Professor Laurent Taskin and Maxime Desmarets for their valuable contributions to the research design and the data collection.

Correspondence concerning this article should be addressed to Gaëtane Caesens, Université catholique de Louvain, Place Cardinal Mercier, 10, L3.05.01, 1348 Louvain-la-Neuve, Belgium. E-mail: gaetane.caesens@uclouvain.be. Phone: +32 10 47 42 99. Fax: +32 10 47 42 99.

Abstract

This research examined the mediating role of employees' psychological empowerment in the relationship between perceived organizational support and employee psychological well-being. Our hypotheses were tested using three different sets of cross-sectional data (N = 237, N = 334, and N = 182). Results indicated across the three samples that psychological empowerment mediates the positive relationship between perceived organizational support and employee psychological well-being. Implications for organizational support and psychological empowerment literatures are discussed.

Keywords: Perceived organizational support, psychological empowerment, employees' well-being.

Perceived Organizational Support and Psychological Empowerment:

A Multi-Sample Study

A significant body of research accumulated over the past three decades suggests that perceived organizational support (POS), defined as employees' beliefs that their organization cares about their well-being and values their contributions, is positively related to indicators of employee psychological well-being at work such as increased levels of job satisfaction, reduced employees' emotional exhaustion or stress (e.g., [1; 2; 3]). Nevertheless, the underlying processes through which POS leads to a greater psychological well-being has not been sufficiently developed at the empirical level [4; 2]. Indeed, according to several scholars such as Baran and his colleagues [4], there is a clear need for more research on the underlying processes through which POS leads to a better psychological well-being. A full understanding of the mechanisms underlying the relationship between POS and employee psychological well-being is still lacking. To fill this gap and further develop organizational support theory (e.g., [5; 1; 2]), the present research examines whether employees' psychological empowerment, defined as a motivational construct manifested through four cognitions, namely meaning, competence, self-determination and impact, might act as an underlying process through which POS fosters employee psychological well-being. We focused here on a broad definition of psychological well-being, which goes beyond the realm of work and refers to "an affective judgement regarding the events that occur in people's lives" [6, p. 365] such as moods, emotions, and fulfillment [see 7].

By examining the relationships between POS, psychological empowerment, and psychological well-being, this research adds to the literature in several ways. First, to our knowledge, this research is one of the few studies examining the relationship between POS and psychological empowerment (e.g., [8]). It therefore adds to the literature on psychological empowerment (e.g., [9]) by examining and explaining how POS is related to the core

components of employees' intrinsic motivation and is thus a driver of employees' empowerment. Second, while previous research showed that POS and psychological empowerment are positively linked to employee well-being at work, such as increased job satisfaction and emotional exhaustion (e.g., [10]), little research has examined how these constructs might influence the well-being of employees in their overall life. Third, our research contributes to organizational support theory (e.g., [5; 1; 2; 3]) by highlighting a mechanism through which POS leads to greater psychological well-being and respond to the call of scholars for more research in this area [4].

POS and Outcomes

Stemming from organizational support theory [5;1; 2; 3], the POS concept refers to employees' perceptions regarding their organization's positive valuation of their contributions and concern for their welfare. Typically rooted in the social exchange perspective [11], POS creates an obligation on the part of employees to reciprocate for the positive treatment received by their organization. To date, the literature has demonstrated that the POS construct has beneficial consequences for both organizations and employees [e.g., 1]. Results of a recent meta-analysis indicated that POS is positively related to a positive orientation toward the organization and work (e.g., increased employees' affective commitment, job involvement, and trust), to positive behavioral outcomes (e.g., increased employees' performance, and decreased employees' counterproductive work behaviors) and to a better employee well-being primarily related to the work domain (e.g., increased levels of job satisfaction and reduced levels of burnout and work-family conflict) (e.g., [1; 2; 3]). Recently, several scholars (e.g., [2; 4]) stressed that more research should be conducted on the relationships between POS and indicators of employee well-being and, more importantly, on the identification of their underlying mechanisms. In this research, we propose that psychological empowerment might be a relevant mediator to consider in examining the

relationship between POS and employee psychological well-being going beyond the work context.

Psychological empowerment is defined by Spreitzer [9] as a motivational construct that manifested itself in four cognitions: meaning, competence, self-determination, and impact. First, *meaning* refers to a general sense and value related to a work objective or purpose. Second, *competence* characterizes individuals' beliefs that they can perform a task with efficiency and is thus similar to self-efficacy. Third, *self-determination* is employees' awareness that they have independent choice and autonomy in how they initiate or regulate their actions. Fourth, *impact* captures employees' perceptions that they have a significant influence on the work environment. Together, these four cognitions "reflect an active rather than a passive orientation to a work role" [9, p. 1444]. Interestingly, several scholars [e.g., 1; 12] proposed that POS should influence positively each of the four dimensions of the psychological empowerment construct. First, POS might indicate to the employee that he or she is an accepted and valued member of the entire organization, which should foster the idea that the work he or she has done is meaningful [12]. They also stated that "such support will also provide the employee with feelings of self-determination because it is appropriate for her, as an accepted member of the organization to determine her own work goals and strategies" [12, p. 983]. Finally, POS provides employees with both the material and social-emotional resources needed to perform their job adequately and to achieve their personal work-related goals. Therefore, POS might also positively influence the competence and impact dimensions of the psychological empowerment construct [12].

At the empirical level, only a handful of studies have reported a positive relationship between POS and employees' psychological empowerment (e.g., [8; 13]). None of these studies was however interested in the precise relationship between these two variables and hypothesized a priori such a link. For instance, Chiang and Hsieh [8] reported in their

discussion that they found a significant positive correlation between POS and psychological empowerment and that this relation needs further investigation. In the same vein, Eisenberger and Stinglhamber [1] stated that "more research needs to be done in this topic using the standard scale for assessing perceived organizational support" (p. 182). In response to these researchers' call and based on the above arguments and previous empirical findings, we therefore predicted that:

Hypothesis 1: POS is positively related to employees' psychological empowerment.

The Mediating Role of Psychological Empowerment

Our first hypothesis suggests a positive relationship between POS and employees' psychological empowerment. Going one step further, it is reasonable to assume that this psychological empowerment should in turn foster employee psychological well-being. Prior scholars claimed that psychological empowerment provides to employees a sense of control over their work environment and helps employees to cope with the job demands they can face at work (e.g., 143]). In line with this, Seibert et al. [12] claimed that "self-determination, competence, and impact should function together to reduce strain even if work demands go up because they increase feelings of control" (p. 985). Supporting this idea, empirical evidence showed a positive relationship between psychological empowerment and several indicators of employees' psychological well-being at work such as increased job satisfaction (e.g., [15]) and decreased levels of employees' burnout (e.g., [12, for a meta-analysis]. In a similar vein, Schermuly and Meyer [16] stressed that "psychological empowerment not only has an effect on work-related feelings of emotional exhaustion but also affect individuals' lives more broadly" (p. 680). More precisely, these authors suggested that a low level of each of the four dimensions of psychological empowerment might lead to depression. Based on the above reasoning, we therefore hypothesized:

Hypothesis 2: Employees' psychological empowerment mediates the positive relationship between POS and employees' psychological well-being.

Method

Sample and Procedure

In order to increase the generalizability of our findings, we collected data using three samples from different organizational settings. Employees composing the three samples were invited, by email, to complete a self-administered electronic survey regarding their attitudes and perceptions at work. More precisely, the human resources department of each of the three companies sent our online questionnaire to several departments for internal distribution. The HR managers were not in a position to confirm that all members of these departments received the questionnaire and thus to provide us with the exact number of employees who were exposed to the invitation to respond. Therefore, it is impossible for us to calculate an exact response rate. The data were collected as part from a larger research project, involving a larger set of variables. Participation was voluntary and the confidentially and anonymity of participants' responses were guaranteed.

The first sample included 237 employees of a financial company located in Belgium. The second sample consisted of 334 employees of a telecommunications company located in Belgium. The third sample comprised 182 employees of a Belgian transport company. Table 1 provides more details on the demographic information for each sample.

Measures

For each sample, POS, employees' psychological empowerment and psychological well-being were measured in exactly the same way. For all measures, participants were invited to indicate the extent to which they agree with each statement using a seven-point Likert-type scale (1 = "*Strongly disagree*" to 7 = "*Strongly agree*").

POS. (α = .88, sample 1, α = .88, sample 2, and α = .89, sample 3). We measured POS

using 8 items from the Survey of Perceived Organizational Support developed by [5]. As previously stated by some scholars [3], the original (36-item) scale is unidimensional and has high internal reliability, so using a short version of this scale is not problematic. A sample item is "*My organization really cares about my well-being*".

Psychological Empowerment. (α = .90, sample 1, α = .89, sample 2, and α = .91, sample 3). Employees' psychological empowerment was assessed using Spreitzer's well-known 12-item scale [9], which has been successfully validated in previous research (e.g., [9]). This scale consisted of four subscales, each composed of three items, to assess the dimensions of meaning, competence, self-determination, and impact of the psychological empowerment construct. Sample items are "*The work I do is very important to me*" (meaning dimension), "*I am self-assured about my capabilities to perform my work activities*" (competence dimension), "*I have considerable opportunity for independence and freedom in how I do my job"* (self-determination dimension), and "*I have significant influence over what happens in my department*" (impact dimension).

Psychological well-being. (α = .88, sample 1, α = .88, sample 2, and α = .91, sample 3). Employee psychological well-being was measured using 10 items from the scale developed by Massé et al. [17]. These items were also used and validated by Gilbert, Dagenais-Desmarais, and Savoie [18] (see serenity dimension). A sample item is "*I feel healthy and in good shape*".

Control variables. Age, gender, organizational tenure, and level of education were assessed using one item for each socio-demographic variable. As recommended by Becker and his colleagues [19], we empirically examined the relationships between our potential control variables and the dependent variables included in our final model (i.e., psychological empowerment and psychological well-being). As indicated in Table 2, in Sample 1, education is positively correlated to psychological empowerment (r = .19, p < .01) and gender is

positively correlated to psychological well-being (r = .15, p < .05). As reported in Table 3, none of the potential control variables were correlated to any of our dependent variables in Sample 2. Finally, as displayed in Table 4, in Sample 3, only gender is positively related to psychological well-being (r = .17, p < .05). Therefore, for Sample 1 and 3, following the recommendation of Becker [20] and [19], we performed our analyses with and without the socio-demographic variables significantly related to our dependent variables as controls. As the pattern of results was identical with and without these control variables in each sample, their inclusion did not seem to alter the interpretation of the research findings. As recommended [20], we thus reported in the present research the results without control variables to lessen the complexity of our model tested.

Data analyses

Data from each sample was analyzed following a two-step approach using LISREL 8.8 software. Due to the small size of two of our samples (i.e., Sample 1, N = 234 and Sample 3, N = 182) relative to the number of parameters to be estimated, we decided to reduce the number of indicators per latent factor. More precisely, we used the partial disaggregation method of Bagozzi and Edwards [21] and created three continuous manifest indicators for the POS latent variable and the psychological well-being latent variable. Next, we first performed confirmatory factor analyses in order to assess the hypothesized measurement model. Second, we tested the hypothesized relationships between our latent variables (POS, psychological empowerment, and psychological well-being) using structural equation modeling (SEM), with the significance level set at p < .05. Finally, the indirect effects for mediation were tested using Hayes' process macro (Model 4, 5000 bootstrap) [22] in SPSS 26.

Results

Confirmatory Factor Analyses

Confirmatory factor analyses were conducted in order to assess the distinctiveness of the three variables included in our hypothesized model. Results reported that a three-factor model including POS, psychological empowerment, and psychological well-being did not fit the data well in each sample (Sample 1: (χ^2(132) = 2013.39, CFI = .74, NNFI = .69, RMSEA = .25; Sample 2: (χ^2(132) = 2689.74, CFI = .71, NNFI = .67, RMSEA = .24; Sample 3: (χ^2(132) = 1347.69, CFI = .76, NNFI = .72, RMSEA = .23). Therefore, as it has been suggested that psychological empowerment is a second-order construct containing four factors and as it has been done in prior studies studying the psychological empowerment construct (e.g., [31]), we tested a CFA model that comprised a second-order factor for the psychological empowerment construct. The results indicated that this model had a very good fit in each sample (Sample 1: (χ^2(128) = 364.04, CFI = .97, NNFI = .95, RMSEA = .09; Sample 2: (χ^2(128) = 319.34, CFI = .93, NNFI = .97, RMSEA = .07; Sample 3: (χ^2(128) = 190.38, CFI = .99, NNFI = .98, RMSEA = .05). Furthermore, the values of the factor loadings on their respective latent construct ranged from .85/.82/.85 to .87/.91/.92 for POS (Sample 1, 2, and 3), from .83/.83/.86 to .96/.90/.92 for meaning (Sample, 1, 2, and 3), from .85/.83/.67 to .94/.96/.94 for competence (Sample 1, 2, and 3), from .84/.80/.88 to .95/.96/.97 for self-determination (Sample 1, 2, and 3), from .84/.83/.85 to .99/.96/.96 for impact (Sample 1, 2, 3), and from .87/.83/.86 to .90/.90/.92 for psychological well-being (Sample 1, 2, and 3). The four dimensions of psychological empowerment also loaded satisfactory on their second-order latent factor (from .56/.43/.58 to .82/.73/.77; Sample 1, 2, and 3).

Descriptive Statistics and Relationship among Variables

The means, standard deviations, reliability coefficients (Cronbach alphas) and correlations among all the study variables for Sample 1, 2 and 3 are presented in Table 2, 3, and 4, respectively.

INSERT TABLES 2 – 3 – 4 ABOUT HERE

Structural Equation Modelling

Building on the measurement model including a second-order factor for psychological empowerment, we tested the hypothesized structural model positing psychological empowerment as a mediator in the POS-well-being relationship. This model accurately fitted the data in each sample (Sample 1: ($\chi^2(129) = 364.05$, CFI = .97, NNFI = .96, RMSEA = .09; Sample 2: ($\chi^2(129) = 319.68$, CFI = .98, NNFI = .97, RMSEA = .07; Sample 3: ($\chi^2(129) = 189.58$, CFI = .99, NNFI = .98 RMSEA = .05). Furthermore, we tested an alternative model adding a direct path between POS and employees' psychological well-being. However, this alternative model was not superior to the hypothesized model in any of the samples (chi-square difference test; [23]) ($\Delta\chi^2(1) = .01$, *n.s.*, Sample 1; $\Delta\chi^2(1) = .34$, *n.s.*, Sample 2; $\Delta\chi^2(1) = .80$, *n.s.*, Sample 3). The hypothesized model was thus retained as the model that best depicts the data and the standardized parameter estimates for this model are shown in Figure 1. As displayed in this figure, POS has a positive effect on employees' psychological empowerment ($\gamma = .57$, $p < .001$; $\gamma = .56$, $p < .001$, $\gamma = .66$, $p < .001$, for Sample, 1, 2, and 3 respectively), which in turn is positively related to employees' psychological well-being ($\beta = .63$, $p < .001$, $\beta = .58$, $p < .001$, $\beta = .54$, $p < .001$, for Sample 1, 2, and 3, respectively). In addition, the indirect effect of POS on employees' psychological well-being through psychological empowerment is significant (indirect effect = .20, BCa 95% CI = [.14; .29], Sample 1; indirect effect = .14, BCa 95% CI = [.07; .22], Sample 2; indirect effect = .17, BCa 95% CI = [.07; .28]) ([22]; Process macro, Model 4, 5000 bootstrap sample), supporting our Hypotheses 1 and 2.

INSERT FIGURE 1 ABOUT HERE

Discussion

The aim of the present research was to examine the relationships between POS, employees' psychological empowerment and their psychological well-being. First, we predicted a positive association between POS and psychological empowerment (Hypothesis 1). In addition, we explored the process of why POS fosters employees' psychological well-being by investigating the mediating role played by employees' psychological empowerment (Hypothesis 2). Using three different samples, the results of SEM analyses reported that POS positively predicts employees' psychological empowerment, supporting Hypothesis 1. In addition, our findings showed that employees' psychological empowerment mediates the positive relationship between POS and employees' psychological well-being, supporting Hypothesis 2. In other words, the more employees feel supported by their employing organization, the more they display psychological empowerment which, in turn helps them to experience a better psychological well-being.

By highlighting a new driver of employee psychological empowerment (i.e. POS), our research contributes to the body of knowledge on the psychological empowerment construct. Indeed, while previous authors have suggested that managerial practices may be able to positively influence employees' empowerment (e.g., [9]), to our knowledge, no study to date has explored the precise relationship between POS and psychological empowerment. This result is consistent with previous research that pointed out a positive relationship between POS and employee psychological empowerment (e.g., [8;13]) and responds to the call by Chiang and Hsieh [8] and Eisenberger and Stinglhamber [1] to examine this relationship further.

In addition, the present research contributes to organizational support theory in several ways. First, most research on the relationship between the POS construct and employee well-

being generally focuses on work-related aspects of employee well-being such as burnout (e.g., [24]), psychological strains at work (e.g., [25; 26]) or job satisfaction (e.g., [27]). This earlier work did not consider the possibility that POS may have an impact on employee well-being that goes beyond the work context. By showing a positive association between POS and overall employee psychological well-being, the present research expands the scope of the influence of POS on well-being outcomes that are not specific to the work context.

Second, our findings highlight a new process that explains the positive relationship between POS and employee psychological well-being. More precisely, we shed light on the mediating role of psychological empowerment in this relationship. Although researchers on the topic of POS have repeatedly suggested the need for further research on processes that might explain the link between POS and employee health and well-being [4; 2], no prior study has attempted to test psychological empowerment as one of these potential mechanisms. Our findings therefore expand the literature on organizational support theory and are consistent with the recent suggestion by Schermuly and Meyer [16] that psychological empowerment has an impact on employee well-being outside of work.

Nevertheless, we must recognize that in this research we focused on the mediating role played by an overall construct of psychological empowerment and did not examine the precise influence of each of its four dimensions. However, as Butts et al. [14] indicated in their paper, “each of the four dimensions of empowerment stems from a rich conceptual and empirical background” (p. 132) (e.g., competence is closely related to Bandura’s concept of self-efficacy [28], meaning and self-determination are closely related to Hackman and Oldham’s job characteristics [29]). Given that previous research has already investigated the positive relationship between POS and employee self-efficacy (e.g., [25]), a promising avenue for future research would be to specifically examine which of the four dimensions of psychological empowerment (i.e. meaning, competence, self-determination, and impact) is

most strongly affected by POS and which of these four dimensions most strongly influences employee psychological well-being.

Limitations and Directions for Future Research

First of all, in all samples, we used a cross-sectional design to test our hypotheses, thus preventing us from drawing causal inferences about the relationships found in the present research. Consequently, we are not able to assess whether POS is the cause of psychological empowerment at work, nor can we assess whether psychological empowerment causes employee psychological well-being. Researchers should conduct longitudinal studies with repeated measurement designs in the future to assess the causal relationships between our constructs.

Second, we relied on self-reported measures for our three samples. Although the use of self-reported measures was the most appropriate technique for assessing our constructs related to employee perceptions, it may have somewhat artificially inflated the relationships found in our research (i.e., common method variance bias; [30]). Therefore, to assess whether the common method variance bias had an impact on our data, we performed the Harman single-factor test [30]. The results of this test indicated a very poor fit for a one-factor model in each of our three samples, suggesting that the common method variance bias is not as troublesome as we might have feared. However, future research could benefit from replicating our research and following recommendation of scholars such as Podsakoff et al. [30] by adding a temporal separation between the measurements of the predictor and the criterion variables.

Third, an important limitation of this research is that a selection bias may have occurred. Indeed, we could not calculate an accurate response rate, nor we could assess the representativity of our samples. Although our findings were replicated among three samples among workers from different companies, it is difficult to assess the extent to which our

results would generalize to broader populations of workers. Future research is needed to replicate our results in a variety of organizations and industrial settings.

Fourth, in this research, we focused our empirical investigation exclusively on the impact of the POS-psychological empowerment link on employee psychological well-being. Since the association between POS and psychological empowerment has been rather under-examined in the empirical literature, future research could assess the consequences of this relationship on outcomes beneficial for organizations such as employee performance, counterproductive work behaviours or actual turnover.

Practical Implications

The results of this study indicate that POS in empowering employees psychologically helps them to experience greater psychological well-being in their life outside of work. The present research therefore suggests some practical implications for managers and practitioners. First, in order to create a greater feeling of psychological empowerment among employees, managers should increase the level of support provided to employees within their organizations. To foster better perceptions of organizational support, managers could provide workers with assistance in stressful situations, promote fair and equitable treatment in all aspects of management practices, offer individualized benefits to employees, and foster a supportive social network [31; 1]. In addition, offering effective training to employees, improving communication, and training organizational leaders to support their subordinates can also help improve perceptions of organizational support (e.g., [1; 31]).

References

1. Eisenberger, R., & Stinglhamber, F. (2011). *Perceived organizational support: Fostering enthusiastic and productive employees*. Washington, DC: APA Books.
2. Kurtessis, J. N., Eisenberger, R., Ford, M. T., Buffardi, L. C., Stewart, K. A., & Adis, C. S. (2017). Perceived organizational support a meta-analytic evaluation of organizational support theory. *Journal of Management*. doi:0149206315575554.
3. Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology, 87*, 698-714.doi:10.1037//0021-9010.87.4.698
4. Baran, B. E., Shanock, L. R., & Miller, L. R. (2012). Advancing organizational support theory into the twenty-first century world of work. *Journal of Business and Psychology*, *27*, 123-147.
5. Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived organizational support. *Journal of Applied Psychology, 71*, 500-507.doi:10.1037//0021 9010.71.3.500
6. Van Horn, J. E., Taris, T. W., Schaufeli, W. B., & Schreurs, P. J. G. (2004). The structure of occupational well-being: A study among Dutch teachers. *Journal of Occupational and Organizational Psychology*, *77*, 365-375. doi:10.1348/0963179041752718
7. Diener, E., Suh, E. M., Lucas, R. E., & Smith, H. L. (1999). Subjective well-being: Three decades of progress. *Psychological Bulletin*, *125*, 276–302.
8. Chiang, C. F., & Hsieh, T. S. (2012). The impacts of perceived organizational support and psychological empowerment on job performance: The mediating effects of organizational citizenship behavior. *International Journal of Hospitality Management*, *31*, 180–190. doi:10.1016/j.ijhm.2011.04.011

9. Spreitzer, G. M. (1995). Psychological empowerment in the workplace: Dimensions, measurement, and validation. *Academy of Management Journal*, *38*, 1442-1465.
10. Audenaert, M., Vanderstraeten, A., & Buyens, D. (2016). When affective well-being is empowered: The joint role of leader-member exchange and the employment relationship. *The International Journal of Human Resource Management*, 1-20.
11. Blau, P. M. (1964). *Exchange and power in social life*. New York, NY: John Wiley.
12. Seibert, S. E., Wang, G., & Courtright, S. H. (2011). Antecedents and consequences of psychological and team empowerment in organizations: A meta-analytic review. *Journal of Applied Psychology*, *96*, 981-1003. http://dx.doi.org/10.1037/a002267
13. Chow, I. H. S., Lo, T. W. C., Sha, Z., & Hong, J. (2006). The impact of developmental experience, empowerment, and organizational support on catering service staff performance. *International Journal of Hospitality Management*, *25*, 478-495.
14. Butts, M. M., Vandenberg, R. J., DeJoy, D. M., Schaffer, B. S., & Wilson, M. G. (2009). Individual reactions to high involvement work processes: investigating the role of empowerment and perceived organizational support. *Journal of Occupational Health psychology*, *14*, 122.
15. Fong, K. H., & Snape, E. (2015). Empowering leadership, psychological empowerment and employee Outcomes: Testing a multi-level mediating model. *British Journal of Management*, *26*, 126-138.
16. Schermuly, C. C., & Meyer, B. (2016). Good relationships at work: The effects of Leader-Member Exchange and Team-Member Exchange on psychological empowerment, emotional exhaustion, and depression. *Journal of Organizational Behavior*, *37*, 673-691. doi: 10.1002/job.2060
17. Massé, R., Poulin, C., Dassa, C., Lambert, J., Bélair, S., & Battaglini, A. (1998). The structure of mental health: Higher-order confirmatory factor analyses of psychological

distress and well-being measures. *Social Indicators Research, 45*, 475-504. DOI: http://dx.doi.org/10.1023/A:1006992032387

18. Gilbert, M. H., Dagenais-Desmarais, V., & Savoie, A. (2011). Validation d'une mesure de santé psychologique au travail. *Revue européenne de psychologie appliquée/European Review of Applied Psychology*, *61*, 195-203.
19. Becker, T. E., Atinc, G., Breaugh, J. A., Carlson, K. D., Edwards, J. R., & Spector, P. E. (2015). Statistical control in correlational studies: 10 essential recommendations for organizational researchers. *Journal of Organizational Behavior*. Advance online publication. doi:10.1002/job.2053
20. Becker, T. E. (2005). Potential problems in the statistical control of variables in organizational- research: A qualitative analysis with recommendations. *Organizational Research Methods*, *8,* 274-289.doi:10.1177/1094428105278021
21. Bagozzi, R. P., & Edwards, J. R. (1998). A general approach for representing constructs in organizational research. *Organizational Research Methods, 1*, 45-87.
22. Hayes, A. F. (2013). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. Guilford Press.
23. Bentler, P. M., & Bonett, D. G. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin, 88,* 588-606. doi:10.1037/0033-2909.88.3.588
24. Kang, B., Twigg, N. W., & Hertzman, J. (2010). An examination of social support and social identity factors and their relationship to certified chefs' burnout. *International Journal of Hospitality Management, 29,* 168–176.
25. Caesens, G., & Stinglhamber, F. (2014). The relationship between perceived organizational support and work engagement: The role of self-efficacy and its

outcomes. *Revue Européenne de Psychologie Appliquée/European Review of Applied Psychology*, *64*, 259-267.

26. Karagonlar, G., Eisenberger, R., & Aselage, J. (2016). Reciprocation wary employees discount psychological contract fulfillment. *Journal of Organizational Behavior*, *37*, 23-40. doi:10.1002/job.2016
27. Caesens, G., Stinglhamber, F., & Luypaert, G. (2014). The impact of work engagement and workaholism on well-being: The role of work-related social support. *Career Development International*, *19*, 813-835.
28. Bandura, A. (2000). Cultivate self-efficacy for personal and organizational effectiveness. In E. A. Locke (Ed.), Handbook of principles of organization behavior (pp.120–136). Oxford, UK: Blackwell.
29. Hackman, J. R., & Oldham, G. R. (1980). Work redesign (Reading, MA: Addison-Wesley, 1980).
30. Podsakoff, P. M., MacKenzie, S. B., Lee, J.-Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, *88*, 879-903.doi:10.1037/0021-9010.88.5.879
31. Eisenberger, R., Malone, G. P., & Presson, W. D. (2016). Optimizing Perceived Organizational Support to Enhance Employee Engagement. *Society for Human Resource Management and Society for Industrial and Organizational Psychology;*

Table 1

Characteristics of the Three Samples (Sample 1: N = 237; Sample 2: N = 334; Sample 3: N =182)

		Sample 1		Sample 2		Sample 3	
Variable		*N*	*%*	*N*	*%*	*N*	*%*
Industry sector		Finance		Telecommunication		Transport	
Size of the organization		4100		14000		2201	
Gender	Women	118	49.79%	127	38.02%	71	39.01%
	Men	119	50.21%	203	60.78%	109	59.89%
	No response	--	--	4	1.20%	2	1.10%
Age	18-25 years	3	1.27%	4	1.20%	5	2.75%
	25-35 years	55	23.21%	30	8.98%	45	24.73%
	35-45 years	73	30.80%	141	42.22%	60	32.97%
	45-55 years	69	29.11%	111	33.23%	42	23.08%
	55-65 years	37	15.62%	44	13.17%	28	15.38%
	No response	--	--	4	1.20%	2	1.10%
Organizational tenure	< 5 years	6	2.53%	16	4.79%	84	46.15%
	5-10 years	53	33.36%	29	8.68%	37	20.33%
	10-15 years	48	20.25%	70	20.96%	21	11.54%
	15-20 years	28	11.81%	80	23.95%	3	1.65%
	20-25 years	33	13.92%	66	19.76%	2	1.10%
	> 25 years	69	29.11%	69	20.66%	33	18.13%
	No response	--	--	4	1.20%	2%	1.10%
Education	Lower secondary education	9	3.80%	10	2.99%	5	2.74%
	Higher secondary education	56	23.63%	92	27.54%	349	18.68%
	Bachelor degree	117	49.37%	136	40.72%	53	29.12%
	Master degree	44	18.57%	66	19.76%	60	32.97%
	PhD or higher degree	11	4.64%	26	7.8%	28	15.38%
	No response	--	--	4	1.2%	2	1.10%

Table 2
Sample 1. Descriptive Statistics and Intercorrelations among Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Gender	--	--	--	.18**	.17**	-.11	.05	.02	.15*
2. Age	--	--		--	.79***	.20**	.13*	-.00	.04
3. Organizational tenure	--	--			--	.29***	.09	-.06	.00
4. Education	--	--				--	.05	.19**	.04
5. POS	4.28	1.03					(.88)	.49***	.32***
6. Empowerment	5.10	0.96						(.90)	.49***
7. Psychological Well-being	5.19	0.96							(.88)

Note. $N = 237$. Internal reliabilities (coefficient alphas) are given in parentheses on the diagonal. POS= perceived organizational support. Females were coded 0 and Males were coded 1. Age was divided into 5 categorical classes (1 = 18-25 years, 2 = 25-35 years, 3 = 35-45 years, 4 = 45-55 years, 5 = 55-65 years). Organizational tenure was divided into six categorical classes (1 = working for the organization for less than 5 years, 2 = 5-10 years, 3 = 10-15 years, 4 = 15-20 years, 5 = 20-25 years, 6 = more than 25 years). Education was coded 1 = lower secondary education, 2 = higher secondary education, 3 = non-university higher education, 4 = university degree, and 5 = post-graduate degree.

$^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 3

Sample 2. Descriptive Statistics and Intercorrelations among Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Gender	--	--	--	.29***	.17**	.04	-.01	.07	.02
2. Age	--	--		--	.71***	-.13*	-.07	-.05	-.01
3. Organizational tenure	--	--			--	-.28**	-.05	-.07	-.08
4. Education	--	--				--	.02	.05	.03
5. POS	4.33	1.07					(.88)	.46***	.37***
6. Empowerment	5.34	0.84						(.89)	.44***
7. Psychological Well-being	5.19	0.98							(.88)

Note. $N = 334$ (excepted for gender $N = 330$, age $N = 330$, organizational tenure $N = 330$, education $N = 330$). Internal reliabilities (coefficient alphas) are given in parentheses on the diagonal. POS= perceived organizational support. Females were coded 0 and Males were coded 1. Age was divided into five categorical classes (1 = 18-25 years, 2 = 25-35 years, 3 = 35-45 years, 4 = 45-55 years, 5 = 55-65 years). Organizational tenure was spitted into six categorical classes (1 = working for the organization for less than 5 years, 2 = 5-10 years, 3 = 10-15 years, 4 = 15-20 years, 5 = 20-25 years, 6= more than 25 years). Education was coded 1 = lower secondary education, 2 = higher secondary education, 3 = non-university higher education, 4 = university degree, and 5 = post-graduate degree. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

Table 4
Sample 3. Descriptive Statistics and Intercorrelations among Variables

Variable	*M*	*SD*	1	2	3	4	5	6	7
1. Gender	--	--	--	.21**	.04	-.13†	.04	.11	.17*
2. Age	--	--		--	.61***	-.35***	-.13†	.13†	.03
3. Organizational tenure	--	--			--	-.58***	-.10	.01	.03
4. Education	--	--				--	.05	.02	-.07
5. POS	4.29	1.13					(.89)	.55***	.36***
6. Empowerment	5.36	0.97						(.91)	.44***
7. Psychological Well-being	5.38	1.02							(.91)

Note. N = 182 (excepted for gender N = 180, age N = 180, organizational tenure N =180, education N =180). Internal reliabilities (coefficient alphas) are given in parentheses on the diagonal. POS= perceived organizational support. Females were coded 0 and Males were coded 1. Age was divided into five categorical classes (1 = 18-25 years, 2 = 25-35 years, 3 = 35-45 years, 4 = 45-55 years, 5 = 55-65 years). Organizational tenure was divided into six categorical classes (1 = working for the organization for less than 5 years, 2 = 5-10 years, 3 = 10-15 years, 4 = 15-20 years, 5 = 20-25 years, 6= more than 25 years). Education was coded 1 = lower secondary education, 2 = higher secondary education, 3 = non-university higher education, 4 = university degree, and 5 = post-graduate degree. $^{*}p < .05$. $^{**}p < .01$. $^{***}p < .001$.

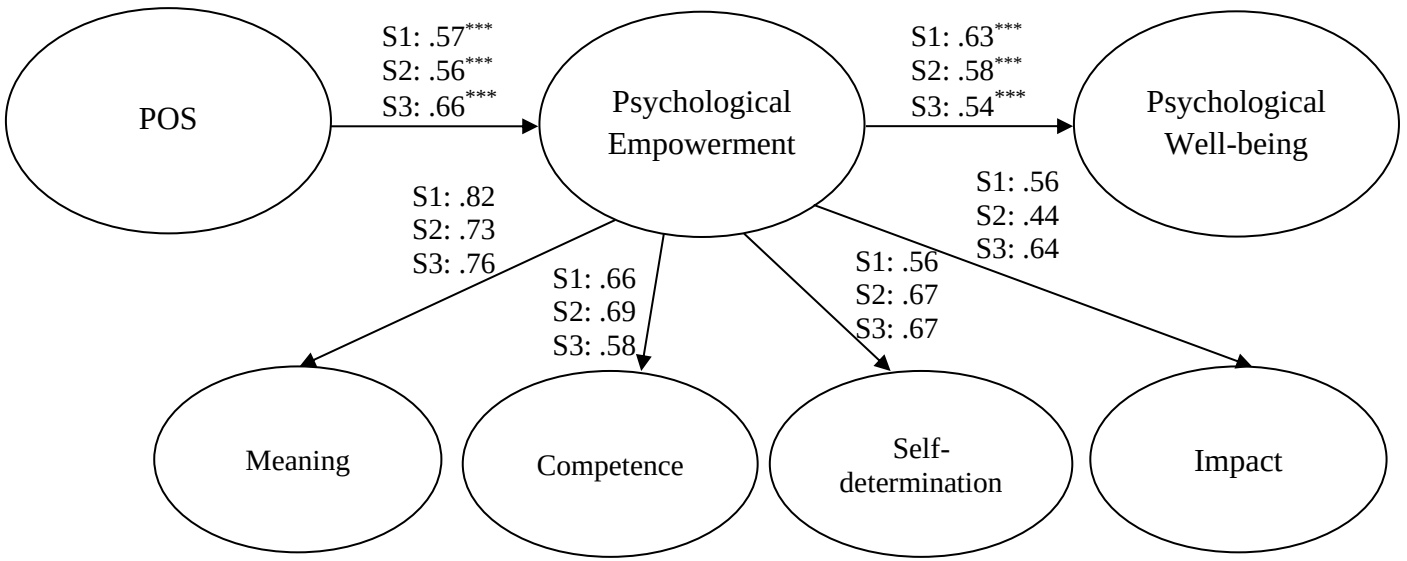

Figure 1. Completely standardized path coefficients for the retained model and standardized factor loadings of the first-order subdimensions on the second-order psychological empowerment factor in the three samples. For the sake of clarity, only structural relationships are shown.

***$p < .001$.