

# Is “Happy Worker” more Productive?

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## Abstract

The purpose of this research is to examine empirically the effects that job satisfaction and well-being at work generate on the individual job performance, investigating the moderating role that the components of the organizational structure play in this relationship. This way, the hypothesis consists in the components of the organizational structure will positively enhance the relationship between well-being at work, job satisfaction and individual job performance. The results of the regression model showed that the variables "age", "well-being at work", "job satisfaction", and "components of organizational structure" are responsible for explaining 64% of the variance of the variable criteria, individual job performance. It was also observed the moderating role of the variable "components of organizational structure" because its inclusion increased the explained variance of the dependent variable. After all the discussions developed, it appears that the two main contributions were: 1) the predictive effect of well-being at work in relation to performance, and 2) identify the moderating effect of the components of the organizational structure.

## Introduction

Based on the assumptions of the human relations movement, the hypothesis "happy worker, productive," says happy employees whose needs are satisfied in their workplace, have greater performance than employees unhappy. However, despite being a popular hypothesis does not explain in detail why happiness and self-realization leads to better performance (Sonntag, 2002). This way, the aim of this research is examine empirically the effects that job satisfaction and well-being at work generate on individual job performance, investigating the moderating role that the components of the organizational structure play in this relationship. To achieve the main objective, some secondary objectives were proposed: 1) test the predictive effect of job satisfaction, well-being at work, and personal and professional variables on individual job performance, and; 2) test the moderating effect of the components of the organizational structure in the relationship between job satisfaction, well-being at work and individual job performance.

Warr (2007) suggests that significant associations between happiness and performance are likely to arise from a third variable in the work environment, such that certain features of the work environment may increase the relationship between the well-being of the employee and certain work activities. In particular, the empirical evidence presented in the research of Rego (2009) suggests that the affective well-being at work explains significant variance of a self-report measure for individual job performance. Employees with high levels of affective well-being at work describe themselves as holders of high individual performance. At the end, the author proposes that future research include moderators to explain the connections between positive emotions and performance.

The choice of organizational structure as a context variable to be studied is due to the fact that the relationship between structure and human factor is an indispensable condition for

the success of any organization (Vasconcellos & Hemsley, 2002). Thus, do not consider their aspects or components would be to overlook the importance of structure in the individual job performance. Based on that, we can say that the structure is transversal to all that happens in the organization. Knowledge of the role of structure components enable trace strategies and practices to enhance the relationship studied.

### **Hypothesis and Theoretical Model**

This research begins with proposals made by Rego (2009) and Warr (2007). Considering the number of variables involved and the relations between themselves, we discussed below relationships between variables that were considered for the development of the hypothesis and hypothetical theoretical model.

#### **Well-being at work as a predictor of individual performance**

Theoretical and empirical evidences suggest that the promotion of psychological well-being seems to be a good way to promote individual and organizational performance (Wright & Cropanzano, 2000). The results obtained in the study of Rego (2009) showed that the affective well-being at work explains 23% of the variance of a significant measure of individual job performance. Also concerned to understand the relationship between psychological well-being and job performance, Wright and Cropanzano (2000) proposed a comparative test of the relative contribution of job satisfaction and psychological well-being as predictors of individual job performance. Two analyzes realized by the authors showed the relative contribution of well-being in performance prediction.

The recent production shows a tendency to study well-being with a negative perspective, i. e., the relationships studied focus on emotional exhaustion, for example. However, we consider that the results of these studies are important, given that were found evidence of emotional exhaustion is negatively related with job performance (Cropanzano, Rupp, & Byrne, 2003;. Halbesleben & Bowler, 2007;. Janssen et al, 2010). It is important to note also that Kaplan, Bradley, Luchman and Haynes (2009) pointed out the existence of a predictive relationship of well-being in relation to performance. Based on the propositions presented, appears that well-being at work is a possible predictor of individual job performance. This inference raises the hypothesis 1a: "Well-being at work is positively associated with individual job performance".

#### **Job satisfaction as a predictor of individual performance**

According to Wright and Cropanzano (2000) there are important empirical evidence that indicates the existence of correlations between variables satisfaction and job performance. The research of Coelho Jr. (2009) demonstrated that satisfaction influences individual job performance; however, this influence depends on the unit in which the employee is allocated. In reviewing the recent literature, studies have pointed to a positive predictive relationship between job satisfaction and job performance, with emphasis in most of these studies, on the task performance (Coelho Jr. & Borges-Andrade, 2011; Edwards, Bell, Arthur Jr., & Decuir, 2008; Fischer, 2003; Schleicher, Watt, & Greguras, 2004;. Sy, Tram, & O'Hara, 2006).

In contrast, the comparative research conducted by Wright and Cropanzano (2000) found that job satisfaction does not offer a contribution on the prediction of job performance; however, the authors alert that these results may have been affected by the modest sample size used. The study by Bowling (2007), based on a meta-analysis, highlights the relationship between job satisfaction and job performance is not relevant, so that variables such as personality traits can minimize the intensity of this relationship. Therefore, the findings of

these authors indicate a predictive relationship between satisfaction and performance, but not significantly influenced by other aspects, resulting in a call for more research involving other variables in this relationship and use of representative samples. The previous propositions show a predictive relationship of job satisfaction on individual job performance, promoting the construction of hypothesis 1b, "Job satisfaction is positively associated with individual performance at work".

### **Professional and personal variables and individual performance at work**

The study undertaken by Waldman and Avolio (1986) found that, for younger employees, there was a consistent and modestly positive correlation between age and performance. Giniger, Dispenzien and Eisenberg (1983) found that older workers had more experience, and concluded that the greater is the experience, better is performance. Somehow, it is evident that the personal and professional variables have some relationship to performance; therefore, it is noticed that the relationships found could be more significant if other variables were involved. Precisely because of this influence, however small, is interest in this research include this relationship in the model, so we have the hypothesis 1c: "Professional and personal variables are positively associated with individual performance at work".

### **Organizational structure, well-being at work, job satisfaction and individual performance**

According to Sonnentag and Frese (2002) performance is impacted by the characteristics of the context, not just individual. The main research on well-being at work refer to the general well-being, disconnected from any context. Researches have revealed the influence of organizational factors or perceptions of organizational aspects on the individual well-being (Paschoal & Tamayo, 2008). Several studies have demonstrated the impact of autonomy on the variables well-being at work, job satisfaction and job performance (Langfred, 2005; Langfred & Moye, 2004; Leach, Wall, & Rogelberg, 2005;. Morgeson, Delaney-Klinger, & Hemingway, 2005;. Ozer, 2011; Stewart, 2006), demonstrating the importance of this component of the organizational structure. In visit made in the recent literature, unfortunately no studies that addressed all components of the organizational structure were found, but the components studied – feedback (Anseel & Lievens, 2007; Ladeira et al, 2012)., authority (Lin et al, 2013); formalization, decision making, centralization (Aryee et al, 2004) – show evidence that organizational structure influences the variables of interest to this study: well-being at work, job satisfaction and performance. Based on all these considerations, we constructed a hypothesis to be studied, expressed below:

*H1:* The components of the organizational structure will positively enhance the relationship between well-being at work, job satisfaction and individual job performance.

### **Procedures for Collecting Data**

For the questionnaire, four instruments were used: a) Self-Assessment Performance at Work Scale (Coelho Jr., Borges-Andrade, Oliveira, & Pereira, 2010), with three factors: "self-management of performance" (13 items;  $\alpha = 0.952$ ); "performance oriented to organizational objectives" (8 items,  $\alpha = 0.941$ ), and; "efficiency and performance tasks" (6 items,  $\alpha = 0.820$ ). b) Well-being at Work Scale (Paschoal & Tamayo, 2008), with three factors: "realization" (8 items,  $\alpha = 0.923$ ), "positive affect" (10 items,  $\alpha = 0.930$ ), and; "negative affect" (12 items,  $\alpha = 0.919$ ). c) Job Satisfaction Scale (Siqueira, 2008), with five

factors, each consisting of five items: "satisfaction with pay" ( $\alpha = 0.930$ ); "satisfaction with colleagues" ( $\alpha = 0.895$ ); "satisfaction with management" ( $\alpha = 0.916$ ); "satisfaction with the nature of work" ( $\alpha = 0.862$ ), and; "satisfaction with promotions" ( $\alpha = 0.914$ ). Perception of Components of Organizational Structure Scale (Coelho Jr., Quadro, Oliveira, & Maciel, no date) with three factors: "centralization, specialization and communication" (17 items,  $\alpha = 0.953$ ); "formalization" (14 items,  $\alpha = 0.933$ ), and; "informal structure" (7 items,  $\alpha = 0.779$ ). The questionnaire also included questions about demographics data of the respondent (personal and professional variables).

To compose the scope to be searched, two organizations were selected: a clinical laboratory and a federal court of justice. Each organization has authorized the participation of 100 employees from different areas, totaling 200 participants. At the end, 51 completed questionnaires were received from the federal court of justice and 83 questionnaires collected in the clinical laboratory. Considering the available population, the rate of return was 67%. To meet the minimum sample size for statistical procedures such as multiple regressions and correlations with more than one independent variable and one dependent variable, Tabachnick and Fidell (2007) propose a rule in which the sample size (N) must be equal or greater than the result of the formula:  $50 + 8m$  (where "m" is the number of independent variables in the model). In the proposed model in this study, the independent variables are three: "well-being at work" is composed by 3 factors, "job satisfaction" is composed by 5 factors, and "components of organizational structure" is composed by 3 factors. From this premise, the recommended minimum sample for this study should be 138 participants. However, the obtained sample was 134 participants; considering the proximity of the amount of participants achieved with the recommended sample, and due to the exploratory nature of this study, this number is suitable for the intents of this research.

## Results

The results showed that most participants (47.9%) are young, having ages between 26 and 35 years. And the majority of respondents were female (73.4%). A significant portion of the participants (40.3%) have only completed high school. There is a certain balance in length of work in the organization, with a slight majority of participants had spent more than five years at work (23.4%). The majority is composed of respondents having effective positions in the organization to which they belong. After the analyzes with and without outliers, we chose to use the database with outliers to this research, once the presence of these extreme cases possible to obtain better results, due to its profile, since can be influential individuals in the organization.

Based on the hypothesis, the proposed relation has four variables and the statistical procedure used to test this hypothesis was multiple linear regression. In the case of this study, the dependent variable is "individual job performance". Consequently, the predictor variables are "well-being at work", "job satisfaction" and "components of the organizational structure". The personal and professional variables were also seen as independent variables. Noteworthy that the raw data did not show a normal distribution; and to meet this assumption, the variables were transformed into standardized Z scores.

Returning to the hypothesis, we highlight the fact that was proposed that the components of the organizational structure will enhance the relationship between the other variables. This means the proposition of a moderation ratio, and multiple regression can be used to identify moderating variables. To test the proposed moderation, Abbad and Torres (2002) state that must be observed if A is a good predictor of C. If so, it checks if A and B predicts C, and the interaction between A and B, calculated by the product  $A \times B$ , also predicts C. If the interaction is a statistically significant predictor of C, B is a moderating

variable. In this research, it can be assumed that the variables “well-being at work”, “job satisfaction” and personal and professional variables assumed the role of A, the variable “individual job performance” assumed the role of C, and variable “components of organizational structure” assumed the role of B.

Thus, the first step was to verify the predictive relationship of the variables “well-being at work”, “job satisfaction” and personal and professional variables with the variable criteria “individual job performance”. The variables were subjected to stepwise regression analysis, revealed that the factors of well-being at work, “positive affect” and “negative affect”, and the professional variable “nature of the position” showed significance for this relationship. The indices obtained in this model are shown in Table 1.

Table 1: Regression results - Variable Criteria: Individual Job Performance

Predictor Variable	Models ( $\beta$ values)		
	I	II	III
Positive Affects	0,523***	0,506***	0,471***
Negative Affects		-0,202*	-0,223**
Nature of the Position			0,187*
R <sup>2</sup>	0,274	0,314	<b>0,348</b>
R <sup>2</sup> Adjusted	0,266	0,300	0,327
R	0,523	0,561	0,590

Note: \*p < 0.05; \*\*p<0.01; \*\*\*p<0.001

The results found in this model demonstrate that this set of variables is responsible for explaining 35% of the variance ( $R^2 = 0.348$ ) of the variable criteria, individual job performance. It is interesting to note that the factor “negative affect” relates negatively with variable criteria, while the other factors relate positively. Considering the hypothesis 1a, we identified a predictive relationship between well-being at work and individual job performance, suggesting that individuals with positive emotions at work show an increase in performance levels, while individuals with negative emotions at work have lower performance levels. Given that the variable “nature of the position” is a categorical, which was transformed to be included in the model, and presents a positive relationship with the dependent variable, it was found that individuals who possess effective positions in the organization tend to present better performances than trainees and outsourced.

With this data, the next step is to test the moderating effect of the variable “components of the organizational structure.” For this, we proceeded the regression with this variable as a predictor of “individual job performance”, with the variables in the previous model. All these variables were also analyzed for the stepwise regression. The results showed that the factor of well-being at work, “positive affect”, factor of job satisfaction, “satisfaction with management”, the personal variable “age”, and factors of organizational structure components, “formalization” and “informal structure” are predictors of variable criteria. The indices obtained for this model are shown in Table 2.

The results found in this model demonstrate that this set of variables is responsible for explaining 64% of the variance ( $R^2 = 0.643$ ) of the criterion variable, “individual job performance”. Compared to the first model tested, this model points to moderator character of the variable “components of organizational structure” because the inclusion of this variable increased the explained variance of the dependent variable. All predictive variables presented in this model were positively related to the variable criteria.

Noteworthy that at the time the variable “components of organizational structure” was inserted into the model, a factor of the variable “job satisfaction” appeared, demonstrating that proposed in the hypothesis, that was the components of the organizational structure increases positively the relationship between well-being at work, job satisfaction and

individual job performance. We also emphasize that the factors "negative affect" and "nature of the position" did not appear in this model.

Table 2: Regression Results with Components of Organizational Structure - Variable Criteria: Individual Job Performance

Predictor Variable	Models ( $\beta$ values)				
	I	II	III	IV	V
Positive Affects	0,593***	0,540***	0,494***	0,498***	0,491***
Formalization		0,455***	0,459***	0,482***	0,447***
Informal Structure			0,196*	0,212**	0,260***
Age				0,176*	0,161*
Satisfaction with Management					0,158*
R <sup>2</sup>	0,351	0,556	0,592	0,622	<b>0,643</b>
R <sup>2</sup> Adjusted	0,342	0,543	0,575	0,600	0,617
R	0,593	0,746	0,769	0,789	0,802

Note: \*p < 0.05; \*\*p<0.01; \*\*\*p<0.001

To conclude the test of moderation, we proceeded with the creation of a predictor variable generated by the product of predictor variables in the model. After creating the "new variable", we proceeded a stepwise regression for the determination of predictive relationship of this new variable to "individual job performance." The result was found that the new variable explains approximately 10% of the variance in the dependent variable. The important thing here is not the value found, but the fact that this interaction is a statistically significant predictor of the variable criteria; therefore, it is evidence that the variable "components of organizational structure" is a moderator of the relationship between well-being at work, job satisfaction, personal and professional variables and individual job performance. Table 3 summarizes the values obtained in this test.

Table 3: Regression results with the product of the predictor variables - Variable Criteria: Individual Job Performance

Predictor Variable	$\beta$ values
Well-being at Work X Job Satisfaction X Personal and Professional Variables X Organizational Structure	0,326**
R <sup>2</sup>	<b>0,106</b>
R <sup>2</sup> Adjusted	0,095
R	0,326

Note: \*p < 0.05; \*\*p<0.01; \*\*\*p<0.001

After performing the steps of regression, and confirmation of the moderating effect of the components of the organizational structure, we have confirmation of the hypothesis proposed in this work, that the components of the organizational structure positively increased the relationship between well-being at work, job satisfaction and individual job performance. The model generated in the regression test is aligned with the proposed theoretical model hypothesized. So, we have to positive affect, formalization, informal structure, age and satisfaction with management, in the studied *locus*, explain 64% of individual job performance. This represents that the model obtained shows which factors predict the construct "individual job performance".

## Discussion

With the results, it is evident that the hypothesis that the components of the organizational structure will positively enhance the relationship between well-being at work, job satisfaction and individual job performance was confirmed. This result also meets the

expectations of Warr (2007) and Rego (2009), who strongly believed that the inclusion of a third variable, or moderating variable, in the relationship between positive emotions and performance could significantly increase the intensity of this relationship.

Rego (2009) found that the affective well-being at work explains 23% of the variance of a significant measure of individual performance. In turn, this study found that well-being at work and job satisfaction, with the moderation of the organizational structure variable, explained 64% of variance of a measure of individual performance. Observing only the statistical results, the inclusion of a moderating variable substantially increases the strength of that relationship. However, we must keep in mind that the instruments used to measure the variables and organizations are different in the two studies. Thus, the evidence found in this study should be seen as progress in building a theory about predictors of performance, and not as a research that simply improved the results of Rego (2009).

The regression model included two factors of the variable "components of organizational structure" – formal and informal aspects. These factors contained items related to aspects of hierarchy, authority, autonomy, departmentalization and physical structure (installations). This means that in the context studied, these aspects influence individual performance at work. The literature also reinforces the role of autonomy as a predictor of job performance (Langfred, 2005; Langfred & Moye, 2004; Leach et al., 2005; Morgeson et al., 2005; Ozer, 2011; Stewart, 2006). Noteworthy the work of Ozer (2011), who studied the moderating effect of autonomy on the relationship between organizational citizenship and job performance. Given this evidence, it appears that the model obtained in this work confirms the results of previous investigations.

The resulting model of regression provided important clues on how relations are established between performance and affective variables. Focusing, first, on well-being, it was found that the model generated without the moderating variable, two factors were related to individual performance. Positive affects had a direct positive relationship, while negative affects had a direct negative relationship. When including a moderating variable, the intensity of the relationship between positive affect and individual performance increased, and the explained variance was 27% to 35%, confirming the expectations of Warr (2007) and Rego (2009). These results are consistent with the evidence found in the literature, as the work of Kaplan et al. (2009), in which several meta-analyses pointed to the predictive relationship of positive affect and negative affect with task performance were undertaken. To the authors, this finding should direct the actions of organizations to promote the well-being, so that should be minimized negative emotions such as stress and anxiety, and incentives the positive, such as excitement and enthusiasm. The evidence obtained in this study is also align with the findings of Cropanzano et al. (2003), Halbesleben and Bowler (2007) and Janssen et al. (2010). These studies identified a negative relationship between emotional exhaustion and performance. Although in this study use the concept of well-being as construct of positive character, we find an alignment of the empirical results, given that emotional exhaustion is usually studied as the opposite of well-being.

In relation to job satisfaction, the regression tests also showed interesting results. In the model that was not included the moderating variable, none of the satisfaction factors significantly associated with individual performance. When the components of organizational structure were inserted in the model, one of the factors of satisfaction, "satisfaction with management" showed a significant positive relationship with individual job performance. This result highlights the moderating role of organizational structure in the relationship between satisfaction and performance.

In general it can be said that this study follows the trend of the literature to identify the predictive relationship between job satisfaction and performance. (Coelho Jr. & Borges-Andrade, 2011; Edwards et al., 2008; Fisher, 2003; Schleicher et al., 2004; Sy et al., 2006). In

turn, the result of the obtained model faces the evidence found by Bowling (2007), who questioned the significance of the relationship between satisfaction and performance, especially when other variables were involved. In the case of this author, the personality traits eliminated the relationship between satisfaction and performance; in this paper, the organizational structure allowed the relationship between satisfaction and performance. This evidence also contradicts the finding of Wright and Cropanzano (2000) that job satisfaction did not offer a contribution for prediction of job performance; but as the authors proposed, further studies should be made because the sample used by them could have affected the results.

The empirical model found the participation of a personal variable in the prediction of performance: age. This finding highlights the importance of observing the impact of this variable, as some authors suggest that this relationship exist (Coelho Jr., 2009; Waldman & Avolio, 1986), but the same was not found significantly different in other researches. Considering the organizations studied here, we found that the relationship between age and performance depended on the inclusion of the components of the organizational structure in the model. Thus, for the studied locus, it follows that the greater the age (or the older is the employee), the better the performance shown.

### **Conclusion**

The present study tested the hypothesis "happy worker, productive" disseminated by common sense, but that had not been tested empirically. Furthermore, we chose to include the variable "organizational structure" in this study because it is a cross factor of all the organization. Thus, to analyze empirically the effects that the job satisfaction and well-being at work generated on individual job performance investigating the moderating role that the components of the organizational structure performing this relationship was fulfilled. After all the discussions developed, it appears that this work has contributed significantly to the advancement of theoretical study of these variables, and the two main contributions were: 1) find the predictive effect of well-being at work in relation to performance, and; 2) identify the moderating effect of the components of the organizational structure.

It is recommended that organizational practices are developed with the objective of increasing the well-being and satisfaction of their employees, and the organizational structure that meets your needs, but prosecutors aspects of well-being and satisfaction should be investigated separately for each organization, considering that may be different due to the specific reality of each one. The main limitation of this study is related to the sample. Although have diversity, consisting of two organizations with members from different hierarchical levels and sectors, unfortunately, it was not possible to have all employees of both organizations. The participation of a greater number of workers would allow the achievement of results more generalizable, and would develop a psychometric re-validation of the instruments used.

### **References**

- Abbad, G., & Torres, C. V. (2002). Regressão Múltipla *Stepwise* e Hierárquica em Psicologia Organizacional: aplicações, problemas e soluções. *Estudos de Psicologia*, 7 (Número Especial), 19-29.
- Anseel, F., & Lievens, F. (2007). The long-term impact of feedback environment on job satisfaction: A field study in a Belgian context. *Applied Psychology*, 56(2), 254-266.

- Aryee, S., Chen, Z. X., & Budhwar, P. S. (2004). Exchange fairness and employee performance: An examination of the relationship between organizational politics and procedural justice. *Organizational Behavior and Human Decision Processes*, 94(1), 1-14.
- Bowling, N. A. (2007). Is the job satisfaction – job performance relationship spurious? A meta-analytic examination. *Journal of Vocational Behavior*, 71(2), 167-185.
- Coelho Jr., F. A. (2009). *Suporte à aprendizagem, satisfação no trabalho e desempenho: Um estudo multinível*. Tese de doutorado não publicada, Instituto de Psicologia, Universidade de Brasília, Brasília.
- Coelho Jr., F. A., & Borges-Andrade, J. E. (2011). Efeitos de variáveis individuais e contextuais sobre desempenho individual no trabalho. *Estudos de Psicologia*, 16(2), 111-120.
- Coelho Jr., F. A., Borges-Andrade, J. E., Oliveira, J. S., & Pereira, A. C. (2010). *Validação psicométrica de medida de auto-avaliação de desempenho no trabalho*. Anais. XXXIV Encontro da Anpad (Enanpad), Rio de Janeiro.
- Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88(1), 160-169.
- Edwards, B. D., Bell, S. T., Arthur Jr., W., & Decuir, A. D. (2008). Relationships between facets of job satisfaction and task and contextual performance. *Applied Psychology*, 57(3), 441-465.
- Fischer, C. D. (2003). Why do lay people believe that satisfaction and performance are correlated? Possible sources of commonsense theory. *Journal of Organizational Behavior*, 24(6), 753-777.
- Giniger, S., Dispenzien, A., & Eisenberg, J. (1983). Age, experience, and performance on speed and skill jobs in an applied setting. *Journal of Applied Psychology*, 68(3), 469-475.
- Halbesleben, J. R. B., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology*, 92(1), 93-106.
- Janssen, O., Lam, C. K., & Huang, X. (2010). Emotional exhaustion and job performance: The moderating roles of distributive justice and positive affect. *Journal of Organizational Behavior*, 31(6), 787-809.
- Kaplan, S., Bradley, J. C., Luchman, J. N., & Haynes, D. (2009). On the role of positive and negative affectivity in job performance: A meta-analytic investigation. *Journal of Applied Psychology*, 94(1), 162-176.
- Ladeira, W. J., Sonza, I. B., & Berte, R. S. (2012). Antecedentes da satisfação no setor público: Um estudo de caso na prefeitura de Santa Maria (RS). *Revista de Administração Pública*, 46(1), 71-91.
- Langfred, C. W. (2005). Autonomy and performance in teams: The multilevel moderating effect of task interdependence. *Journal of Management*, 31(4), 513-529.
- Langfred, C. W., & Moye, N. A. (2004). Effects of task autonomy on performance: An extended model considering motivational, informational, and structural mechanisms. *Journal of Applied Psychology*, 89(6), 934-945.
- Leach, D. J., Wall, T. D., & Rogelberg, S. G. (2005). Team autonomy, performance, and member job strain: Uncovering the teamwork KSA link. *Applied Psychology*, 54(1), 1-24.
- Lin, W., Wang, L., & Chen, S. (2013). Abusive supervision and employee well-being: the moderating effect of power distance orientation. *Applied Psychology*, 62(2), 308-329.

- Morgeson, F. P., Delaney-Klinger, K., & Hemingway, M. A. (2005). The importance of job autonomy, cognitive ability, and job-related skill for predicting role breadth and job performance. *Journal of Applied Psychology*, 90(2), 399-406.
- Ozer, M. (2011). A moderated mediation model of the relationship between organizational citizenship behaviors and job performance. *Journal of Applied Psychology*, 96(6), 1328-1336.
- Paschoal, T., & Tamayo, A. (2008). Construção e Validação da Escala de Bem-Estar no Trabalho. *Avaliação Psicológica*, 7(1), 11-22.
- Rego, A. (2009). Empregados felizes são mais produtivos? *Revista de Estudos Politécnicos*, 7(12), 215-233.
- Schleicher, D. J., Watt, J. D., & Greguras, G. J. (2004). Reexamining the job satisfaction-performance relationship: The complexity of attitudes. *Journal of Applied Psychology*, 89(1), 165-177.
- Siqueira, M. M. M. (2008). Satisfação no trabalho. Em M. M. M. Siqueira (Ed.) *Medidas do Comportamento Organizacional* (pp. 265-274). Porto Alegre: Artmed.
- Sonnentag, S. (2002). Performance, well-being and self-regulation. Em S. Sonnentag (Ed.). *Psychological Management of Individual Performance* (pp.405-425). Great Britain: John Wiley & Sons.
- Sonnentag, S., & Frese, M. (2002). Performance concepts and performance theory. Em S. Sonnentag (Ed.). *Psychological Management of Individual Performance* (pp.3-27). Great Britain: John Wiley & Sons.
- Stewart, G. L. (2006). A meta-analytic review of relationships between team design features and team performance. *Journal of Management*, 32(1), 29-55.
- Sy, T., Tram, S., & O'Hara, L. A. (2006). Relation of employee and manager emotional intelligence to job satisfaction and performance. *Journal of Vocational Behavior*, 68(3), 474-489.
- Tabachnick, B. G., & Fidell, L. S. (2007). *Using multivariate statistics*. New York: Harper & Row Collins College Publishers.
- Vasconcellos, E., & Hemsley, J. R. (2002). *Estrutura das organizações: Estrutura tradicional, estrutura para inovação, estrutura matricial*. São Paulo: Pioneira.
- Waldman, D. A., & Avolio, A. B. (1986). A meta-analysis of age differences in job performance. *American Psychological Association*, 71(1), 33-38.
- Warr, P. (2007). *Work, happiness and unhappiness*. New Jersey: Lawrence Erlbaum Associates.
- Wright, T. A., & Cropanzano, R. (2000). Psychological well-being and job satisfaction as predictors of job performance. *Journal of Occupational Health Psychology*, 5(1), 84-94.