Flow and Engagement at Work: A Literature Review

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Abstract

In the light of Positive Organizational and Work Psychology, flow and engagement are related with well-being and business success. This study examines the relationships between flow and work engagement, while presenting the main concepts about them. A literature review was carried out. Data collection were based on the research for studies with the descriptors "flow" and "engagement", "personal resources", "labor resources" and related terms. This search resulted in 49 studies, which were read and classified according to information about content, year of publication, definitions, types and associated concepts. Among the findings, flow and engagement are linked to superior results in business, worker performance and life satisfaction. Studies point to a wide range of applications, but there is still a need for further research. Keywords: Flow; Engagement; Personal characteristics; Job characteristics.

Flow e Engajamento no Trabalho: Uma Revisão de Literatura

Resumo

À luz da Psicologia Positiva Organizacional e do Trabalho, flow e engajamento estão relacionados a bem-estar e sucesso empresarial. Esse estudo examina as relações entre flow e engajamento no trabalho e apresenta as principais conceituações a respeito deles. Para isso, foi realizada uma revisão de literatura. A coleta de dados baseou-se na procura por produções com os descritores "flow" e "engajamento", "recursos pessoais", "recursos do trabalho" e termos relacionados. Essa busca resultou em 49 estudos, os quais foram lidos e classificados de acordo com informações sobre conteúdo, ano da publicação, definições, tipos e conceitos associados. Dentre os achados, flow e engajamento estão ligados a resultados superiores nos negócios das empresas, no desempenho do trabalhador e em sua satisfação de vida. Os estudos apontam para uma ampla gama de aplicações, mas ainda há necessidade de novas pesquisas.

Palavras-chave: flow, engajamento, características pessoais, características do trabalho

Flow y el Compromiso en el Trabajo: Una Revisión de Literatura

Resumen

Según la Psicología Positiva Organizacional y del Trabajo, flujo y compromiso están relacionados con bienestar y éxito empresarial. Este estudio examina las relaciones entre flujo y compromiso, y presenta las principales concepciones sobre ellos. Para esto, se realizó una revisión de literatura. La recolección de datos se basó en la búsqueda por producciones con los descriptores "flujo" y "compromiso", "recursos personales", "recursos del trabajo" y términos relacionados. Esta búsqueda tuvo como resultado 49 estudios, los cuales fueron leídos y clasificados de acuerdo con informaciones sobre contenido, año de publicación, definiciones, tipos y conceptos asociados. Entre los hallazgos, flujo y compromiso están ligados a resultados superiores en los negocios de las empresas, en el desempeño del trabajador y en la satisfacción de vida. Los estudios revelan una amplia gama de aplicaciones, pero todavía hay necesidad de nuevas investigaciones.

Palabras-clave: Flujo; Compromiso; Características personales; Características de trabajo

Introduction

From the results found in researches conducted in the organizational field, it is understood that the relation between organization and collaborator can be essential both for the success of the institution (although some authors consider as different the meanings of the words Organizations, Companies, and Institutions, in the present study those will be used as synonyms), and for the quality of life of its employees. With the intent to help science and practice in the field, this study adopts the focus of Positive Psychology (PP), whose findings have substantially contributed to the work environment (Salanova, Bakker, & Llorens, 2006; Bakker & Schaufeli, 2008; Snyder & Lopez, 2009; Donaldson & Ko, 2010). Therefore, the questions and thoughts that the present study proposes are based, essentially, in some concepts of this approach applied to the labor world.

Positive Psychology

The Positive Psychology (PP) movement grew from the understanding that the core research of



psychologists in the twentieth century was mostly curative and focused on mental disorders. From this, arises the desire to encourage research focusing on the qualities and on the healthy aspects of people. Thus, this approach became a new field of studies in the psychological sciences. Positive Psychology studies the conditions and processes that influence the flourish or optimal functioning of individuals, groups and institutions (Gable & Haidt, 2005; Snyder & Lopez, 2009; Pacico & Bastianello, 2014). From the perspective of PP, psychologists working with families, schools, religious communities and corporations seek to develop an internal climate that enhances these human strengths. Strengths are ways of thinking, feeling and behaving, which are invigorating and can lead to better performances (Carlomagno, 2016a).

In this way, most of the work conducted based on PP, in this century, is the development of a science of human potential, whose mission is to learn how to flourish individuals (Seligman &Csikszentmihalyi, 2000). Furthermore, it is important to emphasize that this movement searches for the promotion of people positive functioning, without casting aside the issues and problems that impact their lives (Snyder & Lopez, 2009). Amongst its various areas, the research on positive organizations has won a considerable attention, from both researchers and professionals of the field (Donaldson & Ko, 2010).

Positive Organizational Psychology

Faced with the demands of the business world, organizations at this time search for proactive, collaborative people, who have initiative and are responsible for their own development and commitment with the high quality of their performance. On the other hand, collaborators aim feeling energized, enthusiastic and absorbed by their work. In this way, the main point of Positive Organizational Psychology (POP) is improving the worker's efficiency and health in this environment, through the scientific investigation of subjective experiences on the work place (Donaldson & Ko, 2010; Bakker & Schaufeli, 2008).

Among the studies conducted on POP, arise the concepts of flow and work engagement, which can be used by companies to create better working conditions, therefore generating higher results in business, and in each individual's performance and life satisfaction (Nielsen & Cleal, 2010; Perschel, 2010; Vazquez, Magnan, Pacico, Hutz & Schaufeli, 2015; Schaufeli et al., 2013).

Thus, this study aims: (1) to identify and discuss the development of empirical-theoretical articles that address the constructs of flow and work engagement. Also, (2) to describe and analyze the concepts surrounding flow and work engagement, individual resources, and job demands-resources. In addition to this, (3) to verify and underline the concepts in the POP field who still need further investigations.

Method

It should be noted that this study is a narrative literature review, built on the analysis of articles and electronic book chapters chosen upon the personal views of the authors. A narrative review allows the knowledge update of the concepts involved without a pre established method, in a qualitative way (Baumester& Leary, 1997). Nevertheless, this study compiles data deemed relevant to the field.

Aiming to map the existent production in Positive Organizational Psychology on the constructs of flow and work engagement, the scientific databases accessed in this literature review were: Periódicos CAPES, ResearchGate, Wilmar Schaufeli's website e SciELO. These sources were selected based on the possibility of identifing a larger number of journals to be searched, in a short time, containing the topics addressed in this research. Only Schaufeli's site was searched for this paper because it is the main website of individual authors.

The research was conducted using the following key words: flow, engagement, personal resources, job demands, job resources, and related words, both in English and Portuguese. Figure 1 shows the selection of works in this study. This initial search resulted in 113 publications.

Article selection was based on the content analysis of their abstracts, following these inclusion and exclusion criteria: they had to be (1) published scientific investigations with empirical or theoretical biases; (2) studies who discussed, mainly flow and work engagement; (3) content in agreement with the perspective of the present study; (4) articles and book chapters published between 1989 and 2017. This latter criterion refers to the first publications of flow and work engagement, which started in 1989 (Csikszentmihalyi & LeFevre, 1989). Therefore, this review comprehends the early years of these constructs and their development in theoretical and empirical research. This selection resulted in 100 studies.

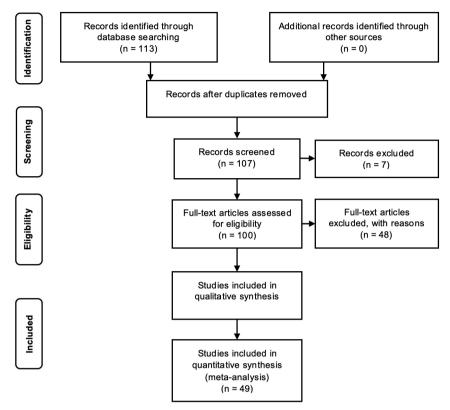


Figure 1. Selection of the publications used in the analysis of this study according to the inclusion and exclusion criteria established in the method. The n represents the number of publications in each step.

After an initial analysis of the papers, a refined investigation was conducted trying to identify the ones with the POP approach. Among these, 52 full-text publications were selected to be used in this study. From these, 49 papers were used in the quantitative analysis. The papers were examined according to their publication year, authorship, and country of publication. Also, when they had following topics: flow or work engagement, related or not with personal resources or job demands-resources.

Results

Initially, the production of publications about flow and work engagement in the POP field were analyzed. It can be noted, as seen in Table 1, the lack of published studies in the years 1998, 2000, 2001, 2007, and between 1991 and 1995. In addition, among the 49 papers, 42 were published after 2000 (85,6%), of which 22 were empirical and 20, theoretical. The year 2000 was considered relevant, as it overlaps with one of the landmarks of the PP movement: the special edition of the journal American Psychologist about Positive Psychology. Taking into account the context and the low number of publications before 2000, the hypothesis that this edition inspired research on the field is reinforced. Moreover, observing that 24 out of 42 studies were published in the last 5 years (48,9%),it can be argued that the research involving these two constructs has been increasing.

In the last 28 years, only 25 empirical studies investigated flow and work engagement - less than 1 study per year. Of these 25, only one clearly integrated flow and work engagement (Medhurst& Albrecht, 2016). However, as we can see in Table 2, three more studies integrated flow and engagement but without analyzing their relationship. In the same line as the empirical ones, 20 of the 24 theoretical studies found were published after 2000 (85.6%).

It can be easily noted the predominance of papers published in the United States of America and the Netherlands. Considering main authorship, few authors lead the publication in these two countries: Csikszentmihalyi, with five publications in the United States and

Table 1 Number of Flow and Engagement Studies by Year of Publication

Year	Empirical		Theoretical		Total by Year	
	Number	0/0	Number	0/0	Number	%
2017 (April)	_	_	1	4,17	1	2,04
2016	5	20	4	16,67	9	18,36
2015	3	12	1	4,17	4	8,16
2014	3	12	4	16,67	7	14,28
2013	_	_	2	8,33	2	4,08
2012	1	4	_	_	1	2,04
2010	2	8	3	12,5	5	10,20
2009	1	4	1	4,17	2	4,08
2008	1	4	1	4,17	2	4,08
2007	_	_	_	_		
2006	2	8	_	_	2	4,08
2005	1	4	_	_	1	2,04
2004	1	4	_	_	1	2,04
2003	1	4		_	1	2,04
2002	1	4	3	12,5	4	8,16
		_		_		
1999	_	_	1	4,17	1	2,04
1998	_	_	_	_	_	
1997		_	1	4,17	1	2,04
1996	1	4	1	4,17	2	4,08
	_	_	_	_	_	
1990	1	4	1	4,17	2	4,08
1989	1	4	_	_	1	2,04
Total	25	100	24	100	49	100

Note. The "|" in the Year column represents the absence of publications in the years covered (e.g., from 1999 to 2002, no publication was found).

Bakker and Schaufeli with, respectively, 5 and 6 publications in the Netherlands. Therefore, it can be noted that almost half of the publications in the United States had as the main author Mihalyi Csikszentmihalyi (41,6%). And, with one exception, all of Netherlands' studies had Arnold Bakker and Wilmar Schaufeli as main authors (91,6%). Brazil shows up in second place, with eight published studies, all after 2014. Following the list, Finland has five studies; Spain, three; followed by Italy and United Kingdom, both with two studies. Australia, Canada, Denmark, Philippines and Pakistan, each had one international publication.

The publications in the field are led by Wilmar Schaufeli, with seven published papers as author (not necessarily main author). Schaufeli's work is essential to the investigation of work engagement and its

Table 2 Number of Publications according to the Approached Topic

Topics approached in the study	No.
Work Engagement	2
Flow	3
Job demands-resources	2
Personal resources	3
Work Engagement + flow	_
Work Engagement + job demands-resources	10
Work Engagement + personal resources	3
Work Engagement + job demands-resources + personal resources	6
Work Engagement + flow+ job demands-resources	1
Work Engagement + flow+ personal resources	_
Work Engagement + flow+ job demands-resources + personal resources	3
Flow+ job demands-resources	10
Flow+ personal resources	1
Flow + job demands-resources + personal resources	3
Job demands-resources + personal resources	2

relationship with job demands-resources, and he is one of the most prominent authors in both areas. In second place comes Arnold Bakker and Mihalyi Csikszentmihalyi, each with five publications. Bakker's work is focused upon positive states in organizations. He investigates flow, engagement and also job demands--resources. Together with Demerouti (Bakker and Demerouti, 2014), Bakker published one of the four papers found that integrated flow and work engagement. Csikszentmihalyi is also in second place on number of published papers, and he stands out for the theorization and measurement of the flow state. His work is focused upon the process of flow and its related variables, aside from recognizing the importance of the construct to the well being of people who experience it.

In third place, regarding authorship is Lívia Carlomagno, Marisa Salanova and Ana Vazquez, each with two publications. Lívia Carlomagno is a Brazilian with field experience on POP, contributing both theoretically and pragmatically to the formation of psychology professionals. Marisa Salanova, Spanish, focuses on the collective flow and on the work variables that can influence this process. She published two of the papers found in Spain. Ana Vazquez, also Brazilian, concentrates on work engagement, the measurement of this variable and its relationship with working conditions. Another 26 main authors have integrated the list, each with one publication.

It was observed that only 10 of the 49 studies (20,1%) investigated only one variable. The most investigated solitary variables were "personal resources" and "flow". Table 2 shows that 21 of the 49 studies found (42.8%) dealt with personal resources (e.g., hope, self--efficacy), and 17 of the 49 were also related to flow or work engagement (34,6%).

Among the 49 studies found, 37 examined job demands-resources (75,5%), and 33 of them dealt with job demands-resources in relation to flow or engagement (67,3%). In this way, it can be seen that more than half of the studies involving flow and engagement at work also involved job demands-resources. Although there is an intersection between the JDR model and the flow and engagement theories, only four studies have integrated the three theories (Bakker &Demerouti, 2014; Donaldson & Ko, 2010; Medhurst& Albrecht, 2016; Schaufeli, Dijikstra, & Vazquez, 2013).

This lack of integration between theories was already expected and this result is also one of the main contributions of this work. It can be seen from Table 2 that it is difficult to speak of only one variable without mentioning others. In the case of the

JDR model, and of flow and engagement at work, the situation is the same.

From this analysis, we sought to respond to the other objective of this research: to describe and discuss, from studies already carried out, the concepts that involve the constructs flow and engagement at work, and personal and work resources.

In the next topic, we will describe and discuss the conceptualizations of each publication found and the integration between the JDR model, flow, and work engagement.

Discussionand Final Considerations

From this narrative literature review, we verified that several studies present results in which the relevance of having a healthy working life in the present time is perceived, because the relationship between company and worker can be essential for both organizational success and for the life of these professionals (Schaufeli et al., 2009; Schaufeli et al., 2013; Perschel, 2010). Organizations expect their employees to be proactive, supportive and continually looking for their personal and professional growth. On the other hand, employees seek, among other things, to put their skills into practice, to grow, and to feel pleasure and enthusiasm for what they are doing in their job (Bakker & Schaufeli, 2008; Luthans, 2002).

Considering the analysis of the literature, it can be assumed that the objectives sought by many institutions and their employees are in agreement with the research findings that involve the experiences of flow and work engagement. Studies point out that the conceptions of both can be used by companies to create an excellent state of functioning and, consequently, to generate superior results in the business, in the individual performance of each worker and in their life satisfaction (Schaufeli et al., 2013; Bakker, 2008). Thus, the hypothesis is raised that they can be strongly correlated with one another. However, only one study was found to correlate these two constructs within the approach adopted in this work (Medhurst& Albrecht, 2016). Therefore, it is recommended that new research be done, to study the relationships between the concepts of flow and work engagement and their connections with personal and job resources in workers.

Understanding that the work context can be organized to promote the experience of flow and engagement, it is essential to emphasize that the conjectures that involve these concepts deal with a better use of

both personal characteristics and job demands-resources (Schaufeli, 2013; Csikszentmihalvi, 1999). According to the literature, even though they are different in each organization, these personal and work attributes seem to potentiate the flow and engagement experiences (Schaufeli, 2013; Salanova et al., 2006; Nielsen & Cleal, 2010). Therefore, it may be possible to propose more assertive and focused interventions, which could build spaces to enhance and to better use these resources within an institution in Brazil.

In addition, by being within a favorable organizational climate, with all these existing characteristics, it is possible for individuals to feel more self-efficacious, hopeful and satisfied with their life. This is because they can reach their goals more easily, feel encouraged to grow in the career and may feel more accomplished. All these results may directly interfere with the well-being of workers, and consequently they may returns those feelings to the organization in which they are inserted. The organization, therefore, can achieve an improvement in its overall performance and in the satisfaction of its clients (Salanova et al., 2014; Uusiautti & Määttä, 2015; Zubair& Kamal, 2015; Schaufeli et al., 2013; Nielsen & Cleal, 2010; Mackay et al. 2008).

As limitations of this narrative literature review, it is possible to mention a possible omission of relevant publications in the performed analysis, due to the option of not using a pre-determined systematic methodology. Therefore, further research is suggested in which a systematic review or a meta-analysis is done.

References

Airila, A., Hakanen, J. A., Schaufeli, W. B., Luukkonen, R., Punakallio, A., &Lusa, S. (2016). Are job and personal resources associated with work ability 10 years later? The mediating role of work engagement. InTaris, T.W. (Ed.). Longitudinal research in occupational health psychology (pp. 167-185). London: Routledge.

Alessandri, G., Borgogni, L., Schaufeli, W. B., Caprara, G. V., & Consiglio, C. (2014). From Positive Orientation to Job performance: The Role of Work Engagement and Self-efficacy Beliefs. Journal of Happiness Studies, 16, 767-788. http://doi. org/10.1007/s10902-014-9533-4

Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. Psychological Review, 84(2), 191-215. DOI: 10.1016/0146-6402(78)90002-4

- Bakker, A. B. (2005). Flow among music teachers and their students: The crossover of peak experiences. Journal of Vocational Behavior, 66(1), 26-44. DOI: 10.1016/j.jvb.2003.11.001
- Bakker, A. B. (2008). The work-related flow inventory: construction and initial validation of the WOLF. Journal of Vocational Behavior, 72(3), 400-414. http://doi.org/10.1016/j.jvb.2007.11.007
- Bakker, A. B., & Demerouti, E. (2014). Job Demands-Resources Theory. In P. Y. Chen & C. L. Cooper (Eds.). Work and Wellbeing: Wellbeing: A complete reference guide (Vol. III; pp. 37-64). Chichester, UK: Wiley-Blackwell
- Bakker, A. B., &Schaufeli, W. B. (2008). Positive Organizational Behavior: Engaged employees in flourishing organizations. Journal of Organizational Behavior, 29, 147–154. http://doi.org/10.1002/job
- Bakker, A. B., &Schaufeli, W.B. (2014). Work engagement. In P.C. Flood & Y. Freeney (Eds.). Organizational Behavior volume of The Blackwell Encyclopedia of Management. West Sussex, UK: Wiley.
- Baumester, R. F., & Leary, M. R. (1997). Writing Narrative Literature Reviews. Review of General Psychology, 1(3),311-320.
- Carlomagno, L. L. L. (2016a). Liderança Positiva. In Corrêa, A. P. (Org.). Psicologia Positiva: Teoria e Prática (pp. 232-239). São Paulo: Leader.
- Carlomagno, L. L. L. (2016b). Psicologia Positiva Aplicada às Organizações. In Seibel, B. L., Poletto, M., &Koller, S. H. (Orgs). Psicologia Positiva: Teoria, Pesquisa e Intervenção (pp. 209-224). Curitiba: Juruá.
- Consiglio, C., Borgogni, L., Di Tecco, C., &Schaufeli, W. B. (2016). What makes employees engaged with their work? The role of self-efficacy and employee's perceptions of social context over time. Career Development International, 21(2), 125-143. http:// doi.org/10.1108/CDI-03-2015-0045
- Cousins, R., Mackay, C. J., Clarke, S. D., Kelly, C., Kelly, P. J., & McCaig, R. H. (2004). 'Management standards' work-related stress in the UK: Practical development. Work & Stress, 18(2), 113-136. http://dx.doi.org/10.1080/02678370 410001734322
- Csikszentmihalyi, M., & LeFevre, J. (1989). Optimal Experience in Work and Leisure. Journal of Personality

- and Social Psychology, 56(5), 815-822. https://doi. org/10.1037/0022-3514.56.5.815
- Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper & Row.
- Csikszentmihalyi, M. (1996). Creativity: Flow and the psychology of discovery and invention. New York: HarperCollins Publishers.
- Csikszentmihalyi, M. (1997). Finding flow: The psychology of engagement with everyday life. New York: BasicBooks.
- Csikszentmihalyi, M., (1999). If we are so rich, why aren't we happy? American Psychologist, 54(10), 821-827. DOI: 10.1037/0003-066X.54.10.821
- Datu, J. A. D., & Mateo, N. J. (2015). Work-related flow dimensions differentially predict anxiety, life satisfaction, and work longevity among Filipinos counselors. Current Psychology, 36(2), 203-208. https://doi.org/10.1007/s12144-015-9401-3
- Donaldson, S. I., &Ko, I. (2010). Positive organizational psychology, behavior, and scholarship: A review of the emerging literature and evidence base. The Journal of Positive Psychology, 5(3), 177-191. http://doi. org/10.1080/17439761003790930
- Gable, S. L., & Haidt, J. (2005). What (and why) is positive psychology? Review of General Psychology, 9(2), 103-110. http://doi.org/10.1037/1089-2680.9.2.103
- Hakanen, J. J., &Schaufeli, W. B. (2012). Do burnout and work engagement predict depressive symptoms and life satisfaction? A three-wave seven-year prospective study. Journal of Affective Disorders, 141,415–424. http://doi.org/10.1016/j. jad.2012.02.043
- Harter, J. K., Schmidt, F. L., & Hayes, T. L. (2002). Business-unit-level relationship between employee satisfaction, employee engagement, and business outcomes: A meta-analysis. Journal of Applied Psychology, 87(2),268-279. https://doi. org/10.1037//0021-9010.87.2.268
- Hutz, C. S., Zanon, C., & Bardagi, M. P. (2014). Satisfação de Vida. In Hutz, C. S. (Org.). Avaliação em Psicologia Positiva (pp. 43-47). Porto Alegre: Artmed.
- Kahn, W. A. (1990). Psychological Conditions of Personal Engagement and Disengagement at Work. Academy of Management Journal, 33(4), 692–724. https://doi.org/10.2307/256287

- Luthans, F. (2002). The need for and meaning of positive organizational behavior. Journal of Organizational Behavior, 23, 695-706. https://doi. org/10.1002/job.165
- Maciel, C. O., & Camargo, C. (2016). Social connection in organizations: the effects of local ties on job engagement and performance. Revista de Administração, 51(4), 377-385. https://dx.doi.org/10.1016/j.rausp.2016.07.005
- Mäkikangas, A., Bakker, A. B., Aunola, K.,&Demerouti, E. (2010). Job resources and flow at work: modeling the relationship via latent growth curve and mixture model methodology. Journal of Occupational and Organizational Psychology, 83(3), 795-814. https://doi.org/10.1348/096317909X476333
- Maslach, C., & Leiter, M. P. (1997). The truth about burnout: How organizations cause personal stress and what to do about it. San Francisco: Jossev-Bass.
- Medhurst, A. R., & Albrecht, S. L. (2016). Salesperson work engagement and flow: A qualitative exploration of their antecedents and relationship. Qualitative Research in Organizations and Management: An International Journal, 11(1), 22-45. https://doi. org/10.1108/QROM-04-2015-1281
- Moneta, G. B., & Csikszentmihalyi, M. (1996). The effect of perceived challenges and skills on the quality of subjective experience. Journal of Personality, 64(2), 275-310. DOI: 10.1111/j.1467-6494.1996. tb00512.x
- Nakamura, J., &Csikszentmihalyi, M. (2002). The concept of Flow.In Snyder, C. R., & Lopez, S. J, (Eds.). Handbook of Positive Psychology (pp. 89-105). New York: Oxford University Press.
- Nielsen, K., &Cleal, B. (2010). Predicting flow at work: investigating the activities and job characteristics that predict flow states at work. Journal of Occupational Health Psychology, 15(2), 180-190. http://doi. org/10.1037/a0018893
- Oliveira, D. d. F., & Ferreira, M. C. (2016).O impacto das percepções de justiçaorganizacional e da resiliênciasobre o engajamento no trabalho [The impact of organizational justice perceptions and resilience on the work engagement]. Estudos de Psicologia, 33(4), 747-755. http://dx.doi. ${\rm org}/10.1590/1982\text{-}02752016000400017}$

- Pacico, J. C., & Bastianello, M. R. (2014). As origens da psicologia positiva e os primeiros estudo brasileiros. In Hutz, C. S. (Org.). Avaliação em Psicologia Positiva (pp. 43-47). Porto Alegre: Artmed.
- Pacico, J. C., Ferraz, S. B., & Hutz, C. S. (2014). Autoeficácia - Yes wecan! In Hutz, C. S. (Org.). Avaliação em Psicologia Positiva (pp. 111-119). Porto Alegre: Artmed.
- Perschel, A. (2010). Work-life flow: how individuals, zappos, and other innovative companies achieve high engagement. Global Business and Organizational Excellence, 29(5), 17-30. http://doi.org/10.1002/
- Saks, A. M. (2006). Antecedents and consequences of employee engagement. Journal of Managerial Psychology, 21(7), 600-619. https://doi. org/10.1108/02683940610690169
- Salanova, M., Bakker, A. B., &Llorens, S. (2006). Flow at work: evidence for an upward spiral of personal and organizational resources. Journal of Happiness Studies, 7, 1–22. http://doi.org/10.1007/ s10902-005-8854-8
- Salanova, M., Rodríguez-Sánchez, A. M., Schaufeli, W. B., &Cifre, E. (2014). Flowing together: a longitudinal study of collective efficacy and collective flow among workgroups. The Journal of Psychology, 148(4), 435–455. http://doi.org/10.1080/00223980.2013. 806290
- Schaufeli, W., & Bakker, A. B. (2004). Job Demands, Job Resources and Their Relationship with Burnout and Engagement: A Multi-Sample Study. Journal of Organizational Behavior, 25, 293-315. https://doi. org/10.1002/job.248
- Schaufeli, W., Bakker, A. B., Rhenen, W. V. (2009). How changes in job demands and resources predict burnout, work engagement, and sickness absenteeism. Journal of Organizational Behavior, 30, 893-917. DOI: 10.1002/job.595
- Schaufeli, W., & Bakker, A. B. (2010). Defining and measuring work engagement: bringing clarity to the concept. In Bakker, A. B., & Leiter, M. P. (Eds.). Work Engagement: a handbook of essential theory and research (10-24). East Sussex: Psychology press.
- Schaufeli, W., Dijikstra, P., & Vazquez, A. C. (2013). Engajamento no Trabalho. São Paulo: Casa do Psicólogo.

- Schaufeli, W. B., Salanova, M., González-Romá, V., &Bakker, A. B. (2002). The Measurement of Engagement and Burnout: a Two Sample Confirmatory Factor Analytic Approach. Journal of Happiness Studies, 3, 71-92. https://doi. org/10.1023/A:1015630930326
- Schaufeli, W. (2013). What is Engagement? In Truss, C., Delbridge, R., Alfes, K., Shantz, A. & Soane, E. (Eds.). Employee engagement in theory and practice (pp. 15-35). London: Routledge.
- Schaufeli, W. B. (2017). The Job Demands-Resources model: A 'how to' guide to increase work engagement and prevent burnout. Organizational Dynamics, 46, 120-132. https://doi.org/10.1016/j. orgdyn.2017.04.008
- Seligman, M. E. P. &Csikszentmihalyi, M. (2000). Positive psychology: An introduction. Ameri-Psychologist, 55(1), 5–14. http://doi. org/10.1037//0003-066X.55.1.5
- Shernoff, D. J., Csikszentmihalyi, M., Schneider, B., &Shernoff, E. S. (2003).Student engagement in high school classrooms from the perspective of flow theory. School Psychology Quarterly, 18(2), 158-176. http://doi.org/10.1521/scpq.18.2.158.21860
- Snyder, C. R., & Lopez, S. J. (2009). Observando nossos futuros por meio da autoeficácia, do otimismo e da esperança. In Snyder, C. R., & Lopez, S. J. Psicologia Positiva. Porto Alegre: Artmed.

- Taris, T.W. &Schaufeli, W. B. (2016). The Job Demands-Resources model. In S. Clarke, T.M. Probst, F. Guldenmund& J. Passmore (Eds.). The Wiley Blackwell handbook of the psychology of occupational safety and workplace health (pp. 157-180). Chichester: John Wilev.
- Uusiautti, S., &Määttä, K. (2015). Engagement and hope as factors behind success at work. Journal of Studies in Education, 5(2), 106-118. http://doi. org/10.5296/jse.v5i2.7434
- Vazquez, A. C. S., Magnan, E. dos S., Pacico, J. C., Hutz, C. S., & Schaufeli, W. B. (2015). Adaptation and validation of the brazilian version of the Utrecht Work Engagement Scale. Psico-USF, 20(2), 207-217. http://doi.org/10.1590/1413-82712015200202
- Vazquez, A. C. S., Magnan, E. dos S., Pacico, J. C., Hutz, C. S., & Schaufeli, W. B. (2016). Avaliação do engajamento das pessoas com o seu trabalho: a versão brasileira da escala Utrecht de engajamento no trabalho (UWES). In Hutz, C. S. (Org.). Avaliação em Psicologia Positiva (75-89). São Paulo: Hogrefe.
- Zubair, A., & Kamal, A. (2015). Work related flow, psychological capital, and creativity among employees of software houses. PsychologicalStudies, 60(3), 321-331. http://doi.org/10.1007/ s12646-015-0330-x30-x

Recebido em: 10-10-2017 Reformulado em: 01-05-2018 Aprovado em: 30-05-2018

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