



Erasmus Mundus Joint Master's Degree in Work, Organizational and Personnel
Psychology (WOP-P)

Decent Work and Psychological Capital: A profile study with academic personnel

Master Thesis

Carolina Bolito

Home Tutors: Leonor Pais (Ph.D.) and Tânia Ferraro (Ph.D.)

Host Tutor: Marina Romeo (Ph.D.)

Coimbra, 26th June 2020

Summary

Identification of the Research Project	2
Abstract	4
Introduction	5
Method	16
Participants	16
Procedure	17
Instruments	18
Data analysis	21
Results	22
Discussion	33
Implications	36
Limitations and Recommendations for Future Research	38
Conclusion	39
References	41
Annexes	49
Annex A. Informed Consent, presented online, in Portuguese	49
Annex B. Administered Questionnaire in Portuguese	51
Annex C. Research Permission to apply Psychological Capital Questionnaire (PC	-

Identification of the Research Project

Research line: *Decent work* and human behavior in the work context

The theme of the Master's Thesis: Decent Work and Psychological Capital: A profile

study with academic personnel

Authors:

Student: Carolina de Figueiredo Rodrigues Bolito, cfrbolito@gmail.com

University of Coimbra & University of Barcelona

Home Tutor: Ph.D. Leonor Pais, leonorpais@fpce.uc.pt

Host Tutor: Ph.D. Marina Romeo, mromeo@ub.edu

Faculty of Psychology, University of Barcelona

Abstract

This research focuses on the interactions between Decent Work and Psychological Capital (PsyCap) in academic personnel (from Portugal and Brazil) aiming to identify distinct profiles emerging from the relationship between these two variables. The sample counts with 738 participants (n = 333, Portuguese; and n = 405, Brazilian) and the data was collected online using two questionnaires: Decent Work Questionnaire (Ferraro, Pais, dos Santos, & Moreira, 2018b) and PsyCap Questionnaire (Luthans, Youssef-Morgan, & Avolio, 2015; Luthans, Youssef, & Avolio, 2007b). Multiple regressions were performed to determine the DW dimensions that significantly predict PsyCap. The creation of professionals' profiles based on those dimensions was performed through cluster analysis. Significant differences regarding DW dimensions and PsyCap were then analyzed through a MANOVA. Results indicate that DW and PsyCap are positively related. Fundamental Principles and Values at Work, Fulfilling and Productive Work, and Opportunities play a role as predictors of PsyCap, and it is possible to create clusters based on the relationship between these two variables. This research is a contribution to a deeper understanding of the interaction between the variables under study and, in practical terms, an input for organizations, providing insight into the type of work elements that should be given unique consideration in the design of systems, structures, and interventions to promote workers' PsyCap.

Keywords: decent work, psychological capital, academic personnel, cluster analysis.

Introduction

The main goal of the present study is to analyze the interaction between Decent Work (DW) and Psychological Capital (PsyCap) in different profiles of academic personnel (from Portugal and Brazil). With this objective, we intend to identify the DW dimensions that significantly predict PsyCap, to create profiles based on those dimensions and finally to study and characterize the differences between them.

In this study, DW is analyzed from a Work, Organizational and Personnel Psychology (WOPP) perspective (Ferraro et al., 2018c), being thus conceptualized as a global concept that comprises work that meets fundamental principles and values, provides workers with productive and fulfilling activity, promotes opportunities for personal and professional development, allows a fair income that enables workers and their families to live with dignity, has an adequate working time and workload, ensures social protection, enables dialogue and freedom to participate in work-related decisions, and has a safe working environment, respecting physical health and integrity (Ferraro et al., 2018c).

The notion of Decent Work (DW) has been present since the foundation of the International Labour Organization (ILO), as part of the Treaty of Versailles, in 1919 (Ferraro, dos Santos, Pais, & Mónico, 2016). However, it was only in 1999 that the concept was formally introduced, during the Report of the Director-General at the 87th International Labour Conference (ILO, 1999). In this report, the Director-General of the ILO at that time, Juan Somavía, defined the promotion of opportunities for women and men to obtain decent and productive work as ILO's primary goal (ILO, 1999). Since then, several landmarks have led the concept of Decent Work to what is now recognized as the Decent Work Agenda (DWA; ILO, 2008b) and it has been incorporated on the United

Nations' 2030 Agenda for Sustainable Development as one of the 17 Sustainable Development Goals (United Nations, UN, 2015).

ILO's actions are guided by four main values: freedom, equity, security and human dignity (ILO, 2008a), expressed through four strategic objectives: standards and fundamental rights and principles at work, promoting employment, social protection and social dialogue (ILO, 1999, 2001, 2008b). From a practical point of view, standards and fundamental principles at work can be seen as preconditions of DW; work with quality and security as its content; and social dialogue as the process towards its achievement (ILO, 2001).

The concept of Decent Work is described in eleven substantive elements (SEs), proposed in the Decent Work Agenda (ILO 2008b, 2013): (1) Employment opportunities, (2) Adequate earnings and productive work, (3) Decent working time, (4) Combining work, family and personal life, (5) Work that should be abolished, (6) Stability and security of work, (7) Equal opportunity and treatment in employment, (8) Safe work environment, (9) Social security, (10) Social dialogue, and (11) Economic and social context for decent work. These substantive elements highlight the multi-faceted nature of the concept of DW. The main concern is, therefore, the extent to which it is possible to establish a series of work attributes recognized in different countries, or even globally, as desirable and, thus, as an aim deserving to be pursued (Ferraro et al., 2016).

Research on DW has been focused on different levels of analysis. Most research has been focused on a macro-level perspective considering statistical, economic, and legal indicators (Ferraro et al. 2018b). However, these indicators demonstrate some limitations when it comes to establishing cross-country comparisons, such as the different social security systems and the different levels of economic, political, social, and national development highlighted by Ghai (2003). Thus, this level of analysis may be

complemented by a micro-level analysis, which considers workers' perception of their working and professional context from a psychological point of view. Within this psychological approach, the concept of DW demonstrates particular interest to Work, Organizational, and Personnel Psychology (WOPP) due to its empirically tested potential to improve workers' conditions, contexts, and well-being, as well as the contribution they deliver to society (Ferraro et al., 2018c). In this field, Ferraro et al. (2018b) developed a comprehensive operationalization of the concept - through which DW is analyzed in this study - expressing the configuration of workers' DW perceptions, based on ILO's substantive elements, resulting in a model of seven dimensions - Fundamental Principles and Values at Work, Adequate Working Time and Workload, Fulfiling and Productive Work, Meaningful Remuneration for the Exercise of Citizenship, Social Protection, Opportunities, and Health and Safety. According to dos Santos (2019), this model integrates disperse research subjects in a comprehensive core concept, which may valuable for research and practice on a global scale.

Although there is still not much research on DW from a WOPP perspective (Pereira, dos Santos, & Pais 2019), some studies have already been conducted. For example, in a study aiming to analyze the interaction between DW and Work Motivation in Portuguese and Brazilian lawyers, Ferraro et al. (2017) found some DW dimensions (Fundamental Principles and Values at Work, Fulfilling and Productive Work, Meaningful Remuneration for the Exercise of Citizenship) to be positively associated with work motivation and negatively associated with amotivation in both samples. In another study, DW played an important role in the promotion of physicians' identified and intrinsic motivation, contributing also to produce work engagement and to avoid personal-burnout (Ferraro, dos Santos, Moreira, & Pais, 2020).

Regarding DW measurement, as far as we know, three perception-based DW measures have already been developed (Duffy et al., 2017; Ferraro et al., 2018b; Webster, Budlender, & Orkin, 2015). The instrument presented by Duffy et al. (2017) was developed under a counseling and vocational psychology perspective and considers the DW concept as a different one from the ILO's definition, presenting a more restricted definition of the concept. The one from Webster et al. (2015) does not cover all the aspects of the DW concept as defined by the ILO, focusing only on nine of the indicators (Pereira et al., 2019), and has a work sociology perspective. The DWQ (Ferraro et al., 2018b), which was used in this study, explores seven dimensions (Fundamental Principles and Values at Work, Adequate Working Time and Workload, Fulfiling and Productive Work, Meaningful Remuneration for the Exercise of Citizenship, Social Protection, Opportunities, and Health and Safety) that cover the whole concept of DW, as they reflect all the already mentioned SEs of DW identified by the ILO (ILO, 2008b, 2013). In addition, this measure has demonstrated adequate reliability coefficients for all seven subscales (Ferraro et al., 2018b) and it is the only one that has been developed under a WOPP approach for measuring workers' perceptions of their working and professional contexts.

PsyCap has first been defined by Luthans et al. (2007b) as an individual's positive psychological state of development characterized by being confident to assume challenging tasks, mobilizing the necessary effort to succeed (efficacy); making a positive attribution about the possibility of succeeding (optimism); persisting towards goals, redirecting paths if necessary (hope); and overcoming adversities to succeed (resilience).

Grounded on the Humanistic Psychology tradition, it was the Positive Psychology movement and its applications to the workplace, namely, Positive Organizational Behaviour (POB) that provided a foundation for this concept (Luthans et al., 2007b).

Humanistic Psychology has long recognized the value of positive experience, trying to focus people on their potential instead of their limits (Resnick, Warmoth & Selin, 2001). The first phase of humanistic psychology, which reached its peak around the 1960s, was widely driven by Abraham Maslow (Khan & Jahan, 2012) who introduced and drew attention to the term *Positive Psychology* in a chapter of his book "Motivation" and Personality" (Maslow, 1954). In this chapter, Maslow emphasized the dominant dysfunctional bias in psychology at that time. This is because, before the Second World War psychologists were considered to have three distinct missions: healing mental illness, promoting happiness and productivity among healthy people, and developing human potential (Seligman & Csikszentmihalyi, 2000). As a result of the enormous need for reparative psychological treatment after the war, little attention was being devoted to the study of human strengths at the time. Therefore, even though several authors had already made the call for a positive perspective, psychology was still dominated by the approach of dysfunctionality until the turn of the century, when Seligman and Csikszentmihalyi (2000) underlined the imminent restoration of the "psychology of positive human functioning" (p. 13). The goal was to redirect psychology to the study of human strengths and potentialities, instead of just focusing on what is dysfunctional and trying to fix it, enabling psychologists to understand and promote the factors that allow individuals, communities, and societies to flourish.

Since its genesis, Positive Psychology has been questioned by authors who consider that there is no need for a separate field of positive psychology and that, if so, then there should also exist the one of negative psychology (Held, 2002) or that it fails to recognize important negative aspects of life (Held, 2004; Pérez-Álvarez, 2013). Seligman, Steen, Park, and Peterson (2005) address these concerns by stating that research on Positive Psychology intends to supplement and not to replace the knowledge

about human suffering, weaknesses, and disorders. Peterson (2009) also states that the aim of Positive Psychology is not to deny the negative events that people may experience, but to alert to the idea that focusing only on disorder may lead to "an incomplete view of the human condition" (p. 1).

In this context, accompanying the evolution of psychology and stimulated by the growing dynamism, complexity, and unpredictability of the labor market, a different approach started to emerge also at the workplace. Thus, in an attempt to apply the ideas of Positive Psychology to the workplace, Luthans (2002b) introduced the term Positive Organizational Behavior (POB), defined as the study of people's positively oriented psychological resources and strengths in the workplace. Four psychological capacities were included in this conception: Hope, Efficacy, Resiliency, and Optimism (Luthans, 2002a; Luthans, Luthans, & Luthans, 2004; Luthans & Youssef, 2004). These constructs meet certain criteria that differentiate them from other positive psychology constructs (Luthans, 2002a, 2002b; Luthans & Youssef, 2007; Luthans et al., 2007b): first, they are theory and research-based; second, they are measurable, that is, there are reliable and valid measures available; third, they are state-like and, thus, malleable and open to development and improvement; and finally, they have an empirically tested impact on performance at work (Luthans, 2002a, 2002b; Luthans & Youssef, 2007; Luthans et al., 2007b).

When combined, the four facets constitute a core construct which was denominated Psychological Capital or PsyCap (Luthans et al., 2004; Luthans & Youssef, 2004). This means that even though each one of the constructs is valid *per se*, it may be more beneficial to consider them as indicators of a higher-order factor, PsyCap. This core construct integrates hope, efficacy, resiliency, and optimism in synergistic and not the only additive way, being, in other words, "greater than the sum of its parts" (Luthans et

al., 2007b, p. 19). Therefore, it is expected that the resulting impact of the investment, management, and development of overall PsyCap on performance and attitudinal outcomes will be broader than the individual capacities considered individually (Luthans et al., 2007b). This conceptualization has been empirically supported by Luthans, Avolio, Avey, and Norman (2007a) that demonstrated that even though each facet has both distinctive and common cognitive and motivational processes, their combined cognitive and motivational effects will be wider and more impactful than any of the constructs considered individually.

PsyCap has been conceptualized as a psychological state (Luthans & Youssef, 2004) and several studies have supported that it can change over time (Avey, Luthans, Smith & Palmer 2010; Peterson, Luthans, Avolio, Walumbwa & Zhang, 2011), and therefore that it may be open to development and improvement, through brief, focused and easy-to-implement training interventions (Luthans, Avey & Patera, 2008; Luthans, Avey, Avolio & Peterson, 2010; Luthans, Avey, Avolio, Norman & Combs, 2006; Luthans, Luthans & Avey, 2014). The possibility of developing PsyCap becomes particularly relevant in today's complex, dynamic and fast-changing job market, in which an employee higher in PsyCap may be more likely to successfully deal with potential adversities than an individual lower in PsyCap (Luthans et al., 2007a; Luthans & Youssef, 2007).

A lot of empirical research on the topic of PsyCap has already been conducted. Concerning PsyCap antecedents, Avey (2014) identified three significant categories: individual differences, related to self-esteem, proactive personality, core self-evaluations and collectivism; supervision and leadership, namely authentic, ethical and empowering leadership; and finally, job characteristics, in terms of task complexity. Srivastava and Maurya (2017) identified work engagement, organizational justice, workplace social

support, and authentic leadership as organizational predictors of PsyCap and sense of humor and positive emotions as individual antecedents of PsyCap. More recently, Sameer, Amin, and Mohamad (2019) found the five job characteristics of skill variety, task significance, job feedback, job identity and job autonomy to be positively related to the four components of PsyCap.

Research on PsyCap outcomes is far more extensive than on its antecedents. For example, Luthans et al. (2007a) identified a positive relationship between employee PsyCap, job satisfaction, and performance. In a study with 227 Chinese white-collar workers, Kwok, Cheng, and Wong (2015) found that among all PsyCap constructs, hope, optimism, and efficacy had a significant and positive effect on job satisfaction. Moreover, these authors found a positive relationship between family emotional support and job satisfaction, with this association being completely mediated by optimism and efficacy (Kwok, Cheng, & Wong, 2015). In a meta-analysis of 51 studies, Avey, Reichard, Luthans & Mhatre (2011) found PsyCap to be strongly related with desirable employee attitudes, such as organizational commitment, job satisfaction, and psychological wellbeing, and negatively related to employee cynicism, turnover intentions, and employee stress and anxiety. Moreover, PsyCap has been found to be positively related to employee's creativity (Rego, Sousa, Marques, & Cunha, 2012; Sweetman, Luthans, Avey & Luthans, 2011) and to problem-solving performance and reported innovation (Luthans, Youssef & Rawski, 2011). Recently, in a review article, Srivastava and Maurya (2017) identified psychological health, organizational citizenship behavior, ethical performance, and creative performance as commonly referred outcomes. Among academic personnel, PsyCap has been shown to predict well-being, directly and indirectly - with meaning in life as a mediator (Li, 2018); to moderate the impact of work-family conflict on job burnout (Pu, Hou, Ma, & Sang, 2017); and to be negatively associated with depressive symptoms (Shen et al., 2014).

Previous research attempting to shed light on the relationship between Decent Work and Psychological Capital has already been conducted. More specifically, a study aiming to analyze the relationship between DW and Work Motivation, with Psychological Capital as a mediator, found that DW plays a significant role as a predictor of different types of Work Motivation, through PsyCap mediation (Ferraro et al., 2018b). Another study with Portuguese and Brazilian knowledge workers aiming to analyze the relationship between DW, Work Motivation and PsyCap has gone further, providing evidence to the idea that DW is positively related to psychological capital and identifying the DWQ dimensions (*Fulfilling and Productive Work* and *Opportunities*) that are most related to the development of PsyCap in that sample (Ferraro et al., 2018a).

The present study aims to verify these results and go further, providing insight into the groups of workers who may encompass certain DW configurations, understanding whether it is possible to create profiles based on the relationship between the two variables under study, and if so, analyzing and characterizing their differences. Furthermore, this study is focused on the way these two variables interact specifically in academic personnel. Higher Education Institutions (HEIs) have suffered significant changes over the last few years, and professionals currently work in a complex environment in which they are increasingly expected to conciliate different responsibilities (Helker, Wosnitza, Mansfield, & Eugster 2018). The pressure to be simultaneously competent in teaching, productive in research and, in most cases, good performers also as managers, may lead these professionals to strive to properly allocate their working time and achieve an adequate balance between work, family, and personal life. In addition, academic personnel works under very different conditions and with

different types of contracts and, as a result, a considerable number of academics are employed part-time and on a short-term basis, especially when they are starting their careers (Teichler, Arimoto, & Cummings, 2013). Recently, Cardoso, Carvalho, and Videira (2018) found that although Portuguese academics consider their profession to remain prestigious and socially valued, they also recognize that their working and contractual conditions have been deteriorating over the last few years. In this context, it becomes relevant to explore how far are DW perceptions present in a profession with such distinctive characteristics and the way these perceptions interact with professionals' PsyCap.

The WOPP perspective upon DW is recent and, therefore, research on this topic is only beginning (Ferraro, dos Santos, Pais, & Moreira 2017). This study aims to fill this gap and perhaps contribute to the future development of a conceptual model of DW from a WOPP perspective. In addition, although growing attention has been given to the antecedents of PsyCap (e.g., see Avey, 2014; Srivastava & Maurya 2017), research on this topic has been mostly focused on the consequences of PsyCap upon a variety of outcomes (Luthans & Frey 2018), highlighting the role of PsyCap as an antecedent variable. Thus, this research also intends to contribute to filling this gap, allowing the understanding of the interaction between workers' DW perceptions and PsyCap in the different profiles.

Although there is not much research that investigates the relationship between the two concepts under study, it is possible to identify points of convergence between some DW dimensions (Ferraro et al. 2018b) and previous research on the antecedents of PsyCap. This correspondence can be found in Table 1.

Table 1 *Correspondence between DW dimensions and PsyCap antecedents*

DW Dimensions	PsyCap antecedents	References
DW1. Principles and Values at Work	Organizational justice Authentic, ethical and empowering leadership Workplace social support	Srivastava and Maurya (2017); Avey (2014)
DW3. Fulfilling and Productive Work	Task significance Job feedback Job identity Work engagement	Sameer et al. (2019); Srivastava and Maurya (2017)
DW6. Opportunities	Job autonomy	Sameer et al. (2019);

Taking the above-mentioned studies into consideration, multiple regressions will be performed expecting that different levels of DW will play an important role as predictors of PsyCap. Thus, our hypothesis is:

H1: Decent work is positively related to psychological capital in academic personnel.

To further analyze the interaction between DW and Psycap, profiles of academic personnel based on the scores obtained in the DWQ factors (Ferraro et al., 2018b) that interact significantly with PsyCap will be created through cluster analysis. The goal is to test whether there will emerge profiles of workers based on the interaction between the two variables under study. In case those profiles are found, we also intend to verify if they are significantly different in predicting workers' PsyCap. Therefore, we propose the following research questions: Are there profiles of workers based on the relationship between the two variables under study, that is, based on the DW dimensions that significantly predict PsyCap? If so, what are the differences between these profiles in terms of PsyCap prediction?

We will start by presenting the method, including participants, procedures, instruments, and data analysis. Results will then be presented and subsequently addressed in the discussion section. Social, theoretical, and practical implications will be presented afterwards. Finally, potential limitations and recommendations for future research will be discussed.

Method

Participants

The sample was composed of 738 participants from Portugal (n = 333; 45.1%) and Brazil (n = 405; 54.9%) and balanced by gender (50% were women and 50% were men). This sample is part of a wider research project conducted by Ferraro et al. (2017, 2018a, 2018b, 2018c, 2020) which emphasized the work experience of different professional groups of knowledge workers. However, in the present study, we decided to focus only on the experience of academic personnel for the already mentioned reasons. The distribution of each demographic characteristic is presented in Table 2.

In terms of age, participants were divided into four categories, each spanning 15 years (2 missing values). There is a slight concentration of professionals in the 36-50 years category (46.1%), followed by the category of 51-65 years (38.3%), which is in line with the fact that the study is focused on the experience of professionally active and highly skilled workers.

The level of education was classified into four categories, adjusted considering the structure of the educational system in each country, and was predominantly constituted by professionals holding a Ph.D. (77.9%). Regarding tenure, participants were divided into five categories, each spanning 10 years, with the majority of professionals

Table 2 Sociodemographic Characteristics of the Sample (N = 738)

Characteristics	n	%
Gender		
Women	369	50
Men	369	50
Age		
21-35	90	12.2
36-50	340	46.1
51-65	283	38.3
66-80	23	3.1
Missing values	2	0.3
Education level		
College Degree, Bachelor (complete) / Master Degree and or post graduation or equivalent (in course)	8	1.1
Master Degree and or post graduation or equivalent/ PhD in course	116	15.7
PhD	575	77.9
Post-PhD	39	5.3
Tenure (years of professional experience)		
From 6 months to 10 years of professional experience	241	32.7
From 11 to 20 years	218	29.5
From 21 to 30 years	181	24.5
From 31 to 40 years	90	12.2
More than 40 years	8	1.1

Procedure

In order to join this study, participants were required to be currently employed, to have at least six months of professional experience, and to be paid for their work. Workers were contacted through professional associations or by sending an invitation to their public email addresses on institutional websites. Recruitment was made by contacting these professionals by e-mail, phone, or personally, briefing them about the study and presenting them with the informed consent and the survey. After being clarified about any questions, participants were required to read the consent and click on a check-box as a way of confirming that they agreed to participate in the study. The questionnaires were then answered in an online platform. Confidentiality and anonymity of the responses were

assured and participants were informed that the results would only serve research purposes and that they could discontinue participation at any time. The task required about 20 minutes. The data was collected between September 2015 and June 2016. This study was assessed and approved by the Ethics Committee of the Faculty of Psychology and Educational Sciences of the University of Coimbra.

Instruments

Decent Work Questionnaire (DWQ)

The DWQ measures workers' perceptions of their working and professional contexts and has demonstrated very good psychometric properties (Ferraro et al. 2018b; Pereira et al., 2019). It has been validated for the Portuguese and Brazilian population and consists of 31 items, with a global score and seven factors, corresponding to seven sub-scales (Ferraro et al., 2018b). The first, Fundamental Principles and Values at Work ($\alpha = .87$; e.g. "In general, decision-making processes about my work are fair") measures the extent to which the workplace meets values as freedom, interactional justice, procedural justice, dignity, participation, non-discrimination, and trust. The second dimension, Adequate Working Time and Workload ($\alpha = .87$; e.g. "My work schedule allows me to manage my life well") is related to the concern for workers' health and the optimization of their contribution to the organizational goals and focuses on working time and workload, balance between work and personal life, and pace of work. The third dimension, Fulfilling and Productive Work (α = .77; e.g. "Through my work I can develop myself professionally") concerns both the aspects of work for workers, and positive organizational results and is related to innovation and intrinsic motivation, satisfaction and recognition, and commitment. The fourth dimension, Meaningful Remuneration for the Exercise of Citizenship ($\alpha = .88$; e.g. "What I earn through my work allows me to live

my life with dignity and independence"), involves the perception of fairness concerning what is earned, which is associated with a remuneration that provides workers and those depending on them with freedom to play a full role as citizens. The fifth dimension is Social Protection ($\alpha = .79$; e.g. "I believe I will have a retirement without financial worries (government or private pension system") and is related to the workers' perception of protection in case of loss of work or illness, through a social security system, for them and their family, and expectations regarding a decent retirement. The sixth dimension, Opportunities ($\alpha = .76$; e.g. "Currently, I think there are work/job opportunities for an individual like me") is related to the possibility of choosing from different jobs available, on the one hand, and to professional progress on the other, as well as with prospects for an increased remuneration and professional development. The last dimension, Health and Safety ($\alpha = .85$; e.g. "I have everything necessary at work to ensure that my health and safety are protected.") involves the protection of workers' health, and the perception of having a safe and comfortable work context and environment (dos Santos, 2019; Ferraro et al., 2018b). Responses to the DWQ were given on a 5-point Likert scale, from 1 = "I do not agree" to 5 = "I completely agree". Cronbach's alpha for Global DW in the current study was .92.

Psychological Capital Questionnaire (PCQ)

The PCQ (Luthans et al., 2015; Luthans et al., 2007b) measures employees' psychological capital in the workplace and it is the most commonly used measure of PsyCap (Dawkins, Martin, Scott & Sanderson, 2013). In this study, we used a PCQ version which has been validated for the Portuguese population (Rego et al., 2012) and demonstrated good psychometric properties (Antunes, Caetano, & Cunha, 2017). This version includes 24 items with a global score and 4 factors, corresponding to 4 sub-scales: Efficacy, Hope,

Optimism, and Resiliency (Rego et al., 2012, previously described). Hope is defined as a "positive motivational state that is based on an interactively derived sense of successful (a) agency (goal-directed energy) and (b) pathways (planning to meet goals)" (Snyder, Irving, & Anderson, 1991, p. 287). Optimism can be seen as an attributional state which describes positive events as a result of personal, permanent and pervasive causes, and negative events as external, temporary, and situation-specific (Seligman, 1998). Resilience is defined as the capacity to overcome potential obstacles and persevere, whether they are adverse and conflictual or even positive events (Luthans, 2002a). Finally, efficacy refers to one's confidence about their capacity to succeed in a particular task within a certain context, mobilizing the necessary motivation, cognitive resources, and actions (Stajkovic & Luthans, 1998). Even though each factor has both conceptual independence and discriminant validity, PsyCap has been conceptualized and empirically supported as a higher-order construct, which means that it is comprised of the shared variance of its four facets (Luthans et al., 2007a). Luthans et al. (2015) also highlighted that PsyCap is a better predictor of the desired outcomes than each of its components considered individually. For this reason, we decided to use overall PsyCap, instead of considering each facet individually. A sample item is 'I can think of many ways to reach my current work goals'. Responses to PCQ were given on a 6-point Likert scale, from 1 = "Strongly Disagree" to 6 = "Strongly Agree". Cronbach's alpha for the overall PsyCap in the current study was .92.

Data Analysis

This is a non-experimental and cross-sectional study, based on quantitative data. The data was analyzed through IBM SPSS 22.0 program for the Windows operating system (IBM Corporation, 2013). In order for the data to be properly adjusted for the use

of the regression technique, outliers were analyzed according to Mahalanobis squared distance (Meyers, Gamst, & Guarino, 2013), having been removed 11 outliers from the sample. Considering the high number of subjects in the sample (n = 738), normality was assured by the Central Limit Theorem.

Taking into account the idea that grouping the Portuguese and Brazilian academic personnel would strengthen the analysis for this professional group, the equality of variances between the two samples was tested (Levene's test) and the null hypothesis that both countries are similar in variances was accepted (Type I error > 0.05) with also roughly similar standard deviations. Therefore, we decided to continue the statistical analysis considering both samples together.

Firstly, descriptive and correlational analyses were performed (see Table 2). Correlations (weak, moderate, or strong) were classified according to Cohen (1988).

After the descriptive statistics and intercorrelation matrix, a multiple linear regression was performed to test the effects of Decent Work on PsyCap (H1) and to identify the DWQ dimensions that are most related to PsyCap.

The creation of profiles of professionals based on the scores obtained from the DWQ factors that significantly predict PsyCap was then performed through cluster analysis, applying hierarchical cluster analysis and, at the second step, using the K-means procedure (Maroco, 2007; Meyers, Gamst, & Guarino, 2013). In addition to the fact that it provides a concise description of the patterns of similarities and differences in the data (Everitt, Landau, Leese & Stahl, 2011), the creation of these profiles may be advantageous in the sense that it can guide future interventions, indicating groups that may benefit from that intervention, and enabling efficient and optimal allocation of resources (Clatworthy, Buick, Hankins, Weinman, & Horne, 2005).

As the K-means is a procedure that requires an indication of the number of clusters to retain, the hierarchical method was performed to determine what the optimal number of clusters would be. The intervals were measured with the Squared Euclidian distance and the between-groups linkage was used as a measure of dissimilarity between subjects, as recommended by Meyers, Gamst, and Guarino (2013). As decision criteria on the number of clusters to be retained (the stopping rules), two criteria were used: the analysis of the agglomeration schedule coefficients (distance between clusters; Maroco, 2007) and the R-Squared¹.

The DW dimensions that were used to create the clusters were then analyzed considering statistically significant differences obtained on overall PsyCap through a MANOVA. The effect size was obtained by calculating the partial eta squared (η^2_p) measure (Howell, 2013).

Results

The descriptive statistics of all the dimensions are presented in Table 3. In the Decent Work Questionnaire, the fourth dimension (Fulfilling and Productive Work) got the highest mean (M = 21.35) opposing the Social Protection dimension which had the lowest mean (M = 11.34). A correlation of .44 (p < .001) was found between Decent Work and PsyCap global dimensions (Cohen, 1988), as can be seen in Table 2. All the correlation coefficients were positive and significant (p < .05). The strongest correlation found was between PsyCap and Fulfilling and Productive Work (p = .51, p < .001),

-

¹¹ R-square Index (RS Index) can be considered as a measure of dissimilarity between clusters (Franke, Reisinger, & Hoppe, 2009; Gan, Ma, & Wu, 2007; Halkidi, Batistakis, & Vazirgiannis, 2002). From the one-way ANOVA output, it is possible to take the sum of in between groups squares (SSB) and the sum of total squares (SST) of all dependent variables. Then calculate the R-squared by dividing SSB by SST (Halkidi et al., 2002; Maroco, 2007; Sharma, 1996; Zhao, 2012).

opposing to PsyCap and Social Protection, which demonstrated the weakest correlation $({\bf r}=.18,\,p<.001).$

Table 3 Descriptive Statistics and Bivariate Correlations between Decent Work factors and Overall PsyCap using Pearson's correlation coefficient (N = 738)

Measure	M	SD	α	1	2	3	4	5	6	7	8	9
1. Global DW	103.77	17.27	.92	1.00								
2. Fundamental Principles and Values at Work	20.07	4.63	.87	.78**	1.00							
3. Adequate Working Time and Workload	12.37	3.60	.87	.70**	.43**	1.00						
4. Fulfilling and Productive Work	21.35	2.83	.77	.61**	.45**	.30**	1.00					
5. Meaningful remuneration for the exercise of citizenship	12.97	3.42	.88	.72**	.42**	.46**	.30**	1.00				
6. Social Protection	11.34	3.54	.79	.67**	.40**	.38**	.28**	.52**	1.00			
7. Opportunities	12.25	3.65	.76	.62**	.41**	.34**	.44**	.33**	.25*	1.00		
8. Health and Safety	13.41	3.40	.85	.68**	.50**	.45**	.27**	.45**	.41**	.19**	1.00	
9. PsyCap	112.98	13.64	.92	.44**	.40**	.22**	.51**	.22**	.18**	.40**	.22**	1.00

^{**} Correlation is significant at the 0.01 level (1 tailed).

* Correlation is significant at the 0.05 level (1 tailed).

For this analysis, Global Decent Work and its respective seven dimensions were considered as predictor variables and overall PsyCap as the criterion variable. Regression results are reported in Table 3. Overall, Decent Work explained 32.01% of the variance, $R^2 = .32$, $F_{(7,737)} = 49.099$, p < .001. Results of the multiple linear regressions (Table 4) suggest that the effect of Decent Work on Psychological Capital is significant and positive, thus supporting Hypothesis 1 which states that Decent Work is positively related to Psychological Capital. Considering the beta scores, the DW factors that showed more influence over PsyCap were Fulfilling and Productive work ($\beta = .37$, p < .001) followed by Opportunities ($\beta = .18$, p < .001) and Fundamental Principles and Values at Work ($\beta = .17$, p < .001).

Table 4 *Regression Analysis Summary for DW' Dimensions Predicting Overall PsyCap (*N = 738)

	PsyCap								
Variables		dardized icients	Standardized Coefficients	Collinearity S	\mathbb{R}^2				
	В	SEB	β	Tolerance	VIF				
						.32***			
DW1_Fundamental Principles and Values at Work	.50	.12	.17***	.57	1.75				
DW2_Adequate Working Time and Workload	05	.14	01	.66	1.52				
DW3_Fulfilling and Productive Work	1.78	.17	.37***	.71	1.41				
DW4_Meaningful retribution for the exercise of citizenship	04	.16	01	.60	1.66				
DW5_Social Protection	12	-14	03	.67	1.50				
DW6_Opportunities	.66	.14	.18***	.71	1.41				
DW7_Health and Safety	.09	.16	.02	.63	1.60				

 $^{* \}rho < .05; ** \rho < .01; *** \rho < .001;$

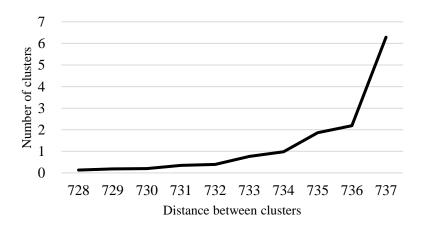
Notes: B = unstandardized regression coefficient; SEB = Standard Errors of B; β = standardized regression coefficient; R^2 = explained variance; Significant β are in bold; Durbin-Watson value = 2.08 (between 1 and 3); Variance Inflation Factor (VIF).

Durbin-Watson value: to test the independence of the errors, the values should be between 1 and 3 for all variables.

Variance Inflation Factor (VIF) to test for multicollinearity; these values were less than 10 for all the variables meaning that none of the variables was collinear (Maroco, 2010)

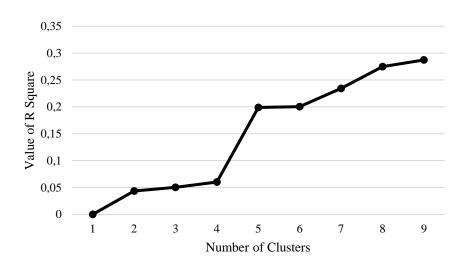
A hierarchical cluster analysis was conducted using the significant DW predictors from the regression analysis (Fulfilling and Productive Work, Opportunities, and Fundamental Principles and Values at Work). From the graphical analysis of the agglomeration schedules coefficients (which can be followed in figure 1) and the R Squared (which can be followed in figure 2), it was determined that there were four clusters in the data.

Figure 1
Agglomeration Schedule Coefficients



In the agglomeration schedules coefficients graph (Figure 1) it is possible to see that the step where the distance coefficients make a bigger jump, is in stage 734. This means that the optimal number of clusters should be k = 738 (N) -734 ("elbow stage") = 4 clusters (Bholowalia & Kumar, 2014). The R-Squared procedure as described by Maroco (2007) and Sharma (1996) indicates that the minimum number of clusters that retain a significant percentage of variance (>.80) is four.

Figure 2 *R-Square Index*



Report means and FCC for the different clusters are shown in Table 3. The mean values were obtained considering the sum of the scores of the items of each dimension, with min. = 6 and max. = 30 for DW1, min.= 8 and max. = 25 for DW3, and min. = 4 and max. = 20 for DW6. Overall, the results indicate that it is possible to differentiate (through the means) the subjects that belong to each cluster, based on these three DW dimensions.

Subsequently, Table 5 describes each profile regarding its' scores for each of the three decent work dimensions. The first profile presented (High Decent Work) is the one that shows the highest concentration of professionals, with 245 participants. This profile exhibits the highest scores in all these three Decent Work dimensions comparing with the other profiles. In contrast, the Low Decent Work profile (n = 104) includes the participants that revealed the lowest levels of all these Decent Work dimensions, especially opportunities. The second cluster, Low Principles and Values at Work (n = 155), reveals low scores on 'Principles and Values at Work', medium on 'Fulfilling and Productive Work' and medium to low on 'Opportunities'. The third cluster, 'Medium Principles and Values at Work' with Low 'Opportunities' (n=234), includes participants that demonstrated low Opportunities, medium 'Fulfilling and Productive Work' and

medium to high 'Principles and Values at Work'; Thus, the main difference between the second and the third profiles was the 'Principles and Values at Work' dimension, which revealed low levels in the second profile and medium to high levels in the third profile.

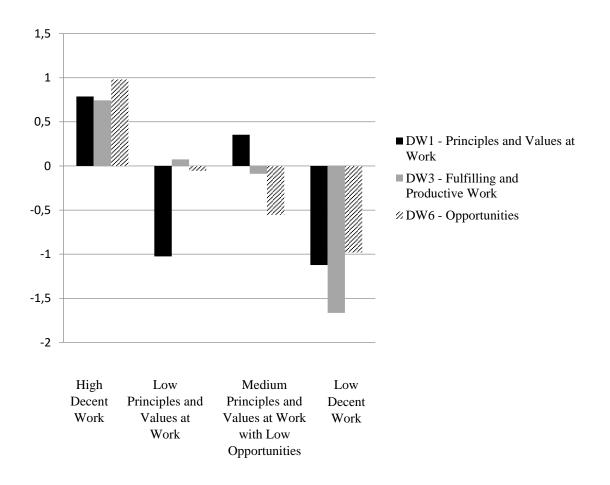
The variables that contribute the most to the definition of the clusters are those with the higher Cluster Mean Square (QMC) and the lowest Error Mean Square (QME), that is, the ones with the highest value of F = QMC / QME. Therefore, it is possible to say that the variable that allows greater discrimination among the clusters is the variable DW1 (F = 443.366) followed by DW3 (F = 336.135) and DW6 (F = 302.630).

Table 5Clusters' descriptive statistics and final cluster centers (FCC)

	I	High DW	Ţ	DW deficit in, at least, one DW dimension $(n = 389)$						Low DW					
	High	Profile 1 Profile 2 Low Principles and Values at Work $n = 245$ Profile 2 Low Principles and Values at Work $n = 155$ Profile 3 Medium Principles and Values at Work with Low Opportunities $n = 234$			Profile 2 Low Principles and Values at Work			Profile 2 Low Principles and Values at Work Profile 2 Values and Values at Work			oles and k with nities		Profile 4 Decent ' <i>n</i> = 104	Work	
	Mean	SD	FCC	Mean	SD	FCC	Mean	SD	FCC	Mean	SD	FCC	F		
DW1_Principles and Values at Work	23.71	2.74	.79	15.33	2.80	-1.02	21.71	2.20	.35	14.88	3.74	-1.12	443.366		
DW3_Fulfilling and Productive Work	23.45	1.55	.74	21.56	1.83	.08	21.10	1.87	09	16.63	2.36	-1.67	336.135		
DW6_Opportunities	15.83	2.03	.98	12.05	3.05	06	10.24	2.31	55	8.67	2.62	98	302.630		

Figure 3 shows the pattern of participants' DW perceptions regarding these three dimensions, in each profile. In this graphic, the standardized values were used to facilitate the understanding of the differences between profiles. The standardization was made based on the means of each dimension across all profiles. Thus, the first and fourth profiles appear very clearly as High Decent Work and Low Decent Work, respectively. In addition, it is easier to observe that the main difference between the second and third profiles is the 'Fundamental Principles and Values at Work' dimension.

Figure 3
Decent Work Profiles



A MANOVA was conducted with the variables used to create the clusters (DW1, DW3, and DW6) and PsyCapital to test if the DW dimensions had, in fact, different statistically significant effects regarding PsyCap. Univariate tests (F) and effect sizes (η 2p) can be found in table 5. A statistically significant MANOVA effect (with Bonferroni adjustment) was obtained, Wilks' λ = .108, F (12,1934,336) = 212.411, p < .001. The multivariate effect size (η 2p) was estimated at .524, which suggests that 52% of the variance in Overall PsyCap was explained by the three DW dimensions. From the univariate point of view, significant effects were found for all variables individually. For DW1, F (2,733) = 433.366, p < .001 with an effect size (η 2p) estimated at .644, which suggests that within the 52% of the explained variance of the model, 64.4% was explained by DW1. For DW3, a significant effect was also obtained, with F (2,733) = 336.135, p < .001, and an effect size (η 2p) estimated at .579, which suggests that within the 52% of the variance explained by the model, 58% was explained by DW3. For DW6, F (2,733) = 302.630 p < .001, η 2p = .553, which suggests that within the 52% of the explained variance of the model, 55% was explained by DW6.

In terms of PsyCap, F $_{(2,733)}$ = 73.142, p < .001 with an effect size (η 2p) estimated at .230. The means (M) and standard deviations (SD) of DW dimensions and PsyCap of each profile can be found in Table 6.

Table 6 *Means (M) and standard deviations (SD) of DW dimensions of each profile and PsyCap: Univariate tests (F) and effect sizes (\eta2p)*

	Profile	Mean	SD	F	Sig.	Partial Eta Squared
DW1_Fundamental Principles	1	23.71	2.74	443.366	.000	.644
and Values at Work	2	15.33	2.80			
	3	21.71	2.20			
	4	14.88	3.74			
DW3_Fulfilling and	1	23.45	41.55	336.135	.000	.579
Productive Work	2	21.56	1.83			
	3	21.10	1.87			
	4	16.63	2.36			
DW6_Opportunities	1	15.83	2.03	302.630	.000	.553
	2	12.05	3.05			
	3	10.24	2.31			
	4	8.67	2.62			
Overall_PsyCap	1	120.64	10.39	73.142	.000	.230
	2	110.54	13.61			
	3	112.10	10.87			
	4	100.55	13.64			

Discussion

This study intended to analyze the effects of Decent Work on Psychological Capital among academic personnel. For that purpose, we intended to understand if groups of subjects based on the relationship between these two variables would emerge, through the creation of profiles based on the scores obtained from the DW dimensions that significantly predict PsyCap. The greatest contribution of this study is the idea that it is possible to create profiles of workers based on the interaction between their DW

perceptions and their Psychological Capital and that those profiles are statistically significant and conceptually supported.

In terms of PsyCap prediction, the role of 'Fulfilling and Productive Work' should be highlighted and is in line with previous findings from Ferraro et al. (2018a). Understandably, those who perceive that the work they perform creates value, that they are satisfied, recognised, committed, and intrinsically motivated (dos Santos, 2019) may demonstrate positive expectations about events at work, take on challenging tasks and mobilize the necessary effort, believing in the possibility of succeeding and persisting against obstacles. The role of 'Opportunities' has also been pointed out in previous research (Ferraro et al., 2018a). It seems that, in the promotion of PsyCap among academic personnel, the perception of being able to evolve in terms of remuneration and professional development can play a significant role. In the present study, 'Principles and Values at Work' also played a role as a predictor of PsyCap. Prior research had already found organizational justice, authentic, ethical, and empowering leadership, and workplace social support to predict PsyCap (Avey, 2014; Srivastava & Maurya, 2017). Thus, this being a dimension of DW that encompasses values such as interactional and procedural justice, dignity, participation, freedom, non-discrimination, and trust (dos Santos, 2019), its effect on academic personnel's PsyCap is understandable and in line with these previous findings.

From the analysis of the clusters' descriptive statistics, it is interesting to note that the "Fulfilling and Productive Work" dimension demonstrated high mean scores across all profiles, contrary to the "Opportunities" dimension, which revealed the lowest mean scores. This may demonstrate the ambiguity that academic personnel perceives between recognizing that this professional activity is fulfilling and productive, but at the same time, that it is also an activity that does not offer many professional and personal

development opportunities currently. These results may be related to the previously mentioned idea that, nowadays, a considerable number of academics are employed part-time and on a short-term basis (Teichler et al., 2013), which may be contributing to this perception regarding opportunities.

The first profile presented - High Decent Work - is constituted by professionals who may perceive that fundamental principles and values are taken into consideration in their workplace, that their work is fulfilling and useful for future generations, and they show a positive expectation about the possibility of having alternative jobs available and being able to progress in professional terms. This is also the group of professionals that showed the highest levels of PsyCap (M = 120.64), which means that these individuals may be more likely to be optimistic regarding events at work, to engage in challenging tasks based on the belief that they will succeed, and to overcome possible obstacles.

The second profile - Low Principles and Values at Work - includes professionals that probably perceive their work as a place where they are not accepted nor have the freedom to participate in work-related decisions, and where they are not treated fairly and with dignity. In addition, this group of professionals is likely to perceive they have few opportunities for professional progress. The third profile - Medium Principles and Values at Work with Low Opportunities - indicates that these professionals are likely to perceive that fundamental principles and values are respected in their work, that their work is fulfilling and productive in some way, but that there is a lack of opportunities for professional development. In terms of PsyCap, the second and third profiles are similar, with the second one showing a slightly lower level.

Finally, the Low Decent Work profile includes professionals that have a perception of their professional and working context as poor DW conditions, and probably feel that their work contributes little to their personal and professional

fulfillment, as well as to future generations and that they are not treated fairly in their work nor have the freedom to participate. At the same time, this group of academic personnel is likely to perceive that they have no alternative job opportunities available and that there are not many chances for professional progress, in terms of remuneration and professional development. This last profile is in line with Cardoso et al. (2018) who found that some academics recognize that there have been changes in HEI in the last years and that they perceive these changes as deteriorating their working conditions (e.g. through the increase in contractual precariousness and reduction in permanent staff). In this sense, this profile strongly contradicts the idea that there is no Decent Work deficit among academic personnel which highlights the relevance of this study, and more than that, the importance of studying DW in highly skilled workers as the academic personnel of our sample. This is also the profile that exhibited a lower level of PsyCap (M = 100.55), which may indicate that these professionals are likely to show less optimism regarding events at work, revealing a lower probability of engaging on challenging tasks based on the belief that they are capable of succeeding, as well as lower resilience against obstacles.

Implications

Given its alignment with other United Nations (UN) initiatives, such as the already mentioned Sustainable Development Goals (UN, 2015) research on DW and the way it interacts with other variables creates new knowledge that can contribute to social benefits. Decent work for all depends on the participation of several stakeholders and, therefore, the greater the number of actors involved in creating decent work, the better the results that will be achieved. Moreover, due to the central role academic personnel plays in the development and qualification of society, new knowledge can contribute to improving higher education management.

This study constitutes a contribution to the development of DW and Psycap, allowing the broadening of the nomological network (Cronbach & Meehl, 1955) of these constructs. Our results are a step forward in this regard, as they demonstrate that it is possible to create profiles of workers based on the relationship between these two variables.

In practical terms, this study provides insight into which work elements ('Fulfiling and Productive Work', 'Principles and values at Work', and 'Opportunities') should be given special consideration in the design of systems, structures, and interventions to promote workers' PsyCap, which may enable human resources practitioners in organizations, and particularly in HEI, to guide the design of renewed practices and policies, allowing an optimal allocation of resources. More specifically we propose the following interventions related to those DW dimensions: the work redesign so that it becomes meaningful for those who perform it, allowing them to be aware of the results of that work and promoting their intrinsic motivation (Fulfilling and Productive Work); train leaders to create work environments in which values such as organizational justice, freedom and non-discrimination are taken into account and in which employees are allowed to participate (Principles and Values at Work); the design of career plans that consider the developmental aspect of workers, enabling their evolution in terms of remuneration and professional development (Opportunities). Given its empirically tested relationship with desirable employees' attitudes and behaviors (Avey et al., 2011), research on possible ways to promote and develop workers' Psycap is beneficial both for employees and organizations, providing human resources and management structures, leadership practices, and organizational policies overall with knowledge that can contribute to simultaneously benefit workers and organizations (Avey, 2014).

Limitations and Recommendations for Future Research

The present study demonstrates some limitations that may be addressed in future research. The fact that it had a cross-sectional design implies that generalizations need to be made cautiously and that these results can be enriched and extended by future longitudinal studies that investigate the interaction between the two variables under study over time.

Since this study is focused specifically on academic personnel, it may be interesting that future research studies the interaction between DW and PsyCap in other occupations and professional groups. Moreover, the knowledge about the relationship between these two variables may be enriched and these results supported if future research investigates this interaction in other countries and cultures as suggested by dos Santos (2019).

Measuring organizational level variables would also be interesting in a context with such specific characteristics as HE Institutions. That type of contribution may be relevant to broadening the understanding of the role that DW perceptions and their interaction with other variables play in the performance and well-being of these workers. In addition, although all were considered to test the effects of DW on PsyCap, this study focused only on three (Fundamental Principles and Values at Work, Fulfilling and Productive Work and Opportunities) of the seven dimensions of DW as defined by Ferraro et al. (2018b). In this way, it could be relevant that future research also considers the remaining dimensions of DW, perhaps relating them to other variables, and extending the nomological network of the concept.

Finally, the fact that the data was collected before the COVID-19 pandemic implies the recognition that, currently, the working conditions associated with this period may not be the same. Even though we are still at an early stage, COVID -19 has been the

source of profound changes in the labor market, through the enormous and abrupt increase in the number of people working from home, workers in lay-off, and unemployment rates (Béland, Brodeur, & Wright, 2020; Coibion, Gorodnichenko, & Weber, 2020). For academic personnel in particular confinement policies have implied several changes, like the sudden transition to full-time remote work, online teaching and mentoring, and an adjustment of research activities (Corbera, Anguelovski, Honey-Rosés, & Ruiz-Mallén, 2020). Therefore, it would be interesting for future research to replicate the results of this study in the post-pandemic period, in order to analyze the potential impact of these changes on the perceptions of this population regarding their working and professional context.

Conclusion

The present study aimed to understand the effects of DW perceptions on PsyCap among academic personnel through the creation of profiles based on the relationship between these two variables.

Our results empirically suggest that DW and PsyCap are positively related, that 'Principles and Values at Work', 'Fulfilling and Productive Work' and 'Opportunities' (DW dimensions) play a role as predictors of PsyCap, that it is possible to create groups based on the relationship between these two variables, and that these profiles differentiate form each other in terms of PsyCap prediction.

Research towards the creation of a conceptual model of DW from a WOPP perspective still has a long way to go, and our results constitute a step in that direction. On the other hand, this research also provides insight into which work elements should be given special consideration in the design of systems, structures and interventions in order to truly promote or increase workers', and in particular academic personnel's,

PsyCap – which is crucial given its already mentioned demonstrated benefits, and the central role that this group plays in society's development and education.

References

- Antunes, A. C., Caetano, A., & Cunha, M. (2017). Reliability and Construct Validity of the Portuguese Version of the Psychological Capital Questionnaire. *Psychological Reports*, 120(3), 520–536. https://doi.org/10.1177/0033294116686742
- Avey, J. B. (2014). The left side of psychological capital: New evidence on the antecedents of PsyCap. *Journal of Leadership & Organizational Studies*, 21(2), 141-149. https://doi.org/10.1177/1548051813515516
- Avey, J. B., Luthans, F., Smith, R. M., & Palmer, N. F. (2010). Impact of positive psychological capital on employee well-being over time. *Journal of Occupational Health Psychology*, 15(1), 17-28. https://doi.org/10.1037/a0016998
- Avey, J. B., Reichard, R. J., Luthans, F., & Mhatre, K. H. (2011). Meta-analysis of the impact of positive psychological capital on employee attitudes, behaviors, and performance.

 Human Resource Development Quarterly, 22(2), 127-152.

 https://doi.org/10.1002/hrdq.20070
- Béland, L.-P., Brodeur, A., & Wright, T. (2020). The short-term economic consequences of Covid-19: exposure to disease, remote work and government response. Institute of Labor Economics. https://www.iza.org/publications/dp/13159/the-short-term-economic-consequences-of-covid-19-exposure-to-disease-remote-work-and-government-response
- Bholowalia, P., & Kumar, A. (2014). EBK-means: A clustering technique based on elbow method and k-means in WSN. *International Journal of Computer Applications*, 105(9), 17-24. https://doi.org/10.5120/18405-9674
- Cardoso, S., Carvalho, T., & Videira, P. (2018). Is It Still Worth Working In Academia? The Views from Portuguese Academics. Higher Education Policy, 1-17. https://doi.org/10.1057/s41307-018-0123-7
- Clatworthy, J., Buick, D., Hankins, M., Weinman, J., & Horne, R. (2005). The use and reporting of cluster analysis in health psychology: A review. *British Journal of Health Psychology*, 10(3), 329-358. https://doi.org/10.1348/135910705X25697

- Cohen, J. (1988). Statistical power analysis for the behavioral sciences. New York, NY: Academic Press.
- Corbera, E., Anguelovski, I., Honey-Rosés, J., & Ruiz-Mallén, I. (2020). Academia in the Time of COVID-19: Towards an Ethics of Care. *Planning Theory & Practice*, 21(2), 191-199. https://doi.org/10.1080/14649357.2020.1757891. doi:10.1080/14649357.2020.1757891
- Coibion, O., Gorodnichenko, Y., & Weber, M. (2020). *Labor markets during the covid-19 crisis:*A preliminary view (0898-2937). Cambridge: National Bureau of Economic Research.

 http://www.nber.org/papers/w27017.
- Cronbach, L. J., & Meehl, P. E. (1955). Construct validity in psychological tests. *Psychological Bulletin*, 52(4), 281-302. https://doi.org/10.1037/h0040957
- Dawkins, S., Martin, A., Scott, J., & Sanderson, K. (2013). Building on the positives: A psychometric review and critical analysis of the construct of Psychological Capital.

 *Journal of Occupational and Organizational Psychology, 86(3), 348-370.

 https://doi.org/10.1111/joop.12007
- Dos Santos, N. R. (2019). Decent work expressing universal values and respecting cultural diversity:propositions for intervention. *Psychologica*, 62(1), 233-250. https://doi.org/10.14195/1647-8606_62-1_12
- Duffy, R. D., Allan, B. A., England, J. W., Blustein, D. L., Autin, K. L., Douglass, R. P., ... & Santos, E. J. (2017). The development and initial validation of the Decent Work Scale. *Journal of Counseling Psychology*, 64(2), 206-221. https://doi.org/10.1037/cou0000191
- Everitt, B., Landau, S., Leese, M., & Stahl, D. (2011). Cluster Analysis. Chichester: Wiley.
- Ferraro, T., dos Santos, N. R., Moreira, J. M., & Pais, L. (2020). Decent Work, Work Motivation, Work Engagement and Burnout in Physicians. *International Journal of Applied Positive Psychology*, 5, 13–35. https://doi.org/10.1007/s41042-019-00024-5
- Ferraro, T., dos Santos, N. R., Pais, L., & Mónico, L. (2016). Historical Landmarks of Decent Work. *European Journal of Applied Business and Management*, 2(1), 77-96.

- Ferraro, T., dos Santos, N. R., Pais, L., & Moreira, J. M. (2017). Decent Work and Work Motivation in Lawyers: an empirical research. *Revista Psicologia Organizações e Trabalho*, 17(4), 192-200. https://doi.org/10.17652/rpot/2017.4.13908
- Ferraro, T., Moreira, J. M., dos Santos, N. R., Pais, L., & Sedmak, C. (2018a). Decent Work, Work Motivation and Psychological Capital: an empirical research. *Work: A Journal of Prevention, Assessment, and Rehabilitation, 60*(2), 339-354. https://doi.org/10.3233/WOR-182732
- Ferraro, T., Pais, L., dos Santos, N. R., & Moreira, J. M. (2018b). The Decent Work Questionnaire (DWQ): Development and a validation in two samples of knowledge workers.

 *International Labour Review, 157(2), 243-265. https://doi.org/10.1111/ilr.12039
- Ferraro, T., Pais, L., Moreira, J. M., & Dos Santos, N. R. (2018c). Decent work and work motivation in knowledge workers: The mediating role of psychological capital. *Applied Research in Quality of Life*, *13*(2), 501-523. https://doi.org/10.1007/s11482-017-9539-2
- Franke, N., Reisinger, H., & Hoppe, D. (2009). Remaining within-cluster heterogeneity: a metaanalysis of the "dark side" of clustering methods. *Journal of Marketing Management*, 25(3-4), 273-293. https://doi.org/10.1362/026725709X429755
- Gan, G., Ma, C., & Wu, J. (2007). *Data Clustering: Theory, Algorithms, and Applications*. USA: Society for Industrial and Applied Mathematics and American Statistical Association.
- Ghai, D. (2003). Decent work: Concept and indicators. *International Labour Review*, *142*(2), 113-145. https://doi.org/10.1111/j.1564-913X.2003.tb00256.x
- Halkidi, M., Batistakis, Y., & Vazirgiannis, M. (2002). Clustering validity checking methods:
 Part II. ACM SIGMOD Record, 31(3), 19-27.
- Held, B. S. (2002). The tyranny of the positive attitude in America: Observation and speculation.

 *Journal of Clinical Psychology, 58(9), 965-991. https://doi.org/10.1002/jclp.10093
- Held, B. S. (2004). The negative side of positive psychology. *Journal of Humanistic Psychology*, 44(1), 9-46. http://dx.doi.org/10.1177/0022167803259645
- Helker, K., Wosnitza, M., Mansfield, C., & Eugster, B. (2018). "I Don't Have Time to Do Any of the Things I Am Responsible For"- University Teachers' Sense of Responsibility for

- Teaching. *International Journal of Teaching and Learning in Higher Education*, 30(2), 207–222.
- Howell, D. C. (2013). *Statistical methods for psychology* (8th ed.). Belmont, CA: Wadsworth, Cengage Learning.
- International Labour Organization. (1999). *Decent work*. Report of the director-general at the 87th session of international labour conference. Geneva: International Labour Office.
- International Labour Organization. (2008a). *Decent work: Some strategic challenges ahead*. In International labour conference, 97th session, report of the director-general. Geneva: International Labour Office.
- International Labour Organization. (2008b). *Measurement of decent work*. Discussion paper for the Tripartite Meeting of Experts on the Measurement of Decent Work. Geneva: International Labour Office.
- International Labour Organization. (2001). Perspectives on decent work: Statements by the ILO director-general. Geneva: International Labour Office.
- International Labour Organization. (2013). Report on Progress and Outcomes on the Monitoring and Measurement of Decent Work. 19th International Conference of Labour Statisticians.

 Geneva: International Labour Office.
- Khan, S., & Jahan, M. (2012). Humanistic psychology a rise for positive psychology. *Indian Journal of Positive Psychology*, 3(2), 207.
- Kwok, S. Y. C. L., Cheng, L., & Wong, D. F. K. (2015). Family emotional support, positive psychological capital and job satisfaction among Chinese white-collar workers. *Journal of Happiness Studies: An Interdisciplinary Forum on Subjective Well-Being*, 16(3), 561–582. https://doi.org/10.1007/s10902-014-9522-7
- Li, Y. (2018). Building well-being among university teachers: the roles of psychological capital and meaning in life. *European Journal of Work and Organizational Psychology*, 27(5), 594-602. https://doi.org/10.1080/1359432X.2018.1496909

- Luthans, B. C., Luthans, K. W., & Avey, J. B. (2014). Building the leaders of tomorrow: The development of academic psychological capital. *Journal of Leadership & Organizational Studies*, 21(2), 191-199. https://doi.org/10.1177/1548051813517003
- Luthans, F. (2002a). The need for and meaning of positive organizational behavior. *Journal of Organizational Behavior*, 695-706. https://doi.org/10.1002/job.165
- Luthans, F. (2002b). Positive organizational behavior: Developing and managing psychological strengths. *Academy of Management Perspectives*, 16(1), 57-72. https://doi.org/10.5465/AME.2002.6640181
- Luthans, F., & Frey, R. (2018). Positive Psychology in the Workplace. In D. S. Dunn (Ed.), *Positive Psychology* (pp. 171-196). New York: Routledge.
- Luthans, F., & Youssef, C. M. (2004). Human, social, and now positive psychological capital management: Investing in people for competitive advantage. *Organizational Dynamics*, 33(2), 143-160. https://doi.org/10.1016/j.orgdyn.2004.01.003
- Luthans, F., & Youssef, C. M. (2007). Emerging positive organizational behavior. *Journal of management*, 33(3), 321-349. https://doi.org/10.1177/0149206307300814
- Luthans, F., Avey, J. B., & Patera, J. L. (2008). Experimental analysis of a web-based training intervention to develop positive psychological capital. *Academy of Management Learning & Education*, 7(2), 209-221. https://doi.org/10.5465/AMLE.2008.32712618
- Luthans, F., Avey, J. B., Avolio, B. J., & Peterson, S. J. (2010). The development and resulting performance impact of positive psychological capital. *Human resource development quarterly*, 21(1), 41-67. https://doi.org/10.1002/hrdq.20034
- Luthans, F., Avey, J. B., Avolio, B. J., Norman, S. M., & Combs, G. M. (2006). Psychological capital development: Toward a micro-intervention. *Journal of Organizational Behavior*, 27(3), 387-393. https://doi.org/10.1002/job.373
- Luthans, F., Avolio, B. J., Avey, J. B., & Norman, S. M. (2007a). Positive psychological capital:

 Measurement and relationship with performance and satisfaction. *Personnel psychology*,

 60(3), 541-572. https://doi.org/10.1111/j.1744-6570.2007.00083.x

- Luthans, F., Luthans, K. W., & Luthans, B. C. (2004). Positive psychological capital: Beyond human and social capital. *Business Horizons*, 47, 45-50. https://doi.org/10.1016/j.bushor.2003.11.007
- Luthans, F., Youssef, C. M., & Avolio, B. J. (2007b). *Psychological capital: Developing the human competitive edge*. New York: Oxford University Press Oxford.
- Luthans, F., Youssef, C. M., & Rawski, S. L. (2011). A tale of two paradigms: The impact of psychological capital and reinforcing feedback on problem solving and innovation.

 Journal of Organizational Behavior Management, 31(4), 333-350.

 https://doi.org/10.1080/01608061.2011.619421
- Luthans, F., Youssef-Morgan, C. M., & Avolio, B. J. (2015). *Psychological capital and beyond*.

 USA: Oxford University Press.
- Maroco, J. (2007). Análise estatística com utilização do SPSS. Lisboa: Edições Sílabo.
- Maslow, A. H. (1954). *Motivation and Personality*. USA: Harper & Row Publishers.
- Meyers, L.S., Gamst, G., & Guarino, A. J. (2013). *Applied multivariate research:* Design and interpretation. USA: SAGE.
- Pereira, S., Dos Santos, N., & Pais, L. (2019). Empirical research on decent work: a literature review. *Scandinavian Journal of Work and Organizational Psychology*, 4(1), 1-15. https://doi.org/10.16993/sjwop.53.
- Pérez-Álvarez, M. (2013). Positive psychology and its friends: Revealed. *Papeles del Psicólogo*, 34(3), 208-226.
- Peterson, C. (2009). Positive psychology. *Reclaiming Children and Youth, 18*(2), 3-7. Retrieved from https://search.proquest.com/docview/852771573?accountid=43959
- Peterson, S. J., Luthans, F., Avolio, B. J., Walumbwa, F. O., & Zhang, Z. (2011). Psychological capital and employee performance: A latent growth modeling approach. *Personnel Psychology*, 64(2), 427-450. https://doi.org/10.1111/j.1744-6570.2011.01215.x
- Pu, J., Hou, H., Ma, R., & Sang, J. (2017). The effect of psychological capital between work—family conflict and job burnout in Chinese university teachers: Testing for mediation and

- moderation. *Journal of Health Psychology*, 22(14), 1799-1807. https://doi.org/10.1177/1359105316636950
- Rego, A., Sousa, F., Marques, C., & Cunha, M. P. (2012). Authentic leadership promoting employees' psychological capital and creativity. *Journal of Business Research*, 65(3), 429-437. https://doi.org/10.1016/j.jbusres.2011.10.003
- Resnick, S., Warmoth, A., & Selin, I. A. (2001). The humanistic psychology and positive psychology connection: Implications for psychotherapy. *Journal of Humanistic Psychology*, 41(1), 73-101. http://dx.doi.org/10.1177/0022167801411006
- Sameer, Y., Amin, A., & Mohamad, M. (2019). Antecedents of psychological capital: The role of work design. *Journal of Economics and Management*, 35, 124-149. doi:10.22367/jem.2019.35.07
- Sharma, S. (1996). Applied Multivariate Techniques. USA: John Wiley & Sons.
- Seligman, M. E. (1998). Learned Optimism. New York: Pocket Books.
- Seligman, M.E.P. & Csikszentmihalyi, M. (2000). Positive Psychology. *American Psychologist*, 55, 5-14. https://doi.org/10.1037//0003-066X.55.1.5
- Seligman, M. E. P., Steen, T. A., Park, N., & Peterson, C. (2005). Positive Psychology Progress:
 Empirical Validation of Interventions. *American Psychologist*, 60(5), 410-421.
 http://dx.doi.org/10.1037/0003-066X.60.5.410
- Shen, X., Yang, Y.-L., Wang, Y., Liu, L., Wang, S., & Wang, L. (2014). The association between occupational stress and depressive symptoms and the mediating role of psychological capital among Chinese university teachers: a cross-sectional study. *BMC psychiatry*, 14(1), 329. https://doi.org/10.1186/s12888-014-0329-1
- Snyder, C. R., Irving, L. M., & Anderson, J. R. (1991). Hope and health. In C. R. Snyder & D. R. Forsyth (Eds.), Handbook of social and clinical psychology: The health perspective (Vol. 162, pp. 285-305). Elmsford, NY, US: Pergamon Press.
- Srivastava, U. R., & Maurya, V. (2017). Organizational and Individual Level Antecedents of Psychological Capital and its Associated Outcomes: Development of a Conceptual

- Framework. *Management and Labour Studies*, *42*(3), 205-236. https://doi.org/10.1177/0258042X17718739
- Stajkovic, A. D., & Luthans, F. (1998). Social cognitive theory and self-efficacy: Going beyond traditional motivational and behavioral approaches. *Organizational dynamics*, 26(4), 62-74. https://doi.org/10.1016/S0090-2616(98)90006-7
- Sweetman, D., Luthans, F., Avey, J. B., & Luthans, B. C. (2011). Relationship between positive psychological capital and creative performance. *Canadian Journal of Administrative Sciences*, 28(1), 4-13. https://doi.org/10.1002/cjas.175
- Teichler, U., Arimoto, A., & Cummings, W. K. (2013). *The changing academic profession: Major findings of a comparative survey*. Dordrecht: Springer. https://doi.org/10.1007/978-94-007-6155-1
- United Nations (2015). *Transforming our world: the 2030 Agenda for Sustainable Development*.

 Resolution adopted by the General Assembly on 25 September 2015 (A/RES/70/1). 69th

 Session of UN General Assembly. New York: United Nations. Retrieved from:

 http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E
- Webster, E., Budlender, D., & Orkin, M. (2015). Developing a diagnostic tool and policy instrument for the realization of decent work. *International Labour Review*, 154(2), 123-145. https://doi.org/10.1111/j.1564-913X.2015.00017.x
- Zhao, Q. (2012). Cluster validity in clustering methods (Academic dissertation, Dissertations in Forestry and Natural Sciences, N. 77. School of Computing, Faculty of Science and Forestry, University of Eastern Finland). Retrieved from http://cs.joensuu.fi/sipu/pub/qinpeithesis.pdf

Annexes

Annex A. Informed Consent, presented online, in Portuguese

TRABALHO DIGNO

O presente projeto tem como investigadores responsáveis Leonor Pais (Universidade de Coimbra) e Nuno Rebelo dos Santos (Universidade de Évora). A equipa de investigação é constituída por membros da Universidade de Coimbra (Leonor Pais e Tânia Ferraro), da Universidade de Évora (Nuno Rebelo dos Santos) e da Universidade de Lisboa (João Moreira), Portugal.

Para participar é preciso:

- ter pelo menos seis meses de experiência profissional;
- estar atualmente ativo(a) profissionalmente [não ser nem desempregado(a) nem reformado(a)];
- ser remunerado pelo trabalho que faz.

Esta investigação é conduzida de acordo com o Código Deontológico da Ordem dos Psicólogos Portugueses (2011).

O presente projeto tem como objetivo estudar diversos aspetos do modo como as pessoas sentem e pensam sobre o seu trabalho.

A sua participação é voluntária. Pode desistir de participar a qualquer momento durante as respostas às questões, caso considere que o deve fazer.

Os dados recolhidos serão usados exclusivamente para fins académicos.

Garantimos o anonimato e confidencialidade das suas respostas, e asseguramos que o tratamento dos dados é meramente estatístico.

É possível solicitar uma síntese dos resultados enviando um e-mail para "Trabalho Digno - INVESTIGAÇÃO" <Trabalho.digno.portugal@gmail.com> colocando no campo assunto 'SÍNTESE DOS RESULTADOS DA INVESTIGAÇÃO'.

Caso tenha alguma dúvida pode entrar em contato com a equipa que está a superintender a recolha de dados em Portugal, através do mesmo e-mail: "Trabalho Digno - INVESTIGAÇÃO" <Trabalho.digno.portugal@gmail.com> colocando no campo assunto 'Dúvida'.

Considere, por favor, que o questionário é constituído por várias partes, sendo que existem instruções específicas para cada uma delas. Pedimos que estas sejam lidas com atenção antes de começar a responder a cada bloco de questões.

O	O contexto profissional no qual estou e sobre o qual pretendo responder ao questionário é:						
() português						
() brasileiro						
() Outro:						

Para avançar, deve clicar na opção abaixo:

[o participante deve clicar aceitando as condições descritas acima para poder avançar para os inquéritos]

() Concordo com as condições para participação conforme descritas acima.

Annex B. Administered Questionnaire in Portuguese

OUESTIONÁRIO DE TRABALHO DIGNO

Versão portuguesa (Portugal e Brasil)

Este questionário pode ser respondido por qualquer pessoa que trabalha. Ele refere-se ao seu trabalho atual e ao contexto profissional no qual o realiza. Por 'contexto profissional' entenda o mercado de trabalho em geral (para alguém com as suas características profissionais), a(s) empresa(s)/organização(ões) onde eventualmente trabalhe, bem como a sua eventual atividade de prestador(a) de serviço (profissionais liberais/autónomos).

Não há respostas certas nem erradas. O importante é que avalie se concorda mais ou menos com as afirmações apresentadas. Utilize a seguinte escala de respostas:

- 1 = Não concordo nada
- 2 = Concordo pouco
- 3 = Concordo moderadamente
- 4 = Concordo muito
- 5 = Concordo completamente

Marque com um (X) a sua opção de resposta para cada afirmação. Responda a todas as afirmações. Relembramos que elas se referem ao seu trabalho atual e ao contexto profissional no qual o realiza.

1. No meu trabalho estou protegido(a) de riscos para a minha saúde física.				4	5
 Tenho perspetivas de ter uma reforma/aposentação/aposentadoria tranquila (pensão, previdência pública ou privada). 			3	4	5
3. Considero adequada a quantidade média de horas que trabalho por dia.			3	4	5
4. Disponho de tudo o que preciso para manter a minha integridade física no meu trabalho.			3	4	5
5. Sinto que estou protegido(a) caso fique sem trabalho (subsídios sociais, programas sociais, etc).				4	5
6. Sinto a minha família protegida através do meu sistema de proteção social (público ou privado).			3	4	5
7. O que ganho com o meu trabalho permite-me viver com dignidade e autonomia.				4	5
8. Sinto que estarei protegido(a) no caso de ficar doente (segurança social, seguros de saúde, etc.).			3	4	5
9. O que recebo pelo meu trabalho permite-me oferecer bem-estar aos que dependem de mim.			3	4	5
10. O que ganho com o meu trabalho permite-me viver com um sentimento de bem-estar pessoal.			3	4	5
11. No meu trabalho existe confiança entre as pessoas.			3	4	5
12. O meu trabalho contribui para assegurar o futuro das novas gerações.	1	2	3	4	5
13. Através do meu trabalho desenvolvo-me profissionalmente.		2	3	4	5
14. Um(a) profissional como eu pode criar o seu próprio emprego.			3	4	5
15. O meu horário de trabalho permite-me gerir/administrar bem a minha vida.			3	4	5
16. Em geral, os processos de tomada de decisão relativos ao meu trabalho são justos.			3	4	5

17. Penso que tenho perspetivas de melhorar a minha remuneração/salário/benefícios.	1	2	3	4	5
18. O meu trabalho permite-me ter tempo para a minha família/vida pessoal.			3	4	5
19. O meu trabalho contribui para a minha realização (pessoal e profissional).			3	4	5
20. Disponho do que preciso para trabalhar com segurança.	1	2	3	4	5
21. Sou tratado(a) com dignidade no meu trabalho.			3	4	5
22. Sou livre para pensar e expressar o que penso sobre o meu trabalho.	1	2	3	4	5
23. Em geral, tenho condições ambientais seguras no meu trabalho (condições de temperatura, ruído, umidade, etc).			3	4	5
24. No meu trabalho sou aceite /aceito(a) tal como sou (independentemente de gênero, idade, etnia, religião, orientação política, etc).			3	4	5
25. Atualmente, penso que há oportunidades de trabalho para um profissional como eu.	1	2	3	4	5
26. Acho que tenho possibilidades de progredir profissionalmente (promoções, desenvolvimento de competências, etc).	1	2	3	4	5
27. Considero adequado o ritmo que o meu trabalho exige.	1	2	3	4	5
28. Na minha atividade profissional existe a possibilidade de participação equilibrada nas decisões por parte de todos os envolvidos/implicados.	1	2	3	4	5
29. O trabalho que realizo contribui para criar valor (para a minha empresa/organização/clientes/sociedade, etc).	1	2	3	4	5
30. Considero digno o trabalho que realizo.	1	2	3	4	5
31. O que ganho financeiramente com o meu trabalho é justo.			3	4	5

CAPITAL PSICOLÓGICO (PsyCap)²

(este questionário tem um total de 24 itens)

Seguidamente, encontra afirmações que descrevem o modo como pode ver-se a si próprio **neste momento**. Use a escala seguinte para indicar o grau em que concorda ou discorda de cada uma das afirmações.

- 1 = Discordo fortemente
- 2 = Discordo
- 3 = Discordo um pouco
- 4 = Concordo um pouco
- 5 = Concordo
- 6 = Concordo fortemente

Segundo determinação da 'Mind Garden' (editor detentora dos direitos autorais do *Psychological Capital Questionnaire*) não é permitida a divulgação do instrumento completo em documento publicado. Por isto, apresentamos seguidamente apenas uma amostra de três itens:

1. Sinto-me confiante a analisar uma solução para um problema de longo prazo.	1	2	3	4	5	6
7. Se me encontrasse numa situação difícil no trabalho, conseguiria pensar em muitas formas de sair dela.	1	2	3	4	5	6
11. Consigo pensar em muitas formas de alcançar os meus objectivos no trabalho.	1	2	3	4	5	6

_

 $^{^2}$ Luthans, Youssef & Avolio (2007); Rego, Marques, Leal, Sousa & Cunha (2010).

Por último, pedimos-lhe que complete, por favor, respondendo às seguintes questões [assinale um X na opção(ões) mais adequada(s) para você]:

1. Sexo	2 Ano do noscimentos	2. Há ayanta tampa astá na say trobalha
	2. Ano de nascimento:	3. Há quanto tempo está no seu trabalho
☐ Feminino		atual e no contexto profissional em que o
☐ Masculino		realiza? anos
4. Sua situação(ões) profissional(ais)	5. Qual o vínculo que mantém com a	6. No seu local de trabalho desempenha
atual(is) (você pode assinalar mais do que	organização onde trabalha (quando	alguma função de chefia / gestão /
1 situação)	aplicável)?	liderança?
	☐ Prestador de serviços (recebimentos	Sim □ Não
☐ Empresário(a)		
☐ Profissional Liberal ou autónomo(a)	por 'Recibo Verde')	
☐ Funcionário(a) público(a)	☐ Contrato a prazo (renovável ou não)	6.1. Se respondeu SIM, que tipo de chefia /
☐ Trabalhador(a) por conta de outrém	☐ Contrato efetivo (sem prazo	gestão / liderança?
[inclui o(a) trabalhador(a) doméstico(a)].	determinado)	☐ Gestão/liderança de topo.
☐ Trabalhador(a)-Estudante	☐ Através de empresa de trabalho	☐ Gestão/liderança de nível intermédio.
☐ Bolseiro(a) de pesquisa (nível	temporário	☐ Gestão/liderança de primeiro nível
superior)	☐ Outros. Especifique, por favor:	(coordenação ou supervisão de uma
☐ Estagiário(a)		equipa).
☐ Aprendiz		
7. Qual seu grau de Escolaridade?	☐ Ensino secundário ou equivalente	☐ Licenciatura concluída (pós-Bolonha)
☐ Saber ler e escrever sem possuir a 4 ^a	(12° ano)	☐ Mestrado Pré-Bolonha
•	` '	
classe.	☐ Ensino pós-secundário (CET)	☐ Doutoramento
☐ 1º Ciclo do ensino básico (ensino	☐ Bacharelato	
primário)	☐ Licenciatura em curso	8. Qual sua área de especialização
☐ 2º Ciclo do ensino básico (6º ano)	□ Pós-Graduação/Mestrado (pós	académica (ex.: Engenharia, Informática,
☐ 3º Ciclo do ensino básico ou	Bolonha)/ Licenciatura Pré Bolonha	Direito, Psicologia, etc)?
equivalente (9° ano)	Botonna)/ Electiciatara i le Botonna	Directo, I sicologia, etc).
	10.0 . 1 .: 1.1	11 D' ~ 1 ' ~ 1
9. Qual a sua profissão atual?	10. Setor de atividade no qual trabalha	11. Dimensão da organização onde
☐ Advogado(a). Área de especialização:	(quando aplicável):	trabalha (quando aplicável):
	☐ Setor primário (agricultura; pesca;	☐ Tem até 9 colaboradores
☐ Analista ou desenvolver de sistemas /	atividades extrativas; matérias-primas).	☐ Tem entre 10 e 50 colaboradores
Programador(a) / Engenheiro(a)	☐ Setor secundário (indústria).	☐ Tem entre 51 e 250 colaboradores
Informático(a).	☐ Setor terciário (comércio e serviços).	☐ Tem entre 251 e 500 colaboradores
☐ Médico(a). Especialidade:	☐ Setor quaternário (informação:	☐ Tem entre 501 e 1000 colaboradores
☐ Investigador(a). Área:	computação e tecnologia da	☐ Tem entre 1001 e 2000 colaboradores
	informação; educação; investigação e	☐ Tem entre 2001 e 5000 colaboradores
☐ Professor(a) Universitário(a). Área:	desenvolvimento; planeamento;	☐ Tem entre 5001 e 10000 colaboradores
	consultoria; e outros serviços baseados	☐ Tem entre 10001 e 20000 colaboradores
☐ Profissional da área de Finanças.	no conhecimento)	☐ Tem mais de 20001 colaboradores
□ Outra. Qual?	□ Outra. Qual?	☐ Trabalho para várias organizações
12. Trabalha diretamente com clientes	`	
	13. Indique, por favor, o seu vencimento	14. Estado civil:
ou utentes?	líquido mensal (aquilo que recebe em	☐ Solteiro(a)
□ Sim	média por mês)	☐ Casado(a) / União estável
□ Não	☐ Até €505,00 (salário mínimo)	☐ Separado(a) / Divorciado(a)
	☐ Entre €505,00 e €1.000,00	□ Viúvo(a)
		15. Tem filhos?
	☐ Entre €1.001,00 e €1.500,00	□ Não
	□ Entre €1.501,00 e €2.000,00	
	☐ Entre €2.001,00 e €2.500,00	☐ Sim. Quantos?
	☐ Entre €2.501,00 e €3.000,00	16. Idades dos(as) filhos(as):
	□ Entre €3.001,00 e €3.500,00	
	□ Entre €3.501,00 e €4.000,00	
	□ Entre €4.001,00 e €4.500,00	
		17. Tem outros dependentes?
	☐ Entre €4.501,00 e €5.000,00	□ Não
	□ Entre €5.001,00 e €5.500,00	☐ Sim. Quantos?
	□ Entre €5.501,00 e €6.000,00	
	□ Entre €6.001,00 e €6.500,00	
	☐ Entre €6.501,00 e €7.000,00	
	□ Entre R\$7.001,00 e €8.000,00	
	☐ Mais de €8.001.00	

Muito obrigado(a) pela sua colaboração!

Annex C: Research Permission to apply Psychological Capital Questionnaire (PCQ) for academic research purposes only

Tânia Ferraro



To whom it may concern,

This letter is to grant permission for Tânia Ferraro to use the following copyright material:

Instrument: Psychological Capital (PsyCap) Questionnaire (PCQ)

Authors: Fred Luthans, Bruce J. Avolio & James B. Avey.

Copyright: "Copyright © 2007 Psychological Capital (PsyCap) Questionnaire (PCQ) Fred L. Luthans, Bruce J. Avolio & James B. Avey. All rights reserved in all medium."

for his/her thesis/dissertation research.

Three sample items from this instrument may be reproduced for inclusion in a proposal, thesis, or dissertation.

The entire instrument may not be included or reproduced at any time in any other published material.

Sincerely,

Mind Garden, Inc. www.mindgarden.com