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Deposited in *Repositório ISCTE-IUL*: 2021-02-16

Deposited version: Accepted Version

Peer-review status of attached file:

Peer-reviewed

# Citation for published item:

Dutschke, G., Dias, Á., Jacobsohn, Lia & Combadão, J. (2019). The job design happiness scale (JDHS). Journal of Organizational Change Management. 32 (7), 709-724

# Further information on publisher's website:

10.1108/JOCM-01-2018-0035

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## THE JOB DESIGN HAPPINESS SCALE (JDHS)

#### Abstract

Purpose – The purpose of this article aims to identify the factors that individuals consider necessary to be happy in their job. Based on these factors, a measure of job design happiness is proposed.

Design/methodology/approach – Two methods were applied, (1) a qualitative study with content analyses (n=969) to develop an exploratory questionnaire and (2) exploratory and confirmatory factor analysis by applying structural equations models. In this second study the questionnaire was sent to a second sample (n=1079).

Findings – Five first order factors were identified: Self-fulfillment; Group Working, Attaining Goals; Leadership and Sustainability and Job/Family Balance. These factors are explained by a second order factor: Job Design Happiness.

Research limitations/implications – Further research is needed to determine how the identified 'job design happiness' components may interact with one another. Testing the scale different industries and national cultures is also suggested.

Practical implications – Managers and human resources practitioners can improve job and organizational performance by applying the scale in several moments in time measuring the job happiness 'pulse', monitoring their decisions.

Social Implications – The adoption of this measure for decision making in organizational and job design can contribute to the improvement of living standards and firm sustainability.

Originality/value – Research on organizational happiness has been increasing but instruments to measure job design happiness, considering organizational factors, are limited.

Keywords: JEL: J280: Job design happiness; Job well-being; Happiness

This paper classified in the Management area of Organizational Theory and Behavior

#### **INTRODUCTION**

The scientific concept of wellness is achieving particular relevance since the World Health Organization (WHO, 1946) defined health, not just through physical medical parameters, but, in a broader way, including the bio-psychosocial well-being perspective. The happiness concept benefits from this perspective. The concepts of well-being and happiness have been used interchangeably (Blanch, et al., 2010; Warr, 2013; Ong and Lin, 2016), or linked to others, depending on the theory considered, as the subjective well-being (Diener, 2000; Strack, et al., 1991) or psychological well-being (Bryce and Haworth, 2003; Ryff and Keyes, 1995; Warr, 1987; 1990). A review of the different definitions reveals that they are supported by each theory they have been built from (Veenhoven, 2012). Like most happiness definitions, the subjective well-being mostly refers to positive feelings associated to positive subjective assessments (Diener, et al., 1991). In its broadest sense, happiness is a general term for all the good in life. According to Blanch et al. (2010), instruments to evaluate wellbeing (happiness) are, among others: the General Health Questionnaire (GHQ) (Goldberg and Williams, 1996), Beck Depression Inventory (Beck, et al., 1961), Satisfaction with Life Scale (Diener, 1994; Diener, et al., 1985), Oxford Happiness Questionnaire (Hills and Argyle, 2002), Quality of Life Enjoyment and Satisfaction Questionnaire (Endicott, et al., 1993), Scales of Psychological Well-being (Ryff and Keyes, 1995; Van Dierendonck, 2004) and the WHO Quality Of Life Assessment Instrument (De Vries and Van Heck, 1997). These instruments consider, mostly, health and pathologic factors as the discriminating criteria and, in particular, psychopathologic factors.

Happiness at work is a multidimensional concept including transient moods and emotions, relatively stable attitudes and highly stable individual dispositions, aggregated at an individual level (Fisher, 2010). According to Bakker and Oerlemans (2011), happiness at work could be conceptualized as a framework, considering that the professional (i) is satisfied with his job; and (ii) experiences frequent positive emotions, such as joy and happiness, and infrequent negative emotions, like sadness and anger. Different authors have been working on the emotional well-being at work. However, measures specifically dedicated to evaluating 'job design happiness' (JDH) are focused on health and pathology factors as the discriminating criteria, in particular, psychopathology factors as work-related emotions, by applying dimensions of pleasantness and arousal (Warr, 1987, 1990). The Job-Related Affective Well-Being model (Warr, 1990), consists of four interrelated factors: anxiety, comfort, depression, and enthusiasm. Another instrument, the Work-Related Quality of Life scale (Van Laar, *et al.*, 2007) evaluate six factors: job satisfaction and career, working conditions, general well-being, work family life balance, work stress and control at work. With the positive psychology development, the concept of 'work engagement' is increasing its importance, being evaluated based on dimensions as vigor, dedication and absorption, stable indicators of the occupational well-being (Rodríguez-Muñoz, et al., 2014), included in the Utrecht Work Engagement Scale (Schaufeli, *et al.*, 2002).

The decisions taken during the job design definition will have a determinant influence on employee's satisfaction and engagement, with direct implications on the productivity and quality of work output (Wall and Parker, 2001). Considering that 'job design' is the employee's way to satisfy globally, personal, family and social, needs (Rush, 1971), can be defined as a structure, content, and professional's work tasks and roles configuration (Parker and Ohly, 2008).

Due to economic and social implications, research in job design, has been prolific and heuristics for the past 30 years. With a focus both on theory and models, became prominent the Job Characteristics Model (Hackman and Holdham, 1976), the Socio-Technical Systems Theory and the Action Regulation Theory (Hacker, 2003). During this period, an extensive new knowledge on the physical characteristics of the tasks, their psychological effects, and the factors moderating these effects, was accumulated. The interest in the job design research plummeted recently as major changes on job reality are occurring (Ambrose and Kulik, 1999). Among others, teams are much more heterogeneous in gender, culture and backgrounds, teleworking/homeworking is becoming normal and millennials have a different relation with the organizations. These relevant changes at the workplace are contributing for the increasing interest of the academy in the job design research, with a major focus on the social and relational job design characteristics (Grant, 2007). Grant *et al.* (2010) propose the incorporation of cross-disciplinary, cross-level, and cross-cultural perspectives. Erez and Earley (1993) refers that job design should be conceived in the organizations by considering regional and national-level cultural values, as may not be possible to have the same job design in two different cultures without confirming, first, whether the workers will (or not) feel well-being.

Despite the increasing interest in the job design research, there still is a gap on identifying instruments measuring factors and components related to job design happiness (JDH), particularly factors related with the socio-cultural variability of wellness. Proposing a measure for JDH would be relatively simple by reviewing the well-being hedonic dimensions. However, it is much more difficult propose an instrument that absorbs the eudemonic aspects of happiness (Ryan and Deci, 2001). Fisher (2010) refers that these, large and complex factors, are located at three levels: transient, psychological and the unit. These factors could be biological (Diener, 2009), motivational (Deci and Ryan, 2008), relational (Biggio and Cortese, 2013), personality (Emmons, 1986), developmental, cognitive and affective (Galinha and Pais-Ribeiro, 2011) and ethical (Krant, 2009). In psychology and social psychology exists multiple paradigms related with reality. However, motive (in opposition to the theories of motivation) is a major concept, managed and accepted by most of paradigms, that tends to be consensual. The concept in which cross-cultural differences were found is the motive. This concept is scientifically accepted as being the one mediating the job design and well-being. In psychology, motive means a personality trait that tends to determine which actions take an individual's values over others'. Motives are part of the self-control process allowing the individual to meet his/her needs. Pleasure, is often related with active satisfaction and, as demonstrated by McLelland (1988), with dominant motifs that change according to culture. More recently, a self-determination theory based on a four-stage motivational sequence (Deci and Ryan, 2000), is been used to explain

how autonomy-supportive environments influence people's health and well-being (Ng and Feldman, 2012). Other theories have also studied the relationship between motifs and well-being, but with an emphasis on other dimensions beyond the self-determination issue. Some authors have postulated about the existence of motivational orientations (Maslow, 1954) or objectives orientation: category intentions guiding action interpretation (Ames, 1992; Galand and Grégoire, 2000). The relationship between the satisfaction of psychological needs, motivation and well-being, is well established in different areas of knowledge, as education, health and workplace (Deci and Ryan, 2008; Ng and Feldman, 2012).

Despite the increasing interest in the job design research, there still is a gap on identifying instruments measuring factors and components related to JDH. With this research we aim contributing to reduce this gap, by proposing a model that identifies and measures the components and factors that may have influence on the job design happiness, also considering factors related with the sociocultural variability of wellness.

#### **METHODS**

Proposing a model for JDH is a challenging task. It is needed the description of a tacit mental model, however, tacit knowledge is not easily verbalized (Batra, *et al.*, 2012). JDH have deeper roots than job satisfaction, with stronger links to employee attitudes as loyalty, and is based on respondents' own perspective on what makes them happy on the job (Ong and Lin, 2016). To identify the respondent's verbalization, individual and subjective, of the components contributing for their JDH, was, first, applied a qualitative and exploratory methodology (study 1), followed by a second order factor confirmatory analysis, aiming to validate the model (study 2).

#### Study 1

## **Participants**

This study, developed in 2012, consisted on 969 interviews. Respondents were active professionals, from the APG (Portuguese Human Resources Association) database and answered has individuals (not as employees from an organization). This method allowed them to respond according to their own believes. In each interview, the study was explained and was asked for the permission to use the data. All responses were confidential. No personal professional data were asked. The sample was segmented by gender (61% male, 39% female), hierarchy (20% directors, 80% non-directors), age (50% up 39 years, 50% more than 40), years in the organization (33% up to 5 years, 67% more than 5), years performing the same job (48% up to 5 years, 52% more than 5) and organization sector of activity.

## **Design and Procedure**

For the interview an open question was made: What do you need to be happy in your job design? The methods used for the analyses were: (1) data collection, (2) data storage, (3) coding, (4) indexing system refinement, (5) code relationship and (6) identify categories. For the stages 3, 4, 5 and 6 a content analysis was applied, by using the software Atlas Ti V6.0, which combines a friendly use and a major ability to encoding and draws conclusions (Miles and Huberman, 1994). The codes enable the identification of occurrence patterns, bias control, alternative or opposite directions and the level of consistency. After identifying the codes, we proceeded to evaluate their interrelation, the frequency of occurrence and the number of relation with other codes. This allowed the establishment of the importance and strength of each code.

#### RESULTS

A total of one thousand references were categorized. Twenty-six components where identified: (1) I like my job, (2) I feel I have autonomy in performing my job, (3) I have the necessary resources to perform my job, (4) My job is in my area of study, (5) The organization allows me to have new challenges in my job, (6) My job allows me to develop as an individual and a professional, (7) My job allows continuous learning, (8) My job allows me to be involved in the organization strategy, (9) I am recognized by performance merit, (10) My job allows me to feel respected, (11) There is a good team spirit in the organization that facilitates my job, (12) There is a good ambiance in the organization that facilitates my job, (13) Most of my colleagues are motivated in their job, (14) There is a good integration between the different departments that facilitates my job, (15) My financial conditions are fair for the job I perform, (16) The goals approved for my job are clear and fair, (17) I always try to achieve the goals set for my job, (18) The organization is able to have new projects enabling my job sustainability, (19) Have a good performance in my job is important for the organization to achieve global objectives, (20) I believe that my job is important for the organization, (21) I feel that my boss has confidence in the way I perform my job, (22) Any time I feel the need, I have my boss's support, (23) I feel that by boss's leadership inspires the way I perform my job, (24) My job allows a good professional/personal life balance, (25) My job allows me to be creative and entrepreneur, (26) I am able to perform my job with organization and without bureaucracy.

Considering these components, an initial questionnaire was developed. The validity was verified through three complementary methods: (i) the questionnaire was designed considering a qualitative research with content analysis, (ii) it was sent to three experts (professor, CEO, HR expert), and (iii) a pre-test with ten respondents was applied (Cronbach, 1971; Green and Lewis, 1986; McMillan and Schumacher, 1989; Rust and Cooil, 1994).

#### Study 2

#### **Participants**

The questionnaire developed in Study 1 was emailed directly to the active professionals of the APG database during 2013. By doing this, respondents felt more confident on sharing their true believes, without concerning their organization judgment. All responses were confidential.

We have received 1200 answers, considering 1079 as valid (83,6%). The sample is segmented by gender (52% male, 48% female), hierarchy (18% directors, 82% non-directors), age (35% up 39 years, 65% more than 40), years in the organization (47% up to 5 years, 53% more than 5), years performing the same job (45% up to 5 years, 55% more than 5) and industry. These figures (gender and age) reflect the Portuguese active population (Pordata, 2015). Even though no data was found for other segments, these values were considered as valuable for the Portuguese reality.

#### DATA ANALYSIS

An exploratory factor analysis (EFA) and confirmatory factor analysis (CFA) was conducted using software R (Rcode Team, 2014) and the packages lavaan, psy, psych, sem, e1071. The EFA input data was raw data and the package psych was used for the estimation of the parameters. For CFA, the covariance matrix was used, through the package lavaan. The components used in these analyses were the 26 previously identified in the content analysis developed in study 1. Skewness and kurtosis were assessed through e1071 package for R.

All components in the EFA were allowed to have loadings with all the factors. In CFA loadings were allowed between factors and its components, according to the relationships hypothesized. In both analyses all factors were allowed to have nonzero covariance between factors.

Several indices were used to assess the goodness-of-fit of the models:  $\chi^2$  value (Bollen, 1989), bearing in mind that the sample size of the study alone could be indicative of the tendency to

produce significant results; RMSEA, using the limit of 0.06, or lower, as indicative of good/adequate fit (Schermelleh-Engel *et al.*, 2003); CFI, which is usually used with a lower limit of 0.95 (Bentler, 1990; Schermelleh-Engel *et al.*, 2003); a lower value than 0.08 in SRMR as adequate fit (Hu and Bentler, 1999) and Akaike Information Criteria (Akaike, 1987). After the CFA initial assessment, and by analysis of the modification indices, the variance of the errors of some of the items in each factor was allowed to vary.

## RESULTS

Cronbach's  $\alpha$  was used to assess the internal consistency of the questionnaire, resulting in the value 0.9745, 95%CI [0.9727, 0.9762] (confidence interval was calculated by bootstrap), a very good result. Pearson's correlation coefficient and correlation network (figure 1) showed a moderate to strong correlation between the 26 components.

# Figure 1 here

#### **Exploratory factor analysis**

EFA with varimax rotation, permitted to assess how the components could cluster together. Accordingly, we also analyzed factors eigenvalues, which indicated the possibility of as many as 7 factors, although the decrease in eigenvalues after 5 factors is minimal. So, we started by assessing an EFA with 7 factors, but because the loadings in 2 factors were very low (explaining 5% of the variance), a model five factors with higher loadings was obtained (69% of variance). Loadings lower than 0.3 were cut, for easier visualization (Figure 2).

# Figure 2 here

## **Confirmatory factor analysis**

To test the fit a first order CFA model was run by maximum likelihood estimation (sample=1763). This fitted model had 72 free parameters, 31 variances, 15 covariances (with 5 covariances between items), 26 paths. The model fit indexes were:  $\chi^2$  (284, N=1757)=2,598.890, p<0.001; RMSEA=0.068, 95%CI [0.066, 0.071]; SRMR=0.035; CFI= 0.950; AIC= 93003.827.

The correlation coefficients between factors (table 1) were measured, showing a moderate to strong correlation. As such, a second order CFA was designed, in which the five factors that were connected with the items indicators, are explained by a single second order factor (figure 3). This fitted model had 68 free parameters, 32 variances, 5 covariance's and 31 paths.

## Table 1 here

## Figure 3 here

The second order CFA model had a very good fit:  $\chi^2$  (289, N=1757)=2,748.149, p<0.001; RMSEA=0.070, 95%CI [0.067, 0.072]; SRMR=0.038; CFI=0.947; AIC=93143.086. All loadings were significant (p<0.001). The Cronbach's  $\alpha$  of each factor was: 0.951, 0.943, 0.952, 0.918 and 0.820, for factors one to five, respectively.

#### DISCUSSION

A first and cross-reading analysis of the factors permits to identify several dimensions contributing to JDH, "understood as a function of both job and personal characteristics" (Warr, 2013, p. 99). The individual dimensions are more related to a long-term perspective, coexisting with other short termed dimensions, giving to the model a superordinate concept to happiness, as suggested by Ong and Lin (2016). Figure 4 outlines the results obtained and the five dimensions of the JDH scale.

However, the factors related with individuals are the most numerous and seem to be dominant when comparing with the social and more instrumental ones. The long-term perspective is particularly visible in the first category of factors, that could be considered as personal self-fulfillment factors.

## Factor 1- Self-Fulfillment

The most prominent factor was designated self-fulfillment. The relation between reasons for self-fulfillment and job design may not seem obvious. But, when analyzing the self-realization origins in psychology, this relation is clear. Self-realization is the main reason for one's action, a kind of a life sovereign purpose guiding all the other actions (Goldstein, 1939). But, being self-realization universal (motives are found in every culture in different form and proportions), what each individual specifically searches, or the way each individual wants to achieve, differs from individual to individual. Each individual has his own innate potential that, naturally, originates different development paths. This is the best way to identify the individual potential, what he does better to adequate the potential with the job being done, and the way it is done (Goldstein, 1939).

The best way to achieve self-realization is doing what we like to do, and, do it as best as we can. In this sense, respondents reported that they need to 'develop a job that they like' to be happy (C1). Do what we like is the epitome of free-will (free choice). As part of the self-fulfillment dimension, free-will is part of the JDH construct. Studies indicate that happiness is related with the possibility of exercise free-will. According to World Values Survey (Inglehart *et al.*, 2008) and European Values Survey (1981-2007), the feeling of free choice and one's life control, have a strong importance on explaining the change in social well-being over time. This association seems to be universal (Welzel and Inglehart, 2010). However, free-will is part of a major conception. The experience of doing things we like is what Csikszentmihalyi (1990) has considered the flow experience.

The flow concept is well accepted and adopted since Burke (2010) studied the relationship between the flow at work experience with indicators of satisfaction, engagement and psychological wellbeing.

Respondents considered that to achieve well-being in their function, is also important the possibility of 'having a continuous learning' (C7) and 'new challenges' (C5). Goldstein (1939) referred that a healthy and normal individual is the one where the tendency to self-realization is due to the joy of accomplishment. The 'work must provide challenges' (C5) reveals that challenges can be positively experienced when associated with performance-related behaviors (Ohly and Fritz, 2010). Furthermore, a challenge is an opportunity of self-overcoming (Lazarus and Folkman, 1984) and should be an important component of JDH. Lazarus and Folkman (1984) realized that a situation could be perceived as challenging when offering potential personal gain, such as mastery or learning. The relation between well-being and challenge is a subject with high potential for future research. The components 'need to have resources' (C3) and 'individuals have the knowledge for the job' (C4) also integrates this dimension. On one hand, JDH must provide challenging activities. On the other hand, should provide the resources and adequate knowledge that enables individuals to accomplish effectively the tasks.

The 'possibility to be creative and entrepreneur' (C25) also contributes for personal selffulfillment. This can be associated with JDH. Goldstein (1939) considered that auto-accomplishment is a natural creative trend. The relation between creativity and proactivity in the labor context (entrepreneurship) is of special interest (Lazarus and Folkman, 1984).

Results indicate that time pressure and job control are related to daily creativity and proactive behavior, supporting the consistency of this feature with those observed previously, but, also, with the 'feel to have autonomy and responsibility in the performance of my job' (C2). The Job Characteristics Theory model (Hackman and Oldham, 1976), central in the Job Design concept, values factors as participation, learning and autonomy, and increasing work motivation (Hackman and Oldham 1976). The 'importance of autonomy' (C2) for the well-being is well studied, although usually mediated by factors like performance avoidance objectives (Heidemeier and Wiese, 2014), existence of a quality competitive ambiance, and organizational commitment (Park and Searcy, 2014).

Another group of components, considered by the respondents, as being part of self-realization and important for the well-being at work are 'involvement in the organization strategy' (C8), 'recognition of merit' (C9) and 'feeling respected' (C10). This subgroup was titled 'recognition, respect and consideration', or simply 'personal account'.

Cullogh, *et al.* (2002) referred that grateful disposition, self-ratings and observer ratings are associated with positive affect, well-being, prosocial behaviors and traits, and religiousness/spirituality. Same authors referred that gratitude is negatively correlated with envy and materialism, and positively related with vitality and optimism. The 'effect of respect' (C10) on well-being seems to be less explored in the psychosocial literature. A recent study (Ng and Diener, 2014) revealed that respect is a strong predictor of positive feelings. The employee possibility to 'contribute for organization strategy' (C8) was appreciated by respondents, related with the possibility to influence, or having power, as a factor of achievement. Jakson (1983), proposed a causal model to describe the effect of participating in the decision, with the perceived influence, conflict, ambiguity, personal and job related communications, social support, emotional strain, overall job satisfaction, absenteeism and turnover intention. Since then, little has been published relating to the contribution to the organization's strategy and occupational well-being.

## Factor 2- Group and Organizational Working

Unlike the previous factor, happiness attribution is placed on group/organizational components, not on individual motivations. This factor is based on psychosocial factors of attribution, not just psychological. Although this is a widespread assumption, only recently the relation between well-being and group dynamics was studied. Hackman (1992) considers that the participation in groups origins personal satisfaction. Freeney and Fellenz (2013) suggests the inclusion of relational resources on models of work engagement and job design.

Results highlight the components of group and organizational dynamics associated with wellbeing. This factor (F2) includes two levels of components: the group/relational level, composed by C11 (good team spirit), C12 (good work environment) and C13 (motivated colleagues), and the organizational/management level, composed by C14 (good integration between departments), C18 (organization develop new projects) and C26 (well organized/structured organization, without bureaucracy).

The interest on organization, informal and relational issues, is gaining importance, since researchers were able to validate their close relation with organizational performance (Venkataramani, *et al.*, 2013). Social well-being is being studied in different dimensions: friendship, trust relations, social support, reciprocity relations, leadership and integration relationships (Albrecht, 2012). Rego, *et al.* (2009) have identified three relationships in organizations: friendship, team spirit, and mutual concern. Social support in organizational psychology is being used to designate the interactions between workers, and workers with their supervisors (Luchman and González-Moralez, 2013).

Human capital factors, like confidence, seem more related to well-being than other work characteristics, as financial or technical factors (Helliwell and Huang, 2011). The relationship between well-being and social and capital work is not always homogeneous (Zacher, *et al.*, 2014). The ambiance, consisting in networks of interaction and communication, through which workers help each other promoting positive affect, is high valuated in the social capital (Karasek and Theorell, 1990) and facilitate the task accomplishment. Reis (1984) stated that having health and good relationships are more likely in competent individuals.

#### **Factor 3- Attaining Goals**

McClelland (1988) refers that motivation is related with behavior selection, energization and direction. The relation between motivational method and tracing a list of objectives is well studied. When a goal is achieved, especially if perceived as important or difficult, the individual feel a sense of relief or extreme joy (McClelland, 1988). This factor (F3) consists, mainly, in the aggregation of the C17 (objectives at individual level), C19 and C20 (objectives at institutional level). Research suggests that objectives serve as an important reference for the affect system, in the sense that individuals react positively when they achieve objectives, and negatively when they fail (Diener, 2009). Other studies suggest that achieving results enhanced well-being. A relation between the promotions of necessity-satisfying experiences as been established with feeling competent, self-determined, and related to others (Sheldon and Elliot, 1999).

Sheldon and Kasser (1995) demonstrate that the relation between objectives achievement and well-being experience is only possible when the objectives are coherent with the intrinsic necessity for competence, self-determination and relatedness. Sheldon and Houser-Marko (2001) refer that the relation is bi-directional: objectives achievement have a positive effect on the well-being, and well-being promotes the establishment of more self-concordant goals.

#### F4- Leadership

Leadership (F4) is in the sequence of (F2) Group and Organizational Working (good ambiance and motivation within the group and organization), in the sense that it can be related to social support components. F4 allows the transition between social, instrumental and productive support. The leadership process has been deeply studied in the organizational psycho-sociology. Skakon, *et al.* (2010) reveals the impact of leaders and leadership styles on employee's well-being.

From the different leadership theories studied, the "transformational leadership theory" (Burns, 1978) has more impact in well-being. Skakon, *et al.* (2010) have clearly identified that the

relation between transformational leadership and employee well-being is explained through the experience of having a meaningful work.

Research demonstrates that individuals, in order to feel good within their job, need to have a leader trusting them (C21), gives support whenever needed (C22) and be inspiring (C23). Brown, *et al.* (2005) described ethical leaders as being honest, trustworthy, fair and caring. They lead employees with respect, keep promises, allow inputs, clarify expectations and responsibilities. Kalshoven and Boon (2012) refers the existence of a relations between ethical leadership, helping and well-being. Gilbreath and Benson (2004) demonstrates that the leader's support is associated with employee well-being and with a lower stress.

#### F5- Sustainability & Job/Family Balance

Sustainability and Job Family Balance factor is related with life and work. 'Work/life balance factors are highly referred in the literature (Crain *et al.*, 2014). 'Job/Family balance' (C24) means that work allows family sustainability. From the motivational theory perspective, sustainability means basic needs fulfillment. The C15 (financial conditions associated with role) should be interpreted in this way. The C16 (function must have clear/fair targets) is understood by the ability to achieve objectives without overexertion. Money gains define the economic status. Is an overarching concept meaning the objective income and material wealth (Howell and Howell, 2008). There is relevant research on the relation between economic prosperity and well-being, individually and global levels (Levine and Lombardi, 2014). The material wealth, also associated with the well-being, is closer to the cognitive component of well-being, than to the affective component (Diener *et al.*, 2010). From a trans-cultural perspective, Tay and Diener (2011) studied the relation between needs fulfillment and subjective well-being in 123 countries, concluding that this relation exists in all regions.

### CONCLUSION

Although the JDH has recently emerged as an important concept among both practitioners and academics, theoretical progress has been hampered. Using a grounded theory approach, this research involved a qualitative and quantitative study, with the objective to identify components and factors contributing for JDH. Thus, this work builds on prior research by taking constructs that had previously been studied independently and demonstrating that JDH can work as an integrated framework. The qualitative study also demonstrates that research on JDH derived directly from well-being and positive psychology theories. The second study was able to validate a model, respective components and factors, by using a SEM analysis. First-order and higher-order representations of JDH were estimated, demonstrating that JDH depends on five factors: self-fulfillment, group and organizational working, attaining goals, leadership, sustainability & job/family balance. The higher-order prototype model adds value in several ways: (i) leads to a higher comprehensive and integrated understanding on how professionals experience the job design happiness, complementing existing studies with a main focus on individual components, (ii) demonstrates how survey data can be collected and modeled, and (iii) demonstrates how more lower-level, and concrete components, can be used to influence higher-level and more abstract professionals perceptions. As such, top management may promote employees' job design happiness, and, this way, obtain higher organizational performance. The hierarchical model proposed, may assist managers in promoting lower-level actions to maximize each component targeted, and this way, influence the higher-level, and more abstract, JDH perceptions. By applying the proposed model, managers would be able to identify organization strengths and weaknesses regarding job design happiness, establish effective actions, measure its impact on productivity, and implement, with a strategic vision, a culture of happiness on job.

# **Limitations and Further Research**

Further research is needed to determine how the identified job design happiness components may interact with each other. For that, experimental research manipulating the features of the job design

happiness prototype would complement this cross-sectional research, helping to more a more unambiguously establish of causal directions. Longitudinal research on temporal development -and possible waning- of job design happiness would be very useful. Also, to validate factors and components among different industries and national cultures. Finally, would be high relevant to find the job design happiness effect on productivity.

#### REFERENCES

Akaike, H. (1987). Factor analysis and AIC. *Phychometrika*, 52(3), 317-332.

Albrecht, S. (2012). The influence of job, team and organizational level resources on employee wellbeing, engagement, commitment and extra-role performance: Test of a model. International Journal of Manpower, 33(7), 840-853.

Ambrose, M. & C. Kulik. (1999). Old friends, new faces: Motivation research in the 1990's. *Yearly Review of Management of the Journal of Management*, 25, 231-292.

Ames, C. (1992). Classrooms: Goals, structures, and student motivation. *Journal of Educational Psychology*, *84*, 261–271.

Bakker, A., & Oerlemans, W. (2011). Subjective well-being in organizations. In K.S.Cameron & G. Spreizer (Eds.). *The Oxford handbook of positive organizational scholarship* (pp.178-189). NY: Oxford University Press.

Batra, R., Ahuvia, A., & Bagozzi, R. (2012). Brand love. Journal of marketing, 76(2), 1-16.

Beck, A., Ward, C., Mendelson, M., Mock, J. & Erbaugh, J. (1961). An inventory for measuring depression. *Arch Gen Psychiatry*, *4(6)*, 561-571.

Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-246.

Biggio, G. & Cortese, C. (2013). Well-being in the workplace through interaction between individual characteristics and organizational context. *Int. J. Qualitative Stud. Health & Well-being*, 8:19823.

Blanch, J.M., Sahagún, M., & Cervantes, G. (2010). Factor structure of working conditions questionnaire. *Revista de Psicología del Trabajo y de las* Organizaciones, *26(3)*, 175-189.

Bollen, K. (1989). Structural equations with latent variables. NY: Wiley.

Brown, M., Treviño, L., & Harrison, D. (2005). Ethical leadership: A social learning perspective for construct development and testing. *Organizational Behavior and Human Decision Processes*, *97*, 117–134.

Bryce, J., & Haworth, J. (2003). Psychological well-being in a sample of male and female office workers. *J Applied Social Psychology*, *33(3)*, 565-585.

Burke, R. (2010). Flow, Work Satisfaction and Psychological Well-Being at the Workplace. *IUP JSoft Skills*, *4*, 37-48.

Burns, J.M. (1978). Leadership. New Your, NY: Harper Row.

Csikszentmihalyi, M. (1990). Flow: The psychology of optimal experience. New York: Harper Row.

Cullogh, M., Emmons, R., & Tsang, J. (2002). The grateful disposition: A conceptual and empirical topography. *JPersonality and Social Psychology*, *82*(1), 112-127.

De Vries, J., & Van Heck, G.L. (1997). The WHO quality of life assessment instrument (WHOQOL-100). *European Journal of Psychological Assessment, 13,* 164–178.

Deci, E., & Ryan, R. (2000). The "what" and "why" of goal pursuits: Human needs and the selfdetermination of behavior. *Psychological Inquiry*, *11*, 227–268.

Deci, E. & Ryan, R (2008). Facilitating optimal motivation and psychological well-being across life's domain. *Canadian Psychology*, *49* (1), 14-23.

Diener, E. (1994). Assessing subjective well-being: Progress and opportunities. *Social Indicators Research*, *31*, 103-157.

Diener, E. (2000). Subjective well-being: The science of happiness and a proposal for a national index. *American Psychologist*, *55(1)*, 34-43.

Diener, E. (2009). The Science of Well-Being: The Collected Works of Ed Diener. New York: Author

Diener, E., Emmons, R., Larsen, R., & Griffin, S. (1985). The satisfaction with life scale. *J Personality Assessment, 49*, 71-75.

Emmons, R. (1986). Personal strivings: an approach to personality and subjective well-being. *JPersonality and Social Psychology*, vol. 51(5), 1058-1068.

Endicott, J., Nee, J., Harrison, W., & Blumentathal, R. (1993). Quality of life enjoyment and satisfaction questionnaire: A new measure. *Psychopharmacology Bulletin, 29(2),* 321-326.

Erez, M., & Earley, P. C. (1993). Culture, self-identity, and work. NY: Oxford University Press.

Fisher, C. (2010). Happiness at work. International Journal of Management Reviews, 12, 384-412.

Freeney, Y., & Fellenz, M. (2013). Work engagement, job design and the role of the social context at work: Exploring antecedents from a relational perspective. *Human Relations*, 66(11), 1427-1445.

Galand, B. & Grégoire, J. (2000). L'impact des pratiques scolaires d'évaluation sur les motivations et le concept de soi des élèves. *L'Orientation Scolaire et Professionnelle*, 29, 431-452.

Galinha, I. & Pais-Ribeiro, J. (2011). Cognitive, affective and contextual predictors of subjective well-being. *International J Well-being*, *2*(*1*), 34-53.

Gilbreath, B., & Benson, P.G. (2004). The contribution of supervisor behavior to employee psychological well-being. *Work & Stress, 18,* 255-266.

Goldberg, D., & Williams, P. (1996). Cuestionario de Salud General GHQ. Barcelona: Masson.

Goldstein, K. (1939). The organism. NY: American Book.

Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review*, *32*, 393–417.

Grant, A., Fried, Y., Parker, S. & Frese, M. (2010). Putting job design in context: Introduction to the special issue. *JOrganizacional Behavior*, *31*, *145-157*.

Hacker, W. (2003). Action regulation theory: A practical tool for the design of modern work processes? *European J Work and Organizational Psychology*, *12*, 105–130.

Hackman, J.R. (1992) Group influences on individuals in organizations. In M.D. Dunnette & L.M. Hough (Eds). *Handbook of Industrial and organizational psychology* (Vol.3. pp.1455-1525). Palo Alto: Consulting Psychologists Press.

Hackman, J. & Oldham, G. (1976). Motivation through the design of work: test of a theory. *Organizational Behavior and Human Performance*, *16*, 250–279.

Heidemeier, H.& Wiese, B. (2014). Achievement goals and autonomy: How person-context interactions predict effective functioning and well-being during a career transition. *JOccupational Health Psychology*, *19*,(*1*), 18–31.

Helliwell, J. & Huang, H. (2011). Well-being and trust in the workplace. *JHappiness Studies*, *12*, 747-767.

Hills, P. & Argyle, M. (2002). The Oxford happiness questionnaire: A compact scale for the measurement of psychological well-being. *Personality and Individual Differences, 33*, 1073–1082.

Howell, R. & Howell, C. (2008). The relation of economic status to subjective well-being in developing countries: A meta-Analysis. *Psychological Bulletin*, *134(4)*, 536-560.

Hu, L., & Bentler, P. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, *6*(1), 1–55.

Inglehart, R., Foa, R., Peterson, C., & Welzel, C. (2008). Development, freedom, and rising happiness: A global perspective. *Perspectives on Psychological Science*, *3*, 264–285.

Jakson, S. (1983). Participation in decision making as a strategy for reducing job-related strain. *JApplied Psychology*, 68(1), 3-19.

Kalshoven, K., & Boon, C. (2012). Ethical leadership, employee well-being, and helping the moderating role of human resource management. *JPersonnel Psychology*, *11(1)*, 60–68.

Karasek, R., & Theorell, T. (1990). *Healthy work: Stress, productivity, and the reconstruction of working life*. NY: Basic Books.

Krant, R. (2009). *What is Good and Why: The Ethics of Well-Being*. Cambridge: Harvard University Press.

Lazarus, R. & Folkman, S. (1984). Stress, appraisal, and coping. NY:Springer.

Levine, R., & Lombardi, C. M. (2014). Low-income women's employment experiences and their financial, personal, and family well-being. *J Family Psychology*, *28(1)*, 88-97.

Luchman, J. & González-Morales, M. (2013). Demands, control, and support: a meta-analytic review of work characteristics interrelationships. *JOccup Health Psychol*, 18(1), 37-52.

Maslow, A. (1954). Motivation and personality. NY: Harper.

McClelland, D. (1988). Human motivation. NY: Cambridge University Press

Miles, M. & Huberman, A. (1994). Qualitative data analysis: An expanded sourcebook (2<sup>nd</sup>ed.). Thousand Oaks: Sage.

Ng, T. & Feldman, D. (2012) Evaluating six common stereotypes about older workers with metaanalytical data. *Personnel Psychology*, 65, 821-58.

Ng,W., & Diener, E. (2014). What matters to the rich and the poor? Subjective well-being, financial satisfaction, and post-materialistic needs across the world. *J. Personality and Social Psychology, 107(2)*, 326-338.

Ohly, S. & Fritz, C. (2010). Work characteristics, challenge appraisal, creativity, and proactive behavior: A multi-level study. *J. Organizational Behavior*, *31*, 543-565. Ong, C., & Lin, M. (2016). Is being satisfied enough? Well-being and IT post-adoption behavior: An empirical study of Facebook. Information Development, 32(4), 1042-1054.

Parker, S., & Ohly, S. (2008). Designing motivating work. In R. Kanfer, G. Chen, & R. Pritchard (Eds.), Work motivation: Past, present, and future: 233-384. New York: Routledge.

Park, R. & Searcy, D. (2014). Job autonomy as a predictor of mental well-being: The moderating role of quality-competitive environment. *JBus Psychol*, *27*, 305–316.

Pordata (2015). Retrieved from http://www.pordata.pt/Tema/Portugal/Popula%C3%A7%C3%A3o-1

Rego, A., Souto, S., & Cunha, M. (2009). Does the need to belong moderate the relationship between perceptions of spirit of camaraderie and employees happiness? *JOccupational Health Psychology*, *14(2)*, 148–164.

Reis, H.(1984). Social interaction and well-being. In S. Duck (Ed.) *Personal relationships V: Repairing personal relationships*. London: Academic Press.

Rodríguez-Muñoz, A., Sanz-Vergel, A., Demerouti, E., & Bakker, A. (2014). Engaged at work and happy at home: A spillover–Crossover model. *JHappiness Studies*, 15(2), 271-283.

Rush, H. (1971). Job Design for Motivation. New York: The Conference Board.

Ryan, R., & Deci, E. (2001). On happiness and human potentials: A review of research on hedonic and eudamonic well-being. *Annu. Rev. Psychol*, *52*,141–66.

Ryff, C., & Keyes, C. (1995). The structure of psychological well-being revisited. *J Personality and Social Psychology*, *69*, 719–727.

Schaufeli, W., Martínez, I., Marqués-Pinto, A., Salanova, M., & Bakker, A.(2002). Burnout and engagement in university students: A cross-national study. *J Cross-cultural Studies*, *33*, 464-481. Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23–74.

Sheldon, K., & Elliot, A. (1999). Goal striving, need-satisfaction, and longitudinal well-being: The self-concordance model. *JPer*sonality and Social Psychology, 76, 482–497.

Sheldon, K., & Houser-Marko, L. (2001). Self-concordance, goal attainment, and the pursuit of happiness: Can there be an upward spiral? *JPersonality and Social Psychology*, *80*, 152–165.

Sheldon, K., & Kasser, T. (1995). Coherence and congruence: Two aspects of personality integration. *JPersonality and Social Psychology*, *68*, 531–543.

Skakon, J., Nielsen, K., Borg, V., & Guzman, J. (2010). Are leaders' well-being, behaviours and style associated with the affective well-being of their employees? A systematic review of three decades of research. *Work & Stress, 24*(2), 107-139.

Strack, F., Argyle, M. & Schwarz, N. (Eds.). (1991). *Subjective well-being: An interdisciplinary perspective*. Oxford: Pergamon Press.

Tay, L. & Diener, E. (2011). Needs and subjective well-being around the world. *Journal of Personality and Social Psychology*, *101*, 354–365.

The R Core Team (2014). R: A language and environment for statistical computing. Viena: R Foundation for Statistical Computing.

Van Dierendonck, D. (2004). The construct validity of Ryff's scales of psychological well-being and its extension with spiritual well-being. *Personality and Individual Differences, 36,* 629–643.

Van Laar, D., Edwards, J. & Easton, S. (2007). The Work-Related Quality of Life (QoWL) scale for healthcare workers. *JAdvanced Nursing*, *60*, 325–333.

Veenhoven, R. (2012). Cross-national differences in happiness: Cultural measurement bias or effect of culture? *International Journal of Wellbeing*, *2(4)*, 333-353.

Venkataramani, V., Labianca, G. & Grosser, T. (2013). Positive and negative workplace relationships, social satisfaction, and organizational attachment. *JApplied Psychology*, *98(6)*.

Wall, T.; S. Parker (2001). N. Smelser & P. Baltes, ed. *International encyclopedia of the social & behavioral sciences* (2nd.ed.). Amsterdam:Elsevier. (pp.7980–7983).

Warr, P.B. (1987). Work, unemployment, and mental health. Oxford: Clarendon Press.

Warr, P.B. (1990). The measurement of well-being and other aspects of mental health. *JOccupational Psychology*, *63*, 193-210.

Warr, P.B. (2013). Fuentes de felicidad e infelicidad en el trabajo:Una perspectiva combinada. *Revista de Psicología del Trabajo y de las Organizaciones, 29,* 99-106.

Welzel, C., & Inglehart, R. (2010). Agency, values, and well-being: A human development model. *Social Indicators Research*, *97*, 43–63.

WHO (1946). Preamble to the constitution of the World Health Organization. New York: Author.

Zacher, H., Jimmieson, N., & Bordia, P. (2014). Time pressure and coworker support mediate the curvilinear relationship between age and occupational well-being. *JOccupational Health Psychology*, 19(4), 462-475.