Validating Sustainable Career Indicators: A Case Study in a European Energy Company

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Abstract: The literature on careers is rapidly evolving, presenting relevant academic developments. Considering the volatility of the environment and the workforce and the search for sustainability, a new research avenue concerning sustainable careers is emerging. Sustainable careers are regarded as a complex mental schema represented by experiences and continuity patterns grounded on individual subjective evaluations, such as happiness, health and productivity. According to conceptual models, these are fundamental individual indicators that allow the attainment of a sustainable career. By following this theoretical proposal, the work tests the conceptual model using proxies for its indicators (job satisfaction, well-being and organizational citizenship behavior). We validate the use of these proxies by performing association, variance, and cluster analysis on data coming from a survey conducted on employees of a European energy company. The results corroborate our hypotheses and support the choice of the selected proxies as adequate operationalization of the indicators. This study contributes to theory and practice alike by validating measures to represent each indicator and their association with sustainable careers. The study contributes to the development of research on sustainable careers by providing a set of measures that can be used to profit from an existing theoretical model and operationalize it in future studies exploring its contribution to several other variables. There are managerial implications that arise from our results and may help human resources managers contribute to the sustainable careers of their employees. We acknowledge the study’s limitations at the end of the paper and offer future directions for research.

Keywords: sustainable careers; well-being; job satisfaction; organizational citizenship behavior

1. Introduction

Sustainable careers are regarded as a cyclical process characterized by mutually beneficial consequences for both the individual and the environment from a long-term perspective [1]. Therefore, sustainable careers can be defined as a form of human sustainability aligned with the ability of individuals to create, test and maintain their adaptive capacity [2]. Sustainable careers have similarities with physical sustainability when considering the consequences that organizational activity can have on material and physical resources [3]. Likewise, sustainable careers also present similarities with social sustainability when considering the impact that organizational activities can have on a material and physical level and the psychological impact on an employee [3,4]. Therefore, career adaptability is a psychosocial construct [5]. Kuchinke [6] emphasizes the importance and development of human beings when addressing the issue of the sustainability of human resources. Nevertheless, although sustainable careers discuss the psychosocial role of career adaptability as one of the core dimensions that shape the person-centered approach to sustainable careers [1], career adaptability by itself is not sufficient to describe career sustainability. Workers who present higher levels of adaptability are prone to be better prepared for future career challenges [7]. According to De Vos and colleagues [1], however, only the combination of adaptivity and adaption with career competencies can promote career sustainability.
at the personnel level, making career adaptation a subdimension of the “Person” dimension defended by the authors.

The literature related to careers has paid special attention to the analysis and study of the topic of sustainable careers [8,9]. Considering such scarcity, the present work is based on the conceptual sustainable career model as proposed by De Vos and colleagues [1]. The authors argue that, at the individual level, sustainable careers are defined by three key indicators: Happiness, Health and Productivity [10]. Happiness refers to the adjustment between goals, values and career that align with the employee’s personal growth [10]. Health refers to career adjustment and is related to the employee’s physical and psychological mental capacities and their perception of quality of life [11,12]. Productivity refers to the employee’s performance and respective long-term career progression within the organization [13].

However, despite the growing research on the topic [1,14], Müller and colleagues [12] explore the main theoretical studies on sustainability and careers [15,16], identifying a gap in the literature that invites empirical investigation on the subject. The validation of a sustainable career variable lacks conceptual clarification with no accepted indicators for measuring the concept; thus, it remains in an embryonic state [17]. There is much that still needs to be undertaken regarding the operationalization of sustainable careers [18]. Additionally, some recent tentative efforts to develop frameworks for sustainable careers originated propositions for particular audiences, such as vocational students [19]. Similarly, we find attempts to develop and empirically test a sustainable career scale that ends up exploring context-dependent variables on specific workplace samples of mature employees [20]. At present, there seems to be no record of an empirical test of De Vos and colleagues’ [1] proposed model using widely accepted measures that are neither context specific nor designed for particular users [18].

In this work, we present a study that fills this said gap. We propose proxies to measure the three indicators of a sustainable career by De Vos and colleagues [1]: job satisfaction (as a proxy for Happiness), well-being (as a proxy for Health) and organizational citizenship behavior (as a proxy for Productivity). The choice of proxies relies on theoretical rationales that discuss the dynamic and cyclical nature of careers—namely by describing measures that can accommodate and are shaped by individual, contextual and time-based influences [1]. To ensure their validation, we use pre-validated constructs that are neither context dependent nor suited for specific samples and propose these variables as proxies for the key indicators of the model. We analyze data collected from a European energy company using an online survey. The results validate our hypotheses and suggest that the three presented proxies are adequate options for the operationalization of the indicators of the model by De Vos and colleagues [1]. This study contributes to theory and generates managerial implications, although it is not free from limitations that we acknowledge.

2. Literature Review

2.1. Sustainable Careers

According to Van der Heijden et al. [20], sustainable careers are reflected through a variety of experiences involving a diversity of patterns, representing different social spaces and having different meanings for each individual that cross different social spaces and provide meaning to each individual. Despite the variety of experiences lived by every person, a career can be designated as sustainable when it meets similar criteria to that of physical sustainability (represented by the consequences of the organizational activity carried out on each employee) and social sustainability (represented by the consequences of the organizational activity carried out on the physical and psychological health of each employee) [3,4,20]. Therefore, career sustainability is built on the ability of human beings to create, test and maintain their adaptive capacity [2], revealing the contribution of psychological resources to sustainable careers [17].
De Vos and colleagues [1] developed an integrative theoretical assumption that focuses on the individual, their organizational context and their actions over time [21]. This view proposes a systemic approach to understanding the influence of the social context (colleagues, organization and other aspects beyond the employee’s personal life) on building a sustainable career [22]. Additionally, this line of research assumes a dynamic approach to careers as cycles of individual decisions [20,22], which are context dependent as time goes by [23]. The time factor comprises the long-term interaction of individuals with society [21], involving changes in the workplace that consequently impact their careers [15].

The sustainable careers model (Figure 1) considers three dimensions: Person, Context and Time [1]. Sustainable careers reflect beneficial consequences for the person and their context from a long-term perspective. The three indicators portray three key characteristics of a sustainable career (Happiness, Health and Productivity), which altogether produce positive results reflected in career success [1,24]. These indicators reflect that which is intrinsic to individual social prosperity and well-being [20].

Happiness refers to the adjustment between individual goals, values and/or needs combined with personal growth and/or issues related to the balance between work and personal life [11]. Health refers to the adjustment between the physical and mental capabilities of the employee related to the perception of well-being and quality of life of each individual [12]. Finally, productivity refers to the employee’s organizational performance combined with long-term career progression [13]. According to De Vos and colleagues [1], the integration of the three indicators operates on an idea of fit, recognizing its relevancy for both individuals and organizations. However, the recentness of the theoretical model [25] and the initial effort in the construction of scales that allow measuring indicators of sustainable careers [11] present obstacles to integrating studies that explore the implications and predictors of this conceptualization of careers. In order to be able to respond to this difficulty, we selected three variables to constitute proxies for the three indicators suggested by De Vos and colleagues [1] (Figure 1). Thus, we propose that the Happiness indicator be measured by the Job Satisfaction proxy, the Health indicator be measured by the Well-being proxy and the Productivity indicator be measured by the Organizational Citizenship Behavior (OCC) proxy. Considering the conceptual model, we also propose that the three indicators of sustainable careers are positively and significantly correlated with each other, constituting as a group an adequate way to analyze employees’ levels of sustainable careers.
2.2. Well-Being

The concept of psychological well-being has gained special attention in organizations [26]. Research on well-being at work is found in the literature supported by two perspectives [27–29]—hedonic and eudaemonic [30]. The first focuses on the conceptualization of well-being as a cognitive and affective assessment that an individual makes of his or her life in an integrated way [26,29]. The second, while less studied [27,28], defends an approach to the phenomenon from an integrated perspective of alignment with beliefs and values based on mental states that are congruent and authentic with the idea of the self [27]. However, the difficult operationalization of the second perspective [27,28] indicates a strong tendency to understand well-being in the organizational context following a hedonic perspective [27]. Ryan and Deci [30] discuss in detail the dichotomy of perspectives that are aligned with the concept of well-being, suggesting possible theoretical solutions that support the operationalization of this concept in the context of the life cycles of individuals in organizations. The choice of well-being as a Health proxy reflects both a significant rise in the literature surrounding psychological health in the workplace context [31] and the parallel growth of research on its physical consequences. As stated by the World Health Organization, well-being reflects “a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity” [32]. In the organizational context, similar parallels are discussed pertaining to the consequences of well-being on job satisfaction and performance [33], constituting a core health-related concern in HR management practices.

The Self-Determination Theory [34] states that a proactive employee stimulates development and growth and interacts with the surrounding social world when dedicated to satisfying three basic ideas: competence (which comprises success and how each person achieves the expected result), relationship (mutual respect) and autonomy (employee initiative) [26,34,35]. Ryan and Deci [30] argue that the satisfaction of these three needs is essential for well-being and psychological growth.
The Person–Environment Fit Theory argues that employee performance and well-being levels are higher where there is a suitable profile for the proposed role. Notwithstanding, the lack of alignment between employee preferences and role characteristics will be detrimental to their respective well-being [36]. This way, the profiles that do not best match the jobs will take longer to perform the associated functions, jeopardizing employee well-being [37]. Individual well-being favors both organizations through increased motivation, productivity, and reduced absenteeism, as well as society, given that people’s psychological health results in global satisfaction [38,39].

Ryff et al. [40] report that workers with higher levels of well-being tend to be more productive and have better physical and psychological health when compared to workers with low levels of well-being. Expanding on such a view, Wright and Cropanzano [41] in their seminal work on the happy–productive hypothesis, discuss the importance of the combined effects of well-being and job satisfaction as predictors of job performance. Recent literature addresses this relationship, referring to the combined influence of both well-being and job satisfaction as predictors of stressors of positive emotions [42], and gaining traction during the COVID-19 pandemic as a combination of measures to understand the needs of organizational support [43]. Therefore, we propose well-being to be a proxy for the Health indicator of sustainable careers by De Vos and colleagues [1]. According to Salas-Vallina and Alegre [28,29], the emotional response that results from meeting the satisfaction requirements of individuals with the nature of their work establishes conceptual parallels with those present in happiness, also promoting feelings of well-being that are strictly linked to the concerns of current organizations [44]. Considering the relationship between well-being and job satisfaction [30] as well as the idea of a convergent relationship between the three indicators of a sustainable career [44,45], we propose that:

H1. Well-being is positively and significantly correlated with Job Satisfaction.

2.3. Job Satisfaction

Happiness stems from “job satisfaction” [46]. Happiness is a daily objective of human beings, as they seek to extend it to all domains of their lives. Consequently, Happiness measures the degree of satisfaction that an individual has with their own life [47]. Satisfaction in an organizational context is a positive emotional state that exists in the performance of an employee’s daily functions [48,49]. In addition to an emotional state, job satisfaction is an attitude that translates into employee behavior [50]. Job satisfaction can be addressed from two perspectives: the humanitarian perspective and the utilitarian perspective [51]. The humanitarian perspective states that the level of satisfaction is measured according to how employees are valued in the organization [51]. The utilitarian perspective, on the other hand, considers that employee satisfaction can trigger attitudes from employees that influence the functioning of the organization [51].

The Need Theory by McClelland [52] explains how the individual need for achievement, affiliation, and power influence employees’ actions within an organizational context. It states that an organization’s employees, whose primary needs are satisfied through workplace experiences, will obtain higher satisfaction in the roles they perform [53]. Although such a theoretical framework exposes the importance of satisfaction for organizations [54] and individuals [55], the measurement of the construct in the literature is built on subjective judgments of adequacy, sufficiency and acceptance [28,29]. The reflection of these psychological needs as dimensions of satisfaction can thus be translated into judgments of working conditions, conditions of the reward models existing in the organization, and even the conditions of access and career development [28,56]. Likewise, empirical evidence also suggests the existence of positive states of mind when the conditions attached to satisfaction in the workplace are fulfilled, providing potential for discussion on the possible relationship between satisfaction and happiness [44,55]. However, the concern of organizations to provide working conditions to meet the satisfaction needs of their employees presents a robust line of investigation focused on the behavioral consequences of job satisfaction [44,45]. For example, Chiaburu and colleagues [45], in a meta-analysis that sought
to explore predictors of OCB in the literature, observed satisfaction as a key predictor effect for OCB—considering either the direction of individual (with other colleagues) or organizational behavior. As a consequence of all of the above, we propose job satisfaction to be a proxy for the Happiness indicator of sustainable careers by De Vos and colleagues [1]. Considering the relationship between satisfaction as a factor of close influence and the relationship with organizational citizenship behaviors [44,45], and the idea of a convergent relationship between the three indicators of a sustainable career [44,45], we propose that:

**H2.** *Job Satisfaction is positively and significantly correlated with Organizational Citizenship Behavior.*

### 2.4. Organizational Citizenship Behavior

Organizational Citizenship Behavior (OCB) is defined by Organ [57] as voluntary cooperative behaviors that workers exercise toward their colleagues that go beyond their functions [58,59]. This behavior leads to greater job satisfaction and a greater sense of perceived fairness [60]). In presenting this argument, Organ [61,62] suggests that OCB represents an input to the employee equity ratio that can be changed more easily than other inputs that involve the daily tasks of employees [63]. OCB is a predictive source of performance in organizations. Supported by the Psychological Impact Theory, which addresses the effects of human resources management (HRM) practices on attitudes that influence organizational performance [64,65], OCB reflects not only the innate characteristics of the task or work that are predictive of performance but also behaviors that portray extra job tasks [65,66].

HR managers can make use of progressive HRM practices [67] to stimulate employees to perform their work beyond in-role behaviors: extra task behaviors. Following a conceptual discussion on the possible effects of OCB on organizations [66], its particular importance is observed in promoting cooperation and coordination between the different levels of the organization and in guaranteeing a capacity for stability and adaptation to change. Such aspects are corroborated by further research [64,65,68]. According to Organ [62], OCB translates into feelings of belonging, commitment, and loyalty to the organization in the long term, which are highly important predictors for achieving productivity in high-performance organizational systems [69]. Several authors have followed the work of Smith, Organ and Near [70] and further refined the concept of OCB (e.g., the view of Ocampo et al. [71]). This line of research has been explored in different contexts and perspectives, showing that OCB is related both at an individual (IOCB) and organizational (OOCB) level and that perspectives should be distinguished [71,72]. Inspired by the five dimensions presented by Bateman & Organ [73]: altruism, courtesy, conscience, civic virtue and sportsmanship, Williams & Anderson [74] address OCB in two groups: altruism and courtesy comprise the IOCB and civic virtue. Conscience and sportsmanship comprise the organizational perspective (OOCB) [71,75]. Sustainable careers comprise a resource preservation process based on Hobfoll’s Theory of Resource Conservation [76], arguing that employees try their best to protect and acquire new resources [77]. However, when there is a loss of resources, they choose to reduce their behavior and conserve the most valuable resources because such an option is supposed to preserve the sustainability of a career [1]. OCB is an extra-task voluntary behavior for the benefit of the organization and/or colleagues that leads to the delivery of emotional and cognitive resources by employees [63,78]. Expanding on such a rationale, evidence also suggests that the perception of OCB activities, considering both individual and organizational-oriented OCBs, are related to well-being-related dimensions [79]. Through the lens of both engagement and positive affective commitment, engagement in OCBs can promote citizenship-oriented initiatives as per the job role [79,80]. By extension, evidence also suggests that the overreliance on motivation-oriented approaches by HRM practices stemming from demands–resources models can further cherish OCB behaviors, being mediated by feelings of well-being [81]. According to Donaldson and colleagues [82], “positive functioning occurs when individuals are able to effectively manage the daily fluctuations in positive- and negative emotions at work (i.e., affect balance) and having the opportunity to live up to their potential, having
a sense of meaning/purpose at work, harboring feelings of control” (p. 3). Such positive feelings are also, in turn, related to engagement in extra-role behaviors, such as OCB [83], therefore, reflecting a cyclical, time-based and contextual phenomena. Bearing in mind all the above, we propose organizational citizenship behavior to be a proxy for the Productivity indicator of sustainable careers by De Vos and colleagues [1]. Considering the relationship between OCB and feelings related to well-being (Organ [62], as well as the idea of a convergent relationship between the three indicators of a sustainable career [44,45], consequently, we suggest that:

**H3.** Organizational Citizenship Behavior is positively and significantly correlated with Well-Being.

### 2.5. The Integrated Nature of Sustainable Careers Indicators

For De Vos and colleagues [1], the integration of happiness, health and productivity in a taxonomy of sustainability in careers operates according to the idea of fit. The three indicators are of recognized importance for individuals and organizations. The perspective of adjusting the three indicators of sustainable careers is aligned with the central premises of human sustainability [2]. The set of indicators works as a mechanism that responds to the changes that emerge from contextual influences happening in a dynamic and combined way [3].

Research corroborates the assumptions that the three indicators reflect a combined and integral reaction to contextual influences. Tordera and colleagues [25] discuss the close relationship between the three indicators of sustainable careers with HRM practices. Likewise, the idea of a combined influence of the three indicators is also corroborated in the career management of self-employed workers [10]. However, the operationalization of sustainability, as proposed by De Vos and colleagues [1], presents problems of an empirical nature, as discussed in the literature [10,11,25]. The difficulties in studying sustainable careers concern measuring the happiness, health and productivity indicators since these are complex phenomena to measure [1,25]. The challenge is further intensified by the scarcity of existing measures to study sustainable careers [11,25]. Such evidence provides two arguments about the conceptual reality of sustainable careers: (a) the scarcity of measures to address sustainable careers leads to the need to use proxies; (b) the choice of proxies must obey an integrated association form, presenting significant and observable positive and negative relationship directions in the three indicators. That is, individuals who show high levels of one indicator (let us say the productivity proxy) must also show high levels of the other two indicators (in the same example, the health and happiness proxies), thus corroborating the conceptual model [1] and the validity of the choice of measures to estimate the phenomenon. Similarly, individuals who show low levels of one indicator (let us say the productivity proxy) must also show low levels of the other two indicators (in the same example, the health and happiness proxies).

Considering the empirical evidence supporting the existence of a combined influence between the three indicators of sustainable careers [1,10,84], we argue that the choice of proxies will be even better supported if there are patterns of employees who report higher and lower levels of sustainable careers. Thus, in order to respond to a need to better understand the integrated and dynamic effects of personal indicators of sustainable careers [1], we propose the following research hypothesis:

**H4.** There are interactions that relate the three indicators’ proxies (satisfaction, well-being and OCB), creating patterns of employees with higher and lower levels of sustainable careers.

### 3. Materials and Methods

#### 3.1. Research Design

This research uses a case study approach using quantitative analysis to investigate the complex nature of the variables in the analysis. The use of a case study strategy is of relevance in circumstances where the initial and yet underdeveloped knowledge is aimed at testing theoretical assumptions [85]. Given the nature of the theoretical model, suggesting a
positivist rationale between variables related to sustainable careers, the sources of evidence support arguments towards the use of standalone quantitative research, following best practices [86]. The study tests the use of three proposed sustainable career indicators’ proxies. Regarding its research position stance, the study follows a hypothetical deductive design and tests four hypotheses using multivariate statistical analysis techniques based on the data collected by questionnaire from a European company based in the energy sector. In order to ensure robust testing of the hypotheses, we carried out three phases of data analysis. First, we analyze the nature of the relationship between the variables through correlation tests, considering the explanatory nature and theoretical emphasis on the nature of the relationship of the three proxies to each other [87]. Then, we perform a multivariate statistical technique of cluster analysis to understand the typologies of patterns that can better justify the use of these proxies through their behavior in groups of employees with different profiles [87,88]. Finally, from the clusters found in the sample, we performed the parametric ANOVA test to analyze the variance of the means of the proxies, using the test to ascertain significant differences in the mean between groups [87]. This last test sought to confirm the statistically significant difference between the clusters found in order to confirm the use of proxies in their theoretically expected predictive behavior [1]. For statistical treatment, Smart PLS® and SPSS® software were used.

3.2. Sampling

The study sample comes from a European energy company, conducting several global commercial activities, acting as a leader in the energy sector, and recognized for its values of innovation, sustainability and humanization focused on creating solutions for its employee and customer needs. The organization is highlighted by benchmarks, which value and include all people in a true sense of belonging. The company is part of a group with a strong commitment to an innovative way of managing careers. Moreover, the central and relevant role that the HRM department assumes in the company’s vision of the future guided the choice of the organization for this investigation. The data collection instrument consisted of a survey built using Qualtrics®. The link to the survey was made available on the organization’s intranet with the due authorization of top management to 843 employees of the group through an electronic platform called “Workplace”. The platform has restricted access to all employees of the group. The employees’ participation was voluntary and anonymous. The participants provided their consent and were informed of the conditions of the study prior to answering the questions. The questionnaire was published on the company’s platform in June and July 2022, and we gathered 190 responses (23% response rate). After following the cleaning processes proposed by Hair and colleagues [87], the final sample consisted of 150 observations. All observations with more than 75% of the response frequency limited to one level of the Likert scale for all measures were excluded. Likewise, responses limited to the single use of two-scale values for all items were eliminated.

As presented in Table 1, most respondents are female (61.3%) and aged between 35 and 45 years (32%). Regarding marital status, 48% of the respondents are married and have a degree (44%). The respondents have between 1 and 5 years of experience (32%) as well as seniority (27.3%) and working time with the current team (52%). Most respondents are currently in a hybrid work regime (91.3%). Table 1 offers the demographic characteristics of the sample.
Table 1. Sample demographics (n = 150).

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3.3. Measures

In this study, we used pre-validated measures from the literature. Two criteria were set for the choice of the measures for the proxies. First, the prioritization of measures that encompassed multi-item solutions, given their higher accuracy in measuring complex stimuli and abstract phenomena [88–91]. Second, the previous validation of the measures in a plurality of settings, considering their number of citations and uses in different literature. The variables were measured according to a 7-point Likert scale (1 = Never and 7 = Always). The items were randomly distributed in a questionnaire consisting of four sections to ensure a reduction in the common method variance. The first section corresponded to the characterization of the respondents and consisted of 9 items. The second section of the questionnaire presented the questions regarding the variables. The Job Satisfaction scale (Sat) has 5 items and comes from the article of Jensen and colleagues [92]. Examples of items on the scale include: “I am satisfied with my current job; I am not subject to excessive stress in my workplace”. The choice of the Job Satisfaction scale in the well-being context stems from meta-analytic evidence suggesting that Job Satisfaction is positively related
to both eudemonic and hedonic dimensions of well-being—namely by being positively related to life satisfaction, happiness, positive emotions and affects [93]. The Well-Being (BE) scale has 6 items and comes from the work of Zheng and colleagues [94]. Examples of scale items include: “I am generally quite satisfied with my current job; In my current job, I feel minimally satisfied with the results of my work”. The Behavior of Organizational Citizenship (OCC) has a total of 16 items and comes from Lee & Allen’s [63] study. Examples of items on the scale include: “I help new employees feel part of the workgroup; I participate in non-mandatory activities that help improve the organization’s image”. The scales were translated into Portuguese and validated following a back translation methodology supported by best practices for the validation of the instruments [95]. In order to reduce the variance from common method bias, the scale translations were validated by two academic colleagues and three HR managers. Previous to conducting the survey at the company, we ran a pilot test with 91 participants from an online snowball sample using the study authors’ social media to publish the link to the survey. Results from the pilot test reassured us about the quality and adequacy of the measures.

4. Results

To assess the reliability of the proposed proxies, the internal consistency was analyzed using Cronbach’s Alpha, Rho_A Coefficient and Composite Reliability (CR). All of the values are above the minimum acceptance point (0.7), ranging from 0.757 to 0.905. Convergent validity was measured through the Average Variance Extracted (AVE), which complies with the threshold in the literature (greater than 0.4) [87]. Table 2 presents the results for consistency and convergent validity of the measures.

Table 2. Internal consistency and convergent validity of Sustainable Careers proxies.

<table>
<thead>
<tr>
<th>Proxies</th>
<th>Cronbach’ Alpha</th>
<th>Rho_A</th>
<th>CR</th>
<th>AVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-Being</td>
<td>0.879</td>
<td>0.885</td>
<td>0.909</td>
<td>0.627</td>
</tr>
<tr>
<td>OCB</td>
<td>0.905</td>
<td>0.918</td>
<td>0.918</td>
<td>0.431</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.850</td>
<td>0.863</td>
<td>0.888</td>
<td>0.535</td>
</tr>
</tbody>
</table>

Considering the dimension (n = 150) and the nature of the proxies, we used Pearson’s r-test statistic [87] to analyze the hypotheses of a correlation between the variables (H1, H2, H3). The results indicate that all have a positive effect on each other, with a significance level lower than 0.001 (Table 3). According to Cohen’s cutoff criterion [96], effect values less than 0.2 are weak; equal to or greater than 0.5, moderate; and greater than 0.8, high. In the case of the analysis, there are two moderate correlations (between Satisfaction and Organizational Citizenship Behavior and between Organizational Citizenship Behavior and Well-Being) and a high correlation (between Satisfaction and Well-Being as it approaches 0.8).

Table 3. Correlations between Sustainable Careers proxies.

<table>
<thead>
<tr>
<th>Proxies</th>
<th>Well-Being</th>
<th>OCB</th>
<th>Satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well-Being</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OCB</td>
<td>0.580 ***</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Satisfaction</td>
<td>0.777 ***</td>
<td>0.414 ***</td>
<td>1</td>
</tr>
</tbody>
</table>

*** p < 0.001.
Therefore, Table 3 supports the positive and significant relationships ($p < 0.01$) between the proposed hypotheses. Based on the literature review carried out, the results show significant positive correlations between the three indicators suggested as proxies for the indicators of De Vos and colleagues’ [1] proposed model. These results provide initial evidence that supports the use of the chosen proxies. In order to better justify the use of proxies as measurement proposals for the indicators of sustainable careers by De Vos and colleagues [1], we carried out a cluster analysis to confirm the existence of employee patterns that show consistency in satisfaction, well-being and OCB levels, and corroborate the dependence and integration of proxies of the proposed conceptual model.

Cluster analysis techniques are subject to a lack of consensus regarding the forms of identification, mapping, and delimitation of groups [87]. Following best practices [88], we performed cluster analysis following a two-step strategy. At first, we used the hierarchical cluster analysis (or hierarchical clustering) technique, which provided us with a recommended solution of two clusters, according to the characteristics of the sample’s behavior in the three proposed proxy variables ($n = 150$). We used a likelihood equation to measure the distance between the clusters (log-maximum likelihood) following Ward’s decision rule [87,88]. The initial solution indicates that the quality of the clusters is between medium and high levels ($>0.5$). The clusters have similar sample values ($k_1 = 54\%$; $k_2 = 46\%$). The most important predictor for the solution was the well-being proxy (1.00), followed by the satisfaction proxy (0.74), with the OCB proxy being the least significant (0.34). Next, we performed a second cluster analysis test using the non-hierarchical technique (k-means). The proxy variables were standardized in order to ensure that a possible measurement bias was reduced [79] and to facilitate the interpretation of clusters in terms of their deviation from the mean of the variables. The final solution, presenting the averages of each proxy in the cluster (standardized centroids), is shown in Figure 2. The solution considers the interaction patterns of the proxies’ mean values in the two groups, considering satisfaction, OCB and well-being as proxies of happiness, productivity and health.

Figure 2. Two-cluster solution for sustainable career proxies.
We labeled the first cluster “sustainable career” because it includes the higher positive centroid differences for the proxies. It includes 52% of the sample (n = 78). In this cluster, all the proposed proxies present higher positive deviances from centroid values: satisfaction (0.678), OCC (0.540) and well-being (0.723). We labeled the second cluster “unsustainable career” because it presents negative deviations from centroid values for the proxies. It includes 48% of the sample (n = 72). In this cluster, all proposed proxies present higher negative deviations from centroid values: satisfaction (−0.735), OCB (−0.585) and well-being (−0.783). Finally, we performed an ANOVA test to verify the difference between the proposed proxies and analyze the statistical significance of the difference of the means presented in the two identified clusters. The results showed a significant mean differences regarding satisfaction (F(1.148) = 148.94, p < 0.05), OCB (F(1.148) = 68.961, p < 0.05) and well-being (F(1.148) = 196.270, p < 0.05) between the two clusters. Such findings support our proposition of the three proxies as a set and show two typologies of employees with contrasting profiles. Table 4 presents the results of the ANOVA test.

Table 4. ANOVA test results.

<table>
<thead>
<tr>
<th>Cluster</th>
<th>Error</th>
<th>F</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>η²</td>
<td>gl</td>
<td>η²</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>74.736</td>
<td>1</td>
<td>0.502</td>
</tr>
<tr>
<td>OCB</td>
<td>47.359</td>
<td>1</td>
<td>0.687</td>
</tr>
<tr>
<td>Well-Being</td>
<td>84.946</td>
<td>1</td>
<td>0.433</td>
</tr>
</tbody>
</table>

5. Discussion and Conclusions

The research explores the relationship between the indicators for a sustainable career provided by the model of De Vos and colleagues [1]. We propose and validate the use of proxies from the literature for the three indicators. In this way, we tested and found evidence of the direct correlation between the three indicators, which are the basis for a sustainable career (supporting H1, H2 and H3). We found evidence in support of H1, consistent with previous relationships found in the literature: individual well-being favors the psychological health of employees, resulting in satisfaction [38,39]. It was also possible to collect evidence in support of H2, in line with previous studies: greater job satisfaction relates to organizational citizenship behavior [60]. Finally, we empirically support H3, continuing the arguments of preceding works: organizational citizenship behaviors bond with the delivery of emotional and cognitive resources by employees [63,78], revealing feelings of well-being [62]. Such results show positive correlations between the three suggested proxies representing the indicators of the theoretical model proposed by De Vos and colleagues [1].

With regard to the integrated nature of the variables as proxies for the indicators of sustainable careers, the results show the existence of two clusters (Table 4). The existence of only two groups that demonstrate a symmetry in the average of the variables of the proxies corroborates the idea defended by De Vos and colleagues [1] of integrated adjustment of the indicators, capturing the idea of fit. The results show a coordinated behavior among the three indicators. This course of evidence reveals the fit among the scales of the variables, reassuring the adequacy of the choice of indicator proxies. In other words, despite being dynamic and contextually dependent, the integrated and combined character of the indicators presents a self-regulated behavior. The appropriateness of these variables as proxies is also supported by investigations that refer to the integrated importance of the three personal indicators of sustainable careers and suggest similar effects that result from the combination of these variables in different types of workers [10,25]. Likewise, our results are in line with the expected relationships between the proxies, either in the circumstance of using other proxies for the indicators of sustainable careers [25] or for validating theoretical parallels that can help the construction of scales for this typology of
careers [11]. The existence of two clusters that reveal an opposing behavior with significant centroid differences exposes the importance of the three proxies as an adequate fit to represent the three indicators. Therefore, the findings confirm H4.

Considering the contributions of this work, we offer the theoretical contribution regarding the operationalization of the indicators of the model presented by De Vos and colleagues [1], which will allow their use in future studies that address the relationship between sustainable careers and other variables in the management domain. In particular, the sub-domain of HRM. Our proposal circumvents the difficulties in studying sustainable careers due to the complexity surrounding the measurement of happiness, health and productivity [1,25]. Moreover, the conjoint use of the three proposed proxies goes beyond addressing the separate indicators and measures sustainable careers in a way that really captures the entire concept. Thus, with this study, we overcome the limitations of existing frameworks for sustainable careers developed for scenarios [19] and specific workplace samples [12]. On the contrary, we provide a wide applicable set of measures to operationalize the study of sustainable careers.

This study also delivers managerial implications. The validation carried out of the theoretical model by De Vos and colleagues [1] on sustainable careers shows a positive correlation between the three variables used as proxies for the indicators of the theoretical model, which offers managers, and in particular HR managers, a solid rationale for understanding sustainable careers. Therefore, the study presents practical contributions to management. The results show that stimulating employees’ well-being, job satisfaction and organizational citizenship behaviors contributes to their sustainable careers. Thus, HR managers should use HRM practices to achieve such effects. HR managers may use formal career and succession planning, internal promotion, mentoring programs, coaching, development centers, performance appraisal, training, compensation and training and development [97,98] to foster the development of sustainable careers in their organizations.

With regard to available HRM practices focused on well-being, we stress five key components: (a) the promotion of investment in employees (e.g., training and development); (b) the provisioning of work engagement to promote job satisfaction (e.g., jobs designed with appropriate workload, role clarity and information sharing); (c) the promotion of a positive social and physical environment (e.g., employment security and workplace safety); (d) the promotion and encouragement of employees’ voice (e.g., broad two-way communication between organizational levels); and (e) offering organizational support (e.g., employees involvement in participative management) [99]. Additionally, progressive HRM practices [67], such as the fairness of rewards, employee skills development and recognition, influence job satisfaction and engage employees in deeper social relationships that incite OCB [100]. HRM practices following the AMO framework (Ability, Motivation and Opportunity) [81,101] enhance employees’ job satisfaction and exhibitions of OCB [102]. Thus, using our results, HR managers are able to make better-informed decisions related to HRM practices that contribute to each of the proxies and, consequently, help to achieve sustainable careers for their employees.

6. Limitations and Future Research

We acknowledge a study’s limitation due to the sample size and the research focus on an individual organization. Likewise, the chosen research design addresses a single time horizon, which limits the validation of the indicator proxies of sustainable careers in the long term. Similarly, several proxy choices, such as Job Satisfaction, can arguably represent a partial variance of the complexity surrounding well-being. We advise future research efforts to expand on our chosen proxies and explore the other indicators of De Vos et al. [1] work. Furthermore, we recommend the future development and use of complex or multilevel dimensions of analysis. We also advise using mixed methods approaches for extra validation of the proposed dimensions as proxies for the individual indicators. That is research designs where qualitative and quantitative works are combined in a single research design to corroborate and triangulate results. We recommend that future studies
integrate the proposed proxies into a causality research model. Since research on HRM practices contributing to sustainable careers remains scarce, we invite colleagues to further study the phenomenon using the proposed proxies.

**Author Contributions:** Conceptualization, C.C. and T.G.; methodology, C.C. and T.G.; data collection, C.R.; formal analysis, C.C. and T.G.; writing—original draft preparation, C.R.; writing—review and editing, C.C. and T.G.; supervision, C.C. All authors have read and agreed to the published version of the manuscript.

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