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# Accountancy as a Meaningful Work. Main Determinants from a Job Quality and Optimization Algorithm Approach

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**Abstract**: The primary purpose of the accounting profession is to provide quality information to the market that facilitates the allocation of resources. The context in which it operates must attend to some stressors that can affect the professional's meaning of the work. Meaningful work (MW) is based on the concept of valuable work and work well done, so it is directly related to the concept of quality at work, which is a constant concern in the accounting profession. The method used to determine meaningful work identifies the set of job quality indexes, as defined by the European Working Conditions Survey (EWCS), related to the MW. This paper has used an integer programming genetic algorithm (GA) to determine the JQIs and the statistically significant combinations. The findings showed that JQIs, skills development and discretion (SD), and physical environment (PE) positively and intensely relate to MW. Likewise, reduction of the work intensity (WI) and improvement of the social environment (SE) are related in the same direction as the MW. On the other hand, the results showed different indicator weightings depending on the age of the accountants. This paper shows the importance that accountants attribute to professional competence and how, throughout their careers, the JQI that most relate to MW is changing, from a social vision to preferences where the care of personal time also prevails.

Keywords: accounting workplace; meaningful work; integer programming genetic algorithm (GA)

#### 1. Introduction

Eurofound defines meaningful work as that which a worker feels is worthwhile and is done well [1]. In the accounting profession, the quality of work is a permanent concern, both in the development of auditing that imposes strict standards on the work quality system and in establishing robust internal control systems within organizations so that their information is reliable. This paper focuses on the working conditions that influence that feeling of useful and well-done work. The paper aimed to discover the dimensions of job quality that relate to meaningful work. The research was carried out at the European level with the European Working Conditions Survey (EWCS).

Resource allocation decisions and stewardship require sound financial information. Users cannot prepare this information; therefore, local commercial laws require the supply of reliable financial statements to be consulted by third parties. In addition to the preparers and users, the information supply chain includes the auditors who provide confidence in its reasonableness. Therefore, the preparation and auditing of financial information constitute activities with an undoubted public interest [2].

The financial information is concentrated around specific dates during the year (in Europe, the end of the year), which contribute to the temporal comparability of the information system so that users can decide the best investment alternatives. Therefore, this



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**Copyright:** © 2021 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https:// creativecommons.org/licenses/by/ 4.0/). concentration of work introduces an overload on the deadlines that preparers and auditors cannot avoid [3]. On the other hand, the economic consequences that derive from the information introduce a conflict in the role of the preparer that the auditors try to mitigate, as the positive theory of accounting describes it [4]. In addition, information preparers and auditors interpret transactions where it is more complex to present the economic substance, specifically, in an environment of more significant litigation, which leads to uncertainty in the role. These pressures affect accountants' health and performance [5–9], and promote dysfunctional behaviors that affect the quality of the work [10–14].

To mitigate these effects, two human resources theories, job demands–resources (JD-R) [15,16] and job demands–control–support (JDCS) [17–19], hold that organizations develop job resources that allow moderating or compensating for the negative effect of job demands. The set of job demands and job resources will determine the job quality. In Europe, job quality is assessed through a multidimensional index that contains seven domains. This approach captures the job demands and resources formulated in human resources theories about managing stress. In addition, Eurofound publishes the European Working Conditions Survey (EWCS) every five years; in the past two waves, the EWCS has displayed these job quality indexes (JQIs).

Accountants carry out their activity in heterogeneous organizations. They work in the accounting and finance departments in corporations, public sector organizations, and audit firms. The characteristics of the work have unique features in each organization, but the transfer of professionals between them, particularly audit firms, who usually supply professionals for accounting departments in corporations and governmental entities, contributes to a shared mindset about the meaning of an accountant.

In an accountancy firm setting, one of the challenges is the high turnover [20], not only for preserving healthy human relations in the organization, but also for attracting talent that fuels the business model and avoiding the negative impact on the work quality [21]. In addition, stressors influence the intention to leave the organization [9,22–25] and constitute negative publicity for the profession. However, the organizational model of audit firms is pyramidal and imposes an intense rotation to maintain prospects at the lower steps of the pyramid [26]. Firms are goal-oriented organizations [27] and have intense competition within the workforce [28]. This tension can lead to conflicting work behaviors and workplace climates [29]. Accountants assume intensity as a job characteristic, and for tackling it, specific job resources, such as the positive social environment, are related to higher levels of work engagement [30]. An improvement in this job resource is the most demanded by accountants, with the lowest level being subjective well-being and less work intensity for those who feel better [31].

The attitudinal variables that condition the behavior of employees in their workplaces are many and varied. Among the best known are organizational commitment, employee loyalty, job satisfaction, work engagement, and motivation. As [32] pointed out, the employee's work-related attitudes are essential for maintaining organizational performance. One of these attitudes that is becoming increasingly important in the field of scientific research is meaningful work. It may be necessary to work on the meaning of the profession to achieve better retention rates [33].

The concept of meaningful work is relevant in core domains of human resource management, but it is also an ambiguous concept that generates little consensus among scholarship [34]. Although most researchers consider that we are dealing with a multidimensional construct, Ref. [35] warned that there is no standard criterion about the exact nature of this concept's different dimensions. In 2017, Ref. [36] carried out a profound revision of the concept where they came to question one of the best-known definitions, such as that of [37], according to which meaningful work is a particularly significant work experience that provides a positive meaning for individuals. The main criticism comes from the definition's tautological character, including some of the terms intended to be explained, such as "work" or "meaning". In Ref [36], it was concluded that meaningful work should be considered the subjective experience of existential significance resulting from the fit

between the individual and work. From this point of view, the work would give meaning and explain the existence of the human being in the world. This proposal coincides with the vision provided by [38], who suggested that this concept presents a more eudaemonic than the hedonic approach to well-being; that is, more oriented to personal growth than to personal pleasure. Given its importance, meaningful work is a core variable of many academic studies, as either an antecedent or consequence of different results associated with workers' work performance in the organizational field [34,39]. Certainly, the experience of meaningfulness in the work environment can be determined by a set of working conditions and backgrounds. For example, the work of [40] confirmed that the workplace's degree of autonomy constitutes an antecedent of the meaning of work. In [41], it was also concluded that physical health risks reduce the significance of veterinarians' work.

On the other hand, more participatory management styles, such as transformational leadership, will increase meaningfulness [42]. In a similar vein, manager recognition causes work to be perceived with greater meaning by employees [43]. On the other side, some of the most significant consequences of meaningful work are that it lowers turnover intentions [44], increases engagement [45], or reduces burnout [46]. For a different geographical context to this study, an indicator of the importance of meaningful work is that American workers would be willing to reduce wages to obtain a job with greater significance [47].

This profession offers young people high social and professional recognition, so they are attracted by the rewards they can achieve in this profession. Therefore, incorporating of young people into the audit makes them predisposed to be captivated by the profession, and this is more likely to occur when their goals are to obtain a better social status, adopt a breadwinner role, and get and retain a recognized status [48].

What engages accounting professionals with their profession? In a recent survey, there were three factors that best explained this engagement: *My job gives me the opportunity to do what I do best* (job fit); *I believe my personal values are aligned with my firm's values* (value alignment); *I believe I make a difference at work* (meaningful work) [33]. Millennials appreciate the last one, which implies that they must believe their job is making a difference in the lives of others.

This research aimed to explain how the different indicators of job quality relate to meaningful work. The JD-R is the theoretical framework, and JQI's were classified into the professional's job demands and resources.

The European Working Conditions Survey establishes a positive association between job quality and meaningful work, considering this as one of the fundamental dimensions to a better experience of working life and subjective well-being, health, sustainable work, and engagement.

Improving job quality and working conditions of European employees has been a crucial aim of the European Commission's agenda since 2010. In this sense, Eurofound defines meaningful work as what a worker feels is worthwhile and done well [4]. From this point of view, it constitutes a motivational and well-being factor, whereas the opposite, performing work that is not meaningful, would constitute a psychosocial risk in the work environment. The EWCS measures meaningful work through a questionnaire that includes items related to workers' perceptions of doing worthwhile work and a job well done; the four indicators of job quality that should cause a more significant meaning of work among employees would be those related to skills and discretion, social environment, prospects, and intensity. This conclusion reached by Eurofound should make even more sense among the group of professionals who were the main object of this research.

The job quality indexes (JQI) could be classified as follows:

- (a) Job demands
- Physical environment (PE) relates to the physical conditions of the workplace, which, in the case of accountants, would be linked to ergonomic risks. This factor does not look critical because the accountant carries out their work in offices, and the accountants are generally not subject to conditions involving a particular physical

demand. The most adverse scenarios may arise in auditors when they have to travel to client offices to carry out their work; however, EWCS does not include this last criterion [1].

- Work intensity (WI) is a job demand associated with tight deadlines, working at very high speed, relying on the work or instructions of others, hiding emotions or managing angry customers. Academic literature has extensively documented WI in accountancy [5,6,14,49,50]. Work intensity also harms the perceived resources available to the professional to obtain subjective well-being, which is an additional effect on the negative and direct effect that work intensity has on well-being [51].
- (b) Job resources
- Work time quality (WTQ) worsens with the work in atypical working times, long days, and the lack of flexibility in working time arrangements. In addition, demanding deadlines can cause that, on specific dates, the days are long, in atypical schedules. These components of the index constitute job demands. Therefore, accountancy firms have developed alternative work arrangements (AWAs) to face these demands [52], with this being one of the job resources that alleviates these stressors' effects. Female accountants usually prefer AWAs [53–55]. However, there is evidence of an adverse effect or perception on long-term career potential [56,57], among other reasons, for the assignment of clients or engagements with a less professional requirement [58,59].
- Social environment (SE) measures social support from peers and superiors, as well as incidents that demonstrate an adverse social environment (such as bullying or harassment). It is one of the primary job resources deployed by accountancy firms and accounting departments to moderate stressors and reduce burnout, turnover intentions [2,22,25,60,61], and dysfunctional behaviors among professionals [62]. Therefore, teamwork is more effective [63], as well as establishing formal procedures to receive feedback from superiors [64].
- Skills and discretion (SD) refer to job control resources under JD-R and JDCS models. This set of characteristics refers to skill development on the job, the content of the position, the training, the decision latitude, and the ability to influence decisions. The accounting profession requires preparedness as clients are able to question their financial reporting practices, which creates a very stimulating environment. The career allows professional development, and many candidates consider audit firms as training schools [48]. The process of indoctrination as a professional involves learning the industry's behavioral and organizational norms [65]. Technical knowledge is a requirement to achieve the position of partner in an accountancy firm. However, behaviors as a professional are critical [66]; today, partners are much more multifarious and homogeneous than in the past [67]. The aspiring partner in a Big 4, in addition to the technical content, communication skills, and overseas exposure, must develop entrepreneurial skills and an excellent technological profile for working in a disruptive environment [68].
- Prospects refer to professional career development and job stability. Young accountants perceive the profession as a starting point in a prosperous career in or out of the firm [69,70]. At the top of the pyramid, satisfaction levels are higher than below it [33]. The firms allude to deferred compensation that appears as the professional career progresses. However, it is not evident that this is an advantage that the firm and the professionals value similarly, due to, among other reasons, the excessive work that the partners deploy, the loss of social reputation due to the financial scandals, and even the decrease in the financial security that the partners have [71].
- Earnings measure the salary of the employees. Young people who enter the profession appreciate other aspects, such as expert learning, security, or meaningful work [72,73]. However, the remuneration is low among the junior professionals of the audit firms, compared to other professional services, and a lower level of well-being is observed [74]. These authors consider that the remuneration at the first stages is not competitive compared to other business professionals. Moreover, the remuneration in

audit firms depends on the organization's position and not on productivity, reinforcing the idea of deferred compensation.

In this manuscript, the model creation has been carried out from a bottom-up approach (from data to theory) instead of the top-down approach (from theory to data), traditionally adopted in the social sciences. In this context, the goal was to select the best set of regressors from the  $2^{28}$  potential submodels composed of the seven job quality indices and the corresponding twenty-one first-order interaction terms). Intuitively, the goal was to obtain a small set of regressors that explain sufficiently the construct under study (a small group of regressors variables that report a high value of  $R^2$ ).

In order to approach this complex problem, several heuristic models have been proposed in the literature [75]. Rather than search through all possible models, those models try to determine a good path through them. Some of the most promising methods are the stepwise procedures (forward selection or backward removal) that sequentially include or exclude regressors based on t-ratio statistics [76,77]. Another popular approach is the one proposed in [78], which selects a battery of tests (residual diagnostics and hypothesis testing on coefficients), a measure of performance, and a search path (to avoid the search in all submodels) [79]. In this manuscript, the variable selection was implemented through an integer programming genetic algorithm (GA) [80] that heuristically explored the search space and aimed to find a reduced set of regressors with high explanatory power.

Finally, following career stage theory, younger people could assign a different value to opportunities for advancement than older workers [81]. Thus, the analysis distinguished younger accountants from more senior accountants because the priorities of each of them could be different [82,83] and, therefore, the JQI that contribute most to the meaning of work would be different also.

The main findings of this research show that accountants with a greater feeling of meaningful work are the ones who most appreciate skills development and the decision latitude that their work offers them. In addition, considering the professional career stage, the youngest appreciate that the social dimension, together with working time quality, is associated with a greater MW. In contrast, in the more senior and professionally developed, it is also associated with those who perceive a higher quality in the management of their time, together with a lower work intensity.

Section 2 presents the materials and methods; then, Section 3 shows the results. Finally, Section Section 4 is devoted to discussing findings, and Section Section 5 presents the conclusions and limitations of this research.

#### 2. Materials and Methods

#### 2.1. Variables

This research used the JQI proposed by the EWCS database and meaningful work as variables. The JQI indexes are monthly earnings, prospects index, skills and discretion (SD), social environment (SE), physical environment (PE), work intensity (WI), and work–life balance (WLB). Except for monthly earnings, which are expressed in euros, the other variables are measured on a scale of 0 to 100 (from worse to better conditions). The WI variable has been coded again because a high intensity is a worse condition, and vice versa. Therefore a small value of WI describes worse conditions, and higher values, better conditions.

#### 2.2. Data Selection

Data came from the European Working Conditions Survey [84]. The sample of accountants was 739 subjects. After deleting observations with lost values, the sample size amounted to 602 individuals. In total, 74.9% were females, and the average age was 45 years.

Table 1 displays the descriptive metrics of the sample variables. Meaningful work among this sample of European accountants showed a high median value of 6.71 out of 8.00. Considering the JQI, the most remarkable was PE (a mean value of 91.9 out of 100),

followed by SE (83.9 out of 100). WI had the worst value (mean value of 34.0 out of 100) and the highest job demand for accounting professionals.

Statistics	Monthly Earnings	Prospects	SD	SE	PE	WI	WTQ	MW
Mean	1567	69.4	70.0	83.9	91.9	34.0	75.9	6.71
Median	1313	68.8	73.0	88.2	92.3	31.8	80.1	7.00
St. Dev.	1063	17.5	15.6	18.1	8.24	18.6	11.8	1.43
Coef. Var.	0.6784	0.2522	0.2229	0.2157	0.0897	0.5471	0.1555	0.2131
Minimum	834	0.00	10.5	0.0	0.0	0.0	18.0	0.00
Maximum	11,777	100	98.0	100	100	91.9	100	8.00

Table 1. Descriptive information regarding the job quality index and meaningful work variables.

Source: EWCS (2016). SD: skills and discretion, SE: social environment, PE: physical environment, WI: work intensity, WTQ: work time quality, MW: meaningfulness of work.

All the variables were recoded into a [0,1] scale for statistical purposes because they had different scales.

Meaningful work among this sample of European accountants showed a high median value of 6.71 out of 8.00. Considering the JQI, the most remarkable was PE (a mean value of 91.9 out of 100), followed by SE (83.9 out of 100). WI had the worst value (mean value of 34.0 out of 100) and the highest job demand for accounting professionals. As can be seen in the Table, the sample of accountants employed in the study was, in general, homogeneous. The only variables with CVs higher than 30% were earnings and work intensity.

## 2.3. Integer Programming Genetic Algorithm for Selecting the Best Set of Regressor Variables2.3.1. General Overview of the Algorithm

This paper proposes a novel genetic algorithm (GA) to address the problem of determining the optimal set of regressors to be included in a multiple regression model. As it is already known, if the model includes only a small set of regressors, the error associated with the model will be most likely high, but if a higher set of regressors are included in the model, its variance will increase. In this context, the goal was to select the best set of regressors from the 2<sup>28</sup> potential submodels composed of the seven job quality indices and the corresponding twenty-one first-order interaction terms).

Thus, the optimization process aimed to find a subset of independent variables and first-order interactions terms that simultaneously minimized the error associated with the model and the number of elements included in it. The number of possible submodels was

$$2^{K+} \left( \begin{array}{c} K\\ 2 \end{array} \right)$$

as the total number of variables is the sum of independent variables, *K*, and interaction terms,

 $\left(\begin{array}{c} K\\ 2\end{array}\right)$ 

Taking into account that the problem had seven independent variables, the number of possible submodels was 2<sup>28</sup>. In order to approach this complex optimization problem, we implemented a simple integer programming genetic algorithm (GA) [80], which can be summarized as follows.

As in standard GAs, the proposed method considers a population of candidate solutions representing different subsets of regressors (both independent variables and interaction elements), which are evolved towards better multiple linear regressions models (taking into their number of variables and their performance). The evolution starts from a population of randomly generated subsets of regressors. Each individual is represented by an array of binary values (chromosome representation). After that, a fitness value is assigned to every chromosome according to the number of variables included in the model and its performance. Then, different mutation and crossover operators are applied to explore the search space, and this iterative procedure is repeated during G generations. The main characteristics of the proposed GA are defined in the following subsections.

#### 2.3.2. Encoding and Initialization of the Population

The different candidate solutions are represented by an array of binary values with

$$K + \left(\begin{array}{c} K\\ 2 \end{array}\right)$$

dimensions. Hence, each candidate solution is defined as

$$x \in \{0,1\}^{K+} \left(\begin{array}{c} K\\ 2 \end{array}\right)$$

where  $x_i = 1$ , if the *i*-th variable is included in the model, and 0 otherwise,

$$i=1,\ldots, K+\left(\begin{array}{c}K\\2\end{array}\right)$$

The initial population of candidates is generated randomly. Expressly, the number of chromosomes of the initial population during the experimentation was set to 300, as we empirically observed that the increase of this number does not improve (or only marginally improves) the results.

#### 2.3.3. Minimization Function

The minimization function implemented in the proposed GA is the Bayesian information criterion (BIC), which is defined as:

$$\begin{array}{l} \min_{x} f(x) \ N \ ln \hat{\sigma}_{x}^{2} + L \ln N \\
s.t. \ x = x_{i} \in \{0, 1\} \\ \end{array}$$

where *N* is the sample size (number of accountants involved in the study), *L* the number of variables involved in the solution *x* (the number of \ones" in the chromosome), and the error variance of the model is

ô

$$\frac{2}{x}$$
 (1)

The BIC aims to obtain promising candidate solutions regarding the error variance of the model (the performance of the model), while minimizing the number of variables included in the model.

#### 2.3.4. Selection Procedure

In the proposed GA, chromosomes are sorted according to the previously defined loss function (to emulate Darwin's natural selection process). The worst half of the chromosomes, those with high BIC values, are then discarded (removed). The remaining ones are then included in the mating pool.

#### 2.3.5. Recombination

This operator creates new o spring chromosomes from the set of individuals selected to combine their chromosomes. In this study, we carried out a random pairing process

that assigned equal probability to each chromosome. In addition, the crossover operator implemented was the single point crossover.

### 2.3.6. Mutation

The mutation operator randomly changes the value in a point within the chromosome of the individual selected to be mutated (if the element in that position is one, then it is mutated to zero, and vice versa). The mutation rate in the experimentation is set to 2%, aiming not to modify abruptly promising areas of the search space.

#### 3. Results

#### General Model

Table 2 displays the results of Regression Model 1. The statistical properties of the model were sound.  $R^2$  was significant, and RMSE and BIC were low. The model contained a small number of variables after the optimization process and improved the interpretation of the results. SD and PE were the only isolated variables related to MW. Both of them were positively correlated with MW, and SD showed the highest relationship. In addition, there was a combined negative effect of SD × PE because a high rating in both of them did not produce an additive effect on MW; this effect was significantly lower. However, a minimum valuation in SD and PE did not penalize the other variable's isolated effect on MW.

JQIs (N = 602)	$\hat{\hat{oldsymbol{eta}}}$	$\hat{oldsymbol{eta}}_{95\%}$	
Skills and discretion	0.8671	(0.6837, 1.0504)	
Physical environment	0.5974	(0.5333, 0.6614)	
Skills and discretion x Physical environment	-0.6772	(-0.8905, -0.4640)	
Social Environment x Work intensity	0.2349	(0.1718, 0.2980)	
Statistical characteristics of the model: $R^2$ :0.2182; F*:40.8412, <i>p</i> -value (F*) = 0.0000 RMSE: 0.1118; BIC: -1293.4			

Statistical properties of the best-performing model: point estimator of the coefficients,  $\hat{\beta}$ ; interval estimator of the coefficients ( $\alpha = 0.05$ ),  $\hat{\beta}_{95\%}$ ; and statistical characteristics of the model.

Otherwise, the combination of SE and WI produced a positive effect on MW. If one of them was too low, the other variable lacked significance on MW; keeping one (SE or WI) stable, the higher SE or WI, the higher MW. This interactive effect allows managing the SE under challenging WI conditions to keep the meaning of the work.

Table 3 shows the regression models (Models 2 and 3) for the subsamples on and under 40. Models 2 and 3 were significant and were sound models because RMSE and BIS were small. The results confirmed the importance of SD and PE in MW, and both of them showed an interactive effect among these variables, correcting their isolated effect. In Model 3, the coefficients for single variables were higher than in model 2.

For accountants under 40 (Model 2), SE and WTQ showed an interactive effect on MW. Combining both increases the MW, and the absence of one reduces this positive and significant relationship. For senior accountants (Model 3), the interaction between WTQ and WI revealed an interactive and positive relationship with MW. This group of accountants appreciated an increase in the WI demands if they properly managed their working time.

There was no baseline model in this research study as the optimal one was obtained through numerical optimization. The GA starts with a random population of alternative model specifications, and in each iteration, the population is evolved through the optimal model (the one that achieves the best  $R^2$  with the smallest set of variables, among the  $2^{28}$  possible combinations).

	Model 2.	Under 40 Years Old (N = 228)	Model 3. Over 40 Years Old (N = 372)	
Variables ( $N = 602$ )	$\hat{eta}$	$\hat{eta}_{95\%}$	β	$\hat{eta}_{95\%}$
Skills and discretion Physical environment Skills and discretion × Physical environment	0.2899 0.3912 -0.1031	(0.1718, 0.4080) (0.2842, 0.4981) (-0.1250, -0.0813)	0.9312 0.6211 -0.7272	(0.6799, 1.1.825) (0.5360, 0.7061) (-1.0166, -0.4378)
Social environment $\times$ Work time quality Work time quality $\times$ Work intensity	0.4255	(0.3088, 0.5422)	0.1932	(0.1081, 0.2783)
Statistical characteristics of the model:	R <sup>2</sup> :0.2692; F:76.9834, <i>p</i> -value (F*) = 0.0000 RMSE: 0.0822; BIC: -2181.5		R <sup>2</sup> :0.2042; F:20.7182, <i>p</i> -value (F*) = 0.0000 RMSE: 0.1321; BIC: -1005.5	

**Table 3.** Models 2 and 3. JQIs indexes related with the dependent variable (MW), under and over 40 years old.

Statistical properties of the best-performing model: point estimator of the coefficients,  $\hat{\beta}$ ; interval estimator of the coefficients ( $\alpha = 0.05$ ),  $\hat{\beta}_{95\%}$ ; and statistical characteristics of the models 2 and 3.

#### 4. Discussion

The meaning of work is a construct representing a level of deep satisfaction with the activity carried out because it generates a feeling of fulfilment [85] and value for others. Our results reported that SD is the JQI that most closely related to MW in the accounting profession. SD showed a direct and positive relationship with the MW. The accounting profession gives a global view of an organization through its figures, and today CFOs are a role that is very close to the CEO of the organization [86]. Regulatory changes, and the adaptation of organizations' business models, require a high degree of updating [64]. Accountants are responsible for reporting the organization's financial health and proposing measures to keep the business sustainable. Those professionals who manage to appreciate this global value of their work (the meaning of their work) are the ones who most appreciate the learning and professional development processes they experience at work, and vice versa, those who do not appreciate this critical role in the organization, do not appreciate the skills development of the accountant role. In the context of audit firms, the character of public service requires maintaining a strict attitude of independence towards the client and constant revisions that do not reduce the levels of professional competence. The assessment of learning in the profession reflects the commitment to professional competence; this learning occurs by both experience and training plans. Learning by experience is acquired by what the customer teaches and through supervision [64]. In this teaching role, seniors can appreciate the importance of professional development in their professional careers much more. As [87] pointed out, nowadays, a sense is emerging that combines organizational identity and professional identity, which they call organizational professionalism.

In the early years of a career, accountancy is a training school, in terms of how to work under pressure, meet tight deadlines, work as a team, and develop financial expertise. In ref [72], it was observed that among the factors that most influenced the choice of the accounting career were expert learning, financial security, and a meaningful job [88,89]. Incorporating into an accountancy firm is a huge challenge for young people. It begins a process of socialization that will moderate their resistance to having an identity and discipline in constant development as their level of professional experience progresses [90,91]. In ref [92], it was concluded that the passage through the professional career from joining the firm to occupying a relevant position in it involves a destabilizing step in terms of their previous identities. This is mainly due to the role change. As the professional objectives are covered, the role evolves to activities associated with commercial aspects related to expanding the client network, rather than technical knowledge.

The second JQI with a higher impact on MW was PE. Accountants considered that the physical conditions of the workplace have a positive and significant influence on the MW. As PE reports a high average value, the interpretation is that low PE valuation affects MW negatively. This effect is not additive to SD because the combined effect of PE x SD decreases the isolated effect of each one.

In addition, the model showed that SE and WI have a combined positive effect on MW. This moderating effect of SE on the intense working conditions have been previously reported in the literature [2,22,25,60,61,93] and it contributes to the meaning of the work.

The results also show a concept of MW that is arrived at differently among young and older accountants. The MW among the youngest is associated with the social life components; therefore, the interrelationship between SE and WTQ is the one that contributes the most to MW. These results confirmed findings of previous literature that pointed to a different scale of priorities among millennials versus baby boomers [82]. Additionally, SD is higher among senior accountants (baby boomers and former generations) than millennials, displaying the propensity of baby boomers to take more advantage of learning opportunities than millennials [94]. Among the differences that millennials show compared to other generations, Ref. [83] stated that millennials especially value their personal life, flexibility in time management, and a solid teamwork culture, which promotes interesting work and facilitates happiness at work. The combination of SE x WTQ has a stronger relationship with MW than SD. It suggests that meaning at work is more connected with its contribution to the social dimension and, to a lesser extent, with developing one's competencies, which also show a significant and positive relationship. The PE has a positive and direct effect on MW, with greater weight than the development of SD.

Otherwise, the senior accountants considered a strong relationship between the expertise acquired in this profession with the MW. In addition, these accountants considered that PE is directly related to MW, although there is no additive effect with SD. These accountants may have reached the utmost discretion and developed skills that allow the job to have meaning. On the other hand, seniors also value the interrelationship between WTQ x WI, which would reflect the appreciation for the pace of work and the reconciliation of work and family life in the most experienced people. In professionals with high activity rates, alternative work arrangements can be an appropriate instrument to reinforce the meaning of work. However, it is necessary to overcome the old wisdom that alternative work arrangements are appropriate for professionals with less critical responsibilities or skills [95].

As previously claimed, the main goal of this study was to explain how the JQI's variables (classified into a professional's job demands and resources) relate to meaningful work in the accountant profession. The answer to the research question is that the job dimensions that give meaning to work activity evolve throughout the professional career [69]. These dimensions are not maintained constants throughout the professional career; however, aspects related to professional competence and flexibility in time management give more meaning to the work of accountants. The working time quality is appreciated by both the youngest and the most senior professional, but in each case is associated with either a teamwork dimension (social environment in young people) or an individual dimension (work intensity, in the older ones). Methodologically speaking, the model creation has been carried out from a bottom-up approach (from data to theory, deductive) instead of the top-down approach (from theory to data, inductive reasoning), traditionally adopted in the social sciences.

#### 5. Conclusions

This study explored the characteristics that make the accounting profession interesting for young people who want to join this profession. Accountants outlined that professional development is related to giving meaning to work. As a highly qualified activity, professionals appreciate the technical competence that they develop. In addition, physical conditions position this job as comfortable; accountants are aware of this issue, and it is related to the degree of meaningful work. The social environment is also appreciated because the accountants carry out their professional activities in teams. The accountancy profession has a challenge with attracting and retaining talent. Skill development and discretion as their career progresses attract new professionals to accountancy; however, firms must outline how this work contributes to cultivating the social dimension of the individual, inside and outside the firm. Therefore, the combination of the social environment related to the quality of time applied to work demands is significant in attracting their attention to the profession. Nonetheless, the senior auditors maintain a high satisfaction ratio concerning the physical environment, and the application of their skills and knowledge generated by their experience provide high significance to the work carried out.

Several limitations affect this research. Firstly, it came from a survey that picked personal perceptions of the individuals. Secondly, data were cross-sectional, and this prohibited conclusions about causality in the relationship between variables. Thirdly, this research could benefit from regressing citation counts on prior publications' metadata, as proposed by [96].

The concept of MW relates to a job well done and a sense of utility. An extension to this work would be to determine what is considered useful work in the accounting profession. On the other hand, the MW construct can be explained by the human values of the professional, for example, as defined by Schwartz (1992) [97]; this would be very interesting to detect profiles that can achieve a higher level of satisfaction in the profession, as well as guide the development of those values throughout the career. It would also be interesting to determine whether a greater sense of MW is related to a lower dysfunctional behavior.

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#### References

- Parent-Thirion, A.; Biletta, I.; Cabrita, J.; Vargas, O.; Vermeylen, G.; Wilczynska, A.; Wilkens, M. Sixth European Working Conditions Survey—Overview Report; Eurofound (European Foundation for the Improvement of Living and Working Conditions): Dublin, Ireland, 2016.
- Umans, T.; Broberg, T.; Schmidt, M.; Nilsson, P.; Olsson, E. Feeling well by being together: Study of Swedish auditors. Work 2016, 54, 79–86. [CrossRef]
- 3. Rebele, J.E.; Michaels, R.E. Independent Auditors' Role Stress: Antecedents, Outcome, and Moderating Variables. *Behav. Res. Account.* **1990**, *2*, 124–153.
- 4. Watts, R.L.; Zimmerman, J.L. Towards a Positive Theory of the Determination of Accounting Standards. *Account. Rev.* **1978**, 53, 112–134.
- Fogarty, T.J.; Singh, J.; Rhoads, G.K.; Moore, R.K. Antecedents and Consequences of Burnout in Accounting: Beyond the Role Stress Model. *Behav. Res. Account.* 2000, 12, 31–67.
- 6. Sweeney, J.T.; Summers, S.L. The effect of busy season workload on public accountants' job burnout. *Behav. Res. Account.* 2002, 14, 223–245. [CrossRef]

- Larson, L.L.; Meier, H.H.; Poznanski, P.J.; Tipton Murff, E.J. Concepts and Consequences of Internal Auditor Job Stress. J. Account. Financ. Res. 2004, 12, 35–46.
- Larson, L.L.; Tipton Mur, E.J. An Analysis of Job Stress Outcomes among Bank Internal Auditors. *Bank Account. Financ.* 2006, 19, 39–43.
- 9. Jones, A.; Strand Norman, C.; Wier, B. Healthy Lifestyle as a Coping Mechanism for Role Stress in Public Accounting. *Behav. Res. Account.* **2010**, *22*, 21–41. [CrossRef]
- 10. Utary, A.R. Effect of Time Budget Pressure on Dysfunctional Audit and Audit Quality, Information technology as Moderator. *Int. J. Econ. Res.* **2014**, *11*, 689–698.
- 11. Svanström, T. Time Pressure, Training Activities and Dysfunctional Auditor Behaviour: Evidence from Small Audit Firms. *Int. J. Audit.* 2016, 20, 40–51. [CrossRef]
- 12. Yan, H.; Xie, S. How does auditors' work stress affect audit quality? Empirical evidence from the Chinese stock market. *China J. Account. Res* **2016**, *9*, 305–319. [CrossRef]
- 13. Broberg, P.; Tagesson, T.; Argento, D.; Gyllengham, N.; Mårtensson, O. Explaining the influence of time budget pressure on audit quality in Sweden. *J. Manag. Gov.* 2017, *21*, 331–350. [CrossRef]
- 14. Christensen, B.E.; Newton, N.J.; Wilkins, M.S. How do team workloads and team staffing affect the audit? Archival evidence from U.S: Audits. *Account. Organ. Soc.* 2021, 92, 101225. [CrossRef]
- 15. Demerouti, E.; Bakker, A.B.; Nachreiner, F.; Schaufeli, W.B. The job demands–resources model of burnout. *J. Appl. Psychol.* 2001, *86*, 499–512. [CrossRef]
- 16. Schaufeli, W.B.; Bakker, A.B. Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *J. Organ. Behav.* 2004, 25, 293–315. [CrossRef]
- 17. Karasek, R. Job demands, job decision latitude, and mental strain: Implications for job redesign. *Adm. Sci. Quart.* **1979**, 24, 285–308. [CrossRef]
- 18. Johnson, J.V.; Hall, E.M. Job strain, work place social support, and cardiovascular disease: A cross-sectional study of a random sample of the Swedish working population. *Am. J. Public Health* **1988**, *78*, 1336–1342. [CrossRef] [PubMed]
- 19. Karasek, R.A.; Theorell, T. *Healthy Work: Stress, Productivity and the Reconstruction of Working Life*; Basic Books: New York, NY, USA, 1990.
- 20. Nouri, H.; Parker, R.J. Turnover in public accounting firms: A literature review. Manag. Audit. J. 2020, 35, 294–321. [CrossRef]
- 21. Van Linden, C.; Vandenhaute, M.L.; Zimmerman, A. Audit Firm Employee Turnover and Audit Quality. Available online: https://ssrn.com/abstract=3775116 (accessed on 28 July 2021).
- 22. Herda, D.N.; Lavelle, J.J. The Auditor-Audit Firm Relationship and Its Effect on Burnout and Turnover Intention. *Account. Horiz.* **2012**, *26*, 707–723. [CrossRef]
- 23. Chong, V.K.; Monroe, G.S. The impact of the antecedents and consequences of job burnout on junior accountants' turnover intentions: A structural equation modelling approach. *Account. Financ.* **2015**, *55*, 105–132. [CrossRef]
- 24. Pradana, A.; Salehudin, I. Work overload and turnover intention of junior auditors in Greater Jakarta, Indonesia. *South East Asian J. Manag.* 2015, *9*, 108–124.
- 25. Cannon, N.H.; Herda, D.N. Auditors' Organizational Commitment, Burnout, and Turnover Intention: A Replication. *Behav. Res. Account.* **2016**, *28*, 69–74. [CrossRef]
- Collins, K.M.; Killough, L.N. An Empirical Examination of Stress in Public Accounting. Account. Organ. Soc. 1992, 17, 535–547. [CrossRef]
- 27. Covaleski, M.A.; Dirsmith, M.W.; Heian, J.B.; Samuel, S. The calculated and the avowed: Techniques of discipline and struggles over identity in big six public accounting firms. *Adm. Sci. Q.* **1998**, *43*, 293–327. [CrossRef]
- 28. Sikka, P. Some questions about the governance of auditing firms. Int. J. Discl. Gov. 2004, 1, 186–200. [CrossRef]
- 29. Ussahawanitchakit, P. Building job satisfaction of certified public accountants (CPAS) in Thailand: Effects of role stress through role conflict, role ambiguity, and role overload. *J. Acad. Bus. Econ.* **2008**, *8*, 12–22.
- 30. Del Pozo-Antúnez, J.J.; Molina-Sánchez, H.; Ariza-Montes, A.; Fernández-Navarro, F. Promoting work Engagement in the Accounting Profession: A Machine Learning Approach. *Soc. Indic. Res.* **2021**. [CrossRef]
- Del Pozo-Antúnez, J.J.; Fernández-Navarro, F.; Molina-Sánchez, H.; Ariza-Montes, A.; Carbonero-Ruz, M. The Machine-Part Cell Formation Problem with Non-Binary Values: A MILP Model and a Case of Study in the Accounting Profession. *Mathematics* 2021, 9, 1768. [CrossRef]
- 32. Rahiman, M.H.U.; Kodikal, R. Impact of employee work related attitudes on job performance. *Br. J. Econ. Financ. Manag. Sci.* **2017**, *13*, 93–105.
- Johnson, S.; Pike, B. Employee Retention: The State of Engagement in Public Accounting Firms and Why It Matters. CPA J. 2018, 88, 64–66. Available online: https://www.cpajournal.com/2020/01/16/employee-retention-the-state-of-engagement-inpublicaccounting-firms-and-why-it-matters/ (accessed on 28 July 2021).
- 34. Bailey, C.; Yeoman, R.; Madden, A.; Thompson, M.; Kerridge, G. A review of the empirical literature on meaningful work: Progress and research agenda. *Hum. Resour. Dev. Rev.* **2019**, *18*, 83–113. [CrossRef]
- Bendassolli, P.F.; Borges-Andrade, J.E.; Alves, J.S.C.; Torres, T.D.L. Meaningful Work Scale in creative industries: A confirmatory factor analysis. *Psico-USF* 2015, 20, 1–12. [CrossRef]

- 36. Both-Nwabuwe, J.; Dijkstra, M.; Beersma, B. Sweeping the floor or putting a man on the moon: How to define and measure meaningful work. *Front. Psychol.* **2017**, *8*, 1658. [CrossRef]
- Rosso, B.D.; Dekas, K.H.; Wrzesniewski, A. On the meaning of work: A theoretical integration and review. *Res. Organ. Behav.* 2010, 30, 91–127. [CrossRef]
- 38. Steger, M.; Dik, B.J.; Duffy, R.D. Measuring meaningful work: The work and meaning inventory (WAMI). *J. Career Assess.* 2012, 20, 322–337. [CrossRef]
- 39. Onça, S.S.; Bido, D.S. Antecedents and consequences of meaningful work. Rev. De Adm. Mackenzie 2019, 20, 1–30. [CrossRef]
- 40. Both-Nwabuwe, J.M.; Lips-Wiersma, M.; Dijkstra, M.T.; Beersma, B. Understanding the autonomy–meaningful work relationship in nursing: A theoretical framework. *Nurs. Outlook* 2020, *68*, 104–113. [CrossRef]
- 41. Wallace, J.E. Meaningful work and well-being: A study of the positive side of veterinary work. *Vet. Rec.* 2019, *185*, 571. [CrossRef] [PubMed]
- 42. Pradhan, S.; Pradhan, R.K. Transformational leadership and job outcomes: The mediating role of meaningful work. *Glob. Bus. Rev.* **2016**, *17* (Suppl. S3), 173–185. [CrossRef]
- 43. Montani, F.; Boudrias, J.-S.; Pigeon, M. Employee recognition, meaningfulness and behavioural involvement: Test of a moderated mediation model. *Int. J. Hum. Resour. Manag.* **2017**, *31*, 356–384. [CrossRef]
- 44. Scroggins, W.A. Antecedents and outcomes of experienced meaningful work: A person-job fit perspective. *J. Bus. Inq.* **2008**, 7, 68–78.
- 45. Janik, M.; Rothmann, S. Meaningful work and secondary school teachers' intention to leave. *S. Afr. J. Educ.* **2015**, *35*, 1008. [CrossRef]
- 46. Allan, B.A.; Owens, R.L.; Douglass, R.P. Character strengths in counselors: Relations with meaningful work and burnout. *J. Career Assess.* **2019**, 27, 151–166. [CrossRef]
- 47. Hu, J.; Hirsh, J.B. Accepting lower salaries for meaningful work. Front. Psychol. 2017, 8, 1649. [CrossRef]
- 48. Lupu, I.; Empson, L. Illusio and overwork: Playing the game in the accounting field. *Account. Audit. Account. J.* 2015, 28, 1310–1340. [CrossRef]
- 49. Law, D.W.; Sweeney, J.T.; Summers, S.L. An Examination of the influences of contextual and individual variables on public accountants' exhaustation. *Adv. Account. Behav. Res.* 2016, *11*, 129–153.
- 50. Persellin, J.S.; Schmidt, J.J.; Vandervelde, S.D.; Wilkins, M.S. Auditor perceptions of audit workloads, audit quality, and job satisfaction. *Account. Horiz.* 2019, *33*, 95–117. [CrossRef]
- Molina-Sánchez, H.; Ariza-Montes, A.; Ortiz-Gómez, M.; Leal-Rodríguez, A. The subjective well-being challenge in the accounting profession: The role of job resources. *Int. J. Environ. Res. Public Health* 2019, 16, 3073. [CrossRef]
- 52. Almer, E.D.; Kaplan, S.E. The Effects of Flexible Work Arrangements on Stressors, Burnout, and Behavioral Job Outcomes in Public Accounting. *Behav. Res. Account.* **2002**, *14*, 1–34. [CrossRef]
- 53. Kornberger, M.; Carter, C.; Ross-Smith, A. Changing gender domination in a big four accounting firm: Flexibility, performance and client service in practice. *Account. Organ. Soc.* **2010**, *35*, 775–791. [CrossRef]
- 54. Gallhofer, S.; Paisey, C.; Roberts, C.; Tarbert, H. Preferences, constraints and work-lifestyle choices: The case of female Scottish chartered accountants. *Account. Audit. Account. J.* 2011, 24, 440–470. [CrossRef]
- 55. Buchheit, S.; Dalton, D.; Harp, N.; Hollingsworth, C. A contemporary analysis of accounting professionals' work-life balance. *Account. Horiz.* **2016**, *30*, 41–62. [CrossRef]
- 56. Frank, K.E.; Lowe, D.J. An Examination of Alternative Work Arrangements in Private Accounting Practice. *Account. Horiz.* 2003, 17, 119–151. [CrossRef]
- 57. Johnson, E.N.; Lowe, D.J.; Reckers, P.M.J. Alternative work arrangements and perceived career success: Current evidence from the big four firms in the US. *Account. Organ. Soc.* **2008**, *33*, 48–72. [CrossRef]
- 58. Dambrin, C.; Lambert, C. Mothering or auditing? The case of two big four in France. *Account. Audit. Account. J.* **2008**, 21, 474–506. [CrossRef]
- 59. Cohen, J.R.; Dalton, D.W.; Holder-Webb, L.L.; McMillan, J.J. An Analysis of Glass Ceiling Perceptions in the Accounting Profession. *J. Bus. Ethics* **2020**, *164*, 17–38. [CrossRef]
- 60. Kalbers, L.A.; Fogarty, T. Antecedents to Internal Auditor Burnout. J. Manag. Issues 2005, 17, 101–118.
- 61. Espinosa-Pike, M.; Barrainkua, I. El efecto de los valores profesionales y la cultura organizativa en la respuesta de los auditores a las presiones de tiempo. *Span. J. Financ. Account.* **2017**, *46*, 507–534. [CrossRef]
- 62. Brink, A.G.; Emerson, D.J.; Yang, L. Job Autonomy and Counterproductive Behaviors in Chinese Accountants: The Role of Job-Related Attitudes. J. Int. Account. Res. 2016, 15, 115–131. [CrossRef]
- 63. Brown, V.L.; Gissel, J.L.; Gordon Neely, D.G. Audit quality indicators: Perceptions of junior-level auditors. *Manag. Audit. J.* 2016, 31, 949–980. [CrossRef]
- 64. Dierynck, B.; Kadous, K.; Peters, C.P.H. Learning in the Auditing Profession: A framework and future Directions. Working Paper. Available online: https://papers.csrn.com/sol3/papers.cfm?abstract\_id=3496805 (accessed on 1 August 2021).
- 65. Fogarty, T.J. Organizational socialization in accounting firms: A theoretical framework and agenda for future research. *Account. Organ. Soc.* **1992**, *17*, 129–149. [CrossRef]
- 66. Grey, C. On Being a Professional in a "Big Six" Firm. Account. Organ. Soc. 1998, 23, 569–587. [CrossRef]

- 67. Carter, C.; Spence, C. Being a Successful Professional: An Exploration of Who Makes Partner in the Big 4. *Contemp. Account. Res.* **2014**, *31*, 949–981. [CrossRef]
- Cheng, Q.; Pang, Y.H.; Pan, G.; Seow, P.S.; Leong, K.S. What does it Take to Become a Partner at an Accountancy Firm? *Perspectives@SMU* 2017. Available online: https://ink.library.smu.edu.sg/pers/374 (accessed on 28 July 2021).
- 69. Bagley, P.L.; Dalton, D.; Ortegren, M. The factors that affect accountants' decisions to seek careers with big four versus non-big four accounting firms. *Account. Horiz.* 2012, 26, 239–264. [CrossRef]
- 70. Umar, M.; Sitorus, S.M.; Surya, R.L.; Shauki, E.R.; Diyanti, V. Pressure, Dysfunctional Behavior, Fraud Detection and Role of Information Technology in the Audit Process. *Aust. Account. Bus. Financ. J.* **2017**, *11*, 102–115. [CrossRef]
- Almer, E.D.; Higgs, J.L.; Hooks, K.L. A Theoretical Framework of the Relationship between Public Accounting Firms and Their Auditors. *Behav. Res. Account.* 2005, 17, 1–22. [CrossRef]
- 72. Magalhaes, J.R.; Wilde, H. An exploratory study of the career drivers of accounting students. *J. Bus. Econ. Res.* 2015, 13, 155–156. [CrossRef]
- 73. Wen, L.; Yang, H.; Bu, D.; Diers, L.; Wang, H. Public accounting vs private accounting, career choice of accounting students in China. *J. Account. Emerg. Econ.* 2018, *8*, 124–140. [CrossRef]
- 74. Broberg, P.; Tagesson, T.; Uman, T. Antecedents of psychological well-being among Swedish audit firm employees. *Int. J. Environ. Res. Public Health* **2020**, *17*, 3346. [CrossRef]
- 75. Wasserman, L.; Roeder, K. High dimensional variable selection. Ann. Stat. 2009, 37, 2178. [CrossRef]
- 76. Bendel, R.B.; Afifi, A.A. Comparison of stopping rules in forward\stepwise regression. J. Am. Stat. Assoc. 1977, 72, 46–53.
- 77. Yamashita, T.; Yamashita, K.; Kamimura, R. A stepwise AIC method for variable selection in linear regression. *Commun. Stat.-Theory Methods* **2007**, *36*, 2395–2403. [CrossRef]
- 78. Hoover, K.D.; Perez, S.J. Data mining reconsidered: Encompassing and the general-to-specific approach to specification search. *Econom. J.* **1999**, *2*, 167–191. [CrossRef]
- 79. Hendry, D.F.; Krolzig, H.-M. Improving on 'data mining reconsidered' by KD Hoover and SJ Perez. *Econom. J.* **1999**, *2*, 202–219. [CrossRef]
- 80. Riccardi, A.; Gemignani, J.; Fernández-Navarro, F.; Heernan, A. Optimisation of non-pharmaceutical measures in covid-19 growth via neural networks. *IEEE Trans. Emerg. Top. Comput. Intell.* **2021**, *5*, 79–91. [CrossRef]
- 81. Moyes, G.D.; Williams, P.A.; Koch, B. The effect of age and gender upon the perceptions of accounting professionals concerning their job satisfaction and work-related attributes. *Manag. Audit. J.* **2006**, *21*, 536–561. [CrossRef]
- 82. Twenge, J.M.; Campbell, S.M.; Hoffman, B.J.; Lance, C.E. Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *J. Manag.* **2010**, *36*, 1117–1142. [CrossRef]
- PwC. PwC's NextGen: A Global Generational Study. 2013. Available online: www.pwc.com/gx/en/hrmanagement-services/ pdf/pwc-nextgen-study-2013.pdf (accessed on 31 July 2021).
- 84. Eurofound. European Working Conditions Survey Integrated Data File, 1991–2015, [Data Collection]; UK Data Service: Dublin, Ireland, 2015; SN: 7363. [CrossRef]
- 85. Milliman, J.; Czaplewski, A.J.; Ferguson, J. Workplace spirituality and employeework attitudes: An exploratory empirical assessment. *J. Organ. Chang. Manag.* 2003, *16*, 426–447. [CrossRef]
- 86. Hoitash, R.; Hoitash, U.; Kurt, A.C. Do accountants make better chief financial officers? J. Account. Econ. 2016, 61, 414–432. [CrossRef]
- 87. Broberg, P.; Umans, T.; Skog, P.; Theodorsson, E. Auditors professional and organizational identities and commercialization in audit firms. *Account. Audit. Account. J.* 2018, *31*, 374–399. [CrossRef]
- 88. Chia, Y.M. Career drivers of junior auditors: An exploratory study. Manag. Audit. J. 2003, 18, 100–111. [CrossRef]
- 89. Chia, Y.M.; Hian Chye, K.; Pragasam, J. An international study of career drivers of accounting students in Singapore, Australia and Hong Kong. *J. Educ. Work* 2008, 21, 41–60. [CrossRef]
- Gendron, Y.; Spira, L.F. Identity narratives under threat: A study of former members of Arthur Andersen. *Account. Organ. Soc.* 2009, 35, 275–300. [CrossRef]
- 91. Coffey, A. "Timing is everything": Graduate accountants, time and organizational commitment. *Sociology* **1994**, *28*, 943–956. [CrossRef]
- 92. Kornberger, M.; Justesen, L.; Mouritsen, J. "When you make manager, we put a big mountain in front of you": An ethnography of managers in a Big 4 Accounting Firm. *Accoun. Organ. Soc.* 2011, *36*, 514–533. [CrossRef]
- 93. Del Pozo-Antúnez, D.; Ariza-Montes, A.; Fernández-Navarro, F.; Molina-Sánchez, H. Effect of a job demand-control-social support model on accounting professionals' health perception. *Int. J. Environ. Res. Public Health* **2018**, *15*, 2437. [CrossRef]
- Fogarty, T.J.; Reinstein, A.; Heath, R.S. Are Today's Young Accountants Different? An Intergenerational Comparison of Three Psychological Attributes. *Account. Horiz.* 2017, 31, 83–104. [CrossRef]
- 95. Powell, G.N.; Mainiero, L.A. Managerial decision making regarding alternative work arrangements. *J. Occup. Organ. Psychol.* **1999**, 72, 41–56. [CrossRef]
- 96. Staszkiewicz, P. The application of citation count regression to identify important papers in the literature on non-audit fees. *Manag. Audit. J.* **2019**, *34*, 96–115. [CrossRef]
- 97. Schwartz, S.H. Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Adv. Exp. Soc. Psychol.* **1992**, *25*, 1–65.