

The indirect impact of satisfaction on accounting professionals' performance: Tunisian context

Lassaad Abdelmoula^{a*} and Sami Boudabbous^a

^aFSEG SFAX, Tunisia

CHRONICLE

Article history:

Received: January 5 2020
Received in revised format:
May 16 2020
Accepted: July 6 2020
Available online:
July 15 2020

Keywords:

Accounting professionals
Job satisfaction
Performance at work
Organizational commitment
Career stages

ABSTRACT

The present work aims to emphasize the indirect impact of satisfaction on the performance of accounting professionals, namely chartered accountants, chartered accountant trainees and accountants. The study is applied to 224 accounting professionals, distributed as follows: 90 chartered accountants, 69 chartered accountant trainees and 65 accountants working in accounting firms. The study proposes a moderation model of how career stages play a moderating role between job satisfaction and performance of accounting professionals. Using the two-Stage least squares (TSLS) method with a bootstrapping of 50 replications, the study notices that the moderating effect of the career stages is remarkable only among chartered accountants. Moreover, the study applies a Fuzzyset qualitative comparative analysis (FsQCA) and finds several equifinal configurations associated with organizational commitment and job performance. Furthermore, the study investigates the mediating effect of organizational commitment on the relationship between job satisfaction and performance at work.

© 2020 by the authors; licensee Growing Science, Canada

1. Introduction

The impact of job satisfaction on performance has remained a controversial issue in the literature (Raza et al., 2015). Several research studies have addressed this issue, but the results are mixed. Moreover, the majority of these studies investigated the cases of teachers (Pawase, 2013), doctors (Khan et al., 2012), nurses (Platis et al., 2015) and employees in general (Funmilola et al., 2013). However, few research studies have dealt with accounting professionals. Moreover, there have been few studies work on the issue of the distinction between the categories of accounting professionals (chartered accountants, chartered accountant trainees and accountants). To this end, we adopted a specific methodology using two variables, namely career stages and organizational commitment, which affect the relationship between job satisfaction and performance. Our methodology was applied to 224 accounting professionals. First, we started by emphasizing the most relevant items related to each variable. For this reason, we introduced these items in a questionnaire to identify the relationship between job satisfaction and performance, taking into account the specificity of the Tunisian context. The respondents showed their perception of the importance of the item by choosing from a 5-point Likert scale (ordinal scale). Once the answers were collected, we performed a factor analysis followed by an internal consistency test. Moreover, the measurement model was tested using confirmatory factor analyses (CFA) with maximum likelihood estimators. The measurement model showed an acceptable adjustment between the hypothetical model and the observed data on a variety of adjustment indices quality. Second, we carried out a comparative study - TSLS and FsQCA - to identify the variables that affect the relationship between job satis-

* Corresponding author.

E-mail address: lassaad.abd86@gmail.com (L. Abdelmoula)

faction and performance of chartered accountants, chartered accountant trainees and accountants. The application of this methodology to the data collected from our sample of Tunisian companies revealed that career stages play a moderating role between job satisfaction and the performance of chartered accountant trainees, accountants and especially of chartered accountants. Thus, the mediating effect of organizational commitment is considered as a solution and a necessary condition for job performance.

The remainder of the paper is organized as follows: Section 2 describes the accounting profession in Tunisia. In section 3, we present the literature review that helped us formulate the hypotheses to be tested. The research methodology is described in section 4, and the results are discussed in section 5. Finally, the paper ends with a conclusion.

2. The accounting profession in Tunisia

The accounting profession has numerous and diverse resources, such as accountants, chartered accountants, academics and teachers as well as corporate and public accountants, all of whom play a role in their fields of expertise. Generally, the profession is supposed to carry out a mission of general interest at the service of the global economy of countries. Moreover, it ensures the reliability of financial and non-financial information from private and public entities as well as the transparency of data used by stakeholders based on high professional and ethical standards. Besides, it plays a central role in working with governments and their departments to identify and implement high-quality standards. Indeed, the accounting profession is a collective representation of members, who have specific rights that enable them to congregate into an order (Dubar et al., 2011; Westland, 2010), to “protect themselves against the risks of liberalism and maintain social respectability” (Sarfatti, 1977). Hence, the collective spirit is materialized by sharing a code of ethics, standards and values. In Tunisia, accounting professionals working in accounting firms can be classified as chartered accountants, chartered accountant trainees and accountants. Any candidate for the profession of accountant holding a bachelor degree in accounting or a higher education qualification in accounting or an equivalent diploma recognized by the specialized equivalence committee of the ministry of higher education and having been admitted by the company's board to carry out a professional internship is considered as an accountant, but not as a member of the company and remains subject to its disciplinary control. He must, thus, respect the obligations imposed on the members of the company in accordance with the legislation and the regulations governing the profession. According to the law organizing the accounting profession, a chartered accountant is an individual, who, in his name and under his responsibility, has a usual job of organizing, verifying, adjusting and assessing the accounts of companies and bodies, to which he is not bound by an employment contract. He can also be appointed as an auditor and is, thus, empowered to certify the fairness and truthfulness of the financial statements according to the Tunisian General Admitted Accounting Principles (GAAP). Moreover, he can be the trustee of companies through advisory functions. He reports his findings, conclusions and suggestions.

The title of chartered accountant trainee is reserved for candidates for the profession of accountant who have a bachelor's degree in accounting and who passed the national accounting diploma examination. These candidates are admitted by the Order of Chartered Accountants of Tunisia (OCAT) to carry out a professional internship. For a period of three years, as of the time they are listed on the Tunisian Chartered Accountants Register, chartered accountant trainees can either work for their own accounts, and in this case, they are held personally responsible for their work or as employees of a member of the OCAT. In this case, they can ensure bookkeeping and the presentation of financial statement of companies and organizations of any kind. They must fulfil the obligations set out in the internal regulations of the institute. Furthermore, their professional activity is subject to the control of a traineeship supervisor. If at the end of their internship these trainees have not obtained the diploma of chartered accountancy, they will be removed from the register; however, they may be granted an end of training certificate for a possible registration in the various accounting diploma examinations.

3. Literature review and research hypotheses

3.1. The relationship between job satisfaction and performance at work

The relationship between job satisfaction and performance is founded on two theories, namely the social-cognitive and the social exchange. The former, which was developed by Ajzen (1991), assumes that the individual's attitude towards the profession (e.g., job satisfaction) affects his behavior (e.g., performance). However, according to Organ (1988), the lower the individual's satisfaction is, the poorer his/her performance is. After investigating the relationship between job satisfaction and performance, Herzberg et al. (1959) found a very low correlation. In this context, Ahmad et al. (2010) examined the interdependence between job satisfaction and performance among 310 employees (including workers and managers) from 15 advertising agencies in Islamabad, Pakistan. Their results indicated that there is a very weak relationship between job satisfaction and performance. Using a sample of 138 employees in transport companies, Ram (2013) studied the relationship

between overall job satisfaction and satisfaction aspects (14 aspects) in India. He showed that there is no direct relationship between job satisfaction and performance. Nevertheless, Pawase (2013) studied the effect of satisfaction on the performance of 15 teachers from public and private polytechnics in the city of Dhule, India. The results showed a positive and significant relationship between the two variables. Similarly, Ali and Qun (2019) conducted a study on the impact of job satisfaction on performance on a sample of 160 nurses from 15 different private healthcare institutions in Bangladesh. They revealed that there is a significant and positive relationship between the two variables. In the same vein, Khan et al. (2012) studied the determinants of job satisfaction on a sample of 200 doctors, nurses, administrative staff of autonomous medical institutions in Pakistan. They showed that remuneration, promotion, job security, working conditions, relationships between employees, between colleagues and with the supervisor as well as the nature of the work have an impact on job satisfaction and performance at work. Perera et al. (2014) analyzed the effect of job satisfaction on the performance of 322 factory employees in 17 clothing companies located in free trade zones in Sri Lanka. The results showed that job satisfaction has a positive and significant effect on performance. Funmilola et al. (2013) examined the impact of the dimensions of job satisfaction on job performance in small and medium-sized enterprises in the metropolis of Ibadan in southwestern Nigeria based on the data collected from 105 employees. The authors showed that the dimensions of job satisfaction not only have a significant effect on performance but can also jointly predict it. Another more refined study was conducted on the relationship between job satisfaction and performance at work by incorporating career development as a moderating variable.

3.1.1. Intervention of the career stages in the explanation of the relationship between job satisfaction and performance at work

The various career development stages represent a widely used concept in explaining the impact of work environment on professionals' behavior. In fact, the theory of career development has made it possible to highlight several conceptual models that identify the different stages of the development of the professional's career on the one hand and the impact of these different stages on the professionals' behaviors and attitudes on the other. Super (1957) identified four phases a professional goes through in his career, namely:

- Phase 1: Exploration stage
- Phase 2: establishment stage
- Phase 3: Maintenance stage
- Phase 4: Disengagement stage

The evolution from one stage to another is likely to change the professional's behavior. Would it thus be more opportune to study the connection between the professional attitudes using a moderating variable, that is career (Luttman et al., 2003)? Earlier studies dealing with the relationship between job satisfaction and the phases of career development have mixed results. For instance, some researchers found that the level of job satisfaction increases as the employee moves from the exploration to the disengagement stage (Slocum & Cron, 1985; Ornstein et al., 1989). Other studies could not show a significant relationship between career stages and the level of job satisfaction (Churchill et al., 1976; Mount, 1984; Luttman et al., 2003; Perrone et al., 2003). Similarly, Stumpf and Rabinowitz (1981) found a significant relationship between the different career stages and performance. In the same vein, Gould and Hawkins (1978) found a positive and significant relationship between performance and job satisfaction during the establishment and maintenance stages. Based on what has preceded, we formulate the following hypothesis:

Hypothesis 1: The relationship between job satisfaction and performance varies through different career stages.

3.2. The relationship between organizational commitment and performance at work

This relationship is based on the leader-member-exchange (LMX) theory. In fact, the works of and Liden et al. (2000) and Wayne et al. (2002) revealed that a high-quality LMX enables employees to develop organizational commitment and improve their performance at work. Moreover, Irefin and Mechanic (2014) examined the impact of employees' commitment on organizational performance with a particular focus on Coca Cola company in Nigeria. On a sample of 120 employees (managers and their superiors), they showed that there is a strong relationship between the employees' organizational commitment and performance. Furthermore, in a study on the impact of organizational engagement and individual skills on teachers' performance, Ade and Noermijati (2013) used 118 questionnaires distributed to elementary school teachers. They demonstrated that organizational commitment has a direct, significant and positive effect on the teachers' performance. Berberoglu (2015) studied the impact of organizational commitment on performance in the health sector in hospitals in the north of Cyprus. A total of 50 questionnaires were distributed to managers, doctors, nurses and chemists. They showed that there is a positive and significant relationship between organizational commitment and performance. Meyer and Allen (1991) concluded that affective commitment is positively correlated with performance at work while normative and continuance commitments are negatively

correlated. Furthermore, Meyer et al. (1993) found that only affective and normative commitment are positively correlated with performance while continuance commitment has a negative impact. Arab and Mardessi (2011) studied the effect of organizational commitment on financial performance using a sample of 38 executives in Tunisian companies. They found a positive relationship between the executives' affective commitment and the organization's financial performance; however, they found a negative relationship between the executives' normative and continuance commitment and organization's financial performance. Folorunso et al. (2014) conducted a study on the impact of organizational commitment dimensions on the performance of the academic staff of Oyo State Owned Tertiary Institutions, Nigeria. On a sample of 197 respondents, they revealed that there is a positive and significant relationship between the dimensions of organizational commitment and performance at work. In another study, Qaisar et al. (2012) examined the effects of the organizational commitment dimensions (affective, normative and continuance) on employees' performance among police officers in Pakistan. The results of their statistical analyses indicated that the aspects of these organizational commitment (affective, normative and continuance) are independent and have a positive and significant effect on the officers' performance. On their part, Memari et al. (2013) studied the impact of organizational commitment on employees' performance among Malik's Bank staff through 230 questionnaires distributed to the bank's administrative staff in Sanandaj. Their results revealed that the different dimensions of organizational commitment have a positive and significant effect on the employees' performance in Iran. On the other hand, Ghorbanpour et al. (2014) found that affective and normative commitments have a positive and significant effect on the auditor's performance while continuance commitment has a negative and significant effect.

3.3. *The relationship between job satisfaction and organizational commitment*

Malik et al. (2010) studied the relationship between satisfaction and organizational commitment in Pakistan. The sample on which they carried out their study was composed of 650 teachers. The results showed that job satisfaction has a positive and significant effect on organizational commitment. Moreover, Eslami and Gharakhan (2012) explored the effect of satisfaction on organizational commitment in Iran. The sample used was composed of 280 employees. In fact, the obtained results showed the existence of a positive and significant relationship between satisfaction and organizational commitment. In the same vein, and on a sample of 106 employees of manufacturing companies in Nigeria, Akhigbe et al. (2014) concluded that there is a positive and significant relationship between job satisfaction and organizational commitment of private sector teachers. Similarly, Ali and Bashir (2018), through questionnaires distributed to teachers (respondents) working in different departments of the University of Leeds and Lahore University, found that there is a positive and significant relationship between job satisfaction and organizational commitment of private sector teachers. In another study, Lumley et al. (2011) studied job satisfaction and organizational commitment in an IT environment on a sample of 196 Indian and African employees and found that both affective and normative commitments are correlated with job satisfaction while that of continuance is not significantly and positively correlated. Inanc and Ozdilek (2015) tried to identify the relationship between organizational commitment and job satisfaction by studying a sample of 244 academics in Turkey. Their results showed that the academics' affective and normative commitment had a positive impact on job satisfaction, while continuance commitment had a negative one. Let us assume that job satisfaction has a positive and significant effect on organizational commitment. Thus, our second hypothesis is as follows:

Hypothesis 2: The organizational commitment has a mediating effect on the relationship between job satisfaction and performance at work.

Therefore, our research model is presented in Fig. 1:

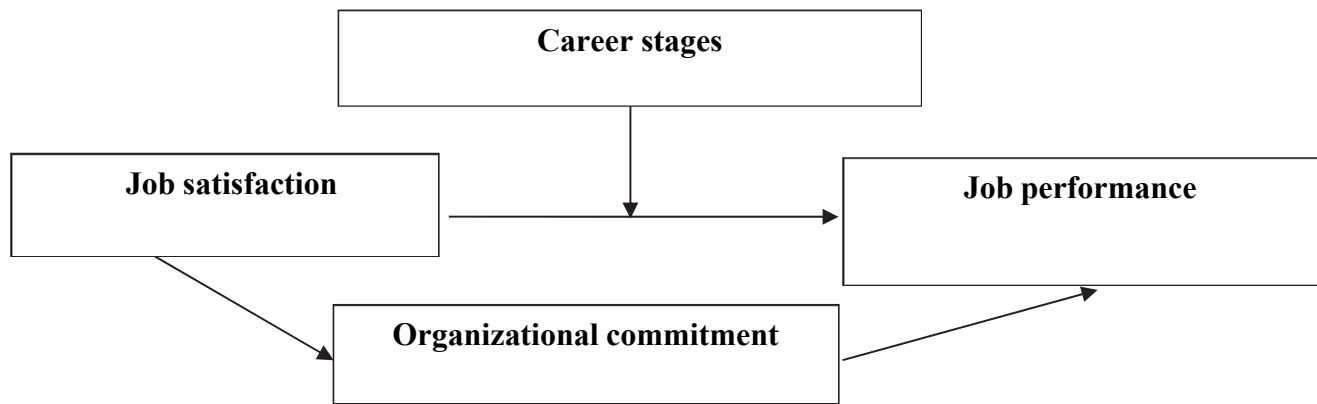


Fig. 1. Research model

4. Research methodology

4.1. Data collection method

A field survey was conducted on a total of 233 accounting professionals working in chartered accountancy firms in Tunisia. However, the sample of our research consisted of only 224 (90 chartered accountants, 69 chartered accountant trainees and 65 accountants). This research was based on the responses received from 224 accounting professionals. Indeed, samples based on professional attitudes are regularly used in organizational commitment and job satisfaction. The respondents were asked to rate their most recent level of concern for each stage of their career. All the exogenous variables measures used a 5-point Likert scale for job satisfaction: 1- strongly disagree -2-disagree -3-Neutral -4-agree -5- Strongly agree. Similarly, for the organizational commitment, as a latent variable, a 5-point Likert scale was used: 1-Strongly disagree -2-Disagree -3- Undecided -4-Agree -5-Strongly agree. To identify the career stages, we also used a 5-point Likert scale: 1: not interested, 2: slightly interested, 3: moderately interested, 4: well interested, 5: strongly interested.

4.2. Measurement of the variables

In what follows, we will present the different variables of our model which are summarized in Table 1:

Regarding the first variable, which deals with performance at work (the variable to be explained), it is measured by 12 elements according to Choo (1986) and Fisher (2001). The second variable, which is based on organizational commitment, (explanatory variable), is measured by Meyer and Allen (1997) through 18 developed elements; 6 elements for affective commitment, 6 elements for continuance commitment and 6 others for normative commitment. The third variable, which is based on satisfaction at work (explanatory variable), is measured by 4 items developed by Hong and Waheed (2011). The fourth variable is structured around career stages (a moderating variable) which consists of 4 stages measured by Kristin et al. (2003) using 12 items.

Table 1
Variables measurements

Variables	Measurements	Authors
Performance at work	12 items	Choo (1986)
Satisfaction at work	4 items	Hong and Waheed (2011)
Organizational commitment	Affective commitment (6 items) Continuance commitment (6 items). Normative commitment (6 items)	Meyer and Allen (1997)
Career stages	12 items. Exploration (3 items) Establishment (3 items) Maintenance (3 items) Commitment (3 items)	Kristin et al. (2003)

4.3. Data analysis methods

This research aimed to present the value of using comparative qualitative analysis (CQA) in the work performance of chartered accountants, chartered accountant trainees and accountants. First, the measurement model was tested using CFA with maximum likelihood estimators. Second, a comparison between the analyses by representing the simultaneous TSLS equations (with a bootstrap and a confidence interval (CI) (95%) and finally comparative qualitative analyses (CQA) were presented. This dual analysis makes it possible to highlight the complementarity of these two types of analyses in determining the relationship between job satisfaction and performance at work. After having explained the differences between the TSLS and FsQCA methods, we analyzed the empirical results of the model with these two techniques to highlight the contributions of the second analytical method.

5. Results and discussion

5.1. CFA with maximum likelihood estimators

Before conducting the final survey, a pre-test and pilot test were conducted to validate the instruments. To assess the logical consistency of the questionnaire as well as its understandability and to reduce possible ambiguities that may arise, a pilot test was administered to 224 accounting professionals. The exploratory factorial analysis with Varimax rotation was conducted to collect the data. The final questionnaire was divided into four sections. The first was designed to assess the career stages of the accounting professionals, while the second included the elements that help measure the organizational commitment or the

relationship between each accounting professional and the organization. The third section was intended to assess job satisfaction and the fourth and last section of the questionnaire aimed at determining the current job performance of the professionals in our sample. First, the objective of the pilot study was to examine the feasibility of the study and refine the measurement of the elements and thus reduce the failures of the main study due to the lack of good psychometric properties of the scales. According to Diamantopoulos et al. (2008), the reflective scale purification can be achieved by removing the elements having a low item-total correlation. In fact, in the main study, we did not drop any item to improve the model fit. The 12 elements that help with the measurement of job satisfaction in the pilot study were correlated (Cronbach's alpha = 0.796) after dropping an item (I feel good at work), which has a low factor load (and a low correlation between the elements). Moreover, all the elements used to operationalize a particular construction should load on a single factor. The measurement model was tested using the CFA with maximum likelihood estimators. It demonstrated an acceptable fit between the hypothetical model and the data observed on a variety of quality of fit indices. All the measures of fit are within acceptable limits (Hair et al., 2014) $\chi^2 = 124$, $\chi^2 / df = 2.166$, CFI = 0.96, the Tucker-Lewis Index (TLI) = 0.92, the root mean square error of approximation (RMSEA) = 0.049 and the standardized root mean square residual (SRMR) = 0.038. Moreover, the adequacy of the measurement model was assessed using the convergent and discriminant validity as well as reliability. The convergent validity was evaluated by examining the factor loadings for each element of our measurement model, such as the squared multiple correlations (SMC), the significance level for each load and the average variance extracted (AVE) for each construction. All factor loads were statistically significant at $p < 0.01$ as indicated in the t-statistics listed in table 2. Moreover, the covariance matrix limited (CML) exceeded the limit value of 0.3 (Jöreskog and Sörbom, 1996) and the Explorative Variance significantly exceeded the recommended level of 0.5 (Hair et al., 2014). These results provided sufficient statistical evidence of convergent validity in our measurement scales. Besides, the correlations between the constructions are all well below the 0.90 threshold, suggesting that all the constructions are distinct from one other. Considering relatively high correlations between some concepts, we first verified multicollinearity by calculating the variance inflation factor (VIF). Indeed, the resulting VIF values are all significantly lower than the cut-off value of 10 (the maximum value is 5.21). Then, the reliability was examined using Cronbach's alpha coefficient. As can be seen in Table 2, all the construction values in our study exceed the acceptance level of 0.70 (Hair et al., 2014).

5.2. Data analysis: comparative study of Two-stage least squares and Fuzzy Set Qualitative Comparative Analysis (FsQCA)

In what follows, we will present in detail a two-step approach. The first stage establishes the reliability and validity of the measurements while the second tests the structural relationships between the latent constructions. Moreover, the analyses of the corresponding data collection consist in ensuring the quality of our purified scales [confirmatory factor analysis (CFA) and the structural equation]. To test our hypotheses, we followed the two-step method recommended by Anderson and Gerbing (1988): the first step evaluates the normality of our data, while the second step, which includes the Hansen test for multi-variate normality, shows that the variables in this study are not normal (Chi-square = 24451.21, $p < 0.01$). For this reason, we used the CFA with a robust maximum likelihood estimator. We then adopted the simultaneous algorithm systems regression equation to test the statistical Analysis system (SAS) structural equation models. The preferred procedure first derived the score factor from the measurement model and then performed the two-stage least squares estimation (TSLS) for the equation systems to address endogeneity and simultaneity problems. Since both antecedents of work performance (i.e. job satisfaction and organizational commitment) are exogenous, their interaction will also be exogenous. Thus, the methodology we adopted consisted of directly examining the interaction effect using TSLS, unlike partial least square path analysis (PLSPA). Moreover, the simultaneous algorithm systems regression equation used to estimate the structural equation models (SEM) are more appropriate for hypothesis testing than PLS-PA algorithms because the latter are mainly exploratory analysis tools and therefore cannot be used for hypotheses testing (Wesland, 2010). Thus, the measurement model was tested using the CFA with a robust maximum likelihood estimator. The convergent validity was assessed by examining the factor loadings for each element of our measurement model as all the factor loadings are statistically significant at $p < 0.01$, as shown by the squared multiple correlations (SMC). Similarly, the resulting VIF values are all significantly lower than the cut-off value of 10. Furthermore, the item-item correlations were verified, and the result showed that the correlations between the different elements measuring "job satisfaction", "career stage" and "organizational commitment" were well below the value of 0.5. Therefore, multi-collinearity is not an issue in this study. To test the robustness of the above results, we also implemented the PLS-PA algorithm to test the structural model. Thus, the results are compatible with those of the simultaneous algorithm systems regression equation, which provides empirical evidence of the robustness of our results.

Table 2

TSLS results with bootstrap (95% CI)

Dependent variable: Task performance using a structural model

Variables	Task performance		
	G1: Chartered accountant	G2: chartered accountant Trainee	G3: Accountant
Satisfaction at work	0.7569689***	0.6441146***	0.8868002***
Exploration stage	0.0167528	0.2003105***	0.1099683
Satisfaction*exploration stage	0.4457218***	0.400244***	0.3025167*
Affective commitment	0.2215837*	0.0357441	0.003693
Normative commitment	0.0156026	0.2549694*	0.7234381*
Continuance commitment	0.5137028**	0.2275524*	0.0367888
Constant	6.090177***	6.590435***	5.6632***
N	90	69	65
R ²	22.79	18.6	16.35
Mean Vif	2.41	2.12	2.087
Satisfaction at work	0.5260077***	0.2581375*	0.4284396***
Establishment stage	0.6244534***	0.6811499***	0.4783248***
Satisfaction * establishment stage	0.8093379***	-0.0058027	0.7069362***
Affective commitment	0.2216157*	0.3359856**	-0.021786
Normative commitment	0.40016331*	0.661861***	0.2309443*
Continuance commitment	-0.0028797	0.2265714**	0.003263
Constant	2.920625***	2.385076***	3.141126***
N	90	69	65
R ²	83.75	60.25	43.54
Mean Vif	1.857	1.69	1.065
Satisfaction at work	0.7797849***	0.2039051*	0.3841141*
Maintenance stage	0.3591173*	0.4737524***	0.114324
Satisfaction * maintenance stage	0.4178455***	-0.0104633	0.3022488***
Affective commitment	0.2231925*	0.0297567	-0.0068089
Normative commitment	0.4200536*	-0.0322933	-0.0257093
Continuance commitment	0.0190993	-0.0398069	-0.0373645
Constant	4.649594***	4.971482***	5.649934***
N	90	69	65
R ²	12.26	18.22	10.65
Mean Vif	2.035	2.184	2.087
Satisfaction at work	0.8023422***	0.6445516***	0.2908906*
Disengagement stage	0.0100913	0.0030339	0.0236016
Satisfaction* disengagement stage	0.4015347***	0.4121083***	0.5019708***
Affective commitment	0.2204595*	0.0212942	-0.0073523
Normative commitment	-0.0167417	0.2597991*	0.3277813***
Continuance commitment	0.6136803***	-0.0217552	-0.0366004
Constant	1.7415***	7.300607***	5.971646***
N	90	69	65
R ²	40.58	12.45	13.8
Mean Vif	2.16	2.18	2.11

(***) p<0.01, (**) p<0.05, (*) p<0.1

Table 3

Results of the structural model using TSLs with bootstrap (95% CI)

Dependent variable: Contextual performance

Variable	Contextual performance		
	G1 : Chartered accountant	G2 : chartered accountant Trainee	G3 : Accountant
Satisfaction at work	0.5317958***	0.7749705***	0.4152245**
Exploration stage	0.061541	0.6981654***	0.1201945**
Satisfaction* exploration stage	0.8022077***	0.4003459***	0.4120692***
Affective commitment	0.2380032*	0.0632355	0.0202206
Normative commitment	0.1226545*	0.3187763**	-0.0018095
Continuance commitment	-0.0190899	0.2490182**	-0.045762
Constant	4.149197***	4.406677***	4.236692***
N	90	69	65
R2	22.19	11.32	13.81
Mean Vif	2.053	1.996	2.099
Satisfaction at work	0.5317958***	0.8042838***	0.30157589***
establishment stage	0.061541	0.6264791***	0.5992528***
Satisfaction * establishment stage	0.4022077***	0.742506***	0.6039736***
Affective commitment	0.2380032*	-0.0168341	-0.0046484
Normative commitment	0.1226545*	-0.0043163	0.7101634***
Continuance commitment	-0.0190899	0.0087414	0.0043265
Constant	4.149197***	0.9167897***	1.027777***
N	90	69	65
R ²	44.38	25.28	26.5
Mean Vif	2.49	2.46	2.12
Satisfaction at work	0.5281814***	0.5557563***	0.4249069***
Maintenance stage	0.0152792	0.0238866	0.0001247
Satisfaction * maintenance stage	0.2017967*	0.2016859**	0.3002323***
Affective commitment	0.5355862***	0.0395692	0.0143099
Normative commitment	-0.024964	0.2025772*	-0.0078975
Continuance commitment	0.5205898***	-0.0392951	0.6431345***
Constant	4.379898***	5.375725***	4.667329***
N	90	69	65
R ²	22.1	14.61	11.77
Mean Vif	2.053	2.07	2.12
Satisfaction at work	0.5235704***	0.2668868*	0.5145888***
Disengagement stage	0.0054983	-0.0103392	-0.0103404
Satisfaction* disengagement stage	0.6247007***	0.400948***	0.2033984*
Affective commitment	0.2356465*	0.0391123	0.0147309
Normative commitment	0.1248376*	0.2270073*	-0.0079827
Continuance commitment	-0.0205713	-0.0387639	0.3441061*
Constant	4.420502**	5.534979***	4.707041***
N	90	69	65
R ²	31.83	14.24	12.69
Mean Vif	2.056	2.07	2.11

(***) p<0.01 (**) p<0.05 (*) p<0.1

The sample was divided according to the category of accounting professionals while the trajectory model was estimated for each group (chartered accountants, chartered accountant trainees and accountants). A series of tests showed that in our research, there is a significant difference between the three groups in terms of job satisfaction, organizational commitment and performance at work. Moreover, the TSLs algorithm was performed for the three groups on the basis of 100 bootstrap samples, then a 95% confidence interval (CI) bootstrap was constructed for the three groups. The TSLs has been implemented and its results are reported in table 3. As a consequence, all the main effects of satisfaction and commitment at work on the performance of contextual tasks are consistent with those of the previous studies. This result is in line with those of Berberoglu (2015). The results suggested that affective commitment is a significantly positive to the contextual and task performance of chartered accountants only. However, the impact of affective commitment on the performance of chartered accountant trainees and accountants at work is statistically non-significant. Unlike chartered accountants who want to stay in the same firm, chartered accountant trainees and accountants are not attached to their firms, especially if there are other alternatives. In the Tunisian context a meaningful

relationship is expected to exist between continuance commitment, which refers to the lack of alternatives, for accounting professionals and their performance at work. In fact, continuance commitment is based on the bootstrap CI and on the differential interaction between job satisfaction and the four career stages, which are confirmed for the chartered accountants, chartered accountant trainees and accountants. In fact, the results show a very significant correlation between job satisfaction and performance in the two dimensions, namely task performance and contextual performance, indicating the validity of the proposed model. As a result, as predicted, the moderating effect of the career stages on the relationship between job satisfaction and task performance is significant for accounting professionals. Moreover, the results confirm a moderating effect of the exploration stage on the relationship between job satisfaction and performance ($\alpha=0.44572$) for chartered accountants. The moderating effect of the exploration stage remains significant for chartered accountant trainees and accountants. Indeed, the exploration period, which can be compared to the adolescence stage, refers to the main concern for those who seek information, establish preferences, make choices and carry out projects. Moreover, this step covers the first confrontations with an existing or new work activity. As expected, for chartered accountant trainees, the moderating effect of the establishment stage on the relationship between job satisfaction and task performance is non-significant ($b= -.0058027$). However, for chartered accountants, this stage reinforces the positive effects of job satisfaction on task performance ($b=0.8093379$, $p<0.01$) as well as on contextual performance ($b=0.4022077$ $p<0.01$). In fact, the establishment stage refers to the chartered accountant's concern of seeking the full realization of his professional life, asserting himself in a socio- professional status that is adequate to himself and his identity and improving his professional situation by progressing as much as possible, including in relation to others. In fact, seeking to settle down includes objectives of stabilization, consolidation and advancement in one's job.

The moderating effect of the maintenance stage on the satisfaction and performance of chartered accountant trainees at work is, as expected, non-significant with a value of ($b=-0.0104633$); nevertheless, it is positive for the chartered accountants and accountants. In fact, the maintenance stage refers to the accountant's concern to guarantee and confirm his professional status, adapt to work, maintain his professional competence through different means and do novel things at work. Therefore, seeking to maintain oneself includes objectives of maintaining, updating and innovating at one's work. In addition, as predicted, the moderating effect of the disengagement stage on the relationship between the satisfaction and performance of accounting professionals at work is significant. Moreover, although this step significantly affects accounting professionals, it has different effects. In fact, the moderating effect raises the contextual performance of accountants to a value of ($b=0.6247007$ $p<0.01$) more than that of the chartered accountant trainees whose value is ($b=0.400948$). The disengagement stage refers to less involvement in the professional life, which consists in looking for other non-professional activities that are generally linked to the prospects of retirement as well as to the real preparation for this retirement. Conventional statistical approaches, such as the structural equation model (SEM) and the multiple regression analysis, are related to the net effect of each antecedent on the results variables. However, the reality suggests that the impact of a variable on the outcome generally depends on other variables (Woodside, 2013). In fact, these traditional methods are inherently limited in their ability to explain the complex interaction of career stages. As a result, in the last few years, the FsQCA, which is an analytical tool that uses the fuzzy set theory and the Boolean logic and explicitly considers all the possible combinations of antecedents associated with the variable result (Fiss, 2011), provides an adapted method to accommodate complex complementarities and non-linear relationships among constructions (Woodside, 2013). Accordingly, this study analyzes the data using the FsQCA to compare and contrast the results of the SEM. The results obtained through the FsQCA have a consistency threshold of 0.241. In addition, the consistency index of the solution is similar to a correlation while the total coverage index is around 83.7%. In fact, each configuration is a sufficient condition for the presence of a high level of task and contextual performance. Although few studies have used the qualitative comparative analysis (QCA) to investigate the performance of the accounting professionals at work, the complex models of causal interrelations between satisfaction and career stages in this study have implemented such explanatory research necessary to facilitate the complementary understanding of the interaction of the effects of satisfaction on performance at work. Consequently, the objective of this study was to re-analyze the data using the FsQCA method to compare and contrast the results obtained through both the SEM and the FsQCA. In fact, the combination of satisfaction at work and the career stages is the only sufficient condition that simultaneously leads to task performance.

In this context, the FSQCA has identified four configurations:

Satisfaction* Exploration stage + Satisfaction *Maintenance stage + Satisfaction *Exploration stage*Organizational commitment + Satisfaction*Maintenance stage*Organizational commitment → Task Performance

With regard to contextual performance, the FsQCA has identified five configurations:

Satisfaction* Exploration stage+ Satisfaction* Establishment stage+ Satisfaction* Establishment stage*Organizational commitment+ Satisfaction*Maintenance stage+ Satisfaction*Maintenance stage *Organizational commitment → Contextual Performance

Table 4

Configurations leading to the presence of a high level of task performance

Configurations	Raw coverage	Unique coverage	Solution
Satisfaction* exploration stage	0.4404	0.3228	0.9112
Satisfaction * maintenance stage	0.5281	0.2844	0.8655
Satisfaction* exploration stage * organizational commitment	0.6124	0.4226	0.8994
Satisfaction * maintenance stage *organizational commitment	0.4227	0.2252	0.7271
Total coverage = 0.8522			
Solution Consistency = 0.8857			

Table 5

Configurations leading to the presence of a high level of contextual performance

Configurations	Raw coverage	Unique coverage	Solution
Satisfaction* exploration stage	0.3927	0.1789	0.6821
Satisfaction* establishment stage	0.3771	0.2077	0.7055
Satisfaction* establishment stage*organizational commitment	0.4933	0.3071	0.8811
Satisfaction*maintenance stage	0.5113	0.4173	0.8992
Satisfaction*maintenance stage *organizational commitment	0.4244	0.3635	0.8004
Total coverage = 0.8001			
Solution consistency = 0.8224			

By comparing these solutions, it seems obvious that the interaction between satisfaction and the exploration stage exists. For example, configuration 1 indicates that 68.21% of the combination of high job satisfaction level and the exploration stage have a high contextual performance. The solution also indicates that 91.12% of the combination of high job satisfaction level and the exploration stage have a high task performance, which leads to a high level of task performance. Moreover, the results showed that for chartered accountants, the high level of interaction between satisfaction and the maintenance stage leads to the presence of contextual performance. Regarding contextual performance, the FsQCA found 5 equifinal configurations, which is much more complicated than the results revealed by the SEM. By comparing configurations 1 and 2 (Table 4 and Table 5), it seems obvious that the organizational commitment has a mediating effect on the relationship between job satisfaction and performance at work. We can say that H1 is validated just for chartered accountant and H2 is confirmed. For the first hypothesis, career stages, such as exploration, establishment, maintenance, and disengagement, have a moderating effect on the relationship between satisfaction and performance of the chartered accounts. In fact, for accountants and chartered accountant trainees, career stages do not have a moderating effect on the relationship between satisfaction and performance. All the more chartered accountants are concerned with ensuring increased performance and productivity at the expense of their career. Moreover, accountants and chartered accountant trainees are primarily concerned with their employment and their integration into the work environment. Therefore, their prospects are promotion in their career. For the second hypothesis, organizational commitment mediates the relationship between satisfaction and performance. This leads us to believe that there is coherence between concrete satisfaction of the accounting professionals and their ability to develop their performance in the working environment. Thus, the organizational commitment of the accounting professionals enables them to evaluate the importance of their perceived performance regarding their overall satisfaction and well-being.

6. Conclusion

The present research work aimed to emphasize the indirect impact of satisfaction on the performance of accounting professionals, namely Chartered accountants, chartered accountant trainees and accountants. The results obtained through the SEM by the TSLS approach showed that career stages, namely exploration, maintenance, establishment and disengagement, play a fundamental moderating role in work performance between job satisfaction and performance of accounting professionals. The results presented when the level of satisfaction of chartered accountants increases, career stages can could reinforce the impact of satisfaction on both task performance and contextual performance. However, these effects can occur only in the presence of organizational commitment that can directly influence performance at work. In addition, the results obtained through the FsQCA revealed that organizational commitment plays a mediating role in the relationship between job satisfaction and performance. As a result, our findings have extended those of previous works that are based on the SEM by showing the complexity of the roles of satisfaction, career stages and organizational commitment in work performance.

Furthermore, this research presents two limitations. First the generalization of the results is difficult due to the limited number of responses obtained (224). Thus, larger sample size in future research may increase the external validity of the results and the second concerns the results found which are contextual and cannot be generalized given the specificity of the Tunisian context. Moreover, this article opens up new avenues of research. it would be interesting to the indirect impact of satisfaction on' audit team 'performance: Tunisian context.

References

- Ade, R., & Noermijati, C. S. (2013). The Influence of Organizational Commitment and Individual Competence on Teacher Performance: In the Learning Organization Perspective. *International Journal of Business and Behavioral Sciences*, 3(8), 19-35.
- Ahmad, H., Ahmad, K., & Shah, I. A. (2010). Relationship between job satisfaction, job performance attitude towards work and organizational commitment. *European Journal of Social Sciences*, 18(2), 257-267.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Akhigbe, O.J., Felix, O.O., & Finelady, A.M. (2014). Employee job satisfaction and organizational commitment in Nigeria manufacturing organizations. *European Journal of Business and Management*, 6(25), 83-95.
- Ali, M. H., & Bashir, I. (2018). The effect of job satisfaction on teacher's organizational commitment, with special reference to private sector universities of Punjab, Pakistan. *International Journal of Scientific and Research Publications*, 8(2), 114-125.
- Ali, M., & Qun, W. (2019). Factors contributing job satisfaction and job performance of nurses in the healthcare industry. *International Journal of Humanities and Social Development Research*, 3(1), 7-22
- Anderson, J. C., & Gerbing, D. W. (1988). Structural equation modeling in practice: A review and recommended two-step approach. *Psychological Bulletin*, 103(3), 411.
- Arab, S. D. B., & Mardessi, S. M. (2011). L'implication organisationnelle: levier pour la performance financière? Une étude dans le contexte tunisien. *Revue Libanaise de Gestion et d'Économie*, 4(6), 21-46.
- Berberoglu, A. (2015). Organizational commitment and perceived organizational performance among health care professionals: Empirical evidence from a private Hospital in Northern Cyprus. *Journal of Economics and Behavioral Studies*, 7(1 (J)), 64-71.
- Choo, F. (1986). Job stress, job performance and auditor personality characteristics. *Auditing: A Journal of Practice and Theory*, 5, 17-34
- Churchill Jr, G. A., Ford, N. M., & Walker Jr, O. C. (1976). Organizational climate and job satisfaction in the salesforce. *Journal of Marketing Research*, 13(4), 323-332.
- Diamantopoulos, A., Riefler, P., & Roth, K. P. (2008). Advancing formative measurement models. *Journal of business research*, 61(12), 1203-1218.
- Dubar, C., Tripiet, P., & Boussard, V. (2011). Sociologie des professions, Paris, 3e édition, Armand Colin, coll. U, 376 p.
- Eslami, J., & Gharakhani, D. (2012). Organizational commitment and job satisfaction. *ARPN Journal of Science and Technology*, 2(2), 85-91.
- Fisher, R. T. (2001). Role stress, the type A behavior pattern, and external auditor job satisfaction and performance. *Behavioral Research in Accounting*, 13(1), 143-170.
- Fiss, P. C. (2011). Building better causal theories: A fuzzy set approach to typologies in organization research. *Academy of Management Journal*, 54(2), 393-420.
- Folorunso, O. O., Adewale, A. J., & Abodunde, S. M. (2014). Exploring the effect of organizational commitment dimensions on employees performance: An empirical evidence from Academic Staff of Oyo State Owned Tertiary Institutions, Nigeria. *International Journal of Academic Research in Business and Social Sciences*, 4(8), 275.
- Funmilola, O. F., Sola, K. T., & Olusola, A. G. (2013). Impact of job satisfaction dimensions on job performance in a small and medium enterprise in Ibadan, South Western, Nigeria. *Interdisciplinary journal of contemporary research in business*, 4(11), 509-521.
- Ghorbanpour, Z., Dehnavi, H. D., & Heyrani, F. (2014). Investigating the effect of organization commitment on performance of auditors in the community of certified accountants. *Interdisciplinary Journal of Contemporary Research in Business*, 5(10), 199-209.
- Gould, S., & Hawkins, B. L. (1978). Organizational career stage as a moderator of the satisfaction-performance relationship. *Academy of Management Journal*, 21(3), 434-450.
- Hair, J., Black, W., Babin, B., Anderson, R., (2014). *Multivariate Data Analysis*. 7th ed. Pearson/Prentice Hall, Upper Saddle River, New Jersey.
- Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The Motivation to Work*. Wiley, New York.
- Hong, T. & Waheed, A. (2011). Herzberg's motivation-hygiene theory and job satisfaction in the Malaysian retail sector: the mediating effect of love of money. *Asian Academy of Management Journal*, 16(1), 73-94.
- Inanc, E. E., & Ozdilek, E. (2015). Relationship between the organizational commitment and job satisfaction of academic staff in Turkey. *International Organization for Research and Development*, 12.
- Irefin, P., & Mechanic, M. A. (2014). Effect of employee commitment on organizational performance in Coca Cola Nigeria Limited Maiduguri, Borno state. *Journal of Humanities and Social Science*, 19(3), 33-41.
- Jöreskog, K.G., Sörbom, D., (1996). LISREL 8 User's Reference Guide. *Scientific Software International, Chicago*.
- Khan, A. H., Nawaz, M. M., Aleem, M., & Hamed, W. (2012). Impact of job satisfaction on employee performance: An empirical study of autonomous Medical Institutions of Pakistan. *African journal of business management*, 6(7), 2697-2705.
- Kristin, M.P., Phyllis, A. G., Jenelle, C.F., & Christine L. C. (2003). The adult career concerns inventor. *Journal of Employment Counseling*, 40, 172-180.
- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of applied psychology*, 85(3), 407.
- Lumley, E. J., Coetzee, M., Tladinyane, R., & Ferreira, N. (2011). Exploring the job satisfaction and organisational commitment

- of employees in the information technology environment. *Southern African Business Review*, 15(1), 100-118.
- Luttman, S., Mittermaier, L. and Rebele, J. (2003). The association of career stage and gender with tax accountants' work attitudes and behaviours. *Advances in Taxation*, 15, 111-143.
- Malik, M. E., Nawab, S., Naeem, B., and Danish, R. Q. (2010). Job Satisfaction and Organizational Commitment of University teachers in public sector of Pakistan. *International Journal of Business and Management*, 5(6), 17-26
- Memari, N., Mahdiah, O., & BaratiMarnani, A. (2013). The impact of organizational commitment on employees job performance. A study of Meli Bank. *International Journal of Contemporary Research in Business*, 5(5), 164-171
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in The Workplace*. Thousand Oaks, CA: Sage Publications
- Meyer, J. P., & Allen, N. J. (1991). A Three-Component Conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.
- Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to the Organizations and Occupations: Extension and Test of a Three – Component Conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.
- Mount, M. K. (1984). Managerial career stage and facets of job satisfaction. *Journal of Vocational Behavior*, 24, 340-354.
- Organ, D. W. (1988). Organizational citizenship behavior: The good soldier syndrome.
- Ornstein, S., Cron, W.L., & Slocum, J.W. (1989). Life stage versus career stage: A comparative test of the theories of Levinson and Super. *Journal of Organizational Behavior*, 10, 117-133.
- Pawase, D.B. (2013). Role of job satisfaction on job performance of teachers from government and private polytechnics. *International Journal of Modern Engineering Research*, 3(3), 1561-1565.
- Perera, G.D.N., Khatibi, A., Navaratna, N., & Chinna, K. (2014). Job satisfaction and job performance among factory employees in apparel sector ASIAN. *Journal of Management Sciences & Education*, 3(1), 196-1104.
- Platis, Ch., Reklitis, P. and Zimerasc S. (2015). Relation between job satisfaction and job performance in healthcare services. International Conference on Strategic Innovative Marketing, IC-SIM 2014, September 1-4, 2014, Madrid, Spain *Procedia ScienceDirect-Social and Behavioral Sciences*, 175: 480 – 487.
- Qaisar, M.U., Rehman, M.S., & Suffyan, M. (2012). Exploring effects of organizational commitment on employee performance: Implications for human resource strategy. *Interdisciplinary Journal of Contemporary Research in Business*, 3(11), 248-255.
- Ram, P. (2013). Relationship between job satisfaction and job performance in the public sector-A case study from India. *International Journal of Academic Research in Economics and Management Sciences*, 2(2), 16-35.
- Raza, M.Y, Akhtar, M.W., Husnain, M., & Akhtar, M.S. (2015). The impact of intrinsic motivation on employee's job satisfaction. *Management and Organizational Studies*, 2(3)m 80-88.
- Sarfatti, L. (1977). *The Rise of Professionalism*. Berkeley: University of California Press.
- Slocum, J.W., & Cron, W.L (1985). The Job attitudes and performance during three career stages. *Journal of Vocational behaviour*, 26(2), 126-145.
- Stumpf, S.A., & Robinowitz, S. (1981). Career stage as a moderator of performance relationship with job satisfaction and role perceptions». *Journal of Vocational Behavior*, 18, 202-218.
- Super, D.E. (1957). *The psychology of careers*. New York, Happer.
- Wayne, S. J., Shore, L. M., Bommer, W. H., & Tetrick, L. E. (2002). The role of fair treatment and rewards in perceptions of organizational support and leader-member exchange. *Journal of applied psychology*, 87(3), 590.
- Westland, J. C. (2010). Lower bounds on sample size in structural equation modeling. *Electronic Commerce Research and Applications*, 9(6), 476-487.
- Woodside, A.G., (2013). Moving beyond multiple regression analysis to algorithms: Calling for adoption of a paradigm shift from symmetric to asymmetric thinking in data analysis and crafting theory. *Journal of Business Resources*, 66, 463–472.

