

International Journal of Entrepreneurship and Project Management (IJEPM)

**THE INFLUENCE OF HUMAN CAPITAL RECRUITMENT
STRATEGIES ON THE COMPETITIVENESS OF SMALL
AND MEDIUM-SIZED PRACTICES (SMPs) IN UGANDA**

Albert Richards Otete

THE INFLUENCE OF HUMAN CAPITAL RECRUITMENT STRATEGIES ON THE COMPETITIVENESS OF SMALL AND MEDIUM-SIZED PRACTICES (SMPs) IN UGANDA

^{1*} Albert Richards Otete

¹PhD Candidate: University Institute for European and International Studies, Netherlands and ESAMI Business School, Tanzania

*Corresponding Author's Email: doctor@otete.org

Tel +256 772703444

Abstract

Purpose: Small and Medium-sized Practice (SMPs) firms are growing exponentially in Uganda. SMPs are all the professional accounting firms, excluding the Big-4 (Deloitte, EY, KPMG and PwC). The objective of the study was to determine the influence of human capital recruitment strategies on the competitiveness of SMPs in Uganda.

Methods: A random sample of 140 SMPs in Uganda was selected. In each firm, a partner who is well versed with the business responded to the questionnaire. The research design was cross-sectional using a quantitative approach. A total of 112 complete case questionnaires were used in the data analysis; an effective response rate of 80%. The null hypothesis was that human capital recruitment strategies do not have a significant influence on the competitiveness of SMPs in Uganda.

Results: 65% of the SMPs were less than 8 years old implying they have more than doubled since the year 2010. The sample was adequate for factor analysis with a Kaiser-Meyer-Olkin (KMO) statistic of 0.70 and the structured questionnaire was deemed reliable using Cronbach α of at least 0.76 for each of two scales. Bartlett test of sphericity was used to confirm that the variables were not intercorrelated while the Variance inflation factors <5.0 indicated no problems with multicollinearity of the independent variables. The average full-time complement of partners/staff was 14 per firm. 75% of the SMPs had less than that number. Professional experience of partners/staff was rated as the most critical measure of competitiveness of an SMP.

Unique contribution to theory, practice and policy: SMPs in Uganda need to bolster their human capital through recruitment strategies that target experienced Supervisor-level staff, and recruiting those with CPA or ACCA qualification would be an added competitive advantage. Future studies into human capital in SMPs should cover staff development, deployment and retention strategies.

Keywords: *Human capital, recruitment, strategies, competitiveness, Small and Medium-sized Practice*

1.0 INTRODUCTION

Small and Medium-sized Practices (SMPs) are regulated accounting firms whose primary role is to provide external audit services to their clients. They also provide tax and consulting services – these two are referred to as non-audit services. Accounting firms are regulated by a Professional Accounting Organization (PAO) in the countries in which they are registered. SMPs are categorized as those regulated accounting firms whose majority of clients are Small and Medium-sized Entities (SMEs) as applicable in their respective country environments.

The PAOs are members of the International Federation of Accountants (IFAC) that has been in existence since 1977. IFAC had a membership of 175 PAOs and was represented in several countries worldwide. The Institute of Certified Public Accountants of Uganda (ICPAU) is a member of IFAC. In 2005, IFAC established the SMP Committee after acknowledging that the SMPs play an important role in the accounting profession worldwide.

IFAC conducts regular surveys of SMPs worldwide. In its such survey, IFAC received responses from SMPs worldwide (IFAC, 2017) and discovered that 88% of the SMPs had 20 or less partners and staff which could give an impression that the SMPs do not have sufficient human capital. In that same survey, one of the top challenges faced by SMPs was failure to differentiate from the competition. The other challenge was inability to attract new and retain qualified and experienced staff. These challenges may have contributed to the perception that SMPs are under-staffed and have low level of competitiveness.

1.1 Hypothesis

H₀₁: Human capital recruitment strategies have no significant influence on the competitiveness of SMP in Uganda

2.0 LITERATURE REVIEW

2.1 Concept of competitiveness

The competition in the global professional accounting market continues to increase as more and more firms enter into that business. Globally, the Big-4 earned USD 135 billion in 2017 as fee revenue (Statista, 2017). This meant that the Big-4 commanded almost 50% share of the global professional accounting market. The remaining half of the market is shared amongst the SMPs. Consequently, the competition is more intense amongst SMPs due to the thousands of firms. The dilemma for SMPs is worsened by the fact that some SMEs opt to utilize the services of the Big-4 thus invading a market that in theory should have been left to the SMPs.

To gain competitiveness over rivals, a firm must innovate continuously through a process of destroying older structures and replacing them with new ones (Schumpeter, 1942). Several decades later, this theory is still relevant and it is such innovation that could help SMPs differentiate one from the competition given the large number of seemingly equal-sized firms offering similar services. The Michael Porter's Five Competitive Forces model (Porter, 2008) reveals that where the threat of new entrants is very high coupled with low barriers to entry, the level of competitiveness will increase. Knowledge of these forces, as part of competitive intelligence gathering, is important for a small firm to survive and grow (Nyakango, 2013).

The Resource-Based View (RBV) promoted by Penrose (1959) and supported by Wernerfelt (1984) postulates that the internal resources of a firm are the source of competitiveness and thus larger firms tend to have an advantage. All such resources must be transformed internally to generate products/services that are superior to those from competing firms.

However, some studies have criticised the RBV on several counts, including the anomaly that it was more applicable to large firms where physical capital is more pronounced. The unfolding of the Knowledge-Based View (KBV) popularized by Grant (2002) brought about a paradigm shift in thinking that is more appropriate to SMPs because “knowledge is power” and such power is held by the human capital in the firm.

2.2 Concept of human capital

Human capital theory suggest that employee incomes are positively influenced by the level of investment in schooling and work experience (Mincer, 1958). Such an investment leads to accumulation of knowledge and skills. The theory thus pre-supposes that recruiting employees with knowledge and skills can guarantee higher productivity at the work place because such a staff knows that to do.

The human capital theory can thus be extended to firm-level where higher human capital investments at individual employee-level collectively translate into higher organizational performance. Human capital accumulation in a firm starts from the recruitment strategy, followed by development through training, deployment of employees to tasks and retention of the skills (Hatch & Dyer, 2004). These authors linked sustained competitive advantage to firm-specific tacit knowledge which could not be easily imitated by competitors. Firms possess knowledge and transfer it among all employees in the same firm (Ambastha & Momaya, 2014; Mahmood, Iqbal, & Sahu, 2014; Nonaka, Takeuchi, & Umemoto, 1996). Industry-specific knowledge and expertise leads to higher levels of competitiveness (Almer, Philbrick, & Rupley, 2014; Mayhew & Wilkins, 2003; Meihami & Meihami, 2014).

Education and work experience have been used in many studies to measure the construct of human capital (Unger, Rauch, Frese, & Rosenbusch, 2011) and to link it to organizational success. Education also had a positive effect on the survival of firms over time, although it did not guarantee the growth of that firm (Backman, 2014). On-the-job training is one way a firm can transfer knowledge to new employees as well as imparting new skills that match changes in the market environment (Jagero, Komba, & Mlingi, 2012). Thus intellectual capital has been identified as a potential source of competitive advantage in many service-oriented industries (Jardon & Martos, 2012; Kamukama, 2013). Acquisition of human capital with knowledge of information technology improved revenue per employee in professional accounting firms (Chang, Chen, Duh, & Li, 2011). In addition, accounting firms with higher education expenses reported higher audit quality, which is a mark of competitiveness (Kang, Lee, Son, & Stein, 2016).

Statista GmbH (based in Germany) which hosts the Statistics Portal published that the Big-4 had a combined global employee base of about one million at end of 2017 (Statista, 2017). Using total global revenues of USD 135billion, this translated to about USD 135,000 revenue per employee for the year 2017. In the professional accounting world, the measure of competitiveness among the top firms is on the number of offices worldwide, number of partners, professional staff headcount and the average fee revenue per employee. This goes to support the view that human capital could have an influence on the level of competitiveness of SMPs.

Majority of SMPs face the challenges of recruitment and retention of qualified staff with the appropriate technical training and soft skills (IFAC, 2017). Most recent studies into accounting firm productivity revealed that the Big-4 had a higher level of productivity than the other firms (Abidin & Mohamad-Nor, 2015; Djerdjouri & Kandiel, 2013; Mohamad-nor, 2015). This is consistent with the concern among SMPs of ineffective utilization and

management of their professional staff.

2.3 Conceptual Framework

The dependent variables are represented by the construct of competitiveness of SMPs in Uganda as assessed by the owners of the firm (that is, by the partners). The criticality of factors of competitiveness that relate to human capital recruitment strategies are rated from the perspective of each firm on a Likert-scale ranging from 1-Not critical, 2-Somewhat critical, 3-Neutral, 4-Critical and 5-Very critical.

The independent variables are represented by the construct of human capital recruitment strategies, operationalized using indicators of experience and education in line with theories of competitiveness. The importance of the firm's human capital recruitment strategies is rated on a Likert-scale ranging from 1-Not important, 2-Somewhat important, 3-Neutral, 4-Important and 5-Very important.

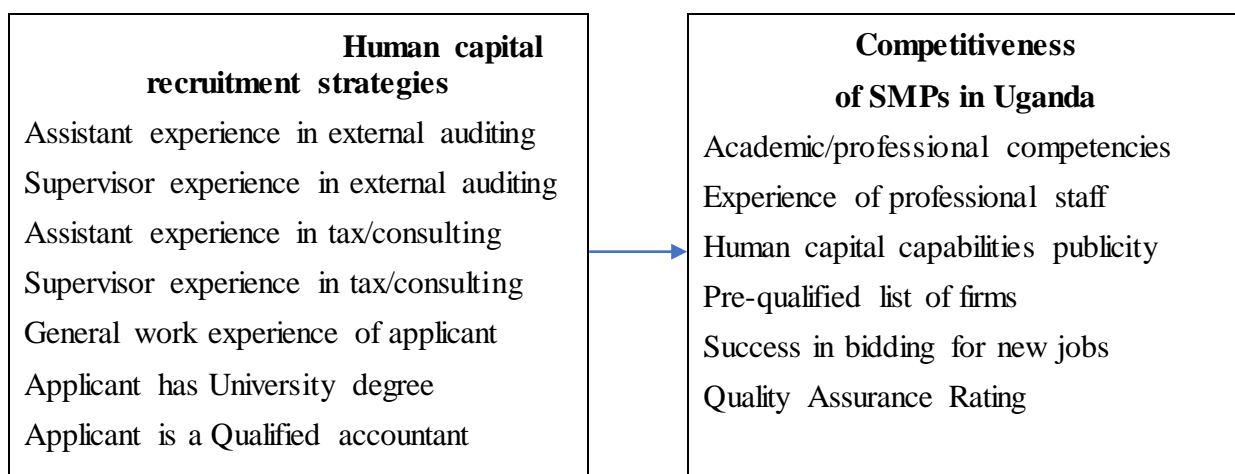


Figure 1: Conceptual framework

3.0 RESEARCH METHODOLOGY

The population of this study is all the 213 SMPs (ICPAU, 2017) in Uganda, which is a list of the regulated accounting firms, excluding the Big-4. A sample size of 140 was determined to be sufficient using the tables (Krejcie & Morgan, 1970). The SMPs on the sampling frame were given a unique number from 0 to 212 after arranging their names in alphabetical order. A total of 140 random numbers were generated using Microsoft Excel. The firms whose numbers were listed were included in the random sample. The names of the partners, office telephone contact, email address and physical location of those firms was obtained from the ICPAU website. This cross-sectional study involved a survey design using a structured questionnaire. This questionnaire was to be answered by one of the partners of the SMP because they understand the business and were best placed to provide valid responses. Where there were two or more partners in the SMP, the partner to respond was purposively selected. Collection of the self-administered questionnaires was primarily via an online link using SurveyMonkey®, a renowned survey tool. A few questionnaires were self-administered in hard-copy and there were a handful of face-to-face interviews held. Data integrity and confidentiality were maximized. Data was captured onto Excel spreadsheets and cross-validated using two independent data clerks to ensure completeness and accuracy. The Excel files were exported to STATA15® for statistical analysis.

4.0 RESULTS AND DISCUSSIONS

4.1 Exploratory data analysis

A total of 112 responses were included in the complete case data analysis which represented an 80% response rate. There was a total of 9 responses that were partial (6% of the sample). A total of 53 (47%) of the respondents were Managing Partner in their respective SMP. This happens in cases where an SMP has two or more partners; one of them may be designated as such. A total of 56 (50%) held the position of Partner while only 13 were ISCQ1 Partner (a partner responsible for International Standard for Quality Control). Only 12% of the respondents were female highlighting the gender imbalance at both partner and staff levels among SMPs. Five respondents had Doctorate degree as their highest academic attainment, 64 had Master's degree, 32 had Bachelor's degree and only 11 had no degree. All the respondents were Certified Public Accountants (CPAs). This is to be expected because ICPAU only grants practicing licences to partners who are qualified accountants, they must be members of ICPAU and possess a minimum level of three years post-qualification experience. However, 66 of them had the ACCA/CA certification having passed those particular examinations. With the advent of the CPA Uganda examinations in the early 2000s, a number of professional accountants have acquired that qualification directly through passing CPAU examinations.

The research was quantitative in approach with a view to generalization of the results to the population of SMPs in Uganda. The reliability of the data collection instrument was confirmed using Cronbach $\alpha = 0.7813$ (7-human capital recruitment strategy items) and $\alpha = 0.7693$ (6 competitiveness items) with a cut-off of 0.6 considered good for reliability (Cronbach, 1951). The item-rest correlations were all positive in the range 0.31-0.43. After running the factor analysis on the Likert-scale items, the Kaiser-Meyer-Olkin (KMO) statistic of 0.6971 was derived to measure and confirm the sampling adequacy (Cerny & Kaiser, 1977) and signal the appropriateness of conducting factor analysis. A KMO higher than 0.6 was considered good enough to warrant a factor analysis (Field, 2009; Hair, 2010). Using box-plot for each variable, outliers were observed. However, the potential influence of outliers was examined using the leverage statistic h (hat value) as defined by (Belsley, Kuh, & Welsch, 1980). An h -value of 0.1 was obtained implying very low influence of such outliers on the model. The Cook's distance was also calculated at 0.017 which was shorter than 0.04 ($4/n$) as per (Cook, 1977) which also confirmed the low threat of outliers on the model.

4.2 Descriptive statistics

As detailed in Table 1, the average age of the firms was 10 years whereas the average practice experience of partners was 12 years. Some of the partners had practiced elsewhere prior to setting up their own SMP. The average full-time staff complement (partners and all staff) was 14, of which 4 of them were female. That average full-time headcount is consistent with the SMP survey conducted by the International Federation of Accountants that revealed that majority of the SMPs worldwide tends to have a complement of 20 or less (IFAC, 2017). There are some outliers in that the maximum full-time complement was recorded as 46. The average number of Partners/staff with at least a University degree was 8 (Bachelor and/or Masters) while those who were qualified Certified Public Accountants (CPA) = 4 per SMP and Association of Chartered Certified Accountant or Chartered Accountant (ACCA/CA) = 2 per SMP. In terms of full-time professional staff, the average number was 4 at Supervisory-level and 5 at Assistant-level. SMPs regularly recruit part-time staff on temporary basis. The

data reveals that an average of 4 part-time staff per SMP. A number of partners/staff have acquired Doctorate degree, but that average is less than one per SMP. The more meaningful statistic is that in all the 112 firms in the sample, there were 25 partners/staff with Doctorate degrees. Furthermore, partners/staff in SMPs have pursued other certifications that signify specialists in diverse fields of forensics, taxation, information systems audit, public finance and internal audit. Whilst their numbers are not as high as CPA or ACCA (relevant to the audit/assurance services), the SMPs are increasingly including such certifications in the recruitment strategy to bolster the human capital capabilities in the segment of tax and consulting services. The study has revealed that majority of the SMPs are tending towards partnerships (two or more partners) as opposed to sole practitioner. The survey also shows that some partners/staff are yet to complete their first degree and about 20% possess Master's degree. In line with the human capital theories, investments in education contribute towards an employee's knowledge and increases the chances of being recruited. On the other hand, employers prefer potential employees with knowledge on the assumption that they understand the subject matter and require a lower learning curve before they begin generating value for the firm.

Table 1: Descriptive statistics

Sample (n = 112 SMPs in Uganda)	Mean	Minimum	Maximum
Average age of the SMP	10 yrs	3 yrs	23 yrs
Number of partners in the SMP	2	1	4
Number of supervisory-level staff	4	3	13
Number of assistant-level staff	5	3	23
Number of part-time staff	4	3	13
Number of support staff	3	0	6
Total full-time staff (partners and staff)	14	7	46
Female staff in the firm	4	0	
Partners and staff with Bachelor's degree	6	1	18
Partners and staff with Masters' degree	2	0	18
Partners and staff with CPA qualification	4	1	18
Partners and staff with ACCA qualification	2	0	18
Average practice experience of partners	12 yrs	3 yrs	23 yrs
Average work experience of supervisors	9 yrs	3 yrs	23 yrs
Average work experience of assistants	5 yrs	3 yrs	13 yrs

Total (out of 1568 full-time = average of 14 staff x 112 SMPs)		
Partners and staff with Doctorate degree	25	
Partners and staff with CAT qualification	79	Certified Accounting Technician
Partners and staff with CIA qualification	33	Certified Internal Auditor
Partners and staff with CTA/ATA qualification	240	Certified Tax Advisor/Accredited Tax Advisor
Partners and staff with CISA qualification	28	Certified Information Systems Auditor
Partners and staff with CFP qualifications	21	Certified Fraud Professional
Partners and staff with CPFA qualification	11	Certified Public Finance Accountant

Source: Author's compilation from statistical analysis

4.3 Eigenvalues

The results of the factor analysis were tabulated with all the factors and their eigenvalues (in descending order of values). The objective was to extract maximum variance in the observed variables. The factors on top of the eigenvalues table were selected for factor analysis (Tabachnick & Fidell, 2007). This factor reduction method is supported by Hair (2010) who suggested that factors that contribute more than 5% of the total variance should proceed into further analysis. An alternative view is that factors with eigenvalue greater than 1.0 (as this is a substantial amount of variation) should be selected (Cerny & Kaiser, 1977; Hair, 2010).

After determining the factors based on eigenvalues, there were variables that were not powerful enough to be included in the model. The elimination of weak variables was achieved by examining the factor loading (the correlation of the variable with the factor). In the following studies, a factor loading of 0.50 and above were chosen (Jardon & Martos, 2012; Kyobe, 2004; Stephen, 2017). An iterative method was used so that one variable loaded onto only one factor. Secondly, at least three variables with loading above 0.50 mapped onto one factor.

4.4 Factor analysis

The tabulation obtained from the factor analysis had many near-zero loadings which made interpretation difficult. The author applied factor rotation to ensure that a variable has a high loading on a single factor and near-zero loading on the other factors. In addition, one factor had to possess a few high loading variables while the rest of the variables are near-zero. Bryant and Yarnold (1995) define factor rotation as "a procedure in which the eigenvectors (factors) are rotated in an attempt to achieve simple structure."

The author considered two main methods of factor rotation (a) orthogonal rotation where the factors are assumed to be uncorrelated with each other and (b) oblique rotation where the factors are assumed to be correlated with each other. (Tabachnick & Fidell, 2007) recommended oblique rotation as a starting point through generation of a factor correlation matrix. If the resultant correlations exceed ± 0.32 , then there is a high probability (above 10%) that correlations exist among the factors to warrant oblique rotation. This type of rotation using direct oblimin was applied in a number of studies (McDermott, Corredoira, & Kruse, 2009; Sandeep Salunke; Jay, 2014; Theron, Nicolene Barkhuizen, & du Plessis, 2014).

On the other hand, the orthogonal rotation using varimax used in the following studies (Fields, Fraser, & Wilkins, 2004; Kamukama, 2013; Kyobe, 2004; Stephen, 2017). The author borrowed the guidance from (Gorsuch, 1983) which stated as follows, “if the simple structure is clear, any of the more popular procedures can be expected to lead to the same interpretations” After running the factor rotations, a table showing only factor loadings above ± 0.50 was displayed to reveal the simple structure as summarised in Table 2 and the author was able to proceed to Structural Equation Modelling.

Table 2: Confirmatory factor analysis – orthogonal varimax rotation (Eigenvalue >1.0000, Factor loading >0.5000)

	Eigenvalues	Standard deviation		3.4497	1.6115
		Mean	deviation	Recruitment Factor	Competitiveness Factor
1	<i>rec_asstexp1</i>	2.54	1.289	0.6315	
2	<i>rec_supvexp1</i>	4.04	0.839	0.6811	
3	<i>rec_asstexp2</i>	2.93	1.237	0.7150	
4	<i>rec_supvexp2</i>	3.84	0.882	0.7697	
5	<i>rec_expothe</i>	3.44	0.876	0.6075	
6	<i>rec_qualfa~t</i>	3.51	1.127	0.5695	
7	<i>comp_acadp~f</i>	4.03	0.963		0.7458
8	<i>comp_workexp</i>	4.30	0.866		0.6281
9	<i>comp_media</i>	3.21	1.083		0.6142
10	<i>comp_bidsu~s</i>	3.77	0.977		0.6329
Factor mean				3.39	3.82
%age of total variance				59.2%	27.6%
Cumulative %age of total variance				59.2%	86.8%

Source: Author’s compilation from statistical analysis

Recruitment: The recruitment strategy for Supervisor-level staff is more stringent (mean score of *rec_supvexp1* = 4.04 and *rec_supvexp1* = 3.84) than for Assistant-level staff (mean score of *rec_asstexp1* = 2.54 and *rec_asstexp1* = 2.93). This is normal given that supervisors are expected to be more knowledgeable and experienced. The variability of responses was also much lower implying closer consensus when it comes to the recruitment of supervisor-level staff. Partners are considered as automatically recruited since they are the owners of the firm.

Competitiveness: The work experience of the partners/staff counts highly as a sign of competitiveness in the minds of most partners of the SMPs in Uganda. The descriptive data

shows that partners have at least 12 years practice experience while Supervisors possess nine years and Assistants have five years. Competitiveness theory suggests that work experience bestows upon the person skills and knowledge that can be transformed into value. The kind of services that SMPs offer (audit, tax and consulting) require a demonstration of skills and knowledge in order to outcompete peers. The display of the SMPs human capital capabilities was rated as moderately critical ($comp_media = 3.21$) due to its passive nature. This manifests in display of images and abridged CVs of partners/staff on websites and other marketing brochures. On the other hand, success in bidding for new jobs tended towards critical ($comp_bidsu-s = 3.77$) for the SMPs. This is much more active than media display in that acquisition of more and more clients through bidding success leads to growth of the firm and eventually increase its competitive advantage.

4.5. Structural Equation Modeling

Structural Equation Modeling (SEM) was deemed most appropriate given the multi-variate nature of the study. SEM allowed the estimation of a model with more than one dependent (endogenous) variable. SEM required an assessment whether a specified model fits the data using both measurement and structural models.

Table 3: Path analysis of human capital recruitment strategies

Latent variable	independent Recruitment	Observed Information Matrix (OIM)			
		Coef.	Std. Error	z	p> z
Measurement model					
<i>rec_asstexp1</i>	Recruitment	0.566	0.085	6.70	0.000
	constant	1.98			
<i>rec_supvexp1</i>	Recruitment	0.613	0.083	7.42	0.000
	constant	4.84			
<i>rec_asstexp2</i>	Recruitment	0.598	0.082	7.26	0.000
	constant	2.37			
<i>rec_supvexp2</i>	Recruitment	0.660	0.076	8.74	0.000
	constant	4.36			
<i>rec_expothet</i>	Recruitment	0.665	0.077	8.59	0.000
	constant	3.95			
<i>rec_qualfa~t</i>	Recruitment	0.600	0.083	7.25	0.000
	constant	3.13			

Co-variances

cov (<i>rec_asstexp1</i> * <i>rec_asstexp2</i>)	0.446	0.080
cov (<i>rec_supvexp1</i> * <i>rec_supvexp2</i>)	0.484	0.083
cov (<i>rec_asstexp2</i> * <i>rec_supvexp2</i>)	0.311	0.073

Likelihood-ratio test of model v saturated: $\chi^2(6) = 3.68$, Probability $>\chi^2 = 0.7202$

Source: Author's compilation from statistical analysis

All the paths for the recruitment latent variable are positive with at least 0.50 correlation coefficient. The positive covariances measure the degree of relationship between the variables which indicates that they move in the same direction when the SMP applies a recruitment strategy for Assistants or for Supervisors. There is also a positive covariance in the relationship between recruitment strategy for Assistants and Supervisor in respect to the tax and consulting experience that the SMP will be looking for. All the standardized factor loadings for the six observed variables were significant with $p < 0.05$

Table 4: Goodness of fit indices (Recruitment)

<u>Fit statistic</u>	<u>Value</u>	<u>Description</u>
Likelihood ratio		
chi2_ms (69)	3.678	model vs. saturated
p > chi2	0.720	
chi2_bs (91)	252.372	baseline vs. saturated
p > chi2	0.0000	

Population error		
RMSEA	0.000	Root mean squared error of approximation
90% CI, lower bound	0.000	
upper bound	0.090	
pclose	0.832	Probability RMSEA ≤ 0.05

Baseline comparison		
CFI	1.000	Comparative fit index

TLI	1.024	Tucker-Lewis index

Size of residuals		
SRMR	0.023	Standardized root mean squared residual
CD	0.739	Coefficient of determination

Source: Author's compilation from statistical analysis

In line with the guidance from (Hu & Bentler, 1998), the eventual specified model was considered a good fit because of the following fit indices. First is the RMSEA=0.000<0.060 limit. This statistic is parsimonious in that it favours fewer estimated parameters in the model. The RMSEA provided for a 90% confidence interval and the results showed that the lower bound = 0.000 while the upper bound = 0.090. The second fit index is the SRMR which is the square root of the difference between the residuals of the sample covariance matrix and the hypothesized covariance model. The SRMR= 0.023<0.090 limit representing good fit.

The third index TLI compares the *chi2* value of the model against the *chi2* of the null model (a worst-case model assuming all measured variables are uncorrelated). The fourth is the CFI which takes into account the sample size and performs equally well with samples of less than 200. Both the TLI = 1.024 and CFI = 1.000 are above target 0.960 limit signaling a good fit.

Other indices include the probability of close fit (*pclose*) of 0.83 which exceeds 0.05 which means that the model is "close-fitting". The coefficient of determination reveals that 74% of the variance in the human capital recruitment strategies of SMPs in Uganda is predicted by the six identified independent variables relating to assistant and supervisor experience plus their qualifications in accounting.

Table 5: Path analysis of competitiveness

Latent dependent variable	Competitiveness			
	Coef.	Observed Information Matrix (OIM) Std. Error	z	p> z
Measurement model				
<i>comp_acadp~f</i> Competitiveness	0.964	4.747	0.20	0.839
constant	4.20			
<i>comp_workexp</i> Competitiveness	0.656	3.238	0.20	0.839
constant	4.98			
<i>comp_media</i> Competitiveness	0.407	2.004	0.20	0.839
constant	2.97			
<i>comp_bidsu~s</i> Competitiveness	0.404	1.989	0.20	0.839
constant	3.87			

Likelihood-ratio test of model v saturated: $\chi^2(0) = 0.51$, Probability $>\chi^2 = .$

Source: Author's compilation from statistical analysis

Table 6: Goodness of fit indices (Competitiveness)

Fit statistic	Value	Description
Likelihood ratio		
chi2_ms (69)	0.507	model vs. saturated
p > chi2	.	
chi2_bs (91)	132.060	baseline vs. saturated
p > chi2	0.0000	

Population error		
RMSEA	0.000	Root mean squared error of approximation
90% CI, lower bound	0.000	
upper bound	0.000	
pclose	1.000	Probability RMSEA <= 0.05

Baseline comparison		
CFI	1.000	Comparative fit index
TLI	1.000	Tucker-Lewis index

Size of residuals		
SRMR	0.010	Standardized root mean squared residual
CD	0.931	Coefficient of determination

Source: Author's compilation from statistical analysis

In line with the guidance from (Hu & Bentler, 1998), the specified model for competitiveness construct was considered a good fit. RMSEA=0.00<0.06 limit, SRMR= 0.01<0.09 limit, TLI = 1.000 and CFI = 1.000, CD = 0.93.

4.6. Testing of Hypothesis 1

Figure 1 reveals that there is significant positive association between human capital recruitment strategies and competitiveness of SMPs in Uganda with a coefficient of 0.36.

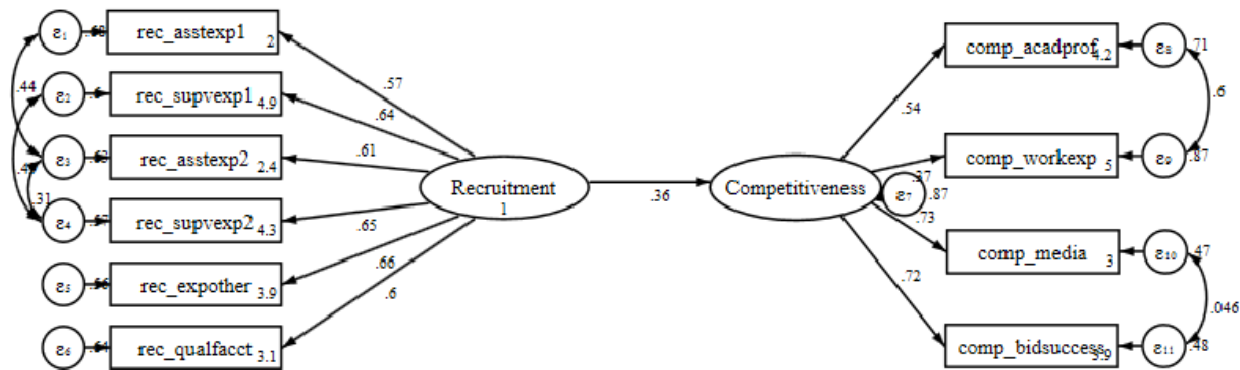


Figure 2: Graphical structural equation model (Latent variable = oval, Observed variable = rectangle, Error = small circle)

Under the competitiveness construct, the covariance between academic/professional qualifications and work experience is positive; $cov(comp_acadprof^*comp_workexp) = 0.60$ and was added to improve on it. This makes theoretical sense because they are twin considerations in the human capital recruitment strategy of any SMP. In addition, in bidding for new jobs or capability to service existing client, the SMPs has to demonstrate that its partners/staff possess the necessary academic and professional qualifications and the commensurate level of work experience. Another covariance added is between media and bid success $cov(comp_media^*comp_bidsuccess) = 0.046$. SMPs have designed brochures that display their services as well as human capital capabilities. Similar information is pasted on websites or other social media, for SMPs that may have web presence. Such display could lead to invitations to bid for jobs. However, the ability to turn bids into tangible client contracts is seen by SMPs as a critical ingredient to their competitiveness.

5.0 CONCLUSION AND RECOMMENDATIONS

The main objective of the study was to ascertain whether human capital recruitment strategies influence the competitiveness of the SMPs in Uganda. The implications of this study are as follows:

Policy: Given the persistent concerns about competitiveness amongst SMPs, IFAC through its SMP Committee could sponsor in-depth surveys of selected SMPs across Uganda and track their progress over time. Instead of the cross-sectional surveys currently undertaken by IFAC, time-series studies could be conducted every five years. Such a policy would unearth salient human capital opportunities that exist in SMPs that would propel ICPAU towards its strategic goals.

Firm-level: Several new SMPs are registered and approved by ICPAU every year. New SMPs have to contend with the Big-4 and peers that have been in the business for longer period of time. Now that the factors of competitiveness that are influenced by human capital recruitment have been identified empirically, the ball is in the court of each SMP. At time of recruitment, focus should be placed on Supervisor-level staff in terms of their experience in audit, tax and consulting, especially from another accounting firm.

Future research: Human capital accumulation in SMPs is a continuous process which starts with the owners (partners) setting up the firm having been granted a practicing licence. The partners develop a human capital recruitment strategy to bring in supervisor-level and

assistant-level staff. Future studies should continue to the next stages of human capital development, human capital deployment and human capital retention.

REFERENCES

- Abidin, S., & Mohamad-Nor, M. N. (2015). Competition in Malaysian Audit Industry: What the Market is Telling Us? *Mediterranean Journal of Social Sciences*, 7(1), 306–311. <http://doi.org/10.5901/mjss.2016.v7n1p306>
- Almer, E. D., Philbrick, D. R., & Rupley, K. H. (2014). What drives auditor selection? *Current Issues in Auditing*, 8(1), 26–42. <http://doi.org/10.2308/ciia-50779>
- Ambastha, A., & Momaya, K. (2014). Competitiveness of firms-review of theory, frameworks and models. *Singapore Management Review*, 26(1), 45–61. <http://doi.org/10.1002/ccd.10430>
- Backman, M. (2014). Effects of Human Capital on the Growth and Survival of Swedish Businesses. *The Royal Institute of Technology, Centre of Excellence for Science and Innovation Studies (CESIS)*, (354).
- Belsley, D. A., Kuh, E., & Welsch, R. E. (1980). Regression diagnostics: Identifying influential observations and sources of collinearity, Volume 101 of. John Wiley and Sons.
- Bryant, F. B., & Yarnold, P. R. (1995). Principal-components analysis and exploratory and confirmatory factor analysis.
- Cerny, B. A., & Kaiser, H. F. (1977). A study of a measure of sampling adequacy for factor-analytic correlation matrices. *Multivariate Behavioral Research*, 12(1), 43–47.
- Chang, H., Chen, J., Duh, R.-R., & Li, S.-H. (2011). Productivity growth in the public accounting industry: the roles of information technology and human capital. *Auditing: A Journal of Practice & Theory*, 30(1), 21–48.
- Cook, R. D. (1977). Detection of influential observation in linear regression. *Technometrics*, 19(1), 15–18.
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16(3), 297–334.
- Djerdjouri, M., & Kandiel, E. A. (2013). An Analysis of Productivity Changes of Chartered Accounting Firms in the UK, 2009-2012. *Journal of Business and Accounting*, 6(1), 120.
- Field, A. (2009). *Discovering statistics using SPSS*. Sage publications.
- Fields, L. P., Fraser, D. R., & Wilkins, M. S. (2004). An investigation of the pricing of audit services for financial institutions. *Journal of Accounting and Public Policy*, 23(1), 53–77. <http://doi.org/10.1016/j.jaccpubpol.2003.11.003>

- Gorsuch, R. L. (1983). Factor analysis, 2nd. Hillsdale, NJ: LEA.
- Grant, R. M. (2002). The knowledge-based view of the firm. *The Strategic Management of Intellectual Capital and Organizational Knowledge*, 17(2), 133–148.
- Hair, J. F. (2010). Black, WC, Babin, BJ, & Anderson, RE (2010). *Multivariate Data Analysis*, 7.
- Hatch, N. W., & Dyer, J. H. (2004). Human capital and learning as a source of sustainable competitive advantage. *Strategic Management Journal*, 25(12), 1155–1178. <http://doi.org/10.1002/smj.421>
- Hu, L., & Bentler, P. M. (1998). Fit indices in covariance structure modeling: Sensitivity to underparameterized model misspecification. *Psychological Methods*, 3(4), 424.
- ICPAU. (2017). ICPAU Accounting Firms, 2017. Retrieved February 3, 2018, from http://icpauportal.com/index.php/external_portal/firms
- IFAC. (2017). *2016 IFAC Global SMP Survey Report & Summary*. Retrieved from <https://www.ifac.org/publications-resources/2016-ifac-global-smp-survey-report-summary>
- Jagero, N., Komba, H. V., & Mlingi, M. N. (2012). Relationship between on the Job Training and Employee's Performance in Courier Companies in Dar es Salaam, Tanzania. *International Journal of Humanities and Social Science*, 2(22), 114–120.
- Jardon, C. M., & Martos, M. S. (2012). Intellectual capital as competitive advantage in emerging clusters in Latin America. *Journal of Intellectual Capital*, 13(4), 462–481. <http://doi.org/10.1108/14691931211276098>
- Kamukama, N. (2013). Intellectual capital: company's invisible source of competitive advantage. *Competitiveness Review: An International Business Journal*, 23(3), 260–283. <http://doi.org/10.1108/10595421311319834>
- Kang, M., Lee, H.-Y., Son, M., & Stein, M. (2016). The association between human resource investment by audit firms and their audit quality. *Asia-Pacific Journal of Accounting & Economics*, 1–23. <http://doi.org/10.1080/16081625.2016.1214605>
- Krejcie, R. V, & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607–610.
- Kyobe, M. E. (2004). Investigating the strategic utilization of IT resources in the small and medium-sized firms of the eastern free state province. *International Small Business Journal*, 22(4), 131–158. <http://doi.org/10.1177/0266242604041311>
- Mahmood, F., Iqbal, N., & Sahu, S. (2014). The Impact of Human Resource Management Practices on Employee Performance in Banking Industry of Pakistan. *Euro-Asian Journal of Economics and Finance*, 2 (1)(January), 86–99. <http://doi.org/10.1016/j.sbspro.2014.11.178>

- Mayhew, B. W., & Wilkins, M. S. (2003). Audit firm industry specialization as a differentiation strategy: Evidence from fees charged to firms going public. *Auditing: A Journal of Practice & Theory*, 22(2), 33–52. <http://doi.org/10.2308/aud.2003.22.2.33>
- McDermott, G. A., Corredoira, R. A., & Kruse, G. (2009). Public-Private Institutions As Catalysts of Upgrading in Emerging Market Societies. *Academy of Management Journal*, 52(6), 1270. <http://doi.org/10.5465/amj.2009.47084929>
- Meihami, B., & Meihami, H. (2014). Knowledge Management a way to gain a competitive advantage in firms (evidence of manufacturing companies). *International Letters of Social and Humanistic ...*, 3, 80–91. <http://doi.org/10.18052/www.scipress.com/ILSHS.14.80>
- Mincer, J. (1958). Investment in human capital and personal income distribution. *Journal of Political Economy*, 66(4), 281–302.
- Mohamad-nor, M. N. (2015). The Structure of Malaysian Audit Market: From 2008 to 2010, 2003(April).
- Nonaka, Ikujiro, Takeuchi, H., & Umemoto, K. (1996). A theory of organizational knowledge creation. *International Journal of Technology Management*, 11(7–8), 833–845.
- Nyakango, M. (2013). Competitive Strategies Adopted by Audit Firms in Nairobi. *International Journal of Social Sciences and Entrepreneurship*, 2(3), 23–29.
- Penrose, E. (1959). The theory of the firm. NY: John Wiley & Sons.
- Porter, M. E. (2008). *Competitive strategy: Techniques for analyzing industries and competitors*. Simon and Schuster.
- Sandeep Salunke;Jay, W. (2014). Examining the critical interplay of knowledge acquisition and integration. In *Academy of Marketing Science Review* (pp. 1–22).
- Schumpeter, J. (1942). Creative destruction. *Capitalism, Socialism and Democracy*, 825.
- Statista. (2017a). Big Four: Employee Numbers, 2017. Retrieved January 28, 2018, from <https://www.statista.com/statistics/250503/big-four-accounting-finns>
- Statista. (2017b). Big Four: Revenues by Function, 2017. Retrieved January 28, 2018, from <https://www.statista.co.in/statistics/250935/big-four-accounting-fmns>
- Stephen, N. (2017). Perceived Auditor Independence Factors in Uganda, (January 2018).
- Tabachnick, B. G., & Fidell, L. S. (2007). *Multivariate analysis of variance and covariance. Using multivariate statistics* (Vol. 3). Allyn & Bacon, Boston.
- Theron, M., Nicolene Barkhuizen, N., & du Plessis, Y. (2014). Managing the academic talent void: Investigating factors in academic turnover and retention in South Africa. *SA Journal of Industrial Psychology/SA Tydskrif Vir Bedryfsielkunde*, 40(1), 1117, 14.

<http://doi.org/10.4102/sajip.v40i1.1117>

Unger, J. M., Rauch, A., Frese, M., & Rosenbusch, N. (2011). Human capital and entrepreneurial success: A meta-analytical review. *Journal of Business Venturing*, 26(3), 341–358. <http://doi.org/10.1016/j.jbusvent.2009.09.004>

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal*, 5(2), 171–180.