The Influence of Fees on the Quality of Professional Services in South Africa

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Abstract

The abolishment of the tariff of professional fees in the construction industry is a growing international trend since the late 1980s. In recent years, this has become a topical issue among built environment professionals in South Africa following a ruling by the Competition Commission in 2016 which prohibits professional councils from publishing a tariff of fees. The period following the ruling has coincided with a perceived decline in quality of professional services outputs which some have attributed to the lowering of fees resulting from market competition. However, this may not necessarily be true as other factors also influence quality. This research examined the claims through the lens of professional theory which asserts that professionals have a 'standard of care' obligation which is not dependent on fees. The examination of data across 15 different professional services disciplines in a new universities project demonstrates that market competition led to fee offers that were lower in comparison to the tariff of fees published by built environment professional councils. However, the professionals delivered a high standard work, which further challenges the claims that lower fees lead to a decline in quality of professional services outputs.

Introduction

In recent years, there has been growing debate in the South African construction industry over the influence of discounted fees on a perceived decline in the quality of professional services rendered by built environment professionals.

Claims have been made that the quality of professional services and outputs has declined. Such claims have coincided with the period following a ruling by the Competition Commission, in 2016, which, in line with international best practice, declared guideline fees published by the professional Councils (see http://www.cbe.org.za/) to amount to price fixing in contravention of the Competition Act of 1998. However, at the same time, there has been a deterioration in the quality of companies awarded professional service contracts through the application of inappropriate public sector procurement practices which have been conducted by "buyers" who have focused on lowest price adjusted for a preference (Watermeyer and Phillips, 2020).

Much of the ongoing debate by researchers such as Liebenberg and Wilson (2011), Malinda (2017), Moos (2017), Okonkwo and Wium (2018) and Akampurira and Windapo (2018) on the relationship between fees and the decline in quality of professional services has been based on perceptions of industry role players. The perceptions of industry role players were advanced in studies that were not rigorously designed to fully illuminate the complex relationship between fees and quality in the provision of professional consulting services and procurement practices. It is evident that the relationship between professional fees and quality has not been comprehensively investigated in previous studies. However, to adequately define the relationship between fees and quality, a comprehensive understanding of the determinants of professional services quality is required.

Therefore, the overall aim of this research was to conduct a comprehensive study into the basic determinants of professional services quality in the construction industry and ascertain the extent to

which the quality is specifically determined by the fees charged by a professional. This paper is the starting point for the whole study on the complex relationship between fees, professional services quality and procurement practices.

Research aim and specific objectives

The aim of this preliminary investigation was to examine the relationship between professionalism theory and the arguments around the decline in quality of professional services. This study also examines the impact of competitive tendering on the procurement of professional services for the first phase of the development of the Sol Plaatje University and the University of Mpumalanga in South Africa (new universities project).

The specific objectives are to:

1) Examine the relationship between professionalism theory and the perceived decline in professional service quality due to lower fee scales. In other words, to critically examine the argument that lower fees ultimately result in reduced quality of professional services through the lens of professionalism theory.

2) Examine the effect of competitive tendering for professional services on pricing levels compared to the tariff of fees published by the built environment professional councils.

3) Examine evidence from the new universities project to ascertain the extent to which quality of professional services and outputs was affected by the use of competitive tendering, since remuneration of built environment professionals on the project was significantly lower than the recommended tariff of fees proposed by professional councils.

Background to the research problem

Professional 'fees' generally refers to payments made by client to consultants, for services provided under the terms of a professional services agreement (Hughes et al., 2015). Traditionally, built environment professionals in South Africa have used a recommended tariff of fees published by a statutory council, which regulates a profession, as a basis to determine the remuneration for their professional services.

However, legislation aimed at preventing anti-competitive behaviour found such practices, in 2016, to constitute a prohibited restrictive horizontal practice in terms of the Competition Act of 1998 which has the effect of substantially preventing or lessening competition in a market. This determination took into account internationally applied norms as required by the Act (CCSA 2016). This finding is not unexpected as the Communication from the Commission - Report on Competition in Professional Services (2004), for example, made the observation that recommended prices, like fixed prices have a significant negative effect on competition. This report furthermore pointed out that:

- the Finnish Competition Authority instigated in the late 1980s the removal of recommended prices in the legal, architectural and other professions;

- recommended prices were removed for architects in France in the late 1990s; and

- recommended prices were abolished in the early 2000s for architects and construction companies in the United Kingdom.

This demonstrates an internationally relevant topic, where the trend across the world has been to abolish recommended professional fees to promote competition. However, it is noted that despite the pro-competitive mechanisms for procurement of professional services in the European Union (EU), architects and engineers in Germany continued to utilise a tariff of fees (Honorarordnung für Architekten und Ingenieure (HOAI)). On the 4th July 2019, the Court of Justice of the European Union (CJEU) ruled that the minimum and maximum rates in the HOAI were not compatible with EU law despite the Federal Government arguing that that the lower limit on fee scales ensured quality standards and the protection

of consumers. The CJEU rejected the argument that lower fees due to competition will adversely impact quality.

Fees for professional services are benchmarked against the cost of construction across the world. This allows data to be developed for different types of projects and enables curves to be generated based on a statistical analysis of the available historic data giving a range of values. For example, the Fees Bureau in the UK publish upper quartile, medium and lower quartile curves for various categories of construction work, based on the gathering and rigorous analysis of data which are not more than two years old. Such curves provide a guide for estimating fees for a particular category of construction works for consultants and clients alike and enables clients to gauge the appropriateness of the fees. This is global practice.

An illustration of the fee curve used by engineering professionals in South Africa (e.g. civil, structural, mechanical and electrical engineering) is shown in Figure 1. Although the Engineering Council of South Africa (ECSA) fee curve in Figure 1 relates specifically to engineering professionals, a similar approach is used by other built environment professions to price their services, with the exception that the other Councils for the professions publish a single curve and not a range of curves. The two curves illustrated in Figure 1 represent upper and lower limits within which professionals decide a suitable level of professional fee depending on factors which may include complexity and level of effort. Ideally, the professional fee offered should fall within the upper and lower limit range.

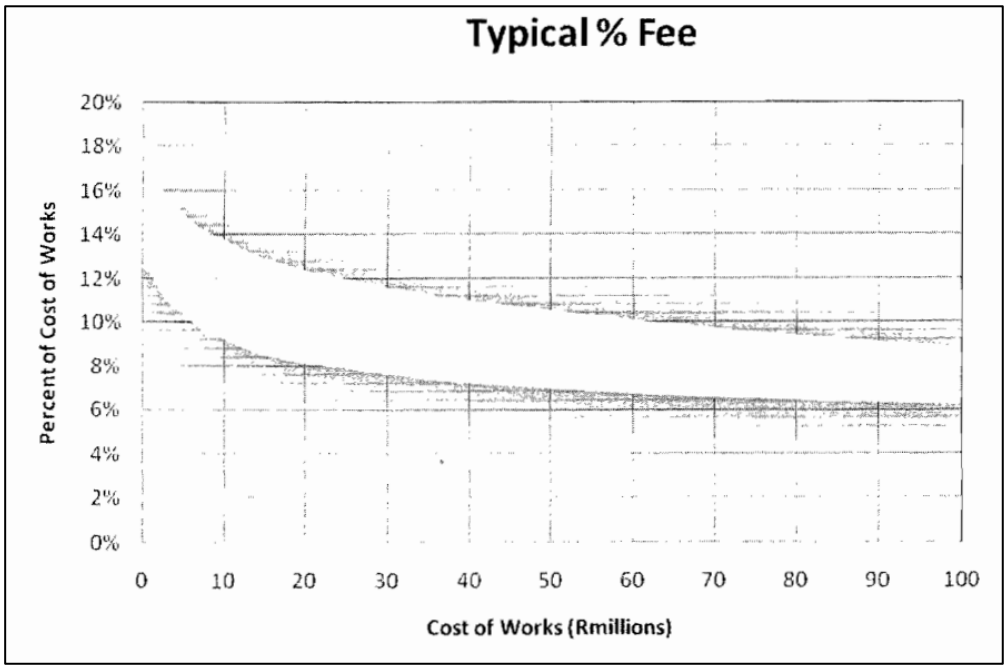

Figure 1: Percentage remuneration for consulting engineering services based on Cost of Works *(Source: ECSA (2011))*

The South African Councils for the Professions have published basic fee percentage (BPF) curves in accordance with their governing legislation for many years. These curves have a similar shape despite their mathematical formulation. The Construction Industry Development Board's Inform Practice Note no 8 of August 2008 (version 2) contains a plot of the average of all the curves at the time of its publication which were published by the various Councils for the Professions on a log scale and a generic best fit curve which approximates the shape of all the curves published by the various Councils. The shape of comparable curves published by ECSA (see Board Notice 201 of 2012), the South African Council for the Architectural Profession (SACAP) (see Board Notice 194 of 2011), and the South African Council for the Quantity Surveying Profession (SACQSP) (see Board Notice163 of 2009 and 2013 Tariff of Professional Fee Schedule) and the CIDB generic curve is shown in Figure 2.

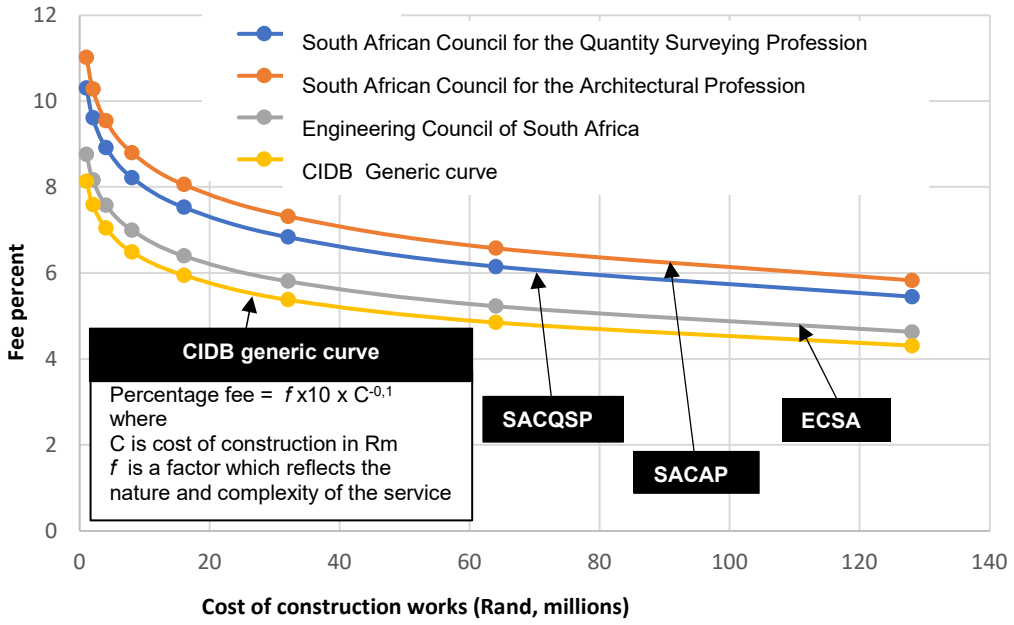

Figure 2: Comparative historic basic fee percentage curves published by the Councils for the Professions from 2011 to 2013

In conducting this research, no rationale/benchmark or data was found for the numerical factors (or adjustment curves in subsequent publications of the ECSA Fee Guideline) used to influence the setting or adjustment of fees or for any of the other curves published by the other built environment councils. Accordingly, the current curves may be viewed as arbitrary in the absence of data or scientific evidence used to derive the curve. It is fair to question the basis and continued adoption of such an approach for the determination of fees for professional services, particularly from the perspective of clients who want value for money and a systematic breakdown of the build-up of prices for professional services.

Members of professional industry groups have asserted in several studies (Liebenberg and Wilson, 2011, Malinda, 2017, Moos, 2017, Okonkwo and Wium, 2018 and Akampurira and Windapo, 2018) that they were observing an ongoing decline in the quality of professional services. Some of them articulated their belief and conclusion that, as the decline in quality of professional services coincided with the period following the ruling by the Competition Commission, the decline is a consequence of reduced/discounted fees. However, Watermeyer and Phillips (2020), point to the poor outcomes of a "buyer" approach and mindset to purchasing transactions which are employed by supply chain management officials within the public sector to the procurement of consulting services. Public procurement frequently takes place without any built environment professional inputs and is commonly based on lowest price adjusted for a preference for those that score above a compliance threshold. This practice has resulted in project delays and inappropriately skilled or inappropriately qualified professional services providers being appointed which has resulted in major cost overruns on projects, inefficient infrastructure being delivered, an alarming increase in the failures of structural systems in buildings, the construction of inefficient facilities, the rise of costly disputes and the delivery of substandard poor quality infrastructure which requires excessive maintenance (Watermeyer and Phillips, 2020). Five questionnaire-based studies (Liebenberg and Wilson, 2011, Malinda, 2017, Moos,

2017, Okonkwo and Wium, 2018 and Akampurira and Windapo, 2018), based on limited samples and a narrow focus on the South African consulting engineering industry, were published between 2011 and 2018. These five studies point to a clear relationship between low professional fees and poor quality. The authors essentially argue that the abolishment of the tariff of fees by the Competition Commission or discounted professional fees, arising from the acceleration of market forces, is the primary cause of

the recent phenomenon of declining quality of professional services. However, the aforementioned papers were silent on the procurement methodology used to solicit tenders and to award contracts.

Internationally, studies by Andi and Minato (2003) and Tilley and McFallan (2000) support the claims that built environment professionals perceive the level of fees to be low and negatively influencing the quality of professional services. However, three studies conducted in the United Kingdom (UK) (Hoxley, 2000), Hong Kong (Phua, 2005) and Sweden (Sporrong, 2011) respectively, dispute the viewpoint that low professional fees necessarily result in poor service quality. Furthermore, there is consensus that the relationship between fees and quality is complex and it would be naïve to simply isolate the fees variable (Andi and Minato, 2003 and Love et al. 2006). Multiple factors (e.g. competence, experience, time, resources, workload, procurement arrangements, etc.) determine quality of professional services and outputs, and research is needed to identify and evaluate the significant factors. This will then inform a comprehensive empirical study in the built environment context about the key determinants of professional service quality.

Considering evidence from the studies by Hoxley (2000), Phua (2005) and Sporrong (2011), it is difficult to generally conclude from literature that there is a direct relationship between fees and quality of professional services. This is particularly notable if factors such as professionalism and the confirmation of competence through professional registration are considered. Professionalism and competency amongst built environment professionals are articulated in the codes of conduct published by the different built environment professional councils. For example, he ECSA Code of Conduct for Registered Persons states that registered persons should not undertake work if they cannot execute it in accordance with the norms of the profession (ECSA, 2017). Similarly, on the issue of competence, the Quantity Surveying Code of Professional Conduct states that registered persons should only undertake work that their training and experience allows them to perform (SACQSP, 2013).

Examination of claims on the relationship between fees and quality through the lens of professionalism theory

The body of knowledge and norms of professional practice traditionally resides in the domain of the professional institutions. It is worthwhile considering the fundamental concept of 'professionalism' as explained in a paper by Hughes and Hughes, 2013). The sociological literature on professionalism (see, for example, Elliot 1972 and Evetts 2003) identifies four basic defining characteristics of professionalism, that is, a distinct body of knowledge, barriers to entry, serving the public and mutual recognition (see Hughes et al., 2015).

This theoretical context implies that a true professional places service and interest of the public ahead of personal interests (Hughes et al., 2015: 7). However, it is acknowledged that for this to work well in practice, a professional needs to have a certain level of financial independence. This creates a need for professionals to develop a better understanding of how to build up prices for their services and offer their services above cost (see explained in a study by Laryea and Hughes, 2011 on the relationship between cost, price and value).

The law literature indicates that professionals have a 'duty of care' to ensure their clients or another party does not suffer unreasonable harm or loss (see Keating on Construction Contracts, 2018). Another related concept is 'Standard of care' which is the degree of prudence and caution required of an individual who is under a duty of care. Thus, professional services must be performed with reasonable care, technical skill and ability, and diligence, expected of a person of ordinary competence. The scale of fees is not a pre-requisite for this obligation.

Therefore, when examined through the theoretical lenses of professionalism and standard of care, there is no theoretical basis for a causal relationship between fees and quality of professional service. Therefore, the notion that a professional may offer a standard of service lower than what can be professionally expected because of the scale of fees associated with the job, is without foundation. At the same time, this raises questions around professional registration standards, professional skill and competence, and procurement practices for appointing competent professionals.

Watermeyer and Smith (2014) pointed out that professional registration takes place at an entry point to a profession against standards expected in independent employment or practice against a broadly

defined body of knowledge. Reliance is thereafter placed on the integrity of the registered professional to not take on work which he or she is not competent to perform.

Matousek and Schneider (1976) analyzed 800 cases of structural failure and found that where engineers were at fault, this was due to 'Insufficient knowledge' and seven other factors which did not include fees. Watermeyer and Smith (2014) caution that no matter how ethical a registered professional is, he or she is not capable of self-assessing what they do not know. Alternatively, the wrong problem may be solved. This places an onus on the procurement process to match a registered professional's experience to the required service in the evaluation process.

Problem statement and gaps in the research literature

Five South African studies argue that the decline in professional service quality is due to the use of market competition. Although there is some support for these findings in the international literature (Tilley and McFallan (2000) and Andi and Minato (2003)), there is also consensus that the relationship between fees and quality is complex and it is naive to simply isolate the fees variable (Andi and Minato (2003) and Love et al. (2006)).

Furthermore, the view that low fees causes poor quality is not supported by Hoxley (2000) who conducted a study after the abolishment of fee scales in the UK. Clients in this study, generally did not experience a decline in quality of professional services following the abolishment of fee scales in favour of competitive bidding practices. Various commissions (including the Competition Commission and CJEU) supporting competitive mechanisms for procurement of professional services have also rejected the notion that lower fees will cause a decline in quality. Therefore, no general conclusion on the relationship between fees and quality can be derived from the research literature.

While the findings of the five South African studies may hold some validity, the claim that lower professional fees is the primary cause of declining professional service quality should be critically interrogated based on the following points:

- First, the justification and rationale behind the published tariff of fees that is used as a benchmark for "discounted" professional fees was not critically examined by the authors as they simply accepted the tariff of fees as the 'correct' level of professional fees.

- Second, no comprehensive investigation has been conducted to determine the factors influencing why professional service quality has declined in the consulting engineering industry. The authors have simply accepted the position that quality has declined due to discounted professional fees.

- Third, the relationship between professionalism and quality needs to be examined as part of the ongoing debate on the influence of fees on professional service quality. This includes the role of professional registration standards/practices and the influence of procurement methodology used to solicit tenders and to award contracts.

- Fourth, the arguments against the use of market competition for procurement of professional services may not be tenable, given the growing trend around the world and CJEU judgment of 2019.

Much of the ongoing debate amongst members of professional industry groups on the relationship between fees and decline in quality of professional services has been based on the perceptions of industry players and a few studies that do not fully illuminate the complex relationship between fees and quality in the provision of professional consulting services. Research is needed to develop a better understanding of the relative significance of factors other than fees, and how, and in what circumstances, these factors influence quality of professional services outputs.

Research methodology and scope

Given the aim and specific objectives of this paper, the following methodological imperatives were necessary to answer the three specific objectives to a good degree of validity.

Firstly, a definition of “professionalism” and its basic defining characteristics from the international research literature was required to use it as a framework to examine key points from the arguments put forward by members of professional industry groups through the lens of professionalism theory (see the Section on “Examination of claims on the relationship between fees and quality through the lens of professionalism theory”).

Secondly, data on a major project where competitive procurement procedure was used to procure professional services, was collected and examined to analyse the difference(s) between competitive prices obtained from built environment professionals for their services and the scale of fees published by professional councils. This would be used as a proxy for assessing the effect of competitive tendering on pricing levels of professional services consultants compared to the tariff of fees published by the built environment professional councils.

Thirdly, the project outcomes were assessed as a proxy to obtain preliminary insights on the effects of comparatively lower fees on quality of professional services and project outcomes. That is, data from the identified major project will be examined to ascertain the extent to which quality of professional services and outputs was affected by the use of competitive tendering since remuneration of built environment professionals on the project was lower compared to the recommended tariff of fees (see Tables 2 and 3).

The selection of the first phase of the new universities project as a focal point of the data collection and empirical evidence examined in this preliminary study was made for several reasons. Firstly, it was a major public project in which a wide range of professional services consultants were appointed. The procurement of professional services across 15 different professional services areas (see Table 2) represented a broad spectrum of the professional services mix to enable a more comprehensive study while project context variables such as type/identity of client and quality of documents are maintained constant as it is prepared by the same team. Secondly, public sector procurement rules and processes were applied which enables reasonable comparisons to be made with other public sector contexts. Thirdly, a competitive tendering approach was used for the procurement of professional services providers which is an appropriate case for the current study in terms of assessing the effects of ‘market competition’ on procurement outcomes. Fourthly, the data was publicly available through a comprehensive close out report published by the New Universities Project Management Team (NUPMT) (2018). This comprehensive data enabled a detailed establishment of the relationship or links between procurement and outcomes to be established from inception to completion of the project. The findings from this preliminary study will inform the design of a comprehensive study on the basic determinants of professional services quality.

Analysis of appointment of professional services consultants through a competitive tendering process

Tenders were invited in national and local newspapers during 2014 to secure the services of professional teams required to design buildings and support construction activities using an open procedure (see ISO 10845-1) with all the preference points allocated to broad-based black economic empowerment (B-BBEE). Stringent eligibility criteria were applied to ensure that those tenderers that were evaluated would be capable of providing the required services. Such criteria were aimed at ensuring that the successful tenderers would provide independent advice, were not unincorporated joint ventures, were registered companies, had in their full time employ a suitably qualified person to either provide the service or direct the services, were able to produce annual financial statements, had contactable references for the provision of similar services, had in place a minimum level of professional indemnity cover and had a turnover in excess of a threshold.

Tenderers were evaluated in terms of financial offer, preference and quality i.e. on a balance between comparative offer adjusted for a preference and quality as provided for in ISO 10845-3 (Watermeyer et al, 2018). Two standard quality criteria were evaluated in all tenders, namely the experience of the principal consultant (key person) in terms of professional profile and experience in relation to the required service and the value added by the tenderer (i.e. the answer to the question as to why the employer will derive better value for money by contracting with the tenderer rather than with any other tenderer). An approach paper was also evaluated for some of the services. Contracts were based

on the NEC3 PSC (Option G: Term contact) and entered into with the successful tenderers for a three-year term.

Tenderers had to tender in all cases, their maximum hourly rate and the cents per R100 or part thereof of the total cost of employment which enables an hourly rate to be calculated (CENTS). Tenderers were also required to tender their adjustment factor (FCON) to enable a fee percentage to be applied to the cost of construction to be derived from the following formula:

Fee percentage = BPF x FLE x FPO x FCON

where:

BPF (basic percentage fee) is derived from a nominated historic guideline fee published by a council;
FLE is an adjustment factor that reflects the level of effort required in providing the services which was negotiated post the award of the contract and which was set at 1,0 for tender purposes;

FPO is an adjustment factor to account for differences between the consultant's overheads and profit structure and the standardised value upon which the BFP is assumed to be based i.e. CENTS / 16; and

FCON is an adjustment factor tendered by the consultant.

Procurement outcomes for architectural services

A two-stage design competition was developed to extract innovative designs, ideas and practices and to identify talented designers to participate in the development of the new universities. The design competition was linked to the qualified procurement procedure to enable framework agreements to be entered into with up to 5 architectural practices. Those participants who were admitted to the second stage of the competition following their selection by a jury were invited to associate with architectural practices and to submit tender offers. Table 1 provides a summary of the procurement outcomes.

Table 1: Procurement outcomes for architectural services (Watermeyer, *et al*, 2018)

	Sol Plaatje University	University of Mpumalanga
Maximum hourly rate excluding VAT but including travel costs		
Maximum	R 1 750	R 2 300
Minimum	R 1 050	R 1 100
Average	R 1 410	R 1 531
Cents per hour / R100 of total annual cost of employment excluding VAT but including travel costs (F_{PO})		
Maximum	19 cents	17,5 cents
Minimum	13 cents	12 cents
Average	15,6 cents	14,9 cents
Effective adjustment factor to SACAP December 2011 fee scale*		
Maximum	1.13	1,14
Minimum	0,7	0,68
Average	0,93	0,92
Socio-economic		
Average B-BBEE score (max = 10)	5.4	4.8

* The effective adjustment factor = tendered F_{CON} x tendered cents per hour per R100 of total cost of employment / 16

Procurement outcomes for other professional team services

Statistics relating to the tenders advertised between March and August 2014 are provided in Table 2. Several tenderers were not scored either due to their failure to satisfy the eligibility criteria, score above the quality threshold score of 60 out of 100 or to tender the specified financial parameters.

Table 2: Tenders received for professional services (March to August 2014) (Watermeyer, *et al,* 2018)

Service	Tenders			Averages of scored tenderers						Dates (Closing of Tender/ Tender committee)	No of awards
	Received	Responsive	Scored	Max hourly (Rand)	Salaried staff (CENTS)	Effective adjustment factor*	B-BBEE (score out of 10)	Quality score	**Highest quality**		
Sol Plaatje University											
Electrical engineering	17	12	9	1183	13.2	0.89	7.8	78.0	88.3	11-03 /20-03	2
Civil engineering	19	14	14	1134	13.4	0,88	6.9	75.0	84.3	11-03/ 20-03	1
Fire engineering	2	2	2	1050	13.8	na	9.0	72.2	78.3	11-03 /20-03	1
Mechanical engineering	13	8	7	1265	14.4	0,91	8.7	71.2	80.2	11-03 /20-03	2
Structural engineering	18	16	16	1165	13.9	0.88	7.8	77.3	90	11-03 /20-03	2
Wet services	5	3	1	1050	12.5	0,7	9.0	77	77	27-03 /17-04	1
Project management	13	6	4	1663	12.3	na	7.8	75.6	92.5	27-03 /27-06	2
Cost consulting	14	9	7	1079	14.9	0.82	7.6	73.8	89.5	27-03 /17-04	2
Geotechnical	4	3	2	2284	16.5	na	6,5	72.9	83.3	08-04 /15-05	1
Traffic engineering.	8	3	3	1183	13,6	na	8.3	79.7	86.0	08-04 /15-05	1
Acoustic engineering	2	1	1	1940	18.0	na	8	91.7	91.7	08-04 /15-05	1
Landscape architectural	11	5	3	946	10,8	0,68	5,5	79.8	88.5	08-04 /15-05	1
Strategic environmental	5	2	2	1225	15,8	na	7.0	92.5	100	28-05 /27-06	1
Health and safety	9	2	2	925	14.5	na	7.0	71.7	72,5	20-08 /08-10	1
Environmental compliance	11	3	3	823	12.3	na	7.7	84.6	88.1	20-08 /08-10	1
University of Mpumalanga											
Electrical engineering	16	13	10	1223	13.5	0.93	7.3	77.8	89.2	18-03 /17-03	2
Civil engineering	16	13	12	1098	13.6	0.74	7.4	75.1	91.8	18-04 /17-04	2
Mechanical engineering	12	9	8	1287	14.4	0.94	7.8	72.9	84.8	18-03 /17-04	2
Structural engineering	20	18	18	1200	14.1	1.1	7.6	72.6	88.3	18-03 /17-04	2
Wet services	4	2	1	900	16.5	3.0	0	68.5	68.5	02-04 /17-04	1
Project management	15	9	7	1562	13.6	na	7.2	71.9	92.5	02-04 /27-06	1
Cost consulting	15	10	6	1032	13.8	0.89	8.5	78.4	88.5	02-04 /17-04	2
Geotechnical	8	5	4	1014	14.0	na	4.5	81.7	86.7	08-04 /12-06	1
Traffic engineering	6	4	3	867	13.3	na	7.0	79.5	81.7	08-04 /12-06	1
Acoustic engineering	2	1	1	1940	18.0	na	8	91.7	91.7	08-04 /12-06	1
Landscape architectural	10	3	3	1033	11.3	0,77	9	83.1	88.8	08-04 /12-06	1
Strategic environmental	4	2	2	1225	15,8	na	7.0	93.7	99.4	28-05/ 27-06	1
Health and safety	14	1	1	1100	15.0	na	9	72.0	72.0	20-08 /08-10	1
Environmental compliance	14	5	5	873	13.5	na	8.0	80.3	88	20-08 / 8-10	1

***** The effective adjustment factor = Tendered F_{CON} x tendered CENTS / 16

Analysis of the influence of competitive tendering on pricing levels of professional services consultants

One of the research objectives was to examine the effect of competitive tendering of fees for professional services on pricing levels of professional consultants in comparison to the tariff of fees published by built environment professional councils.

Table 1 provided a summary of the procurement outcomes for architectural services. By way of comparison, the South African Council for the Architectural Profession's recommended time based rates (effective from 1 January 2012), exclusive of VAT, are R 2 400 per hour for specialists and R 1 875 per hour for a partner or equity holder with more than 10 years of experience and 16,5 to 22,5 CENTS, depending upon the level of responsibility they carry.

The average tendered parameters of the successful tenderers in the disciplines other than architecture is indicated in Table 3. The fees recommended by the South African Council for the Quantity Surveying Profession (SACQSP – effective 1 January 2013), Engineering Council of South Africa (ECSA –

effective 1 January 2014), South African Council for Landscape Architects (SACLAP – effective 1 January 2013) and the South African Council for the Project and Construction Management Professions (SACPCMP – effective 1 January 2012) are shown in brackets in Table 3.

Table 3: Average parameters tendered by the successful tenderers (Watermeyer, *et al,* 2018)

Average tendered parameters	Cost consulting	Engineering (electrical, mechanical, civil and structural)	Landscape architecture	Project managers
Maximum hourly rate excluding VAT but including travel costs	R 933 (SACQSP = R 1669 if public sector 2014 director salary applied)	R 921 (ECSA = R1958 if 2014 public sector director salary applied)	R 895 (SACLAP = R 1140 – 2013 rate)	R 1291 (SACPCMP = R 1469 – R 1780 if 2014 public sector director salary applied)
Cents per hour / R100 of total annual cost of employment excluding VAT but including travel costs	12.3 (SACQSP = 16.5 – 17.5)	12.3 (ECSA = 16,5 to 17.5)	11 (SACLAP = 12.5 to 17,5)	11.8 (SACPCMP = 14.7 – 16.5)
Effective adjustment to guideline fee scales published by a statutory body	0.72 x basic SAQSP 2013 fee	0.73 x basic average ECSA 2014 fee	0.69 x basic SACLAP 2013 fee	na
Average preference score out of 10	8.8	8.8	8.0	6.5

All the tendered financial parameters are significantly lower than that recommended by the built environment professional councils, before reductions are made for travelling expenses which are included in the tendered fees but excluded in the published tariffs of fees.

Table 4 sets out the tendered parameters for civil engineering services at one of the universities. The effective adjustment to the basic percentage fee (BFP) can be calculated by multiplying FCON with the calculated FPO (CENTS / 16). These two tendered parameters enable tenders to make adjustments to the standard guideline fee percentages (BFP) to reflect their overhead structure and their perceived risks, efficiencies, travelling costs etc.

Table 4 provides some useful insights into the pricing structures that were tendered and sheds some light on the reasons for differences in pricing. Differences in the tendered profit and overheads produced the greatest reduction in the guideline fees. It should be noted in this regard that tendered CENTS of 16 cents results in a staff cost multiplier of 2,82 on the assumption that 1760 hours are billable in a year while an tendered CENTS of 11 cents results in a staff multiplier of 1,94.

Discussion of findings

The first objective was to examine the relationship between professionalism theory and the perceived decline in professional service quality due to lower fee scales. The literature in Hughes and Hughes (2013) and other sources demonstrates that the professional obligation to provide a quality service that meets the minimum standard expected of a professional is not linked with the scale of fees. Therefore, any arguments justifying the relationship between fees and quality of professional services lacks theoretical foundation when examined through the lens of professionalism theory.

The second objective was to examine the effect of competitive tendering on pricing levels of professionals compared to the tariff of fees published by the built environment professional councils. The results for this are presented in Tables 3 and 4. The consistently lower rates indicated in Tables 3 and 4 are not unexpected as Consulting Engineers South Africa's Biannual Economic and Capacity Survey July to December 2013 reports that "the average discount being offered to clients increased marginally from 24,0 percent to 24,5 percent in the current survey. Discounting has gradually increased in line with the tougher tendering conditions experienced by firms. Discounted rates are

benchmarked against the ECSA Guideline fee scales." (Watermeyer, et al, 2018). However, Table 4 suggests that the primary differentiator is profit and overheads rather than "discounting".

Table 4: Financial parameters tendered for civil engineering services at one of the universities during 2014

Tender no	Maximum hourly rate	CENTS	F_{CON}	Effective adjustment to BPF	Percentage adjustment to guideline fees (BFP)	Comparative offer based on the Tender Assessment Schedule	Analysis of comparative offers
A	1200	16	1.0	1	0	R 1 334 000.00	
B	900	12.5	1.0	0.78	-22	R 1 023 437.50	
C	850	12	1.0	0,75	-25	R 975 500.00	
D	1200	12	1.0	0.75	-25	R 1 150 500.00	Highest R 1 334 000 Lowest R 867 007.50
E	1050	12.8	0.90	0.72	-28	R 1 079 080.00	
F	1200	15.5	1.0	0.97	-3	R 1 311 062.50	
G	1100	14	1.1	0.96	-4	R 1 228 475.00	Mean R 1 152 494.01
H	1050	15	0.95	0.89	-11	R 1 193 718.75	
I	1920	17.5	0.88	0.96	-4	R 1 708 475.00	
J	850	11	0.79	0.54	-46	R 867 007.50	
K	1050	12.5	0.90	0.70	-30	R 1 066 093.75	Standard deviation ± R 230 528.19 (or ± 20%)
L	800	12.5	0.75	0.59	41	R 892 578.13	
Average	1098	13.6	0,94	0.74	-26	R 1 152 494.01	

The arguments made in some studies (Tilley and McFallan, 2000, Andi and Minato, 2003, Liebenberg and Wilson, 2011, Malinda, 2017, Moos, 2017, Okonkwo and Wium, 2018 and Akampurira and Windapo, 2018) could be based on low fees caused by market competition driven contract awards to the lowest tender offer received, a procurement approach which may well impact negatively on quality. This approach to procurement was not pursued in the case study where the contract award was based on a balance between fees, quality and preference following a tactical approach to establish the capabilities of tenderers. It could be argued that adequate fees were paid to the consultants in the case study despite the fees being lower than the published guideline tariffs. However, it can equally be argued that higher fees provide no guarantee of quality as other factors influence quality besides fees (for example, experience, competence, time and procurement approach) (see Hoxley, 2000, Phua, 2005, Sporrong, 2011, and Watermeyer and Phillips, 2020). Therefore, no general, direct relationship between fees and quality can be concluded and comprehensive research is needed into the basic determinants of the quality of professional services.

The third objective was to ascertain the extent to which the quality of professional services outputs was influenced by the use of competitive tendering, since remuneration of built environment professionals on the project was lower than the recommended tariff of fees proposed by professional councils (see Tables 1 and 3). The project outcomes in terms of time, cost and quality can be summarised as follows (see also Laryea and Watermeyer, 2020 and NUPMT, 2018):

- **Time:** The new buildings for the third intake of students during 2016 were not completed within the optimistic initial time frames which in some instances straddled two industry shutdown periods. The actual time for completion exceeded the planned time for completion between 10 and 48%, however, all academic facilities were opened at the start of the 2016 academic year.

- **Cost:** The 52 000 m^2 of buildings were delivered slightly below the Department of Higher Education and Training's (DHET) cost norms for university facilities while the individual work packages were delivered on average within 2% of the agreed price at the time when the contractor commenced with construction at both universities. The reduced cost was achieved notwithstanding extensions of time being granted and the designs

being incomplete when the works commenced due to the fast track nature of the project.

- **Quality:** Quality and fit for purpose buildings were delivered in accordance with the specifications. The professional teams delivered a high standard of services with the buildings receiving several industry awards in recognition of attention paid to detail in their delivery:

    - Sol Plaatje University's Library and Resource Centre, on Central Campus, won an international architecture award at the 14th edition of the 2019 International Architecture Awards.
    - School of Education's Teaching Practice Building won the South African Institute of Architects' Regional Award for Architecture 2019
    - The Moroka Halls of Residence Building located on the Sol Plaatje University Campus in Kimberly was shortlisted for the 2019 International Urban Project Award
    - World Architecture Festival 2017 Highly Commended Award – Best Use of Colour, Sol Plaatje University, 2017
    - World Architecture Festival 2017 finalist in two categories: Higher Education and Science and Best Use of Colour, Sol Plaatje University
    - Finalist in the 2016 Southern African Institute of Steel Construction (Commercial Architectural Category) – wind driven louvres and bespoke multi-coloured vertical louvres
    - The Sol Plaatje University Library C004 was the overall winner in the 'Buildings Greater than Three Storeys' category, Architectural Concrete in the Fulton Awards 2017.

The time and cost outcomes and the quality awards reflect quality despite the fees being significantly lower than the recommended scale of fees published by professional Councils. However, it should be noted that the project in this context was led by an experienced client team who functioned effectively as leader of the delivery process (see Laryea and Watermeyer, 2020).

Conclusions

The aim of this paper was to examine the relationship between fees and professional services quality through the lens of professionalism theory, and to examine the impact of a competitive tendering approach in the new universities project on the quality of professional services outputs. Two key conclusions are presented in relation to the research aim:

First, the examination of the relationship between professionalism and quality through the lens of professionalism theory raises some interesting questions around the barriers to entry, professional competence, professional conduct, and why a professional would accept a job and then produce a lesser quality output due to lower fees. The literature indicates that a true and competent professional who accepts a job would produce outputs that at least meets the minimum quality of service required of a professional. Therefore, the contention that the decline in professional service quality is primarily caused by lower fees does not hold. Professional councils ensure appropriate barriers to entry based on competence. Professionals are also aware of the minimum standard of care required when providing a service.

Second, the evidence in Tables 2, 3 and 4 demonstrates that the use of market competition led to fee offers that were lower in comparison to the tariff of fees published by built environment professional councils. Market competition has long been established as a mechanism that leads to greater consideration of efficiency factors by suppliers. The need here is for professional consultants to develop their ability to price professional services competitively and for clients to structure an appropriate procurement environment to solicit competitive tender offers from those that have the necessary experience and competencies to perform the required service. Although the fees offered through a competitive tendering process were lower than the recommended tariff of fees, a high quality of services were rendered by the various members of the professional team which resulted in the buildings winning various local and international industry recognition and awards. The evidence in this study does

not support the viewpoint that competitively tendered fees, which are likely be lower than the published tariff of fees, necessarily leads to a decline in quality of service deliverables.

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