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FACTORS AFFECTING EFFECTIVE MANAGEMENT OF LIMITED RESOURCES IN SOUTH AFRICAN COMPREHENSIVE UNIVERSITIES

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ABSTRACT

The recent #FeesMustFall campaign coupled with the declining funding of universities calls for effective management of limited resources. Since procurement is the largest expense accrual function in any organisation, these institutions have more obligation of being responsive to the management of limited resources. The purpose of this article is to determine the factors affecting the effective management of the limited resources in South African comprehensive universities. A qualitative approach using multiple cases was adopted. Face-to-face interviews were conducted using open-ended questions. The findings revealed that the effective management of limited resources in the South African comprehensive universities is affected by the policies, non-compliance, thresholds, supplier rotation and centralisation. Consequently, these institutions do not contribute sufficiently to the university's overall objectives for competitive advantage and sustainability. It is recommended that South African comprehensive universities streamline operations, remove internal barriers, impose strict compliance measures and communicate the vision across the university.

Keywords: South African comprehensive universities, limited resources, procurement best practices.

JEL Classification: M10, I23, I28

1. INTRODUCTION

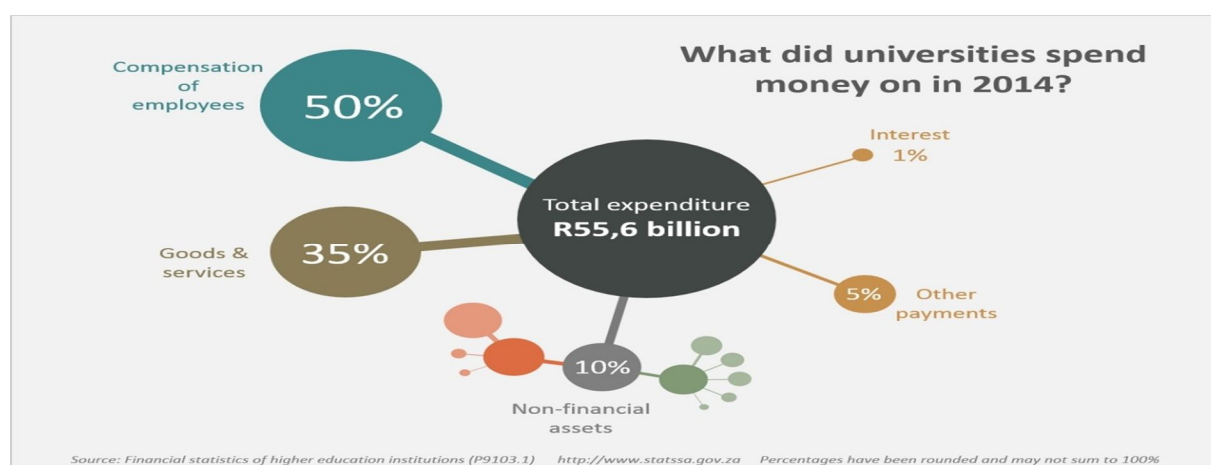
Universities in South Africa (SA) face a predicament of declining public funding, increasing inflation as well as the #FeesMustFall campaign which left South African universities with a shortfall of R2.33 billion (Writer, 2015; Mthombeni, 2016). Moreover, the operating costs of universities have escalated; raising the cost of higher education by 8% - 12% per annum (The Mercury, 2013). The role of procurement therefore, becomes increasingly important as these institutions have to do more with constrained resources. The situation forces these institutions to look for value-creation and cost-saving opportunities much more than before in order to gain a competitive advantage (Bloch, 2011:5). In order to maximise the limited resources, Rudzki and Trent (2011:7) highly recommend the adoption of procurement best practices (PBPs) as one of the dimension for success. According to Gilbert (2008:1055), a best practice is a technique or methodology that through experience and research has proven to reliably lead to a desired result. However, developing and sustaining procurement best practices is not an easy task. This is because the adoption of these practices is time consuming, entails breaking down barriers in internal resistance, demands a new approach to suppliers, demands considerable investment in good leadership, training, performance measurement and technology (Booth, 2010:70).

In addition, the value or the strategic importance of the procurement function has not been realised by many organisations (Cousins, Lamming, Lawson & Squire, 2008:8). Also, the implementations of PBPs require senior management commitment, formulation of organisational structure that permeates the implementation of PBPs, transformational leadership, as well as adequately skilled, experienced and qualified staff. Moreover, the procurement function requires streamlined processes and the employment of PBPs in order to efficiently manage limited resources (Dlamini, 2016). Streamlining of procurement processes and implementing PBPs involve knowing exactly which best practices should be employed. Furthermore, it requires developing measurable performance standards in order to identify possible failures and develop corrective measures

(Ngatara & Ayuma, 2016:234). Yet, most of these elements are lacking in most universities (Dlamini, 2016). Thus, many institutions fail to save costs, minimise waste and impact the bottom-line needed for long term sustainability.

Consequently, universities expenditure in South Africa increased to R55.6 billion during the 2014 financial year, which is estimated at a 12.1% increase per annum (StatsSA, 2015). Most of the expenditure (i.e. 50% or R27.5 billion) is consumed by compensation of employees, followed by the procurement of goods and services which accounts for R19.3 billion (35%), procurement of non-financial assets which tallies to R5.5 billion (10%) and other payments which equates to R2951 billion(5%). Figure 1 below illustrates the universities' expenditure in South Africa in 2014.

Figure 1: Breakdown of Universities Spending 2014



Source: StatsSA, 2015

Universities, plays a vital role in producing knowledge, generating socially committed graduates, and providing various services for enabling this country to pursue social equity, justice and higher standards of living for all, and contributing to the revitalisation of the African continent. Therefore, universities in South Africa are at centre of the government agenda as stated in the Higher Education Act 101 of 1997. But, they are expected to do more with fewer resources as they are non-profit-making institutions and dependent mostly on government subsidies for sustainability. Hence, these institutions comply with most public procurement policies and Acts. However, adherence to procurement procedures and fairness has been a challenge in the public sector as well as in comprehensive universities as part of public entities (Green, 2014). Comprehensive universities (CUs) are unique institutions within the higher education domain with regard to the broad range of knowledge offerings that they impart, from career-focused to professional, from specialist to general academic along a horizontal axis (Boulton & Lucas, 2011:2512). In addition, financial crises brought about by the infringement of policies have been observed as a challenge that has surfaced in the South African universities procurement system. This has led to five of the 23 public universities being placed under administration between 2011 and 2012 (Flanagan, 2012).

Hence, this article seeks to determine the factors affecting the effective management of limited resources in South African comprehensive universities. The layout of this this article is as follows: the next section starts by expounding literature on the importance of procurement within an organisation, introduces procurement best practices and present a synopsis of South African comprehensive universities' procurement policies and practices. Then, data and methodology is presented, followed by findings and discussion. The article concludes by providing recommendations and further research on effective management of the limited university resources.

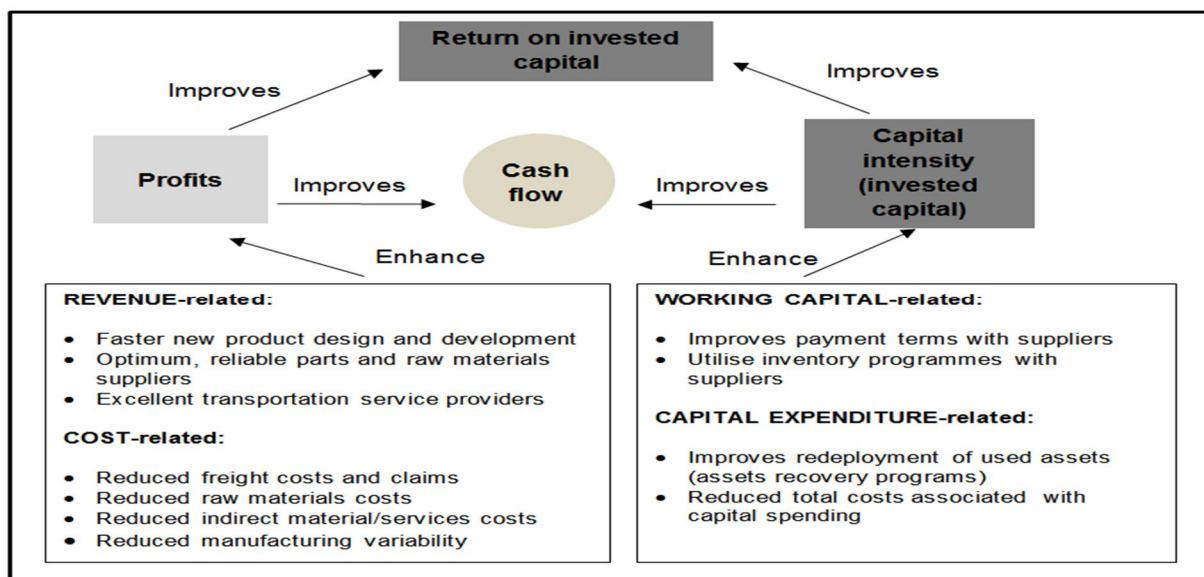
2. LITERATURE REVIEW

Procurement accounts for most of an organisation’s expenditure; therefore, its operation affects the bottom line of the entire organisation (Fourie, 2011:15; Burt, Petcavage & Pinkerton, 2012; Bozarth & Handfield, 2013:210). The procurement function plays a crucial role in assisting organisations in their endeavours to drive cost reduction programmes. The programmes include measures such as improving material acquisition and delivery, reducing cycle-times, enhancing the process of improving the bottom line and bringing more value to the customers at a lower rate when compared to their competitors (Turner, 2011:89). According to Hugo and Badenhorst-Weiss (2011:7), the efficiency of the procurement function may impact three key organisational areas, namely:

- The profit leverage effect: this reflects that a small percentage of savings in the purchase price may cause a relatively large percentage increase in the organisation’s profit.
- The turnover/total cost balance: the procurement function has a major impact on the net income of the firm by balancing the income from turnover (sales) with the cost of inputs that are required to generate turnover.
- The return on investment (ROI): the most efficient procurement processes have the potential to lower costs of sales, which means that the gross income, and accordingly, the total income of the organisation may increase.

The areas mentioned above shows the value and impact of the procurement function and how it can reduce supply risks and volatility in revenues and earnings. Figure 2 below, illustrates how these elements combine to enhance the organisation’s performance and it reflects how efficient procurement enhances profits using revenue. It also displays cost-related measures to improve return on invested capital (ROIC) and cash flow for the organisation. Also, the working capital and capital expenditure can enhance invested capital which, in turn, also improves cash flow and ROIC. Therefore, it is important that the procurement function manages the acquisition of limited resources effectively and efficiently in order to make a meaningful contribution to other functions in the organisation, such as production or operations, marketing human resources, public relations and finance. These functions rely on procurement’s timeous supply of good quality materials and services to operate efficiently and effectively (Hugo and Badenhorst-Weiss, 2011:11). The efficiency and effectiveness in the procurement function may be achieved through the introduction of PBPs.

Figure 2: Performance Improvement Framework



Source: Rudzki and Trent (2011:6)

2.1 Review of Procurement Best Practices

Procurement best practices (PBPs) are described as a supply management philosophy, which encompasses a set of well established, common practices employed by leading edge organisations when conducting their procurement. The aim is to consistently and continuously improve spend and supplier base optimisation to increase return on investment and the bottom-line, to sustain and grow in the long term (Dlamini, 2016). PBPs are generally adopted by institutions that have evolved from reactive purchasing to supply management level. A number of studies have been conducted on procurement best practices, among others Cox (1996), Nelson, Moody and Stegner (2005), Bernardes and Zsidisin (2008), and Burt, Petcavage and Pinkerton (2010). However, not all modern organisations have fully adopted PBPs in order to reap the benefits that are brought by its application (Rudzki, Smock, Katzorke & Steward, 2006:4). Most organisations underestimate the positive impact that the application of PBPs can have on the bottom line of an organisation (Blanchard, 2010:56). Some organisations realise the potential that the procurement function has, but sometimes do not conserve the practice and eventually remain stuck on the elementary stages of development (Nelson, *et al.*, 2005: 12). The few that constantly strive to embrace PBPs rely on the expertise of the procurement function to drive profitability improvements programmes that translate to innovation and increased value creation (Cousins, *et al.*, 2008:8).

2.2. Summary of Procurement Best Practices

Table 1 presents a summary of PBPs and description of best practices and contribution to improve procurement efficiency and effectiveness.

Table 1: Summary of Procurement Best Practices

Procurement best practice	Description of best practices and contribution to procurement efficiency and effectiveness
Strategic commitment from senior executives	Eagerness of top management in giving procurement full support in the formulation and implementation of aligned strategies (Schuh <i>et al.</i> , 2009).
Translating corporate goals into procurement objectives	Align procurement strategies with overall organisational goals, thereby creating and sustaining a competitive advantage for the whole organisation (Ireland & Webb, 2007).
Organisational design	Formalising viable systems of communication, dividing labour, coordination and control is called organisational design (Rudzki & Trent, 2011:64). There is a general recognition of importance of the reporting line of procurement, but there are still some situations where the most senior procurement manager is not placed at a sufficiently high level within the overall organisation in order to clearly outline communication and integration processes with regard to decision-making (McClelland, 2006; Handfield <i>et al.</i> , 2011:167).
Education and training	Motivational tool used to increase individual skills (Monczka <i>et al.</i> , 2010:285).
Performance measurement	Analysing organisational processes and methods against leaders in the competition for improvement (Comm & Mathaisel, 2005: 229).
Innovation and technology	Automation and application of computer software to procure, e.g. e-sourcing, e-reserve auctions and e-procurement (Rudzki <i>et al.</i> , 2006:122). Through innovation of technology, efficiency becomes eminent and costs are drastically reduced.
Managing supply chain	Denotes the way in which supply processes within and outside the organisation are structured and managed (Van Weele, 2010:251). This

	management approach enables business enterprises and government institutions to react to intense global competition by using information technology and new forms of inter-organisational relationships with the aim of increasing customer satisfaction, market share and profits.
Risk management	Ensure profitability and continuity of the organisation (Moller, 2012:39).
Research	A systematic collection, classification, analysis and interpretation of information on all issues related to materials supply (Lysons & Farrington, 2006:629). Research in procurement assist management to make informed decisions based on sound knowledge.
Consortium procurement	Leverage economies of scale through bulk purchases (Burt <i>et al.</i> , 2010:259).

2.3. A synopsis of South African Comprehensive Universities

In South Africa comprehensive universities (CUs) were primarily established to increase accessibility particularly to disadvantaged rural and poor students into quality higher education. The CUs in South Africa include the University of South Africa (Unisa), University of Venda (UV), University of Johannesburg (UJ), Walter Sisulu University (WSU), University of Zululand (UNIZULU) and the Nelson Mandela Metropolitan University (NMMU) (International Education Association of South Africa (IEASA, 2012:15). CU's are expected to cater for diversity, student mobility, responsiveness and flexibility (Department of Education (DoE, 2004:5). Therefore, CUs contribute meaningfully to poverty alleviation measures. However, with so many directives laid on the CUs, it was inevitable that challenges and opportunities would result. Mbabane (2010:3) highlight these challenges which among others include defining and repositioning themselves, curriculum and programme mix, diversity issues and integration disputes. Yet, the emergence of CUs also presented opportunities of pooling resources and capacity which needs to be embraced in public procurement policies and practices.

2.4. Public Procurement Policies and Practices of Comprehensive Universities

2.4.1. Public Procurement

Public procurement is a process used by the state to acquire, and manage goods, works and services required to fulfil the public function (Arrowsmith & Quinot, 2013:1; Watermeyer, 2012:35). Public procurement involves procuring goods and services which are consumed by the public, therefore, efficiency and effectiveness are vital to minimise the possibility of service delivery protests. The sector is very large and has huge expenditures (Pauw, Woods, van der Linde, Fourie, & Visser, 2009:229; Van Weele, 2005:340). Owing to the magnitude and nature, this sector impacts mostly on socio-economic developments (Watermeyer, 2012:35). This means the procurement system cannot afford to be flawed, as massive losses could result. Therefore, it is logical that this sector is highly regulated. Due to the greater scrutiny and transformation of the public procurement sector, it is imperative to understand its objectives. According to Le Roux de la Harpe (2009:514), the objectives of public procurement are political in nature and aim to serve the socio-economic need of people:

- to obtain goods and services in such a manner that **value for money** (efficiency) is achieved
- to avoid corruption and conflict of interest through ethical conduct and **integrity**
- **accountability**
- to offer equal opportunities and equal treatment of providers (**equity**)
- **fair and impartial treatment** of providers
- **effective** implementation of industrial, social and environmental objectives
- **open** competition of public markets to international trade

The objectives of public procurement, therefore, aim at value creation, in terms of acquiring quality goods and services in a timely fashion and at a minimal cost, while managing risk and ensuring that socio-economic

objectives are achieved. In South Africa, the primary and secondary objectives of public procurement are entrenched in the Constitution of the Republic of South Africa, Act No 108 of 1996. This Act institutes government's policy for applying the preferential system. It also establishes requirements for the award of contracts to be lawful, reasonable and procedurally fair. Table 2 below indicates the content of these objectives and their source reference.

Table 02: Primary and Secondary Objectives of Public Procurement in South Africa

Objective		Reference
Primar	A procurement system that is fair, equitable, transparent, competitive and cost effective.	Section 217 (1)
Secondary	A procurement policy that may provide for: <ul style="list-style-type: none"> ▪ categories of preference in the allocation of contracts; and ▪ the protection or advancement of persons, or categories of persons, disadvantaged by unfair discrimination. 	Section 217 (2)

Source: Bolton (2006); Watermeyer (2011)

2.4.2. Procurement Policies and Practices of Comprehensive Universities

Procurement in all CUs is governed by their respective procurement or supply chain policy and to some extent, public procurement policies and regulations such as the Promotion of Equality and the Prevention of Unfair Discrimination Act, 2000 (Act 4 of 2000), Preferential Procurement Policy Framework Act, 2000 (Act No 5 of 2000), Broad-Based Black Economic Empowerment Act, 2003 (Act No. 53 of 2003), Prevention and Combating of Corrupt Activities Act, 2004. (Act No. 12 of 2004), Public Finance Management Act (Act No. 1 of 1999), Framework for Supply Chain Management (2003) and Construction Industry Development Board Act, 2000 (Act 38 of 2000). The policies provide a framework governing the procurement process and procedure to be followed when acquiring goods and services for the each university. Issues such as ethical standards and conflicts of interests, all procurement transactions and interactions with suppliers, including supplier selection and evaluation, are subject to the provisions outlined in the code of ethics and conduct, and policies related to the prevention of fraud/corruption and other irregularities are also encouraged. In addition, the principle of the declaration of interest is included within the procurement system employed by the comprehensive universities. Furthermore, confidentiality and accuracy of information is incorporated to ensure that the procurement process is respected by all stakeholders (Unisa, 2009; NMMU, 2012). The policies also address foci such as among others: compliance, thresholds, supplier rotation and centralisation. These focus areas will be briefly discussed.

➤ *Non-compliance*

The procurement policies emphasise that responsibility centre managers are accountable for the reasonable use of the resources and comply with policies, procedures and applicable legislation. The policies further stipulates that the acquisition of goods and services must conducted in line with the related policies such as; the public tender policy, purchasing procedures, policy on official signing powers, electronic payments and contracts and other related financial policies. The objectives of procurement in Unisa are (i) to promote the proficient supply of goods and services through the promotion and application of *best procurement practices* (ii) to ensure that the university conducts business with entities that are committed to ethics and social responsible practices (iii) to set out the rules and authority levels for the acquisition of goods and services (Unisa, 2009). However, South African public sector including universities faces many unethical challenges that range from non-compliance with regulations to corruption, negligence, and incompetence, inadequate measures for monitoring and evaluating, and fraud (Ambe & Badenhorst-Weiss, 2011:438).

➤ *Supplier rotation*

Determining the right number of suppliers to maintain and how often to rotate them is a critical step in effective supplier management (Hugo and Badenhorst-Weiss, 2011:69). Some institutions prefer to deal with a

few competent suppliers as they deem it difficult to manage a large number of suppliers (Monczka *et al.*, 2010:230). In South Africa, supplier rotation is promoted by the government since procurement is used as a tool for social justice and results in job creation and encourages fair labour practices (Ambe & Badenhorst-Weiss, 2011:440). Thus, in the National Treasury Practice Note no. 8 of 2007/2008, it is stated that suppliers per commodity or service should be done on a rotation basis in order to stimulate competition amongst the suppliers. These CUs promote and reinforce broad based black economic empowerment (BBBEE) in support of improving the socio-economic conditions in South Africa with this practice. However, in terms of section 47 (4) (c) of the Public Finance Management Act (PFMA), institutions of higher education are not obliged to employ Preferential Procurement Policy Framework Act (PPPFA) regulations, but the universities embraces it where possible in support of improving the socio-economic responsibilities in South Africa (Unisa, 2009; UNIZULU, 2013). Hence they rotate suppliers on a continuous basis.

➤ *Thresholds*

Regulation of the threshold values is a practice that is drawn from section 76 (4) (c) of the Public Finance Management Act (PFMA) of 1999. The threshold values stipulate the certain ranges for procurement of goods and services give guidance on whether petty cash, verbal or written quotations or competitive bids should be followed (National Treasury, 2007:1). Table 3 below displays an example of the categories of threshold values used by CUs.

Table 3: Thresholds Categories for Acquisitions of Goods and Services

Category	Requirements*
Up to R2,000	One verbal quotation
R2,001 to R10,000	Two written quotations
R10,001 to R500 000	Three written quotations from approved suppliers using attached RFQ document
R500 001to R1 999 9999	Four written quotations from approved suppliers using attached RFQ document
R 2 million and more	Tender process apply

Source: NMMU SCM policy (2012); National Treasury (2011)

Furthermore, the policy of “value for money” is applied when acquiring goods and services according to the universities’ thresholds values (National Treasury, 2011:5). The National Treasury’s Code of Conduct for Supply Chain Management (SCM) practitioners is also used by most procurement employees and other role players such as universities to enforce threshold values. In addition, disciplinary actions are taken against employees that do not comply with the codes of the policy and thresholds values (Unisa, 2009; NMMU, 2012).

➤ *Centralisation*

Hugo and Badenhorst-Weiss (2011:30) put forward the most general organisational structures, namely; centralised, decentralised, a hybrid or combination, and also the use of cross-functional teams. With regard to the decentralised organisational structure, the organisation assigns full autonomy to each of its units, while centralisation means that all purchases are made from a central office. Each organisational choice has advantages as well as disadvantages; hence some organisations usually balance the shortcoming of each alternative by adopting a hybrid method (Handfield *et al.*, 2011:162). Table 4 below presents the advantages and disadvantages of the centralised and decentralised structures of procurement.

Table 4: Advantages and Disadvantaged of Centralised and Decentralised Structures

Type of structure	Advantages	Disadvantages
Centralised	<ul style="list-style-type: none"> – Materials and products are standardised – Negotiation power is increased and volume discounts are made possible – Staff are afforded the opportunity of 	<ul style="list-style-type: none"> – There is slow response time to regional plants – There is resentment from geographically dispersed business unit management

	<ul style="list-style-type: none"> – becoming experts – Control is improved – Administrative costs are reduced – Supplier relations are enhanced – Information systems integration is facilitated – Duplication of effort is eliminated 	<ul style="list-style-type: none"> – There is a tendency to bypass the central buying office – There is less integration with user departments – Staff structure is top heavy – There is a lack of insight into the requirements of dispersed plant units
Decentralised	<ul style="list-style-type: none"> – There are better relations between decentralised purchasing and other functions – There is good service delivery to regional plants – There is faster reaction time to user departments in emergencies – Support of local suppliers generates goodwill – There is a greater autonomy for profit centres – Interdivisional competition can improve purchasing performance 	<ul style="list-style-type: none"> – There is loss of economies of scale – Suppliers are confused by dealing with many offices – There is duplication of staff and facilities – Control over the functions is much more difficult – There is a greater likelihood of communications breakdown – There is focus on local units and under-emphasis on strategic issues

Source: Hugo & Badenhorst-Weiss (2011: 31)

Generally, centralisation is performed by specialists and results in efficiency. Most CUs have adopted a centralised system. However, the trend in the Central and Eastern European countries has changed for a decentralised approach (Organisation for Economic Co-operation and Development (OECD), 2000:3). Matthews (2016) also, raised a concern that universities ignore evidence that decentralisation works better than centralisation. As to whether CUs should centralisation or decentralise is mystery at this stage.

3. DATA AND METHODOLOGY

A qualitative approach using multiple cases was adopted. This approach is suitable since the topic addressed in this study was not previously researched to this extent and there was no evidence that it had been addressed previously with the same audience at South African comprehensive universities (Creswell, 2009:18). Face-to-face interviews were conducted using open-ended questions since in-depth information was required to understand the problem. The interviews lasted from 45 to 60 minutes and were scheduled at a time that was convenient for the participants. These interviews were audio-recorded and transcribed with the permission of the participants. Due to the sensitivity of the information pertaining to this study, it was necessary to maintain a sense of sensitivity to participants' discomfort relating to sensitive issues and experiences. For this reason a debriefing was offered to participants if needed, immediately after the interviews or at a time convenient to participants.

There are twenty three public universities in South Africa and two newly-established National Institutes of Higher Education. The participants were chosen from the six comprehensive universities. The sample was drawn from three comprehensive universities with diverse historical backgrounds were chosen; historically distance education, historically advantaged university and historically disadvantaged. Thus, purposive sampling was used. The participants of the study were general procurement staff and management from the three comprehensive universities because they possess expert knowledge about the procurement policies and practices. The comprehensive universities were preferred because they encompass elements that prevail in all three types of universities found in South Africa (academic university, university of technology and comprehensive universities). According to Saunders, Lewis & Thornhill (2012:287) cumulative results of the diverse cases of data collected help to understand and answer the research questions fully. Data was analysed using Computer Aided Computer Qualitative Data Analysis Software (**CAQDAS**) called Atlas ti. Data analysis process involves reflection and engagement with the collected raw data through coding and grouping of concepts and themes to identify key themes in the data, and eventually to draw an interpretation about the data (Quinlan, 2011:425).

4. FINDINGS AND DISCUSSIONS

Five factors emerged from the findings on the management and procurement of the limited resources namely; policy, non-compliance, thresholds, supplier rotation and centralisation. The findings revealed that comprehensive universities in South Africa are restricted by policies which also guide their procurement. Non-compliance to the policies and procedures was also found to be a challenge in these universities. Thresholds are also used by the universities to guide procurement values. Supplier rotation came out strongly as a socially responsible empowerment tool even though some participants complained about the effectiveness of this practice. In addition, centralisation was one practice that universities use but, sometimes not for the right reasons. Consequently, the procurement function of these institutions does not contribute sufficiently to the university’s overall objectives for competitive advantage and sustainability. According to the participants, this challenge was exacerbated by complying with the rigid, cumbersome and unclear public procurement policies that govern procurement in South Africa. Table 5 below summarises the main findings and provides supporting quotations from the data.

Table5: Summary of Findings

Sub-themes	Findings	Quotes
Policy	<ul style="list-style-type: none"> ▪ Procurement is guided by governmental policies and those of the respective universities. ▪ Policy serves as guidelines that promote ethical conduct, ensures integrity, transparency and open systems. ▪ Policies are regarded as rigid and do not take the acquisition of special or unique items into consideration. 	<p><i>But, you must remember we, procurement, we need to follow what the government is saying. (4:128)</i></p> <p><i>... you need to be transparent and you need to be open, you need to be fair and you need to be all of those things and you don't ask for freebies. You hear what I am saying. (9:106).</i></p> <p><i>... there were things that were, they were like blocking things to happen before you could do something for example you couldn't, if an item is more than R50 000, it needs three quotations, if our policy says three quotations its says three quotations you can't do without you know having three quotations only to find that it's is not about the quotations, sometimes it's about the service, the uniqueness of the service. (4:189).</i></p>
Non-compliance	<ul style="list-style-type: none"> ▪ Non-compliance was evident within and outside the procurement department of some universities. 	<p><i>There was non-compliance. Still now there is non-compliance. (5:12).</i></p> <p><i>To tell you the honest truth, it's very difficult to, I don't know whether it's difficult for end-users or its ignorance, but from our side we enforce it. If somebody submits something that is not adhering to the procurement policy, we reject the requisition until such time that you fully adhere to the policy. (3:21)</i></p>

		<p><i>Mh! there are loopholes, but basically we want everything to come to here, but there are still loopholes. We find that some of the things were delivered in the departments, which is not right. We still are working on that as well. (5:107)</i></p>
<p>Thresholds</p>	<ul style="list-style-type: none"> ▪ Comprehensive universities make use of procurement thresholds that are specified in their policy and procedure manuals. 	<p><i>...the process is you have to get quotations, depending on the value. The policy will tell you that if you want to buy something for this much, you have to obtain so many quotations. (3:4). the three quote rule that applies. You send the specification. You ask people to give you and quote you. You do it in evaluations to see which one is best because even though the policy talks about the three quote, the lowest quotation or the lowest cost, but sometimes it's not always the case because when you do a technical evaluation you find that this company cannot fulfil your needs but it's the cheapest company, so you end up going with the one at the highest score who's going fulfil your needs but which the price would be a little bit higher as well. There's always that conflict in requirements. There's always the contradiction, so which is why we look at the proviso because we are looking at the value for money. Price is one component of the entire value chain because mind you price itself is a cost. It's a total cost of ownership.</i></p>
<p>Supplier rotation</p>	<ul style="list-style-type: none"> ▪ Use the rotation of suppliers, and emphasised that procurement is used as an empowerment tool 	<p><i>...we want to make a point that we share the pie with every supplier so it's an ideal, it's the best practice to rotate suppliers; you mustn't forget the issue of procurements goes with empowerment. (1:143).</i></p>
<p>Centralisation</p>	<ul style="list-style-type: none"> ▪ Centralisation is mostly used to take responsibility for BEE procurement purposes. 	<p><i>...we have got a centralised procurement department. I believe that the benefits for a centralised procurement department is somebody needs to take responsibility for BEE but centralised buying, we have got all the people doing the procurement activities in one building (9:78).</i></p>

Most CUs follow public procurement policies because, in South Africa procurement is used as a tool for social justice (Ambe & Badenhorst-Weiss, 2011:440). This means that public procurement supports the socio-economic values of the country. To some extent, the National Treasury's Code of Conduct for SCM Practitioners is used by university employees and other role players involved in the procurement process. The participants interviewed asserted that their procurement process and procedures are generally guided by the policy. According to Fourie (2011:33) and Leenders, Johnson, Flynn and Fearon (2006:61) the phases of the procurement cycle should be designed in line with the broad policy and the strategy of the procurement function, coordinated and communicated well with the other functions in the organisation for synergy and compliance purpose. The participants narrated that their procurement is guided by the policies from the government and their respective universities. However, some of the participants raised concerns about the rigidity of policies that is blocking innovation and creativity in procurement. The participants mentioned that the policies do not take into considerations the acquisition of special or unique items and thus restricts effective management and procurement according to the best practices into considerations. The challenge of policies is not exclusive to the CUs, the National Treasury (2015) highlighted that public procurement policy and regulations are habitually unclear and cumbersome.

Conversely, the participants felt that the use of policy as a compliance tool was inefficient, not followed or not enforced. Even though there are prescriptions of how to conduct procurement, there are still issues of non-compliance that were experienced in this regard, thus, restricting the management of limited resources eventually resulting in fraud and maladministration (Leach, 2012; Phakathi, 2013). According to Mohamedbhai (2016), corruption in higher education has been a challenge for many years. This issue is confirmed by Ambe & Badenhorst-Weiss (2011:438) where they reiterated that public procurement in SA faces many challenges ranging from non-compliance with regulations to corruption, negligence, incompetence, inadequate measures for monitoring and evaluating, and fraud. In some instances, participants stated that non-compliance was more prevalent on the side of the users and not in the procurement function itself. Some participants articulated that they enforce compliance by rejecting non-complying orders, but admitted that it is difficult to enforce compliance in order to save the limited resources of the universities under these conditions. As indicated in the introduction, adherence to procurement procedures and fairness is a challenge in the public sector as well as in CUs as part of public entities (Green, 2014).

All the comprehensive universities make use of procurement thresholds that are specified in their policy and procedure manuals. The thresholds quote different values and procedures that should be followed for specific thresholds, for example, when to obtain quotations or follow the tender processes (National Treasury, 2007). The universities have different threshold limits guided by the National Treasury regulations and SCM Guidelines and Reforms. However, some participants complained that the thresholds limit the purchasers from getting value for money and does not take into account the total cost of ownership. Arrowsmith (2012) proposed flexibility and simplifying complex rules that set boundaries thereby, promoting value for money and taking into consideration total cost of ownership. However, universities in South Africa are classified as unscheduled public entities and therefore, are not bound by the PFMA. Thus, they are free to adjust threshold values to suit their own environment. However, this is not easy for universities as they are subsidised by the government and this explains the reasons for conforming to the government legislation even when they are autonomous.

It was surprising that some participants regarded the rotation of suppliers as an ideal situation when contrasting it to the best practice. According to Burt *et al.*, (2010:41) the ideal situation is to reduce the supply base and deal with a few competent suppliers. The reasons for reducing the number of suppliers on the database leads to increased leverage, reduced costs, and better relationships with suppliers, which assist the institution to respond better to increased competitive pressure and changing customer requirements or expectations (Ogden & Ellram, 2003). However, the response was startling when the participants who occupy senior positions validated that supplier rotation is a best practice. This ideology could be the result of conforming to the government prescriptions of social justice. Even though the intention of empowerment is a good gesture for social development conversely; it did not seem to be serving the purpose of best practice as some managers referred to it.

Most universities seemed to favour centralised system. Hugo and Badenhorst-Weiss (2011:30) suggests three types of procurement systems, namely; centralised, decentralised, a hybrid or combination. But it came as a surprise though that the reasons cited for the use of centralisation was to take responsibility for BEE procurement purposes mostly. None of the participants mentioned that they prefer centralisation for control purposes, reducing cost or standardisation of processes. It did not come through that participants understood the advantages and the disadvantages of centralisation. There is no best approach between centralisation and decentralisation according to OECD (2000:5) as circumstances, culture, level of economy and market development vary from country to country. A hybrid approach seems to be the best solution to balance the system.

5. CONCLUSION

The purpose of this paper was to determine the factors affecting the effective management of the limited resources in South African comprehensive universities. The study highlighted some of the factors affecting the effective management of limited resources in South African comprehensive universities. It is therefore, recommended that South African comprehensive universities should employ PBPs in order to streamline operations, remove internal barriers to curb unethical conduct and non-compliance to policies and communicate the vision to the procurement staff and the organisation as a whole. In addition, these universities may introduce innovation and relevant technology for spend visibility, reducing costs and implementing shorter cycle times. Furthermore, it is advisable that these institutions should set performance targets and continuously measure and evaluate the planned against the actual output. Also, sensitising the entire university community to comply with procurement policies and procedures, creating awareness on procurement's impact on value maximisation and contributions to the corporate objectives should be viewed as a strategic requirement. Lastly, instilling the culture of efficiency and cost savings measures for the whole university to reduce maverick spending by introducing spend analysis, and the consolidation of purchases for groups should be considered for sustainability.

This paper contributes to theory and understanding of procurement by adding value to the understanding of PBPs in universities that could help the CUs to gain a competitive advantage. Although this article may contribute to the understanding of PBPs in South African universities and has highlighted the gap between theory and practice, there are limitations that are worth declaring:

- Since the approach of this research study is qualitative in nature, it is not possible to generalise the results to the other universities in South Africa.
- Access to information and participants was difficult due to the sensitivity of procurement information.

It is recommended that future research be repeated in a different context, for example, with all three types of universities found in SA, as findings might differ.

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