Motivation sources and leadership styles among middle managers at a South African university

Orientation: Leadership challenges have been evident in the South African higher education sector since 2004. Dealing with these challenges has focused more on external factors at top management level than on the possible contribution of intrinsic factors among other levels of institutional management.

Research purpose: The purpose of the research was to determine the relationship between motivation sources and the leadership styles of middle managers in a South African higher education institution.

Motivation for the study: The ongoing leadership challenges in the higher education sector in South Africa require not only strategies to deal with them at a national level but also academic efforts that focus on previously neglected areas, such as sources of leadership motivation.

Research design, approach and method: The population of the study consisted of 75 middle managers, comprising both academic and non-academic staff. A final sample size of 40, conveniently selected, was achieved. A quantitative research approach was employed using the case study method.

Main findings: Results showed a positive relationship between transformational leadership and intrinsic process motivation, self-concept internal motivation and goal internalisation motivation. A negative correlation was found between instrumental motivation and transactional leadership style.

Practical and managerial implications: Motivation sources could be used to explain leadership behaviour and assist in the selection and development of specific leadership styles for the different managerial levels within academic institutions through motivation profiling. Sources of motivation may provide one of many pieces of information to consider when making recruitment and leadership development decisions within institution.

Contribution or value added: This is the first study of its kind to investigate the two variables within a higher education context. The study makes an invaluable contribution to the broadening of existing knowledge and a scholarly understanding of leadership motivation and behaviour.

Introduction

This study seeks to determine the relationship between motivation sources and leadership styles among middle managers at a South African university. Leadership styles are conceptualised as different approaches adopted by leaders at different levels in an organisation to guide and direct the behaviour of subordinates towards the achievement of organisational goals (Quick & Nelson, 2009). Motivation sources are defined as those psychological states that arouse an individual to act in a particular and sustained way (Kreitner & Kinicki, 2010).

Research has shown that leaders can be understood, and subsequently developed, by examining a number of variables that contribute to their leadership styles. For example, evidence alludes to the existence of a relationship between a leader’s life events and leadership style (Barbuto, 2005); between the personality of a leader and leadership practice (Dulewicz & Higgs, 2005); between personal variables, such as age, and leadership style (Bass & Riggio, 2008); and between motivation and leadership style (Barbuto, 2000). In most of these studies, the leadership style frequently reported was that of transformational leadership, with other leadership styles not significantly explaining the variance in data.
Empirical evidence is also available (Ryan, 2010) on the existence of different sources of motivation such as goal internalisation, self-concept internal motivation, intrinsic process motivation, instrumental motivation and self-concept external motivation. The extent to which these motivational sources could explain different leadership behaviours among top management in a corporate environment has been established (Barbuto, 2000). An understanding of this relationship is important in all sectors and at all levels of management. Research by Fernandez and Rainy (2006) and Northouse (2016) shows that middle management in any organisation is critical for ensuring the implementation of strategies and policies and therefore contributes to organisational effectiveness and profitability. Although researchers have investigated motivation and leadership in different organisations, research in academic institutions, more particularly in emerging economies, has remained a neglected area (Siddique, Aslam, Khan, & Fatima, 2011).

**Context of the study**

Since the mergers and incorporations of higher education institutions in South Africa 14 years ago, the higher education sector has experienced debates and concerns on issues of leadership, curriculum development and many other critical issues (Kristan, 2005). These concerns have continued unabated, as evidenced by the recent wave of student protests in the higher education sector. Most of these protests were, and continue to be, directed at universities’ leadership. What this suggests is that leadership issues in the South African higher education system remain a challenge and require attention.

Leo (2015) confirms that leadership concerns in the higher education sector in South Africa date back to 2004. The mergers, and resultant transformation agendas which were followed, were necessitated by the need to redress past inequalities, meet the pressing needs for access to higher education and respond to new realities and opportunities, such as changes in student demographics (Van der Westhuizen, 2004). The overall aim was to increase accessibility and achieve equity in the provision of higher education for all. The mergers and incorporations created new types of higher education institutions, such as Universities of Technology, hereafter referred to as UoTs, characterised by their vocational orientation (Chipunza & Malo, 2017). Students enrolled in these institutions spend a year in the workplace before they graduate. Most of the current higher education institutions in the country were established as a result of either an incorporation or a merger between two or three previously different institutions. This meant that there were changes in leadership, systems, procedures, staff quality and complement, student numbers and conditions of service, among other things, in order to live up to the new demands of a new order.

The above-mentioned changes meant that the new universities’ management had to design new strategies, recruit new personnel, and redeploy and reassign others in order to implement new policies and programmes, as well as to achieve a new culture infusion within these institutions. In other words, the right ‘middle managers’ had to be recruited to ensure that the new order was lived and realised, and that the required attitudes, culture of work and issues of quality were gradually established. Despite this, there have been reports of mass resignations of middle and top managers from administrative and academic positions within these newly created higher education institutions. In addition, disturbingly poor quality and credibility of leadership at some of the higher education institutions has resulted in numerous court cases between some universities’ leadership and the government over governance issues (Southern African Legal Information Institute, 2012). Further, governance of higher education at a systems level has been described as characterised by fragmentation, inefficiency and ineffectiveness, lack of cooperation, few common goals and negligible systemic planning (Higher Education South Africa, 2009; Shivambu, 2015). These concerns raise questions on the type of leadership that is appropriate for the country’s higher education institutions.

Efforts have been made to address these concerns, such as setting up commissions of enquiry, appointing administrators and changing rectors (top leadership). However, there is a paucity of evidence indicating what has been done to understand the challenges faced by and associated with management within higher education institutions, more particularly those associated with middle managers, and the role played by motivation and leadership style in this regard. Considering the evidence that leadership can be understood from different sources, including motivation (Barbuto, 2000), the questions that arise then are, firstly, what type of middle managers or leaders were put in place in the new institutions to implement the new order? Secondly, what sources of motivation do these managers have that drive their leadership styles?

**Problem statement**

The role of motivational sources in influencing leadership behaviour has been well researched among top managers in the corporate world (Barbuto, 2000). However, this relationship has not been explored widely at other levels of leadership within different sectors and in emerging economies, where leadership issues may be of great concern. An investigation of motivation sources and related leadership behaviour among middle managers within the higher education context in South Africa could assist in the selection and development of specific leadership styles for academic institutions through motivation profiling. The aim of this study was therefore to determine the relationship between motivation sources and leadership styles of middle managers at a South African university by answering the following questions:

- What are the sources of motivation for middle managers?
- What leadership styles are utilised by these middle managers?
- Is there a correlation between the middle managers’ motivation sources and leadership styles?
Literature review

Theoretical framework

The study is based on Victor Vroom’s expectancy theory (1964), which was popularised in his book Work and Motivation (Vroom, 1964). This is one of the most well-known key process theories and commonly applied in attempting to understand human motivation and the resultant outcomes. The theory holds that the tendency of a person to act in a certain way depends on the strength of the expectation that the act will be followed by a given outcome and on the degree to which that person desires the outcome (Swanepoel, Erasmus, & Schenk, 2008). The theory is based on three variables: valence – the preference or values attached to the outcome by the employee, which varies from person to person; instrumentality – the extent to which one believes that performance at a given level will result in the desired outcome; and expectancy – the probability that a certain outcome will ensue if certain behaviour is chosen (Mullins, 2010). In this study’s context, it is possible to argue that the decision to behave in a particular way as a leader, whether as a transformational, charismatic or transactional leader, is being based on the value held for such actions as well as the perception that certain outcomes (such as employees behaving in a certain way, e.g., increasing levels of productivity) could be achieved. Support for this argument is provided by Chen and Zhao (2013) who used expectancy theory to examine factors that motivate business faculty members to conduct research. The study found that the value of rewards was the biggest determinant of research productivity. According to Chen and Zhao (2013), faculty members who were not tenured tended to be motivated by extrinsic rewards, whereas tenured faculty members tended to be intrinsically motivated by the respect earned through conducting research. With such evidence, the justification for using the theory to understand the link between middle managers’ sources of motivation and preferred leadership styles appears appropriate.

The concept of leadership

Leadership is a widely researched topic, and its importance in modern organisations cannot be over emphasised. Leadership scholars have defined it in different ways. For example, Anca and Dumitru (2012) claim that leadership is the process of influencing the activities of a person towards achieving the objectives of the organisation, whereas McCallum and O’Connell (2009) regard leadership as the use of influence to encourage participation in achieving set organisational goals or objectives. A closer look at these definitions shows that leadership is the process of influencing others to work exceptionally well towards the achievement of the established organisational objectives or goals. This influencing process can be exerted by top, middle and supervisory level management in any organisational setting. In the context of this study, higher education middle managers, that is, non-academic staff holding responsible administrative and managerial positions below the level of registrar or chief administrative officer, as well as academic staff at the level of head of department, subject area or research unit and who may formally report to either a faculty dean or directly to the vice-chancellor, depending upon the decision-making structure of the institution (Schofield, 1996), are assumed to be critical in exerting influence within institutions of higher learning.

Leadership styles

Leadership styles are a set of dynamic relationships, which are based on mutual influence between leaders and followers (Northouse, 2016). These dynamic relationships are expected to result in increased levels of motivation and development on either part. Mullins (2007) also maintains that leadership styles typically determine how the leader behaves towards members of the group. These relationships can be explained and understood within the framework of social exchange theory (Blau, 1964; Chernyak-Hai & Tziner, 2014) – an influential paradigm, which posits that human relationships are formed by the use of subjective cost-benefit analyses. This means that a leader whose style and interactions are based on trust and positive gestures will influence corresponding reciprocation by his or her subordinates. Although a number of leadership styles exist and have been reported in literature (Cummings & Worley, 2015), for the purpose of this study, three leadership styles have been adopted and tested in terms of how they are influenced by motivation sources. These are: the transformational leadership style, the transactional leadership style and the charismatic leadership style. These styles have received much attention in the literature and have been explored in similar studies in the private sector (Downes, 2016; Trevor & Hill, 2012).

Charismatic leadership style

A charismatic leader is characterised by behaviour that is out of the ordinary, novel, unconventional and counter to norms (Schermherhorn, Osborn, Uhl-Bien & Hunt, 2012). Charismatic leaders are perceived as mavericks that initiate and support radical change. In organisations, charismatic leaders are useful in the sense that they can convince and inspire people to support changes (Bergh & Theron, 2006). In higher education institutions, charismatic leaders could arouse the motivation of followers, and this arousal could have important effects on attitudes such as commitment to the vision and the mission articulated by the institution. They can also be useful in the context of ongoing higher education sector changes in South Africa, in terms of inspiring and convincing subordinates to adopt to ongoing changes.

Transformational leadership style

A transformational leader helps define the vision of the organisation and establishes the link between that vision and the type of management and organisational principles that are introduced (Badawy & Bassiouney, 2014). Transformational leaders are able to identify the long-term potential of an idea or organisation, and communicate the idea or dream to others in a convincing and inspiring manner (McCleskey, 2014). What this entails is that such type of leaders have the capacity...
to transmit a sense of commitment and can craft activities and roles that are clearly and easily embraced by subordinates. It is how they do it that is important. For example, Oshagbemi and Gill (2003) suggest that transformational leaders treat each worker as an individual (individual consideration), transmit their values and ethical principles (idealised influence), provide challenging goals and communicate a vision of the future (inspirational motivation), and encourage innovative ways of problem-solving (intellectual stimulation). These four principles of transformational leadership have received much attention in many studies (Bass, 1985; Grant, 2012; Tse, Huang, & Lam, 2013).

Idealised influence is the manner in which subordinates trust and simulate their leaders’ behaviours. The followers also embrace their leader’s values and commit to achieve their vision, which maximises self-confidence and the pride of participating with the leader (Alabduljader, 2012). It is the emotional component of leadership and describes how leaders can act as role models. Inspirational motivation is achieved by providing meaning and challenge at work. Expectations are set by leaders for followers and are well communicated. Team spirit is aroused, and enthusiasm and optimism are displayed (Marchington & Wilkinson, 2012). Schepers, Wetzels and Ruyter (2005) concur that inspirational motivation involves inspiring and empowering followers to enthusiastically accept and pursue challenging goals and a mission. Intellectual stimulation is about challenging subordinates to be innovative and challenge their own beliefs and values as well as those of the organisation or leader (Northouse, 2016). The leader here promotes subordinates’ own problem-solving approaches. Individualised consideration entails leaders acting as coaches, listening to subordinates and creating an enabling environment, though, for example, use of delegation (Wells & Peachy, 2011).

The impact of globalisation, technology advancements and a competitive operating environment have forced higher learning institutions to adapt to strategic change in order to remain relevant and competitive (Nordin & Kasbon, 2013). Therefore, the need for middle managers in higher education institutions to be transformational has become more critical than ever before, as the implementation of established strategic objectives has become a core managerial function. Middle managers are therefore expected to ensure that subordinates have the right motivation, knowledge, skills and attitudes in carrying out the activities necessary for the achievement of objectives in each division or unit.

**Transactional leadership style**

Hargis, Watt and Piotrowski (2011:64) define transactional leaders as ‘leaders who identify the needs of their followers and engage in exchange relationships with them based on objectives to be met’. With this style of leadership, clear goals and objectives are set and rewards (financial or non-financial) for achieving goals clearly specified. The transactional leadership style is based on three exchange styles, which are contingent rewards, active management by exception and passive management by exception (Sahaya, 2012). Contingent rewards are the exchanges between leaders and subordinates in which efforts by subordinates are exchanged for specific rewards, such as salary and benefits, bonuses or other incentives. A job description, usually drawn up by middle managers, becomes the basis for the leader to understand the subordinates, because it states the job to be executed and what benefits the employee will receive in performing that job (Basham, 2012). Active management by exception is characterised by the leader’s continued observation of followers to ensure that agreed upon standards of performance are met (Hargis et al., 2011). With active management by exception, a leader arranges to monitor performance of their subordinates, and communicates and takes corrective measures where subordinates are found to be wanting (Colquitt, Lepine, & Wesson, 2009). In this case, middle managers are at the cornerstone of ensuring compliance by subordinates with set out procedures or standards, and the application of suitable corrective procedures for the subordinates such as warning, transforming or dismissing (Alabduljader, 2012). Like any other organisation in the country, higher education sector administration and management in South Africa is guided by legislative frameworks, such as the Higher Education Act 101 of 1997, the King IV and V Reports on Corporate Governance, the Labour Relations Act 66 of 1995, and so forth. In addition, each institution has its own policies and procedures that must be complied with. Middle managers are, by the very nature of their function, responsible for ensuring most of the compliance issues. As such, elements of transactional leadership, especially the active management by exception skills, are needed by this group of employees.

**Leadership in higher education institutions – Global view**

The leadership of higher education institutions has been placed under increasing scrutiny since the 1980s with the expansion of student numbers, changes in funding for student placements, technology and continuing globalisation of the sector (Black, 2015). With such ongoing changes, higher education institutions are required to consider how to develop their leaders and what might be the appropriate leadership behaviour to enable adaptation to these new circumstances (Black, 2015). For example, in the United Kingdom, the rapid change and transformation that took place in recent years, driven by various players in the field such as local governments, global markets and internationalisation, as well as student and local community demands (Angawi, 2012:34), necessitated the establishment of programmes to motivate, influence and shape the attitudes of staff, academics and students. The idea was to transform all levels of leadership within higher education institutions from playing figurative roles with administrative responsibilities, to change agents playing progressive transformational roles (Angawi, 2012). In the African context, the major challenges of higher education institutions are more related to governance and management. According to Sifuna (2012), typical challenges range from maladministration, underfunding and infrastructure to the unavailability of resources and inability of institutions to adapt to the globalisation trends. As alluded to previously,
South Africa has seen unprecedented changes in the higher education landscape since 1994 as restructuring policies of the democratic government were increasingly applied (Tsheola & Nembambula, 2015). The restructuring of South Africa’s higher education sector placed onto the agenda the type of institutional leadership required to drive transformation, especially for mergers and incorporations involving historically disadvantaged universities. As a result, universities experienced leadership instability, public contestations, a paucity of academic leadership, internationalisation and globalisation imperatives, mushrooming of virtual, private and corporate universities as well as growing corporatisation, rampant managerialism and state control (HESA, 2009). The country’s higher education institutions are seen by some to be riddled with intractable governance and leadership dilemmas (Tsheola & Nembambula, 2015).

**Work motivation**

The term ‘motivation’ describes the reason for action to be taken. In the work context, Grobler, Warnich, Carrell, Elbert and Hatfield (2011) define ‘work motivation’ as the force that energises employee behaviour, gives direction to behaviour and underlies the tendency to persist, even in the face of one or more obstacles. Werner, Bagrain, Cunningham, Potgieter and Viedge (2017) concur that motivation is the power within people that arouses, directs and sustains their behaviour. A closer look at both definitions alludes to the fact that work motivation is an internal state that encourages an individual to perform outstandingly to achieve organisational goals. Several authors have pointed out the importance of motivation within the work environment. For example, Adzei and Atinga (2012) state that motivation makes employees put up positive attitudes, work hard, be punctual and contribute meaningfully to the organisation. Similarly, Toe, Murhadi and Lin (2013) observed that business success is linked to having teams of employees who are highly motivated. Studies highlighting why motivation is important in the workplace can, however, be criticised for focusing more on the internal and external conceptualisation of motivation and not much on their sources.

**Sources of work motivation**

The notion of work motivation is grounded in two basic approaches to motivation: the content theories (Maslow Hierarchy Needs Theory, McClelland’s Needs Theory, Herzberg’s ERG Theory, Herzberg’s Two-Factor Theory (Schermernhorn et al., 2012), which focus on the individual factors(needs) within each person that initiate, guide, sustain and stop behaviour (Amos, Ristow, & Ristow, 2004), and the process theories (Equity Theory, Goal-Setting Theory, Vroom’s Expectancy Theory (Martin & Fellenz, 2010)), which explain the process of how behaviour is initiated, directed and sustained. Arguments for the merits of each viewpoint of motivation have been long and exhaustive in the social sciences literature (Barbuto, Trout, & Brown, 2004). No viewpoint can be regarded as superior to another as both can be used to contextualise motivation in different situations (Bergh & Theron, 2005). However, using the tenets of these motivation theories in the last 20 years, five sources of work motivation have been developed and tested to predict transformational leadership behaviours, specifically (Barbuto & Scholl, 1998). The extent to which other leadership behaviours are linked to these developed five sources is still a grey area to be explored, especially in different organisational settings and contexts. The five sources are intrinsic process motivation, instrumental motivation, self-concept external motivation, self-concept internal motivation and goal internalisation motivation. These are briefly explained subsequently:

*Intrinsic process motivation* is derived from absolute enjoyment of working and work acts as an incentive because an employee enjoys what he or she is doing (Moradi, 2015). Barbuto and Gifford (2012) concur that this type of motivation refers to motivation because of the enjoyment of the task, wherein work itself becomes motivational for the individual because of sheer enjoyment of performing the task. Therefore, intrinsically motivated leaders find pleasure in the work they do. It is about enjoyment during the activity.

*Instrumental motivation* evolved from Barnard’s (1938) exchange theory, as well as from expectancy theory and equity theory, which presume that organisations and employees enter into exchange relationships where external factors such as money or promotion drive employee motivation to perform a task (Northouse, 2016). Instrumental rewards therefore motivate individuals when they perceive that their behaviour will lead to certain extrinsic tangible outcomes, such as pay, promotions and bonuses (Barbuto 2005).

The *self-concept externally* motivated leaders seek affirmation from followers based on their traits, competencies and how they are perceived. The self-concept externally motivated leaders have a high need for recognition (Roberts, Hann, & Slaughter, 2006). This motivation is similar to McClelland’s (1961) need for affiliation, Alderfer’s (1969) relatedness needs and Maslow’s (1943) need for love, affection and belonging (Barbuto & Gifford, 2012).

*Self-concept internally* motivated people set their own internal standards of traits, competencies and values. These become the basis for their motivation as they engage in behaviours to reinforce the set standards. They have a high need for achievement (McClelland, 1961).

Individuals motivated by *goal internalisation* believe in the cause or purpose of the organisation. It represents the absence of self-interest. They adopt behaviours that are in tandem with their ideal values and beliefs, and adopt a sense of duty and working towards the goal of the whole organisation (Barbuto & Scholl, 1998). Leaders high in goal internalisation emphasise on principles and values and look to matching them with goals and the organisational mission and vision (Moradi, 2015).
Motivation sources and leadership styles

The purpose of this study is to determine if there is a relationship between middle managers' leadership styles and their motivation sources. As previously alluded, although previous studies have examined the relationships between the two (e.g., Antonakis & House, 2014; Barbuto, 2000; Buble, Juras, & Matic, 2014; Graves, Sarkis, & Zhu, 2013), the different context (higher education) managerial level considered (middle managers), as well as the addition of other leadership styles (transactional and charismatic), is what makes this study unique.

Previous studies have shown that intrinsically motivated leaders find enjoyment and pleasure in the work they do (Barbuto, 2005). Transformational leaders, on the contrary, achieve maximum performance from followers because they are able to inspire followers to raise their criteria for success and to develop innovative problem-solving skills (Northouse, 2016). It is therefore suggested that a leader who inspires is one who enjoys his or her work. This enjoyment of his or her work could be a source of inspiration (role models) to the followers to emulate the leaders' behaviour and also incorporate enjoyment with their work. It is further postulated that leaders motivated by work itself are more likely to allow divergent views in the work context, create a work climate of delegation and treat each employee in a unique way. As such, these leaders are likely to self-report an ideology consistent with transformational leadership. A study by Barbuto (2005) conducted among 186 leaders from various organisations in the United States reported that intrinsic process motivation correlated with transformational behaviours, although it was not in a higher education setting.

Charismatic leadership is thought to be key in the implementation of transformation, because it is the leader’s ability to generate great symbolic power (Stout-Rostron, 2014). The charisma, which can be equated to the leaders' ability to articulate a vision as in transformational leadership, exhibiting sensitivity to follower and demonstrating novel behaviours, is what makes followers perceive the leader as inspiring. This research suggests that transformational leaders are more likely to allow divergent views in the work context, create a work climate of delegation and treat each employee in a unique way. As such, these leaders are likely to self-report an ideology consistent with transformational leadership. A study by Barbuto (2005) conducted among 186 leaders from various organisations in the United States reported that intrinsic process motivation correlated with transformational behaviours, although it was not in a higher education setting.

When leaders are high in external self-concept motivation, they tend to be externally based and seek affirmation of their traits, competencies and values from external perceptions (Barbuto, 2005). Classic articulations of social rewards or social exchanges found in transactional leadership style are consistent with the motivational explanation of self-concept external motives (Barbuto, 2000). Both self-concept external motivation and transactional leadership style include managers using social rewards and praises to motivate employees to accept them and view them positively. Thus, leaders high in external self-concept motivation behave in ways that will make reference group members satisfied to gain their acceptance and status. Consistent with this type of motivational drive is the social identify theory of Ashforth and Mael (1989) which focuses on social reference and standing. This is supported by a study by Chaudhry and Javed (2012) who found a positive relationship between self-concept external motivation, and transactional and charismatic leadership styles among 278 employees in the banking sector of Pakistan. Similarly, the relationship of external concept motivation with charismatic leadership is supported by Kuhnert and Lewis (1987) who reported links between social tactics of influence, such as ingratiating and personal appeals, described as similar to charismatic leadership. Based on the above evidence, it is therefore suggested that middle managers' self-concept external motivation will be related to charismatic and transactional leadership styles.

Self-concept internal motivation is derived from an individual's desire to satisfy, sustain their perception of characters, sufficiency and values (Moradi, 2015). In this regard, motivation is regarded as freely chosen and emanating from one’s self, and not under pressure from some external force (Brophy, 1989). Leaders whose source of motivation is self-concept accept their strengths and ability for self-determination. According to Pintrich and Schunk (2002), to have the desire to satisfy own sufficiency (strength) values is synonymous to self-determination. The author further argues that to have self-determination is to decide how to act in the environment one finds himself or herself in. This research suggests that transformational leaders’ desire to create positive change is based on the self-
concept internally driven motivation which is linked to their desire to satisfy their strength in inspiring and intellectually stimulating others for organisational success. In addition, it is assumed that the desire to satisfy and sustain perceptions of their own values engenders leadership behaviours that create positive change in the followers – such as taking care of each subordinate’s interests. It is reasonable therefore to suggest that when managers adopt the transformational leadership style, they are engaging in behaviours that satisfy their self-concept intrinsic motivation. Some studies, however, found results contrary to what is proposed in this study. For example, a study conducted by Barbuto (2005) among 186 leaders from a variety of organisations in the United States reported a negative correlation between self-concept internal motivation and transformational leadership behaviour. Despite this finding, the fact that the present study is utilising a different set of leaders in a particular context might prove otherwise. As such, it is hypothesised that self-concept intrinsic motivation of middle managers will be related to transformational leadership styles.

Leaders high in goal internalisation emphasise on their principles and values and look to matching them with organisational mission, vision and goals (Moradi, 2015). Similarly, transformational leaders’ behaviours are most typically seen in people who trust and believe in the goals of the organisation, naturally expanding to belief in the organisation’s cause, mission and vision (Barbuto, 2005). Barbuto found a positive correlation between goal internalisation and transformational leadership behaviour indicating that managers with high levels of goal internalisation motivation self-report an ideology consistent with transformational leadership style. Their working behaviour has a purpose and a goal that is fulfilling the organisation’s business direction and success. Middle managers represent an important group in organisations, performing a critical function between strategy formulation and implementation, and front-line management to achieve the strategy (McGurk, 2015). As such, their purpose is to satisfy the strategic interest of senior managers by inspiring, simulating and creating a climate for organisational success. Based on this analysis, it is hypothesised that goal internalisation motivation of middle managers is correlated with transformational leadership styles.

Research design
The research sought to describe the proposed relationships between the variables of interests, that is, motivation sources and leadership styles. As such, an ex post facto design type, the correlational-descriptive case study design was adopted. The choice of the design was informed by the fact that the relationship to be described was only examined after the data had been collected, hence ex post facto.

Quantitative research approach
The study followed the quantitative approach, associated with the empirical deductive reasoning philosophical paradigm, positivism. Quantitative research designs (Kumar, 2011) deal with large numbers or respondents, and also use numbers to generalise comparisons and conclusions about populations (Ghauri & Gronhaug, 2005). It was for these reasons, and the fact that hypotheses were generated for testing, that the approach was chosen. Interviews, which are time-consuming, could not have provided a platform for comparison of data.

Research strategy
A case study strategy, using questionnaires as a data collection method, was used to determine the relationship between the middle managers’ sources of motivation and their leadership styles.

Research method
Research setting
The study was conducted at the two campuses of one of the institutions of higher learning in South Africa.

Target population
The target population in this study comprised all middle managers (academic and non-academic) at the university where the study was undertaken. The total population of both academic and non-academic middle managers was 75 (N = 75) and was divided as follows: 25 academic heads of department and 50 non-academic staff and heads of centres. The unit of analysis was each middle manager.

Sampling
Sampling refers to the process used to select a part of the population for a study (Creswell, Vicki, & Clark, 2007). Sample size in quantitative research for a small population is about 30% of the population (Wagner, Kin & Lynch, 2012). Researchers always advocate for sample representatively, and not necessarily its size. In this research, 40 middle managers selected via non-probability convenience sampling participated in the study. This represented 53% of the population of middle managers at the university.

Measuring instrument
Data collection was performed using a self-administered structured questionnaire. The self-administered questionnaire had items measured on a Likert type scale ranging from 1 = ‘strongly disagree’ to 5 = ‘strongly agree’. The questionnaire consisted of three sections. Section A solicited biographic or demographic information in relation to respondents’ age, gender and educational qualifications. Section B measured the middle managers’ motivation sources, using the adapted and adjusted Motivation Sources Inventory (MSI) developed by Barbuto and Scholl (1998). Section C measured leadership behaviours among the middle managers’ using the Multifactor Leadership Questionnaire (MLQ-Rater version) developed by Bass (1985). The items in these adopted questionnaire(s) were adjusted to suit the sample as well as the context of the study. Questionnaires were distributed by the researchers themselves to willing and available ‘middle managers’ at the institution.
Statistical analysis

Descriptive statistics, such as frequency calculations, measures of central tendency (the mean, median and mode) and measures of variation (range and standard deviation) were used to summarise the sample responses to all questions or items in the questionnaire. Inferential statistics such as Cronbach’s alpha, Spearman’s and Pearson’s coefficient correlations were used to determine the reliability of the different questionnaire items and test the hypothesised relationships among the different motivation sources and leadership styles. Detailed analyses procedures are described in the results section.

Ethical considerations

Permission was sought and granted by the institution’s research committee. The purpose of the research was explained to all participants to secure informed consent. Confidentiality of data collected by aggregating results, as well its safe keeping and provision of results to the university’s authorities, was explained and assured.

Results

Response rate

Of the 75 middle managers, only 40 middle managers were willing to complete and returned the questionnaires, thereby representing a 53% response rate. According to Bryman and Bell (2011), a response rate above 50% is acceptable for any further analysis of data.

Research participants

Thirty-six of the middle managers in the sample were males, whereas 24 were females. Forty-five of them were above 40 years of age, while 35.0% had at least a doctoral qualification, followed by 32.5% with at least a degree. More than 65.0% of the sample had worked at the institution for more than 5 years.

Reliability coefficients

Cronbach’s alpha coefficient was used to estimate the reliability of the motivation sources and leadership styles items. All the items of the two constructs had an alpha value of above 0.5, except for the individualised consideration variable of transformational leadership which was subsequently dropped from further analysis.

Variables’ averages

Averages were calculated to indicate the levels of importance attached to each of the variables by the respondents, as shown in Table 1.

As shown in the results above, inspirational motivation (4.45) had the highest mean average score, indicating greater consistency of responses for transformational leadership, followed by intellectual motivation, with a mean average score of 4.38. Among the leadership styles, only charismatic leadership had the highest mean average score of 4.45. These results show that transformational leadership (especially inspirational motivation and intellectual stimulation) and charismatic leadership styles were regarded as most important by the respondents.

Normality tests

Where parametric tests for correlations, for example, Pearson’s correlation coefficient, are used to analyse data, the requirement is that all the variables must be normally distributed. In this regard, a normality test known as the Kolmogorov–Smirnov (KS) test was used to determine whether motivation sources and leadership styles were normally distributed. The results are presented in Table 2. Using a significance level of 0.1, normally distributed variables in the study were intrinsic process motivation, instrumental motivation, self-concept internal motivation,
goal internalisation motivation, transformational leadership style, contingent reward, transactional leadership style and charismatic leadership style. Those variables that are not normally distributed were self-concept external motivation, idealised influence, inspirational motivation, intellectual motivation, management by exception – passive, management by exception – active, and motivation sources. Therefore, two types of correlation coefficients were used, namely the Pearson’s correlation coefficient and the Spearman’s rho correlation coefficient.

**Hypotheses testing**

To test the five hypotheses of the research, a correlation test was performed between motivation sources and leadership styles. Pearson’s correlation coefficient was used on variables that were normally distributed, whereas the Spearman’s rho correlation coefficient was used on variables that were not normally distributed.

The first hypothesis stated that *intrinsic process motivation is positively related to charismatic and transformational leadership style*. To test this hypothesis, the Pearson’s correlation coefficient was used. In addition, the Spearman’s rho correlation coefficients were used to establish whether or not there was a positive relationship between intrinsic process motivation and the components of transformational style (idealised influence, inspirational motivation and intellectual motivation), because Spearman’s rho coefficients are normally used on variables that are not normally distributed. The results are presented in Table 3.

The results in Table 3 show that transformational leadership style and idealised influence had positive correlation coefficients of 0.323 and 0.321 and \( p \) - values below 0.1, respectively. This means that there was a significant positive relationship between intrinsic process motivation and transformational leadership style and between intrinsic process motivation and idealised influence. Hypothesis 1 is therefore supported regarding these two variables. When managers adopt the transformational leadership style, they behave in admirable ways and display conviction and take a stand that causes followers to identify with them (Northouse, 2016). Previous research results on the relationships between the two variables are supported by the current results. For example, Barbuto (2005) reported that intrinsic process motivation correlated with transformational behaviours. This means that leaders who enjoy work also wish the same to happen to their followers and therefore make efforts to make them understand the value of the vision and mission (idealised influence).

The second hypothesis state that *instrumental motivation is positively related to transactional leadership style*. Pearson’s correlation coefficient was used to establish the existence or non-existence of a positive relationship between instrumental motivation and transactional leadership style and its component, contingent reward. Furthermore, the Spearman’s rho correlation coefficient was used to establish whether or not there was a positive relationship between instrumental motivation and the following components of transactional style: active management by exception and passive management by exception. The results are presented in Table 4.

No relationship was found between instrumental motivation and transactional leadership. The results do not confirm hypothesis 2. This negative correlation contradicts the findings of Barbuto et al. (2000) who found that instrumental motivation correlated with transactional leadership style, contingent rewards and management by exception. Middle managers in university settings do not usually have control over employee rewards that are monetary in nature. The results could be a reflection of this explanation or the fact that most of the participants could have been heads of academic department whose rewards seem less than those of their non-academic counterparts.

In terms of the third hypothesis which states that *self-concept external motivation is positively related to transactional and charismatic leadership style*, the Spearman’s rho correlation coefficient was used to test the hypothesis, specifically, the relationship between self-concept external motivation transactional leadership style and its components (contingent reward, active management by exception and passive management by exception), as well as between self-concept external motivation and charismatic leadership style. The results do not confirm the hypothesis 3. No relationship was found between self-concept external motivation and charismatic leadership style. However, a positive correlation was found between self-concept external motivation and

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Variables</th>
<th>Value (CC)</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson’s</td>
<td>Transformational leadership style</td>
<td>0.323</td>
<td>0.042</td>
</tr>
<tr>
<td></td>
<td>Charismatic leadership style</td>
<td>0.119</td>
<td>0.463</td>
</tr>
<tr>
<td>Spearman’s</td>
<td>Idealised influence</td>
<td>0.321</td>
<td>0.044</td>
</tr>
<tr>
<td></td>
<td>Inspirational motivation</td>
<td>-0.024</td>
<td>0.884</td>
</tr>
<tr>
<td></td>
<td>Intellectual motivation</td>
<td>-0.071</td>
<td>0.664</td>
</tr>
</tbody>
</table>

Other variable is instrumental motivation. CC, correlation coefficient.

<table>
<thead>
<tr>
<th>Correlation</th>
<th>Variables</th>
<th>Value (CC)</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pearson’s</td>
<td>Contingent reward</td>
<td>-0.137</td>
<td>0.399</td>
</tr>
<tr>
<td></td>
<td>Transactional leadership style</td>
<td>0.044</td>
<td>0.787</td>
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<tr>
<td>Spearman’s</td>
<td>Active management by exception</td>
<td>-0.002</td>
<td>0.990</td>
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<tr>
<td></td>
<td>Passive management by exception</td>
<td>0.126</td>
<td>0.438</td>
</tr>
</tbody>
</table>

Other variable is instrumental motivation. CC, correlation coefficient.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Value (CC)</th>
<th>( p )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contingent reward</td>
<td>0.152</td>
<td>0.350</td>
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<tr>
<td>Active management by exception</td>
<td>0.176</td>
<td>0.277</td>
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<tr>
<td>Passive management by exception</td>
<td>0.128</td>
<td>0.430</td>
</tr>
<tr>
<td>Transactional leadership style</td>
<td>0.267</td>
<td>0.096</td>
</tr>
<tr>
<td>Charismatic leadership style</td>
<td>0.109</td>
<td>0.504</td>
</tr>
</tbody>
</table>

Other variable is self-concept external motivation. CC, correlation coefficient.
transformational leadership style at a significance level $p = 0.096$ which was less than 0.1, accompanied by a coefficient of 0.267.

In terms of the hypothesised relationship between these two, hypothesis 3 is supported. With transformational leadership style, the manager sets clear goals and objectives and clearly specifies what rewards (financial or non-financial) can be expected for achieving goals (Sahaya, 2012). Based on these findings, one might infer that when middle managers adopt the transformational leadership style within the institution, they may be influenced by the institutional-wide performance management system of which they are in charge. As such, the results of this study are unsurprising as both self-concept external motivation and transformational leadership style involve leaders using social rewards and seeking praises to motivate and reward exceptional performance in employees. These results are also consistent with a study by Chaudhry and Javed (2012) who found a positive relationship between self-concept external motivation and transformational leadership style.

Hypotheses four stated that self-concept internal motivation is positively related to transformational leadership style. The Pearson’s correlation coefficient was used to establish this relationship. In addition, the Spearman’s rho correlation coefficients were used to establish whether or not there was a positive relationship between self-concept internal motivation and the components of transformational leadership style (idealised influence, inspirational motivation and intellectual motivation). The results are illustrated in Table 6.

The results in Table 6 show that the relationship between self-concept internal motivation and all components of transformational leadership style was highly correlated ($p = 0.000$) with positive coefficient values. Transformational leadership theory is all about leadership that creates positive change in the followers. To do so, leaders should themselves have an inner need to satisfy their personal values.

In this case, middle managers in the study showed how they were well grounded in directing followers towards the

| TABLE 6: Self-concept internal motivation and transformational leadership style. |
|----------------------|---------|----------|
| **Correlation**      | **Variables**     | **Value (CC)** | **P** |
| Pearson              | Transformational leadership style 0.735 | 0.000 | 0.000 |
|                      | Idealised influence 0.701 | 0.000 | 0.000 |
| Spearman’s           | Inspirational motivation 0.326 | 0.040 | 0.000 |
|                      | Intellectual motivation 0.539 | 0.000 | 0.000 |

Other variable is self-concept internal motivation. CC, correlation coefficient.

The results in Table 6 show that the relationship between self-concept internal motivation and all components of transformational leadership style was highly correlated ($p = 0.000$) with positive coefficient values. Transformational leadership theory is all about leadership that creates positive change in the followers. To do so, leaders should themselves have an inner need to satisfy their personal values.

The results in Table 7 show that transformational leadership style and two of its components (idealised influence and inspirational motivation) had $p$-values that were below 0.1 and also had positive correlation coefficients of 0.348, 0.307 and 0.339, respectively. This means that there was significant positive relationship between goal internalisation motivation and transformational leadership style, as well as with two of its components (idealised influence [$p = 0.054$] and inspirational motivation [$p = 0.032$]). Therefore, the above hypothesis is supported. These results correspond with Barbuto’s (2005) findings in which transformational leadership style was found to be directly correlated with goal internalisation, indicating that managers with high levels of goal internalisation motivation are driven solely by a belief that the goals of the organisation are both worthwhile and achievable and therefore self-report an ideology consistent with transformational leadership style. The institution under study had a strategic vision and the fact that middle managers participated in its development could explain their standing with transformational leadership tenets to satisfy these values. Odumeru and Ifeanyi (2013) argue that transformational leaders act in the interest of the whole group. Consistent with the present results, actions such as ‘empowering’ could be construed of as inspiring the group through the leader’s intrinsic motivation drive. In a country like South Africa where transformation is high on the strategic agenda, transformational leadership styles are needed, more especially in institutions of higher learning which are facing constant pressure to change in a number of ways.

The last hypothesis states that goal internalisation motivation will be positively related to transformational leadership behaviours. The Pearson’s correlation coefficient was used to establish whether or not there was a positive relationship between goal internalisation motivation and transformational leadership style. Additionally, Spearman’s rho correlation coefficients were used to establish whether or not there was a positive relationship between goal internalisation motivation and the following components of transformational leadership style: idealised influence, inspirational motivation and intellectual motivation. The results are presented in Table 7.

The results in Table 7 show that transformational leadership style and two of its components (idealised influence and inspirational motivation) had $p$-values that were below 0.1 and also had positive correlation coefficients of 0.348, 0.307 and 0.339, respectively. This means that there was significant positive relationship between goal internalisation motivation and transformational leadership style, as well as with two of its components (idealised influence [$p = 0.054$] and inspirational motivation [$p = 0.032$]). Therefore, the above hypothesis is supported. These results correspond with Barbuto’s (2005) findings in which transformational leadership style was found to be directly correlated with goal internalisation, indicating that managers with high levels of goal internalisation motivation are driven solely by a belief that the goals of the organisation are both worthwhile and achievable and therefore self-report an ideology consistent with transformational leadership style. The institution under study had a strategic vision and the fact that middle managers participated in its development could explain their standing with goals internalisation, and the need to ensure that subordinates are inspired and intellectually stimulated to embrace the strategic direction of the institution.

**Limitations and recommendations**

The study is limited in terms of the generalisation of results, because a case study method was followed. In addition, a greater sample size could have led to a much broader view of the issues under investigation. Despite these limitations, the study provides a useful departure point for how middle management can contribute to the amelioration of leadership challenges in the South African higher education sector.
**Recommendations for practice**

Like organisations in business and industry, institutions of higher education want to hire and retain talented and professionally committed academics. Motivation sources could be used to explain leadership behaviour and could therefore help in the selection and development of specific leadership styles for the different managerial levels within academic institutions through motivation profiling. Sources of motivation may provide one of many pieces of information to consider when making recruitment and leadership development decisions within institutions.

The findings regarding relationships between self-concept external and transactional leadership style provide a platform for institutions to design programmes that enhance social cohesion and further enhance a sense of affiliation among leaders. This has ramifications for leadership behaviours that support the implementation of new strategies and compliance with newly adopted policies. The results supporting relationships between intrinsic process motivation, self-concept internal motivation and goal internalisation and transformational leadership style call for development programmes that further promote the use of transformational leadership styles, bearing in mind the theory that confirms that leaders can be developed.

**Recommendations for future research**

The focus on this study was on self-report measures. Future research could focus on other levels of management, but then compare this with data obtained from followers or subordinates. In addition, an extension of the study on a larger scale, using a bigger sample size, could highlight some best practices among different institutions in terms of profiling their leadership positions. Finally, the inclusion of how demographic variables could play a role on the choice of motivation sources and leadership styles among higher education leadership would be an interesting study for the future.

**Conclusion**

Using quantitative analysis techniques, this study investigated the relationship between motivation sources (intrinsic motivation, instrumental motivation, self-concept external motivation self-concept internal motivation, and goal internalisation) and the three leadership styles (transformational, transactional and charismatic). The results showed that intrinsic process motivation highly correlated with transformational leadership style, especially idealised influence. Hypothesis 1 was therefore supported. It is therefore reasonable to conclude that the middle managers in the institution were motivated by the enjoyment they got from their work, and this had an influence on preferred leadership style, that being transformational leadership.

The hypothesised relationship between instrumental motivation and transactional leadership was rejected, leading to the conclusion that the middle managers’ motivation was not driven by external rewards and that their leadership style was not based on promising reward to their subordinates.

No relationship was found to exist between self-concept external motivation and charismatic leadership style. However, self-concept external motivation was correlated with transactional leadership style. Hypothesis 3 was therefore not rejected pertaining to this relationship, suggesting that the middle managers were also driven by the need for affiliation, or recognition, and sought to achieve that through setting standards and ensuring that subordinates perform accordingly.

There was a significant relationship between self-concept internal motivation and transformational leadership, supporting hypothesis 4. One can therefore conclude that middle managers in the institution were driven by the need to achieve and that they valued and supported individual subordinates’ inherent strength for the achievement of organisational goals through transformational leadership styles.

Goal internalisation motivation was found to be correlated with the transformational leadership style aspects of idealised influence and inspirational motivation, indicating that hypothesis 5 was not rejected. It can be concluded that the middle managers had a full understanding of the vision and mission of the institution and that they wanted such internalisation to be cascaded down to their subordinates through inspirational and motivational strategies.

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**Competing interests**

The authors declare that they have no financial or personal relationships that may have inappropriately influenced them in writing this article.

**Authors’ contributions**

C.C. conceptualised, analysed and wrote up the results and L.L.M. wrote up the literature and methodology sections.

**References**


