



Validating the Measures of Transformational-Transactional Leadership Theory in the Context of Selected Public Universities in Uganda

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ABSTRACT: The study validated the measures of Transformational-Transactional Leadership Theory in the context of selected administrative and academic heads of public universities in Uganda. Basing on the conceptualization by Avolio et al., (1999), Transformational –Transactional Leadership Theory was studied in terms of: idealised influence attributed, idealised influence-behavioural, inspirational motivation, intellectual stimulation, individualized consideration; contingency rewards, active management by exception, and passive-avoidant leadership. The study used a correlational research design on a sample of 93 respondents that were university managers, namely administrative and academic heads of Busitema and Kyambogo Universities in Uganda. Data was collected using a self-administered questionnaire and analysed using quantitative methods that were descriptive and partial least squares structural equation modelling (PLS-SEM) with the help of SmartPLS to determine the measures of Transformational –Transactional Leadership Theory.

Descriptive results indicated that eight constructs of Transformational –Transactional Leadership Theory of idealised influence attributed, idealised influence-behavioural, inspirational motivation, intellectual stimulation, individualized consideration; contingency rewards, active management by exception, and passive-avoidant leadership were high. PLS-SEM indicated that the eight constructs of idealised influence attributed, idealised influence-behavioural, inspirational motivation, intellectual stimulation, individualized consideration; contingency rewards, active management by exception, and passive-avoidant leadership were appropriate measures of the Transformational –Transactional Leadership Theory. It was concluded that managers of public universities in Uganda need to promote a high level of idealised influence attributed, idealised influence-behavioural, inspirational motivation, intellectual stimulation, individualized consideration; contingency rewards, active management by exception, and passive-avoidant leadership among administrative and academic heads of departments . Therefore, the study recommended that managers of public universities in Uganda should emphasise idealised influence attributed, idealised influence-behavioural, inspirational motivation, intellectual stimulation, individualized consideration; contingency rewards, active management by exception, and passive-avoidant leadership among administrative and academic heads of departments.

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KEYWORDS:

Idealised influence attributed, idealised influence-behavioural, inspirational motivation, intellectual stimulation, individualized consideration; contingency rewards, active management by exception and passive-avoidant leadership.

INTRODUCTION

The Transformational-Transactional Leadership Theory by Burns (1978) and advanced by Avolio et al (1999) identifies two, namely transformational and transactional leadership styles which informed this study. Transformational leadership, as conceptualized by Bass (1985), stresses stimulating and encouraging followers to foster innovation, loyalty, and long-term success. It promotes a future-oriented approach, encouraging adaptability, creativity, and engagement (Avolio & Bass, 2004). Conversely, transactional leadership focuses on standardised processes, result-based benefits, and rewards to drive efficiency and productivity in the short term (Burns, 1978). While both leadership styles lead to organisational advancement, their relative effectiveness within different business climates, particularly in Uganda, remains an area of critical analysis (Ofenimu, 2025). Bass (1985) invalidated Burns' leadership concept by developing the Multifactor Leadership Questionnaire (MLQ). By conducting factor analysis, Bass proficiently identified three sub-components of transformational leadership that were termed charisma, personal consideration, and intellectual

stimulation. Bass also identified two sub components of transactional leadership that were termed contingent reward and management by exception. According to Bass, charisma is the individual's ability to induce employees and lead them to follow the supervisor's vision and mission. According to Bass (1985), charisma has two sub element namely; idealized influence attributes which refer to perceptions of characteristics found within a leader, and idealized influence behaviour which refers to follower perceptions of leadership behaviour. Personal consideration is a supervisor's capability to pay individual attention to employees, while intellectual stimulation the leader's capability to encourage employees to think of innovative and proactive solutions to various problems at hand. Later, Bass & Avolio (2000) added another factor, namely inspiration to describe transformational leadership. However, the capacity to inspire seems to be closely linked to charisma and is therefore regularly noticed as a component of the same (Putra et al., (2020).

Leithwood and Jantzi (2000) identified six main features of transformational educational leaders, namely creating the vision and goals of higher education, dispensing intellectual stimulation, advancing individualized support, consolidating professional practices and values, upholding high performance expectations, and advancing structures to promote participation in decisions of higher education. Contingent reward, one sub component of transactional leadership, relating to situations in which leaders give incentives to subordinates for completing the agreed assignment. Management by exception is another sub component that describes transactional leadership, relating to situations where the leader only reacts in case of a problem. Management by exception component involves two forms: passive and active (Bass & Avolio, 1990). The sub component of management by exception seems negative as leadership attributes (Geijsel et al., 1999). In educational realms, transactional leadership has been presented as having four components, namely staffing, instructional support, monitoring school activities, and community focus (Leithwood & Jantzi, 2000).

The Transformational-Transactional Leadership Theory is based on ideas advanced by Avolio (1999) who conceptualized transformational and transactional leadership styles to include seven leadership factors that must be possessed by the highly transformative and successful leaders namely; idealised attributed, and idealised behaviour, inspirational motivation, intellectual stimulation, individualized consideration, contingent reward, active management-by-exception and passive-avoidant leadership. In subsequent writings Bass (1988) noted that although charismatic and inspirational leadership were unique constructs, they were often not empirically distinguishable, thus reducing his original multifactor model to six factors. The Transformational-Transactional Leadership Theory is based on a Multifactor Leadership Questionnaire (MLQ Form 5X) which identifies the characteristics of a transformational leader and helps individuals discover how they measure up in their own eyes and in the eyes of those with whom they work (Multifactor Leadership Questionnaire, 2018.).

The latest version of the Multifactor Leadership Questionnaire (MLQ Form 5X) which was advanced by Avolio et al., (1999) was used comprising of 34 revised items concerning university leaders namely ; emphasise values, consider a sense of purpose, exhibit morals and ethics, emphasise the collective mission, talk optimistically about staff and the organisation, talk enthusiastically about activities, clear vision, confidence in handling affairs, seek different views from staff, re-examine assumptions before taking action, new ways of doing things, different angles of accomplishing activities. Also, teach and coach subordinates, give attention to staff, handle staff equally, help staff develop their strengths, clarify rewards, assist staff based on effort, reward achievement, and recognise achievement. Further, focus on mistakes of staff, spend time on urgent matters, neglecting a calm and planned way, track mistakes of staff, concentrate on failures of staff; and react to problems if serious, react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues. The study was more interested in validating the impact of transformational and transactional leadership styles. The total number of items was used consisted of 34 items, 20 of which belonged to transformational and 14 to transactional styles of leadership (Hoxha.2019).

It is from Burns (1978) comprehensive model of transformational and transactional leadership that Avolio et al., (1999) advanced the Transformational-Transactional Leadership Theory. Transformational-Transactional Leadership Theory helps to explain how transformational and transactional leadership styles influence organisational effectiveness. Transformational leadership is the belief that effective leaders inspire their teams to work towards a common goal which helps them develop innovative methods to address organisational impediments (Hoxha, 2019). According to Kehr et al., (2023), transformational leadership theory is in essence a motivation theory based on several statements made by the theory pioneers (Burns, 1978; Bass, 1985; House, 1977; Bass, 1998; Bono & Judge, 2004; Gagné et al., 2020; House & Shamir, 1993), but no earlier work has directly scrutinized the associations between TL and followers' motives with the exception of Jacobsen & House (2001). The central concern of transformational leadership is to induce followers to stir their followers to go beyond their self-interest for the good of the group (Krishnan, 2004). The four tenets of the transformational leadership style are idealized influence, inspirational motivation, intellectual stimulation and individualised consideration (Avolio et al. (1999). Idealised influence in terms of idealised influence-attributed and idealised influence-behaviour describes the leader's confidence to win the trust of followers, inspirational motivation describes a leader who has a will to cheer up hi/her subordinates while intellectual stimulation is about the leader's capability to motivate subordinates, and individualized consideration regards the leader honouring and giving care to the followers (Korejan & Shahbazi, 2016).

The Transactional Leadership style on the other hand describes a leadership that has attracted attention for its structured approach, which stresses clear expectations, defined roles, and a system of rewards and punishments based on performance (Inriani

et al., 2025), which can help manage routine tasks effectively (Abbasi et al., 2025). This clear system of rewards and penalty helps create a reliable and predictable work atmosphere, where followers understand exactly what is required of them and the repercussions of their actions (Ahmad, 2025). Mendoza et al., (2023) clarified that the transactional leadership style has confirmed a positive significant influence on organisations because it emphasizes meeting established goals and improving quantifiable performance. This leadership prioritizes supervision and control over followers in their work undertakings and accommodates rewards or sanctions depending on the results attained (Aga, 2016), it focuses on executing strategies to strengthen the hierarchical structure (İşcan et al., 2014), and it inspires followers through their interests and needs and stresses that goals and objectives should match the contingency rewards and inducements agreed upon (Arokiasamy et al., 2015). As described by Bass (1985), this leadership style is built on three key elements: contingent reward, where employees receive incentives based on their performance; active management by exception, where leaders monitor and address performance deviations in real-time; and passive management by exception (*laissez-faire*), where leaders intervene only when significant issues arise. While this framework provides clarity and accountability, it may limit employee autonomy and innovation, as it prioritizes adherence to established rules over creative problem-solving (Ofenimu, 2025).

Bass et al., (2003) gave details of the eight dimensions of the Transformational-Transactional Leadership Theory thus; under the idealized influence, transformational leaders act in ways that permit them to serve as role models for their subordinates. Here, leaders are admired, respected, and trusted. Subordinates identify with the leaders and try emulating them; leaders are bestowed by their subordinates as having exceptional abilities, persistence, and determination. Thus, there are two aspects to idealized influence namely; the leader's behaviours and the aspects that are attributed to the leader by subordinates and other accomplices; under inspirational motivation, leaders react in ways that motivate and inspire those surrounding them by providing meaning and challenge to their subordinates' tasks. Team work is triggered; passion and anticipation are displayed; leaders get encourage subordinates in envisioning attractive eventual possibilities; they create clearly communicated assumptions that employees need to handle and also justify loyalty to goals and the shared vision (Rahman et al., 2014).

Intellectual stimulation leadership entails leaders who provoke their followers' intellect, question the status quo and stimulate creative thinking. Followers are encouraged to analyse their assumptions, create new ideas, and apply innovative problem solving approaches. The leadership style discourages dictating changes but rather nurturing an atmosphere where followers gain freedom of expressing their creativity and risk taking abilities. Transformational leaders value their team's ingenuity thereby cultivating a culture of continuous improvement and exploration. Individualized Consideration transformational leaders excel in providing customised care to each employee's needs and development. They act as mentors or instructors, proactively guiding followers in their personal and professional goal attainment. This style is concerned with recognising and appreciating employees' exceptional aspirations and learning preferences, and adapting their guidance to tailor to individual circumstances. This not only helps in developing employees' prospects but also vitalises their loyalty and commitment, as they feel sincerely sustained and valued by their leader thereby enhancing organisational effectiveness (Bass et al., 2003; Gupta, 2025).

Contingent reward as the first element of transactional leadership is based on transactions or exchange of resources with followers which can be material or psychological (Aga, 2016). It comprises the description of the work to be performed, where incentives are used to influence the worker. The leader clarifies the established objectives, indicates the expected levels of performance, gives recognition when goals are met, and sets the rewards to the followers for their efforts. This dimension is composed of four elements: resource sharing, reward system, fulfilment of obligations, and personal recognition (Mendoza et al., 2023). Passive management by exception as the second element of transactional leadership is based on not intervening and letting problems arise and only attending to them when they are serious (Aga, 2016). Therefore, it is the most careless leadership style and can become liberal because it avoids establishing agreements and specifying expectations or goals (Bass et al., 2003). Various studies have found that this approach does not favour the achievement of objectives (Birasnav & Bienstock, 2019). Flatau-Harrison et al., 2020) explained that applying this leadership style usually endangers teamwork environmental security and does not recognise employees (The factors in this dimension are: passive corrections, self-interest, keeping the system working/ not taking risks, maintaining traditional ideas/ not innovating, promoting established rules/ not inspiring, commitment to realism/no vision, job instability, resistance to change, mouldable ethics, and less concern for employees(Mendoza et al., 2023).

Arokiasamy et al., (2015) and Birasnav & Bienstock, 2019) assert that active management by exception as the third dimension of transactional leadership involves continuous surveillance to avoid distortions in procedures, neglecting of rules, or errors in the system, and to take corrective action as a matter of urgency; compliance standards are specified and taking of punitive measures to un successful followers based on the set expectations; and changes to reduce errors are instituted before they become more serious or complex. This leadership style contributes significantly to improving organizational performance and ensures that standards and contractual obligations are met. Basically, the style maintains the organisation's current performance levels and consists of ten facets: setting standards, a focus on organisational goals, follower control, hierarchical decision making, improving development opportunities, supervision, auditing, short-term strategies, improving qualitative performance, and feedback (Mendoza et al., 2023). It is important to note that contingent reward is related to active management by exception because it aims to reward

all workers for their work (Aga, 2016), and facilitates supervision and control thereby helping to keep the production system running (Fletcher et al., 2019).

However, a challenge existing in Ugandan public universities believed to be related to their organisational effectiveness was leadership as manifested by the challenge of the authoritarian model of governance indicated by a lack of effective engagement of the teaching staff in the management of pedagogical approaches. The leadership model does not promote open dialogue on how universities should be governed. There is also a habit by university managers to bypass line managers (Turyahikayo et al., 2024a). The universities suffer from the problem of ineffective university administration, management, and leadership yet it is irrefutable that leadership is very key for an educational establishment to run remarkably (Kasule, 2025). On their part, Turyahikayo et al., (2024c) reports that the heavy disputes between the top management and lower-level management on matters relating to problem solving and insufficient negotiation skills polluted harmony among the staff which wholesomely had a detrimental effect on the employee productivity (KyU Staff Evaluation Report, 2012). Leadership style should therefore considerably comply with the situation at hand in order to achieve efficiency by exercising influential communication skills. Kato et al., (2023) revealed that the problems of Kyambogo University staff were a result of inadequate leadership because of the lack of a collective vision between staff members and the managers of the university. And on their part, Mugizi et al. (2022) reported that the university suffered mismanagement, deterioration in governance, unethical and reckless behaviours. The Transformational-Transactional Leadership Theory suggests existence of three leadership styles that are transformational, transactional and laissez-faire. This study tested how the three leadership behaviours influenced organisational effectiveness of universities in terms of productivity, adaptability and flexibility as operationalized by Mott (1972). Thus, this study was attracted to how the leadership styles influenced the organisational effectiveness of public universities in Uganda.

The study tested the hypotheses to the effect that:

1. The transformational leadership style has a significant influence on the organisational effectiveness of public universities.
2. The transactional leadership style has a significant influence on the organisational effectiveness of public universities.
3. The laissez-faire leadership style has a significant influence on the organisational effectiveness of public universities.

THEORETICAL REVIEW

The transformational-transactional leadership theory by Burns (1978) and advanced by Avolio et al. (1999) informed this study. The theory recognises two leadership styles namely; transformational and transactional leadership styles. Transformational-transactional leadership theory is one way in which the leadership practices can be depicted and judged. Transformational leaders exhibit astonishing and unified vision with their followers, prompting others to deliver exceptional work. Transactional leadership portrays more of a give and take working association whereby a rapport between leader and employee is settled through exchange, such as a rewards program for actualising specific objectives (Lai, 2011).

Bass (1999) identifies the ability of transformational leaders to motivate their followers, activating higher-order needs, establishing a climate of trust within the organization, and emphasizing the importance of organisational goals over individual ones. Carless and Wearing (2000) reported that transformational leaders convey a profound and positive vision of the future, contact subordinates on an individually, boost their progress, dispense adequate consideration for followers' achievements, stimulate disparate opinions on business problems, clearly accentuate organisation values, and act as role models for organisation employees through their actions (Dukanac et al., 2025). Whereas the transactional leadership style is the reciprocal relationship between the supervisors and subordinates whereby each of them makes a deal out of the expectation of realising each other's demands since it is the leader's way of sustaining performance by gratifying the needs of followers (Putra et al., 2020). **Transformational leadership style**

Transformational leadership has evolved since the term was first coined in 1978 by James M. Burns who explained that the transforming leader looks for potential motives in followers, seeks to satisfy higher needs, and engages the full person of the follower. The result of transforming leadership is a relationship of mutual stimulation and elevation that converts followers into leaders and may convert leaders into moral agents (Howell et al., 2022). Balwant et al. (2019) defined transformational leadership style as involving a leader who clearly pronounces a practical vision of the future that is shared, thought provoking to employees and highly considers employee subordinate differences. They further reported that transformational leadership style highly applies to university teaching in form of transformational instructor leadership. Putra et al., (2020) reported that transformational leadership confines leaders and employees in a partnership process and thus enhancing the performance of the overall organisation.

Rahman et al., (2014) defined transformational leadership as leaders who make use of anticipated needs or demands of employees based on collective common goals and objectives. This is consummated by the leader enunciating their vision of what they see as the opportunities and threats facing their organisation, the organisation's strengths, weaknesses, and comparative advantages, and effectuates consciousness and ratification of the purposes and mission of the group. Magasi (2021) defined transformational leadership styles as a style where subordinates desire beyond their self-interest, and focus on the higher level of motivation for the organisation which eventually ameliorates its effectiveness. Bojovic and Jovanovic (2020) clarified that transformational leadership style is where leaders use their vision and personality to inspire followers to adjust their expectations, perceptions, and motivations to work towards achieving the common organisational goals and objectives. Additionally, Chen et al

(2022) posited that transformational leadership theory assumes that leaders should respect and trust their subordinates so that they may gain their loyalty and make them believe in universal contributions to the organisational goals achievement through commitment, creativity and innovativeness in solving work related problems that result to organisational effectiveness.

Mekonnen and Bayissa (2023) suggested that transformational leadership style is in several aspects the extension of transactional leadership style, is direct or participatory and shares some common characteristics with charismatic leadership though charisma is a component of transformational leadership. This view was in line with Abdelallem and Zeid (2023) who explained that transformational leadership is the most desirable leadership style because it deals with emotions, values, and creativity of employees and it generates innovation plus obtaining employee commitment and creating higher work quality and innovative problem-solving processes. With transformational leadership, superiors inspire followers to achieve beyond expectation by emphasizing followers' values and helping them to match their values with organisational values.

Transactional leadership style

According to Rahman et al., (2014), transactional leadership is defined as involving an exchange process that may result in subordinate adherence with leader inquiries but is not likely to generate passion and commitment to assignment objectives. Transactional leadership occurs when the leader rewards or sanctions the followers, depending on the sufficiency of the follower's performance (Bass & Riggio, 2006). Beakana (2017) defined transactional leadership style as one that focuses on the motivation and punishment of subordinates through rewards and sanctions thereby rewarding high performers and punishing non- performers accordingly. Additionally, transactional leadership style is defined as an approach where the leader stresses the exchange of rewards and punishments implying that high performers are rewarded and poor performers are sanctioned appropriately (Sofi & Devanadhen, 2015). Azizaha et al. (2020) as the exchange relationship that is created between leaders and their subordinates where each party strikes a deal as a way of satisfying each one's interests and hence enabling the leader to maintain organisational performance by stressing the satisfaction of the needs of his followers. Fazzi and Zamaro (2016) opined that transactional leadership style follows an approach of give and take of those benefits agreed upon by both parties in their exchange transactions.

Transactional leadership explains the relationship between the leader and followers based on exchange or contingent rewards put in place by the leader to enhance goal achievement (Algahtany & Bardai, 2019). Similarly, Purwanto et al, (2020) explained that transactional leadership style relates with motivating subordinates by enhancing their personal interests and that it involves values which are relevant to exchange processes that include honesty, responsibility and reciprocity. Transactional leadership style is therefore the exchange relationship between the leader and followers firmly built on the mutual benefit principle. Crews et al (2019) asserted that transactional leadership style is the leader's ability to reinforce followers for their positive achievement of the bargain and that it involves three dimensions/ constructs namely; contingent rewards which involves leaders engaging a path-goal exchange of reward for excellent performance, active management-by-exception where leaders engage in corrective action based on leader- subordinate transactions, and passive management-by-exception where leaders leave subordinates to take full responsibility for their actions but come in to intervene after mistakes have become apparent.

Laissez-faire leadership style

Laissez-faire leadership is characterised by minimal guidance and autonomy provision to team members, can engender adverse outcomes within organisational settings. Despite potential advantages in select scenarios, this leadership approach is commonly linked to negative organisational consequences such as; lack of direction, wherein leaders fail to articulate clear objectives, fostering confusion and hindering productivity, diminished motivation may result from employees feeling undervalued, leading to reduced job satisfaction and morale, suboptimal decision-making may occur due to inconsistent choices stemming from insufficient guidance and expertise among team members, and a deficit in accountability may lead to quality control issues, missed deadlines, and substandard performance (Kamal& Kesuma ,2024). Laissez-faire behaviours are ones that temporize decisions and relinquish responsibility. These leaders give no feedback or support to the subordinate and it is a "hands-off" approach to leadership (Northouse, 2004). Laissez-faire leadership is also referred to as a non-leadership style; leader avoids accepting responsibilities, is absent when needed, fails to follow up on requests for assistance, and resists expressing his or her views on important issues; gives the majority of control in the decision-making process to the followers; assumes that subordinates are intrinsically motivated and should be left alone to accomplish tasks and goals; and leader does not offer direction or guidance (Jones & Rudd,2008). According to Bass and Avolio (1990, 1995), laissez-faire leadership is termed as passive (or lack of) leadership. Hence, this study regarded laissez-faire leadership as passive-avoidant leadership.

EMPIRICAL REVIEW

Transformational leadership is defined as a style where leaders make use of potential needs or demands of employees based on shared common goals and objectives. This is accomplished by the leader pronouncing their vision of what they think as the opportunities and threats confronting their organisation, the organisation's strengths, weaknesses, and comparative advantages, and generates awareness and acceptance of the purposes and mission of the team (Rahman et al., (2014). In addition, Chen et al (2022) clarified that transformational leadership theory assumes that leaders should respect and trust their followers so as to gain their

loyalty and make them believe in all-embracing contributions to the organisational goals realisation through commitment, creativity and innovativeness in solving work related problems that result to organisational performance. Conversely, transactional leadership style is defined as a leadership that concentrates on submission by the followers using rewards and punishment (Layek & Koodamara, 2024). In addition, transactional leadership style has proved to have a positive influence on institutions because it focuses on meeting established goals and improving quantitative performance. Thus, this leadership emphasizes supervision and control over employees in their work tasks and provides rewards or punishments depending on the results obtained; and focuses on implementing strategies to improve the hierarchical structure (İşcan et al., 2014), and it inspires followers through their interests and needs (Mendoza et al., 2023). The MLQ -5x instrument is made up of forty -five descriptive statements (Bass & Avolio, 2000) and the measurement items are both self -rated and peer -rated by five -point Likert - type scales.

The indicators that measure transformational- transactional leadership styles by Seyal and Rahman (2014) are; provide others with assistance in exchange for their efforts, re-examine critical assumptions to questions whether they are appropriate, fail to interfere until problems become serious, focus attention on irregularities, mistakes, exceptions and deviations, avoid getting involved when important issues arise, talk about most important values and beliefs, absent when needed, seek differing perspectives when solving problems, talk optimistically about the future, instil pride in others for their association, discuss in specific terms who is responsible for achieving performance targets, wait for things to go wrong before taken action, talk enthusiastically about what needs to be accomplished, specify the importance of having a strong sense of purpose, spend time teaching and coaching, make clear what one can expect to receive when performance goals are achieved, believe firmly in “If it isn’t broke, don’t fix it”, go beyond self-interest for the good of the group, treat others as individuals rather than just as a member of a group, demonstrate that problems must become chronic before taking action, act in ways that build respect, concentrates fully on mistakes, complaints, and failures.

In addition, consider the moral and ethical consequences of decisions, keep tracks of all mistakes, display a sense of power and confidence, articulate a compelling version of the future, and direct attention toward failures to meet standards, avoid making decisions, and consider an individual as having different needs, abilities, and aspirations from others, get others to look at problems from many different angles, help others to develop their strengths, suggest new ways of looking at how to complete assignments, delay responding to urgent questions, emphasize the importance of having a collective sense of mission, express satisfaction when others meet expectations, express confidence that goals will be achieved, effective in meeting others’ job-related need, use methods of leadership that are satisfying, get others to do more than they expected to do, effective in representing others to higher authority, work with others in a satisfactory way, heighten others’ desire to succeed, effective in meeting organisational requirements, increase others’ willingness to try harder, and lead a group that is effective.

Transformational leadership style empirical review

Northouse’s transformational leadership model consists of 4Is as follows: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration (Northouse, 2016). Idealized influence is the ability to evaluate and/or emulate the track records of other successful leaders which can be done through coaching or following a supervisor’s career path as well as building collaborations and invigorating leadership skills. Inspiration motivation helps supervisors influence subordinates and to move beyond envisioned impediments to achieve objectives. Intellectual stimulation is based on creativity, innovation, and strategic thinking. Individualized consideration refers to the circumstance during which a supervisor listens to and understands a subordinate’s needs and desires to give them the tools to perform at higher levels (Northouse, 2016). Developed by Bass and Avolio (1997), the MLQ -5xTM measures four tenets of transformational leadership: idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Avolio et al. (1998) conceptualised transformational leadership as follows; idealised influence (attributed charisma), idealised influence (behavioural charisma), inspirational motivation, intellectual stimulation and individualized consideration. Rahman et al., (2014) conceptualised transformational leadership as follows; idealized influence attribute, idealized influence behaviour, inspirational motivation, intellectual stimulation, individualized consideration.

Transformational leadership was measured by various scholars; (Bass & Avolio, 2000; Ismail et al., 2010; Rahman et al., 2014; Howell et al., 2022; Irdiyansyah et al., 2024; Turyahikayo et al., 2024c; & Rashid & Wahab, 2024). The indicators that measure transformational leadership by Ismail et al., (2010) are, instills pride, spends time teaching and coaching, considers moral and ethical consequences, views staff as having different needs, abilities, and aspirations, listens to concerns, encourages performance, increases motivation, encourages to think more creatively, sets challenging standards, and encourages rethinking never-questioned ideas. Bass & Avolio, (2000) developed and validated a transformational leadership scale (MLQ 5X) with indicators that were; act in ways that build others’ respected when considering the moral and ethical consequences of decisions, talk enthusiastically about what needs to be accomplished, re-examining critical assumptions to question whether appropriate, and considering an individual as having different needs, abilities, and aspirations from others, discussing in specific terms who is responsible for achieving performance targets (Rahman et al., 2014). In comparison, the above scholars; (Bass & Avolio, 2000; Ismail et al., 2010; & Rahman et al., 2014) conceptualised transformational leadership differently where by Ismail et al., 2010; & Bass & Avolio, 2000) have relatively fewer indicators tailored to specific constructs, and Seyal and Rahman et al., (2014) developed many indicators and not well aligned to the specific constructs in the measurement tool, thus creating some sense of ambiguity in

the eyes of current and future researchers. This creates a measurement gap that hinders consistency and reliability hence need for this study to validate these measurement indicators.

Howell et al., (2022) conceptualised transformational leadership to include five elements namely; idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration based on Bass (1985) conceptualisation. Korejan et al., (2016) conceptualised transformational leadership in terms of five elements namely individualized consideration, intellectual stimulation, inspirational motivation, idealized influence using the following measurement indicators; instilling a sense of pride and honour to members to connect with others, showing a sense of power and competence, act in a way to rise other's respect, sacrificing personal interest for other's interest, talking optimistically about the future, talking seriously about things that should be done, emphasizing on the importance of foresight, giving hope to members about achievable goals, careful examination of offers to ensure their suitability, taking into account different perspectives while solving a problem, requesting for examination of problems from different perspectives, suggesting new ways of how to do something, allocating time for guidance and training, treating with members as a person not as a member, considering people with different needs, abilities and creativities, help others to develop their capabilities.

Irdiyansyah et al., (2024) conceptualised transformational leadership in terms of five elements namely individualized consideration, intellectual stimulation, inspirational motivation, idealized influence. The indicators used under these elements were; praise the teacher's performance, express gratitude to the teacher, giving awards to outstanding teachers , provide an assessment of the teacher's performance, get to know the teacher individually , know the characteristics of each teacher, understand the diversity of potential that teachers have, get to know the teacher's background, provide opportunities for teachers to solve problems ,foster teacher optimism regarding the future of students and schools, provide flexibility to teachers in carrying out their duties, provide opportunities to participate in training outside of schools, providing freedom of expression, receive criticism and suggestions, respect your colleagues' opinions, and conduct deliberations regarding the problems faced, increase knowledge to improve the quality of work, practicing innovations that are based on developments in science and technology, provide direction and guidance, appreciate the abilities and talents, motivate to generate teacher enthusiasm and optimism, encourage practicing creative learning models,

Also, spur optimizing potential, pay attention to staff ideas, pay attention to expectations and input, carrying out tasks and obligations in a disciplined manner, act as role model , implement discipline as per rules, provide guidance, guidance on developing potential, have a wide network and connections , capable of communicating well, creating an atmosphere of togetherness , listen to complaints related to learning, create a conducive social atmosphere, maintain conducive environment, dividing institutional tasks in a professional and proportional manner, prioritize school interests, and devote time for the benefit of the school. In contrast, Howell et al., (2022) and Irdiyansyah et al., (2024) conceptualised transformational leadership in the same way in terms of five elements namely individualized consideration, intellectual stimulation, inspirational motivation, idealized influence. However, their measurements indicators differ in comprehensiveness whereby Howell et al., (2022) developed fewer items compared to his counterpart though they both stressed leaders inspiring, coaching, developing, respecting and modelling their followers. Also, all the indicators stressed leadership that involves cohesion, commitment, trust, motivation and performance. There is thus a variation that creates an overlap. Hence, the above studies used different indicators, highlighting a need for standardization. This requires validating current measurement scales to ensure consistency and reliability.

Turyahikayo et al., (2024c) constructed and validated a transformational leadership scale with indicators that were: proud of the superiors, going beyond self-interest, earned respect, portray authority and confidence, emphasise values, give a sense of purpose, exhibit morals and ethics, emphasise the collective mission, talk optimistically on a range of issues pertaining to staff and the organisation, talk enthusiastically about organisation activities, have a clear vision, express confidence in handling organisation affairs, seek different views from staff, re-examine assumptions before taking action, suggest new ways of doing things, suggest different angles of accomplishing tasks, teach and coach subordinates, give attention to staff ,handle staff equally, and help staff develop their strengths. The indicators that measure transformational leadership by Rashid and Wahab (2024) were cultivate ideal influence, inspirational motivation, build intellectual stimulation, and consideration is based on the individual. The indicators for the current scholars (Turyahikayo et al., 2024c; & Rashid & Wahab, 2024) have slightly improved the measurement indicators of measuring transformational leadership though they also differ in complexity and structure. The former has many indicators than the later and even yet different. This discrepancy emphasizes the necessity to review and confirm the relevance of the indicators in the existing measurement scale. The challenge still remains how we can best measure such exemplary leadership styles beyond simply using survey tools, as well as to develop them over time in organisations

Transactional leadership empirical review

Avolio et al. (1998) conceptualised transactional leadership styles as follows; contingent reward, management-by-exception-active, and management-by-exception-passive. According to Luthans and Doh (2009), transactional leadership is identified as having three elements as follows: contingent reward, management by exception-Active and management by exception-Passive. Bass and Avolio (2000) conceptualised transactional leadership styles as follows; contingent reward, management-by-exception-active, and management-by-exception-passive. Scholars; (Ismail et al., 2010; Seyal & Rahman, 2014; Arokiasamy et al., 2015; Mendoza et al., 2023; &Turyahikayo et al., 2024c) investigated various aspects of transactional leadership. Ismail et al., (2010) constructed and

validated indicators that measured transactional leadership that are; makes clear expectation, will take action before problems are chronic, tells standards to carry out work, works out agreements, monitors performance and keeps track of mistake.

On the other hand, Arokiasamy et al., (2015) constructed and validated a transactional leadership scale with indicators that were; focus on task completion, teacher compliance, rely quite heavily on organisational rewards and punishments to influence teacher performance, emphasize work standards, assignments, and task-oriented goals. In contrast, both Ismail et al., (2010) and Arokiasamy et al., (2015) validated few indicators of transactional leadership with some overlap. With Ismail et al., (2010) using five items and Arokiasamy et al., (2015) using only three. Comparing the above two with Seyal & Rahman, (2014) who developed forty five items of both transformational and transactional leadership styles without specifying the constructs aligning with the given items in their measuring tool reveals use of diverse indicators that cause overlap and confusion on the part of future scholars. This variation punctuates the need for a standardized tool to persistently measure leadership styles, leading to the development of a specific measurement scale.

Relatedly, Mendoza et al., (2023) developed indicators that measured transactional leadership that are resource sharing, reward system, fulfilment of obligations, personal recognition, passive corrections, self-interest, keeping the system working/not taking risks, retaining traditional ideas/not innovating, promoting established rules/not inspiring, commitment to realism/no vision, job instability, resistance to change, mouldable ethics, less concern for employees, setting standards, focusing on organisational goals, follower control, hierarchical decision making, improving opportunities for development, supervision, auditing, short-term strategies, improving qualitative performance, feedback. Research on transactional leadership has used diverse indicators, with some overlap. This variation highlights the need for a standardized tool to consistently measure leadership styles, leading to the development of a specific measurement scale. For instance, Seyal & Rahman, (2014) ambiguously constructed indicators without alienating which are for transformational or transactional leadership in the measurement tool. In contrast, Mendoza et al., (2023) clearly specified each construct with its measurement indicators which enhances clarity. However, the items were too many under each construct which may cause overlap. This causes confusion to future researchers referring to it. Thus, there is need for a standardized tool for better consistency and reliability.

Further, Turyahikayo et al., (2024c) developed indicators that measured transactional leadership that were; clarify rewards, assist staff based on effort, reward achievement, recognise achievement, focus on mistakes of staff, concentrate on solving problems rather than working in a calm, organised manner, track mistakes of staff, concentrate on failures of staff, react to problems if serious, react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues. The indicators above were well aligned with their constructs and regulated in number. Compared to the earlier researchers who provided a limited number of indicators (Ismail et al., (2010; & Arokiasamy et al., 2015) and others who developed too many items not aligned with their respective constructs (Seyal & Rahman, 2014), the current researchers (Mendoza et al., 2023 & Turyahikayo et al., 2024c) have improved the measurement indicators but still with some overlap that prohibits better consistency and reliability. Hence, despite efforts to assess transformational-transactional leadership styles, inconsistencies in the indicators used across studies reveal a gap in standardized measurement. This discrepancy punctuates the necessity of this study to review and confirm the relevance of the indicators in the existing measurement scale. This therefore requires validating current measurement scales to ensure consistency and reliability. Hence, the need for this study.

Laissez-faire leadership empirical review

Bass and Avolio (1990) explained laissez-faire leadership as the absence of leadership, the avoidance of intervention, or both. With Laissez-faire leadership, there are generally neither transactions nor agreements with subordinates, decisions are often delayed; feedback, rewards, and involvement are absent; and there is no attempt to motivate subordinates or to acknowledge and gratify their needs. A laissez-faire leadership style is not only the absence, and therefore a type of zero leadership, but it signifies not meeting the legal assumptions of the followers and/or leaders concerned (Skogstad et al., 2007). Kelloway and colleagues (2005) state that poor leadership, including laissez-faire leadership, may be a root cause of particular workplace stressors such as role conflict, role ambiguity, and the perceptions of low-quality interpersonal treatment by the leader, with subsequent consequences in the form of stress reactions and strains. However, empirical studies documenting such relationships between laissez-faire leadership as an antecedent of workplace stressors and consequences in the form of strains are scarce. Empirical studies of laissez-faire leadership have mainly focused on direct associations with job satisfaction, cohesiveness, and productivity (Bass, 1990), where exposure to laissez-faire leadership behaviours has been shown to be negatively associated with subordinates' job satisfaction (Judge & Piccolo, 2004) as well as satisfaction with the leader and leader effectiveness (Bass & Avolio, 1994; Judge & Piccolo, 2004; Yammarino, Spangler, & Bass, 1993).

Jones and Rudd (2008) identified two constructs of laissez-faire as laissez faire and passive-management –by-exception. Management-by-Exception (passive) and laissez-faire which is an inactive form of leadership characterized by a reluctance to become actively involved and a view that the best leadership is to disassociate from the action, both associated with laissez-faire leadership. Xirasagar (2008) conceptualised laissez-faire leadership in terms of passive-management-by-exception and laissez-faire; with measurement indicators that reacts to problems, if chronic, if not broke, don't fix, puts out fires, avoids involvement, unavailable when needed, avoids deciding, delays responding. Bass' dimensions of laissez-faire and passive management-by-exception correlate

positively with each other and negatively with all other sub dimensions of transactional and transformational leadership. Thus, the two forms of leadership are not only empirically but also theoretically linked, as they are both exceedingly passive in nature, thus opposed to all other measured dimensions that are active in nature (Den Hartog et al.,1997). This study too looked at laissez-faire in terms of passive-avoidant leadership style and the measurement indicators were; react to problems if serious, , react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues.

METHODOLOGY

Research Design and Sample

The study used the correlational research design. The correlational research design is a quantitative research design that seeks to ascertain the level of correlation between or among the variables. The design helped to analyse linkages between variables (Mohajan, 2020). The correlational design involved linking leadership styles with organisational effectiveness. The population of the study comprised 265 administrative and academic heads that is 85 people for Kyambogo University, 60 for MUST, 63 for Gulu University and 62 people for Busitema University. Since the population was small, the researchers planned to study all of them. However, appropriate data was collected from 231 people comprising 61% the projected study participants. This sample was considered sufficient because according to Mellahi and Harris (2016) a response rate of 50% above is good in humanity studies. This made it possible to obtain the data required to generalize the study's conclusions.

Instrument

The data collection instrument was a self-administered questionnaire constructed based on an earlier instrument by Avolio et al. (1999) who operationalized transformational-transactional leadership styles in terms of idealised influence (attributed charisma), idealised influence (behavioural charisma), inspirational motivation, intellectual stimulation and individualized consideration.. The indicators of transformational leadership were proud of the superiors, going beyond self-interest, earned respect, portray authority and confidence, emphasise values, give a sense of purpose, exhibit morals and ethics, emphasise the collective mission, talk optimistically on a range of issues pertaining to staff and the organisation, talk enthusiastically about organisation activities, have a clear vision, express confidence in handling organisation affairs, seek different views from staff, re-examine assumptions before taking action, suggest new ways of doing things, suggest different angles of accomplishing tasks, teach and coach subordinates, give attention to staff ,handle staff equally, and help staff develop their strengths. The indicators of transactional leadership were clarify rewards, assist staff based on effort, reward achievement, recognise achievement, focus on mistakes of staff, concentrate on solving problems rather than working in a calm, organised manner, track mistakes of staff, concentrate on failures of staff, react to problems if serious, react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues. Before data collection, factor analysis using smartPLS was utilised to validate the instrument at the preliminary level. The indicators in each dimension were scaled using a five-point Likert scale, with one representing the worst-case scenario and five representing the best-case scenario. The anchors used were 1=Strongly Disagreed (SD), 2= Disagreed (D), 3= Not Sure (NS), 4=Agreed (A), and 5 = Strongly Agreed (SA).

Data Analysis

The data analysis included computing descriptive statistics in terms of frequencies and percentages for the public universities' heads of administrative and academic staffs' background characteristics. SmartPLS was used to create measurement models that ensured their validity and reliability. The measurement models included a validity and reliability test. Validity testing included calculating the Heterotriat-Monotrait (HTMT) ratio of correlation and the Average Variance Extracted (AVE) to determine whether the measure indicators were consistent and independent. Reliability tests involved Cronbach's Alpha and Composite Reliability (CR). In addition to Cronbach's Alpha, CR was tested since it allows indicators of variables to become reliable. Further, CR takes into account the external properties of the indicator variables. Partial least square structural equation modelling (PLS-SEM) was used to create the model that shows relevant indicators for the several components of the Transformational –Transactional Leadership Theory.

FINDINGS

This section shows the results for leadership styles and organisational effectiveness in public universities in Uganda. The results include demographic profiles of both the administrative and academic heads that participated in the study, the measurement methods and the structural models.

Demographic Profiles of the Respondents

Demographical profiles were considered in terms of sex, age categories, education levels and working experience. The results on the same were as presented in Table 1.

Table 1: Demographic Characteristics of administrative and academic heads

Variable	Categories	Frequency	Per cent
Gender	Male	152	65.0
	Female	82	35.0
	Total	234	100.0
Age Groups	Up to 30	6	2.6
	30 but below 40	45	19.2
	40 and above	183	78.2
	Total	234	100.0
Highest academic qualification	Bachelor's degree	18	7.7
	Masters	101	43.2
	PhD	115	49.1
	Total	234	100.0
Working Experience	Less than one year	30	12.8
	1 but less than 5 years	41	17.5
	5 but less than 10 years	63	26.9
	More than 10 years	100	42.7
	Total	234	100.0

The results in Table 1 on gender indicate that males (65.0%) were the relatively larger number of administrative and academic heads who offered the responses while the females were the least group (35.0%). Thus, the findings reveal that a bigger number of male administrative and academic heads participated in this study. Nevertheless, both male and female administrative and academic heads were considered for the study since the population of female heads was equally high. The majority of the study participants (78.2%) were 40 years and above with 19.2% aged between 30-40 years and 2.6% aged 30 years and below. Thus, results were representative of administrative and academic heads covering all age groups. The modal percentage (49.1%) was of those with PhD degrees followed by 43.2% who had master's degrees, and 7.7 % had bachelor's degrees. Thus, results are generalizable to academic staff with different academic qualifications at university occupying different administrative and academic positions of leadership. Further, the modal percentage (42.7 %) was of those who had served for 10 years and above followed by 26.9% who had served between 5-10 years, 17.5% had served between 1-5 years, and 12.8% had served for less than 1 year. Thus, the results report that administrative and academic heads who participated in the study had spent a substantial period of time serving the universities. Thus, the findings can be generalised on different academic and administrative heads in the universities.

Measurement Models

The measurement models include discriminant validity (Heterotrait-monotrait ratio Correlations (HTMT)), reliability (Cronbach's alpha and composite reliabilities), average variance extracted, and Collinearity assessment. Discriminant validity measured the independence of the measures (constructs) while Cronbach's alpha (α) and composite reliability (CR) measuring a construct (Cheung et al., 2023). The results follow in Tables 2 and 3.

Table 2. AVE and Heterotrait Monotrait (HTMT) Discriminant Validity assessment

Measures	AVE	LS	TSL	TL
LS				
TSL	0.540	0.813		
TS	0.514	0.751	0.573	

LS = Leadership Styles, TS = Transformational Leadership, TSL = Transactional Leadership.

The convergent validity results in terms of average variance extracted (AVE) indicated that all AVE values were above the minimum of 0.5 and heterotrait-monotrait (HTMT) ratio of correlations were all below the maximum 0.90 (Purwanto & Sudargini, 2021) indicating validity of the instrument. Therefore, with AVE values above the minimum, the constructs measuring the different variable converged on them hence were appropriate measures while with heterotrait-monotrait (HTMT) ratio of correlations also below the minimum, the constructs were independent measures hence discriminatively valid.

Table 3. Composite Reliability and Cronbach's Alpha for the Study Constructs

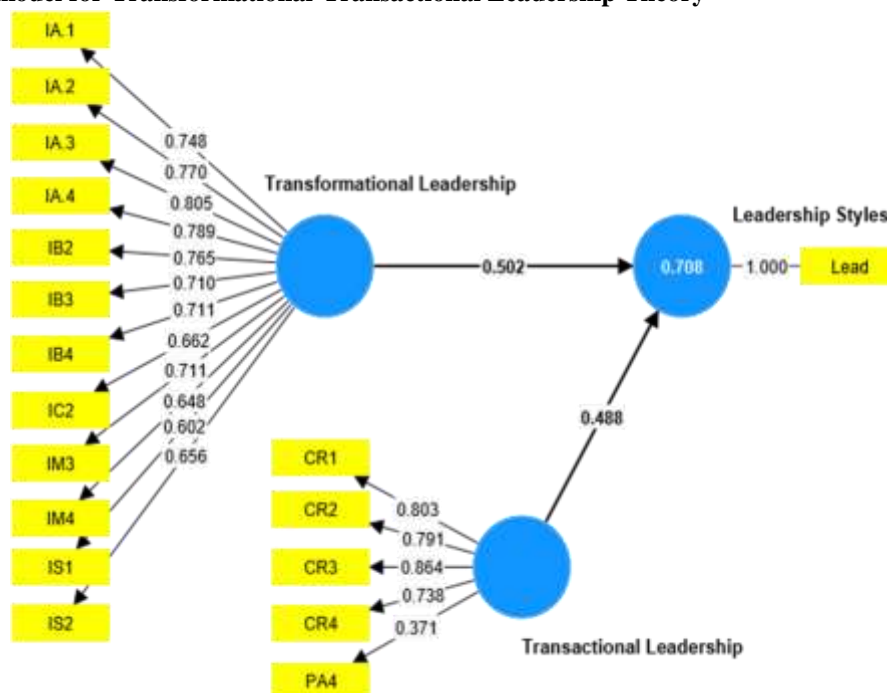
Measures	α	CR
Adaptability	0.775	0.847
Flexibility	0.721	0.827
Productivity	0.762	0.840
Transactional Leadership	0.765	0.847
Transformational Leadership	0.913	0.927

Source: Survey data (2023)

The reliability results in Table 3.4 indicated that the Cronbach's and composite reliability values were the minimum of 0.70 for both (Purwanto & Sudargini, 2021). That meant that the indicators of the different measures (constructs) measuring the variables were reliable. Therefore, the indicators of the different measures were interrelated or highly correlated hence the data collected was reliable. In calculating reliability, composite reliability was preferred since Cronbach Alpha has limitations of presuming that all indicator features are the same in the study population, therefore decreasing the reliability scores. In addition, Cronbach's Alpha is sensitive to the number of items on the scale and often underestimates the reliability of internal consistency (Hair Jr. et al., 2021). However, composite reliability is liberal since it takes into account the external properties of the indicator variables (Fu et al., 2022). Further, the Collinearity (VIF) test demonstrated that there was no high correlation (collinearity) between the constructs that measured the Transformational-Transactional Leadership Theory because the results were less than 5, which is the maximum (Tomaschek et al., 2018). The VIF results indicated that the constructs used to measure the Transformational-Transactional Leadership Theory were independent, and hence measured the theory independently.

Structural Model for Transformational-Transactional Leadership Theory

Structural equation modelling was used to determine the Transformational-Transactional Leadership Theory measures. Figure 1 displays the results. The structural model showed the indicators of the different constructs measuring the variable.

Figure 1: Structural model for Transformational-Transactional Leadership Theory

Source: Survey data (2023)

Figure 1 Structural Equation Model for Leadership styles

The figure 1 indicated that leadership styles were investigated as a bi-dimensional concept that included transformational leadership and transactional leadership styles containing seventeen indicators. The transformational leadership style was measured using five constructs that were the idealised influence-attributed (IA); the idealised influence-behaviour (IB); the inspirational motivation (IM); the intellectual stimulation (IS); and, the individual consideration (IC). Then the transactional leadership style involved three constructs namely the contingent reward (CR); the active management-by exception (AE); and, the passive-avoidant leadership

(PL). Twelve out of the twenty indicators measuring transformational leadership style loaded highly above the 0.50 which was the minimum validity value using factor analysis (Hair Jr. et al., 2021) but eight items did not load. All the four indicators of the idealised influence-attributed (IA1-IA4) loaded highly and were retained. Only three indicators of the idealised influence-behaviour were retained (IB2-IB4) as they loaded highly and only one indicator (IB1) was dropped because it did not load heavily.

Regarding the inspirational motivation construct, two out of four constructs (IM3 & IM4) loaded highly and retained whereas the rest two (IM1 & IM2) did not load highly and were removed. Still to note, with the intellectual stimulation, two indicators (IS1 & IS2) loaded above 0.50 and were retained while the other two (IS3 & IS4) did not load and were removed. And for individual consideration, only one indicator (IC2) loaded highly and was retained while the other three (IC1, IC3 & IC4) did not load highly and were removed. For the transactional leadership style, all the four indicators of contingent reward loaded highly above 0.50 and were retained (CR1-CR4) while only one indicator of passive- avoidant leadership (PA4) loaded highly and retained and the other five indicators (PA1-PA3, PA5-PA6) did not load highly above 0.50 and were removed at outlier analysis stage. For active management-by-exception, all the four indicators (EA1-EA4) did not load above 0.50 and were dropped but the items retained were valid measures of the constructs in the model.

DISCUSSION

The results revealed that the seven out of the eight constructs of idealised influence attributed, idealised influence behaviour, individual consideration, inspiration motivation, intellectual stimulation, contingent reward, and passive -avoidant leadership save for active- management by- exception were appropriate measures of the Transformational-Transactional Leadership Theory. For example, for idealised influence attributed, it was affirmed that the indicators measured the construct consistent with the previous researchers. The analysis indicated that instills pride, spends time teaching and coaching, considers moral and ethical consequences, views staff as having different needs, abilities, and aspirations ,listens to concerns, encourages performance, increases motivation, encourages to think more creatively, sets challenging standards, and encourages rethinking never-questioned ideas (Ismail et al., 2010), act in ways that build others' respected when considering the moral and ethical consequences of decisions, talk enthusiastically about what needs to be accomplished, re-examining critical assumptions to question whether appropriate, and considering an individual as having different needs, abilities, and aspirations from others, discussing in specific terms who is responsible for achieving performance targets (Bass & Avolio, 2000).

Similarly, instilling a sense of pride and honour to members to connect with others, showing a sense of power and competence, act in a way to rise other's respect, sacrificing personal interest for other's interest, talking optimistically about the future, talking seriously about things that should be done, emphasizing on the importance of foresight, giving hope to members about achievable goals, careful examination of offers to ensure their suitability, taking into account different perspectives while solving a problem, requesting for examination of problems from different perspectives, suggesting new ways of how to do something, allocating time for guidance and training, treating with members as a person not as a member, considering people with different needs, abilities and creativities, help others to develop their capabilities (Korejan et al., 2016), praise performance, express gratitude, giving awards to performers , provide an assessment, get to know individual staff, know the characteristics of each worker, understand the diversity of potential of workers, get to know staff background, provide opportunities for solving problems ,foster staff optimism regarding the future of students and schools, provide flexibility to staff in carrying out their duties, provide opportunities to participate in outdoor trainings, providing freedom of expression, receive criticism and suggestions, respect your colleagues' opinions, and conduct deliberations regarding the problems faced, increase knowledge to improve the quality of work, practicing innovations that are based on developments in science and technology, provide direction and guidance, appreciate the abilities and talents, motivate to generate teacher enthusiasm and optimism, encourage practicing creative learning models,

Further, spur optimizing potential, pay attention to staff ideas, pay attention to expectations and input, carrying out tasks and obligations in a disciplined manner, act as role model , implement discipline as per rules, provide guidance, guidance on developing potential, have a wide network and connections , capable of communicating well, creating an atmosphere of togetherness , listen to complaints related to learning, create a conducive social atmosphere, maintain conducive environment, dividing institutional tasks in a professional and proportional manner, prioritize school interests, and devote time for the benefit of the school (Irdiyansyah et al., 2024), proud of the superiors, going beyond self-interest, earned respect, portray authority and confidence, emphasise values, give a sense of purpose, exhibit morals and ethics, emphasise the collective mission, talk optimistically on a range of issues pertaining to staff and the organisation, talk enthusiastically about organisation activities, have a clear vision, express confidence in handling organisation affairs, seek different views from staff, re-examine assumptions before taking action, suggest new ways of doing things, suggest different angles of accomplishing tasks, teach and coach subordinates, give attention to staff ,handle staff equally, and help staff develop their strengths (Turyahikayo et al.,2024c), and cultivate ideal influence, inspirational motivation, build intellectual stimulation, and consideration is based on the individual (Rashid and Wahab ,2024). With the current consistent with the previous measurement scales, it can be affirmed that the indicators studied were valid measures of transformational leadership.

For transactional leadership, it was confirmed that the indicators measured the construct consistent with the previous researchers. As such, the study indicated that makes clear expectation, will take action before problems are chronic, tells standards to carry out work, works out agreements, monitors performance and keeps track of mistake (Ismail et al., 2010), focus on task completion, teacher compliance, rely quite heavily on organisational rewards and punishments to influence teacher performance, emphasize work standards, assignments, and task-oriented goals (Arokiasamy et al.,2015), resource sharing, reward system, fulfilment of obligations, personal recognition, passive corrections, self-interest, keeping the system working/not taking risks, retaining traditional ideas/not innovating, promoting established rules/not inspiring, commitment to realism/no vision, job instability, resistance to change, mouldable ethics, less concern for employees, setting standards, focusing on organisational goals, follower control, hierarchical decision making, improving opportunities for development, supervision, auditing, short-term strategies, improving qualitative performance, feedback (Mendoza et al.,2023), clarify rewards, assist staff based on effort, reward achievement, recognise achievement, focus on mistakes of staff, concentrate on solving problems rather than working in a calm, organised manner, track mistakes of staff, concentrate on failures of staff, react to problems if serious, react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues (Turyahikayo et al.,2024c). The results align with earlier research, confirming that the indicators examined accurately reflect self-management capabilities, thereby validating their use as effective measurement tools.

CONCLUSION

The study concluded that indicators assessed in this article to measure Transformational-Transactional Leadership Theory, namely idealised influence-attributed, idealised influence-behaviour, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, active management-by exception, and passive-avoidant leadership are valid and reliable. For transformational leadership, the indicators are that proud of the superiors, going beyond self-interest, earned respect, portray authority and confidence, emphasise values, give a sense of purpose, exhibit morals and ethics, emphasise the collective mission, talk optimistically on a range of issues pertaining to staff and the organisation, talk enthusiastically about organisation activities, have a clear vision, express confidence in handling organisation affairs, seek different views from staff, re-examine assumptions before taking action, suggest new ways of doing things, suggest different angles of accomplishing tasks, teach and coach subordinates, give attention to staff ,handle staff equally, and help staff develop their strengths .While for transactional leadership the indicators are that clarify rewards, assist staff based on effort, reward achievement, recognise achievement, focus on mistakes of staff, concentrate on solving problems rather than working in a calm, organised manner, track mistakes of staff, concentrate on failures of staff, react to problems if serious, react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues.

RECOMMENDATIONS

The study recommends that researchers can use the indicators assessed in this article to measure the four elements of Transformational-Transactional Leadership Theory, namely idealised influence-attributed, idealised influence-behaviour, inspirational motivation, intellectual stimulation, individual consideration, contingent reward, active management-by exception, and passive-avoidant leadership. These indicators have been tested and validated, providing a robust framework for scholars to investigate the Transformational-Transactional Leadership Theory in various contexts. By using these indicators, researchers can confidently explore how these different components of transformational-transactional leadership styles influence different behavioural variables. For transformational leadership the indicators include proud of the superiors, going beyond self-interest, earned respect, portray authority and confidence, emphasise values, give a sense of purpose, exhibit morals and ethics, emphasise the collective mission, talk optimistically on a range of issues pertaining to staff and the organisation, talk enthusiastically about organisation activities, have a clear vision, express confidence in handling organisation affairs, seek different views from staff, re-examine assumptions before taking action, suggest new ways of doing things, suggest different angles of accomplishing tasks, teach and coach subordinates, give attention to staff ,handle staff equally, and help staff develop their strengths.

While for transactional leadership the indicators include clarify rewards, assist staff based on effort, reward achievement, recognise achievement, focus on mistakes of staff, concentrate on solving problems rather than working in a calm, organised manner, track mistakes of staff, concentrate on failures of staff, react to problems if serious, react to failure, react to problems, if chronic, avoid taking decisions, resist expressing views, and delay responding to issues.

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Appendix 1: Instrument

Construct	Item	Measure
Section A: transformational- transaction leadership.		
Idealised influence attributed (IA)	IA.1	proud of my superior
	IA.2	going beyond self interest
	IA.3	earned respect
	IA. 4	portray authority and confidence
Idealised influence Behaviour (IB)	IB.1	emphasise values
	IB.2	give a sense of purpose
	IB.3	exhibit morals and ethics
	IB.4	emphasize the collective mission
Inspiration motivation (IM)	IM.1	talk optimistically on a range of issues pertaining to staff and organisation
	IM.2	talk enthusiastically about organisation activities
	IM.3	have a clear vision
	IM.4	express confidence in handling organisation affairs.
Intellectual Stimulation (IS)	IS.1	seek different views from staff
	IS.2	re-examine assumptions before taking action
	IS.3	suggest new ways of doing things
	IS.4	suggest different angles of accomplishing tasks

Individualised consideration (IC)	IC.1	teach and coach subordinates
	IC.2	give attention to staff
	IC.3	handle staff equality
	IC.4	help staff to develop their strength
Contingent reward (CR)	CR.1	clarify rewards
	CR.2	assist staff based on effort
	CR.3	reward achievement
	CR.4	recognise achievement
Active management- by-exception (AE)	AE.1	focus on mistakes of staff
	AE.2	spend time on problems that need to be dealt with quickly, instead of working in a calm, planned way
	AE.3	track mistakes of staff
	AE.4	concentrate on failures of staff
Passive- avoidant leadership (PL)	PL.1	react to problems if serious in this university
	PL.2	react to failure
	PL.3	react to problems, if chronic
	PL.4	avoid taking decisions
	PL.5	resist expressing views
	PL.6	delay responding to issues