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Article

Transformational Leadership and Student Academic Performance in Iraq Educational Institutions: Mediating Role of Teacher's Leadership and Teachers Self-Efficacy

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Abstract

The present research effort determined the academic performance of higher education sector of Iraq that is prejudiced by the various leadership factors. This study incorporated the teachers' self-efficacy and teachers' leadership as mediators between transformational leadership and academic performance. The study was conducted on the higher education sector of Iraq and data was collected through questionnaire by employing the simple random sampling and was assessed by utilizing the Smart-PLS 4.0 to test the relationship between proposed variables of the research framework. The study revealed that transformational leadership influence the academic performance, teachers' self-efficacy and teachers' leadership. The hypotheses H1, H2 and H4 reported as statistically significant, however the direct relationships between teachers' self-efficacy and academic performance, the relationship between teachers' leadership and academic performance found to be insignificant that hypotheses H3 and H5 were rejected. Surprisingly, the teachers' self-efficacy and teachers' leadership significant mediates the relationship between transformational leadership and academic performance, they hypotheses H6 and H7 were accepted. The study suggests to adopt the transformational leadership style and focuses to ensure the develop the teachers' self-efficacy, develop the leadership skills among teachers in order to ensure the academic performance. The future research avenue is given at the end of the present paper.

Keywords

Transformational leadership, teachers' self-efficacy, teachers' leadership, academic performance, higher education sector Iraq

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The universal challenges have been faced by various organizations due to rapidly changing business environment due to knowledge generation and instantaneous change in demand of clients and stakeholders. The sustainability of the organization depends upon the improvements of the business operations and activities by meeting the requirements of the consumers. The change has been observed across the world in all industries, similarly the education sector received the impact due to rapid changes in operational environment, the higher education sector has faced such situation that has led towards the adoption of emerging practices similar to business operations for obtaining the organizational success and sustainability. One of the major factor is the globalization of education as this market has gained the attention of its stakeholders around the world due to its higher significance in the society (William & Amin, 2006). The abilities of the organizations towards adoption of emerging practices, initiate the change and striving for improvements must be effectively managed that plays major role in the success of executing such strategies that accomplish the target of required change and organizational success. This era is referred as information age, knowledge generation and management in modern world that is considered as one of the keys for academic institutes towards the change and improvements. It has been stated that management is taken as much seriously due to its impact on organizational performance related outcomes as information accumulation is considered as less important but the way to utilization of information and resources to covert it in profitability. The dynamic environment requires effective management and decision-making to understand the link between predictors of performance of successful organization through efficient integration of required perspective and organizational strategy (Zack, McKeen, & Singh, 2009; Zwain, Lim, & Othman, 2012).

The major goals of education institutes found to be focusing on the academic success and achievement of good grades with positive outcomes for learners and the system itself. The researchers have focused on the important factors related to education and for academic success of students and the consultation from educational psychologists (Mega, Ronconi, & De Beni, 2014). The research scholars have focused upon the recognition of the motivational role and learning strategies with academic emotions in learning and performance (Ngwira et al., 2017; Sagheb et al., 2018). The research scholars have focused on the qualitative research methods, correlation analysis, experimental approach that reveal the relationship between various variables that predict the academic performance. The studies have been carried out in the field of education, social sciences and psychology but the results of the study cannot be generalize for all the contexts, the academic field has the influence on the learning strategies of the students (Vierhaus, Lohaus, & Wild, 2016). The different emotions and findings have been depicted in diverse context due to different academic settings and environment, the emotions might be different due to change in the context. It has been also stated the medical education has been overlooked by the researchers and there is lack of research on academic outcomes related to medical field. It has been stated the medical industry has the higher level of stress among the employees, higher level of depression and anxiety in the Iranian context, however the higher level of income expectations encourage them to adopt the specific field (Hayat et al., 2020).

The rapid development of technological internet-based application increased the usage of social media for communication and interaction transformed the offline means to the online means for selecting and purchasing the items, similarly the services has been altered. The huge number of individuals found to be using social media for various purposes and majority of them are younger and are students of any level. The social media emerged the altered way of communication through usage of internet-based applications that also support the students for their educational purposes (Tajudeen Shittu et al., 2011). The technological applications have supplemented the performance of students due to current revolution, as emergence of technology Web 2.0 and social media found to be helping for students that enhanced the academic performance of students. It has been observed that utilization of social media and its popularity among students for educational purposes and contributed in the value of pedagogy (Al-Rahmi et al., 2018b). The social media tools have given an opportunity to enhance the learning capabilities and encourage the students to become more interactive towards the active learning. It has been also criticized that there is a vast majority of students that unwilling to join the technological or social media applications for academic performance. The students found to be reluctant in usage of social media applications for communication and interaction for academic purposes by establishing the formal relationship between colleagues and faculty. The educational institutes encourage to use social media features to their students for increasing the students' academic performance through effective utilization of communication among faculty members and students are encouraged to adopt the technology for improved the services related to the education (Al-Rahmi et al., 2018a).

The technology has potential to influence the educational activities through the utilization of internet-based applications that enable the interaction, collaboration, interaction and critical thinking and active participation for resource sharing. The utilization of technology has added the value to the pedagogical perspective and influenced the attitude of the students, as the effective communication and collaboration is ensured through the adoption and utilization of internet-based applications. There is limited research on assessing the behavioral factors that are influenced towards the academic performance of students in higher education sector. It has been revealed that in Asian context the social media is considered as an informal way of collaboration and communication by higher number of educators specifically for the purpose of social networking, and communication instead of enhancing the academic performance of the students (See Yin Lim et al., 2014). However, there is vast majority of students that utilize the social media applications for collaboration and communication through updated technology and unique features that impact the learning outcomes and academic performance. However, the negative influence has been observed due to student's interaction, that social media affect the educational gain as it hamper the academic performance (Sibona & Choi, 2012). The studies have been conducted to assess the relationship between academic performance of students and usage of social media for effective communication and collaboration. It has been argued in the prior literature that utilization of social media increases the performance of students through effective collaboration as it increases the learning process. Further, there is limited studies have been conducted to assess the role of social media applications or technological applications for defining the academic performance (Alalwan et al., 2019).

The abilities of small and medium enterprises are assessed by the performance measurement under the financial, and non-financial perspectives, the preferences are given to the specific factors as per the objectives of the study conducted in the sector as few authors measure performance based on return on assets, return on investment and net profit after tax, market share, productivity, competitive position, growth, stakeholder satisfaction and profitability for measuring the performance of the firm (Tavitiyaman, Qiu Zhang, & Qu, 2012). The literature argued that performance of the organization is measured by various variables such as the market share, the productivity of the firm, competitive position of the firm, growth of the firm, the assessment of satisfaction and profitability made by the firms. Research studies have been conducted to assess the relationship between human resource practices and the performance of employees, it has been highlighted that the low literacy rate in Pakistan is caused by the lower-level performance of universities as none of the universities is listed in the top-ranked universities of the world (Chen, Li, & Li, 2022). The higher education sector and government intended to take the initiatives to enhance the performance of academic staff of universities that reflect in the education quality and further consequences. The prior studies have highlighted the HR practices that contribute in improving the performance of the university teachers. The formulation and development of human resource practices observed to be ensured the performance of teachers that resulted in increased achievement of universities (Abdullahi et al., 2022).

The education sector is considered as basic and major sector of society as quality-based education sector is essential for society and its development due to its lead towards success, progressive and growth. The quality of education ensures the development of skills among learners that brings benefits to the society to progress and prosperity that is built on creativity. There are number of factors including quality learners, the environment, material, educational delivery processes, teachers and outcomes of educational material are required by quality education system that work towards generation of skills, that further contribute in highest level of excellence (Khan, Ali, & Arain, 2022). The universities meant to provide quality education through effective training that becomes the value for higher education institutes, the upgradation of curriculum, policy of institutes or combination of both contribute in providing quality education, meanwhile the laboratories must be equipped and libraries must be updated and linked with e-libraries of the world, further, the infrastructure must be developed. The higher education sector ensures and provides the supervision for quality of education, teaching methodology and research activities through establishing the quality enhancement cell for maintaining the quality of education (Shaheen, Ahmad, & Shah, 2020).

The appropriate leadership is required in education sector for grasping the objectives and benefits, the transformational leaders influence the employees for gaining the trust and respect that derives towards the achievement of the collective mission (Yukl, 1981). The leaders play the role in encouraging the employees to work hard and to be innovative, the inspirational motivation towards achievement of performance standards through creation of climate for effective collaboration and teamwork. The effective

and appropriate leadership enable to shape the vision, gain commitment and vision for appropriate environment for innovation. There are number of leadership styles including spiritual, ethical and servant leadership that have been popular in last decade, the research scholars have demonstrated the negative relation between ethical leaders and subordinates that intend to leave the job, negligence and fatigue during job. It has been stated in the literature that personality, moral character, and behavior relates to the religious faiths, it means the managers found to be more committed towards the religiosity that influence the decision making as compare to less religiously committed managers. The ethical leadership found to be effective in sustainability and encouragement in organizations (Budur, 2018).

The prior literature has highlighted the benefits of various factors including knowledge management in higher-education for effective research process, for the development of curriculum process, student and alumni services, administrative services and strategic planning. There are number of benefits havens been observed of effective knowledge management such as the achievement of the goals. The developed countries including United States, United Kingdom, and various Asian countries have incorporated the knowledge management at college and university level due to its contribution in organizational performance and success, that is also much needed in Iraqi higher education sector (Zwain et al., 2012). The transformation is necessary in higher education institutions in Iraq, and the education sector found to be responsive towards the adoption of such practices that enable the higher level of performance including the effective leadership that ensure the knowledge management, the Iraqi education system considered as best education system in Middle East region, however after economic turmoil and war, sanctions from world led towards the poor performance of education system and suffered due to international isolation, so therefore the higher education sector received direct impact due to international scenario. The Iraqi universities and higher education sector found to be suffered in various aspects including curricula development, acquisition of resources, teaching methodology, adoption of modern technology and research, so therefore there is dire and urgent need to bring back the glory of the Iraqi education institutions (Zhen, 2022).

This study intends to determine the academic performance of the students through effective leadership style, teachers' leadership and teacher's self-efficacy. The current study argues that effective leadership style that is considered as transformational leadership style has the tendency to influence the academic performance, and the self-efficacy and leadership capability of the teacher has the tendency to mediate and influence the academic performance.

Literature Review

Transformational Leadership Style and Academic Performance

The universities and colleges fulfill the educational need of various students in highly competitive, challenging and dynamic environment and appropriate university leaders are necessary to tackle the different kind of students. The differentiation of universities can be assessed by the responsiveness of the students, as responsive agility considered as the ability of university to perform the efficient response to the changing need of the student's wants and demands (Herman, Setiyaningrum, & Ferdinand, 2018; Ravichandran, 2018). The quick and adequate response is required from universities to the internal and external environment as a rapidly changing business environment has created lot of challenges and hurdles to cope and it has become tough to sustain the performance. It has been reported in the literature that universities has the tendency to respond innovatively and rapidly to the environmental changes to maintain the performance and quality standards (Asadi et al., 2017; Ravichandran, 2018; Rulinawaty & Samboteng, 2020).

The transactional leadership style is expressed as self-interest through establishment of exchanging relationship and its ability of leader to manage the behavior of employee and organizational resources for achievement of goals. It has been reported that transactional leadership is effective in accomplishment of the goals, objectives and organizational success through assurance of monitoring and fulfilling the obligations (Bowers, Hall, & Srinivasan, 2017; Purwanto, 2019; Supriadi et al., 2020). Leaders make sure to harvest the benefits and provide the trickledown effect to the employees through appropriate rewards for excellent performance and playing role in achievement of the strategic objectives, it has been found that transactional leadership style motivate the employees and subordinates to achieve the organizational goals as self-interest by fulfilling the notion of exchange of benefits between employer and employees (Wen et al., 2019).

The transformation leadership style has remained in focus of research scholars as it extracts that they have the ability to perform whatever they think, they motivate their employees or subordinates for achievement of results beyond expectations, they play vital role in affecting organizational perception and outcomes (Getachew & Zhou, 2018; Purnomo et al., 2020). It has been argued in the literature that transformational leaders has the tendency and ability to improve the performance in long-term through effective productivity, creativity, and by reinforcing the awareness of employees (Lan et al., 2019). The transformational leadership style helps employees in understanding the organizational values, goals and objectives, focuses on empowerment and motivate the followers for desired consequences, in nutshell, transformational leadership is appropriate in achievement of new level of abilities and performance through accomplishment of goals and personal objectives. The RBV (resource-based view) theory underpin the notion of the study that transformational leadership influence the customer responsiveness and play crucial role in development of innovative services for achievement of strategic goals. The abilities of the employees play vital role in satisfying the customers' need with their effective and quick response, the transformational leadership style influence the behavioral component, inspirational motivation, idealized influence, intellectual stimulation and individual consideration, so therefore it is established that leaders contribute in development of the skills and techniques in various perspectives to enrich their skills, abilities and knowledge by fulfilling the customers' need (Nwachukwu et al., 2019; Ovezmyradov & Kurata, 2019). The previous research has been published that examined the relationship between transformational leadership and organizational agility, however the influence of transformational leadership rarely occurred in the literature (Akkaya & Tabak, 2020).

The study investigated the relationship and impact of transformational leadership and transactional leadership on employee engagement and responsiveness agility. The relationship between transactional leadership and responsiveness agility reported as insignificant, the relationship between transformational leadership and responsiveness agility found to be insignificant, however the significant relationship has been reported between transformational, transactional leadership and employee engagement, moreover the employee engagement significantly mediated the relationship between transactional leadership, transformational leadership and responsiveness agility (Salahat, 2021). It has been reported in prior published literature that transformational leadership assist in identifying the employee's requirement to meet the needs at higher level, as emotional attachment of leaders bring positive changes to organization. On the other hand, transactional leadership provides satisfaction on the accomplishment of the task (Wu & Shiu, 2009). The prior studies have incorporated the different leadership style such as transformational leadership that supposed to be effective, supportive and flexible and features including inspirational leadership, charismatic leadership, behavior towards subordinates and intellectual motivation and creative ways to handle the problems, challenges and issues at organizations (Bommer, Rubin, & Baldwin, 2004). The prior literature also highlighted that transformational leadership influence the organizational commitment, and has the tendency to convince and motivate the followers and encourage employees to deal issues with employee commitment, problems and issues. The transformational leadership qualities inspire the followers and enhance the organizational commitment by knowing the strengths and weakness of the individual employees that gain the commitment (Emery & Barker, 2007).

The following hypothesis is derived on the base of above literature

H1: Transformational Leadership has positive significant influence on Academic Performance of the students in the higher educational institutes of Iraq

Relationship between Transformational Leadership and Teachers' Self-efficacy and its impact on Academic Performance

The social learning theory has four elements including watch learning variables, self-regulation, reciprocal determinism and the self-efficacy defined by the Albert Bandura in 20th century. The judgement of people about the capabilities of themselves towards the organization and execution of various diverse course of actions required to attain the specific level of performance (Bandura, 2012). The self-efficacy is termed as the important aspect in the development of social learning that improves the confidence of the people, it has been stated self-efficacy refers as the behavior of an individual and the assessment of the capabilities of an individual towards the achievement of the required outcomes (Bandura, 1977). It has been stated that features of self-efficacy vary in general in terms of scale, power and according to any task encountered by an individual during the life associated with various challenges. The challenges affect the perception related to the self-efficacy as

challenges found to be difficult, range from simple to moderate and then to extreme difficult, generality refer towards the skills of the group or an individual possesses and their abilities to use knowledge, skills and abilities in the given situation. Finally, the belief of an individual for their self-efficacy motivates them for achievement of them goals and objectives. The weak belief on self-efficacy of an individual often permit the negative thoughts that destroy the personality and self-efficacy.

In the literature, it has been found and revealed that positive self-efficacy influences the students towards achievement of learning motivation, learning atmosphere and learning satisfaction. The study conducted on the teachers and students to determine the influence of teachers' self-efficacy on the performance of the students, it has been evident that the role of teachers play important role in shaping the future of students by adding the value to the students' career, so therefore there is need to develop the teachers' self-efficacy that further influence and contribute in the life of student's academic performance. The positive self-efficacy must be induced to the teachers for contribution actively and adding value to the knowledge, skills and abilities of the students (Allami, Fauzee, & Sin, 2017). The teachers have the tendency to impact the social, culture, and economic development initiatives, the highly satisfaction of teachers play important role in enhancing the performance of students academically. The happiness of the teachers contributes in the satisfaction, engagement and performance of the students, and influence the policies at the institutions. It has been found that self-efficacy of teachers reduces the workplace stress, improve the working climate and involvement of the teachers also enhance the performance related outcomes (Elrayah, 2022; Judge, Zhang, & Glerum, 2020).

The new teaching plans are necessary to be developed for job satisfaction of teachers and it is necessary to develop the professional teaching plans that aligned with the government's plan in harvesting the self-efficacy, workplace stressors, working environment and engagement of teachers (Raziq & Maulabakhsh, 2015). The primary factors have been identified in job satisfaction, such as self-efficacy, workplace stress, working environment and teacher engagement, that further influence the students' life and their performance. The dominant acts of teachers at university level, and effective tactics and communication increase the teachers' satisfaction that further leads towards the self-efficacy of the teachers. The effective policies and leadership influence the engagement, reduce the anxiety, enrich the self-efficacy, however the lack of self-efficacy negatively impact the performance (Hafeez et al., 2019; MacBeath, 2012). The influence of teachers and contribution of teachers may diminish due to lack of supportive working environment and suitable leadership style (Raziq & Maulabakhsh, 2015). The employees satisfaction and student performance negatively influenced by the working stress, however the prior literature has stated that self-efficacy, workplace stressors, atmosphere and teachers' engagement as significant indicators of satisfaction level of teachers (Padmanabhan, 2021).

The researcher argues that transformational leadership influence the teachers' self-efficacy, so therefore the following hypothesis is derived:

H2: Transformational Leadership has positive significant influence on Teachers' Self-efficacy in the higher educational institutes of Iraq

H3: Teachers' Self-efficacy has positive significant influence on Academic Performance of the students in the higher educational institutes of Iraq

Relationship between Transformational Leadership and Teachers' Leadership and its impact on Academic Performance

The transformational leadership focus on employees' perception, in job the measuring of job satisfaction, it relates to the occupational prestige, career development and employees self-esteem, these are dimensions that remain concern of transformational leadership (Bogler, 2001). The literature has explained that leadership motivates the employees in achievement of goals, objectives and aims more than the planned, and expectations, the transformational leadership style has the tendency to motivate the employees to the level to attain the efficiency. The researchers have reported that transformational leadership found to have higher impact on the employees, or followers to change their attitude towards the goals, and shape their attitude to protect the interest and brings the benefits to the organizations. The literature highlighted that promoting development and strategic approach in organization leads to the change while effectively managing the process and employees as expected to influenced by the transformational leadership style. The discrimination is an important phenomenon that takes place in organization based on the race, gender, color, religion and age, the transformational leaders found to be highly effective in mitigating the negative emotions, and control the situation that may arise due to discrimination.

It has been reported that transformational leadership contributes in higher productivity, it also play significant role in reducing the turnover intention of employees, and enhance the higher level of job satisfaction (Javed, Jaffari, & Rahim, 2014).

Previously, the study has been conducted to assess the employee performance, influenced by the transactional leadership style, and transformational leadership style, the study also investigated the influence of leadership styles on job satisfaction, the job satisfaction argued to be influential towards the employee performance. The findings of the study revealed that transactional leadership found to be more effective and striking towards employee performance and job satisfaction as compare to transformational leadership, however the job satisfaction mediated the relationship between transactional and transformational leadership styles to predict the employee performance (Paracha et al., 2012). The economical perspective of the organizations influenced by the leadership style as it considered as one of the most important factors in the banking sector to determine the performance. The literature has focused on the transformational leadership and innovativeness directly or indirectly linked with the performance and productivity of the employees in the organizations. The charismatic leaders much likely to be transformational leaders, however there is difference to produce the change, creativity and business sense for the both kind of traits. The prior studies have contributed in expansion of theory for the constructs of transformational and transactional leadership styles to explain the concepts. The study reported that transactional leadership style found to be more appropriate than transformational leadership style in routine responsibilities, administrative control and yield control (Ali Khan, Masih, & Ali, 2021). The study has been conducted to determine the employee well-being influenced by transactional leadership and trust in leader through mediating role of organizational climate. The study was conducted on the employees of cement sector of Pakistan, the results reported that transactional leadership and trust in leader influences the organizational climate and employee well-being, further the study revealed that organizational climate significantly mediated the relationship between transactional leadership and trust in leader to predict the employee well-being (Ali Khan et al., 2021). The study reported significant results, however the study overlooked to assess the role of transformational leadership in explaining the performance related outcomes, and employee related behavioral consequences.

There is scarcity of the literature and empirical evidence on assessing the role of transformational leadership in expressing the teachers' leadership and its impact on academic performance of students. This study argues and intends to determine the association between transformational leadership and teachers' leadership, and influence of teachers' leadership on academic performance of students. The following hypotheses are derived based on above arguments and literature review:

H4: Transformational Leadership has positive significant influence on Teachers' leadership in the higher educational institutes of Iraq

H5: Teachers' leadership has positive significant influence on Academic Performance of the students in the higher educational institutes of Iraq

Mediating Role of Teachers' self-efficacy and Teachers' leadership

This section of the study discusses the mediating role of teachers' self-efficacy and teachers' leadership between transformational leadership and academic performance, the study argues that teachers' self-efficacy has the tendency to strengthen the relationship between transformational leadership and academic performance, similarly the teachers' leadership also expected to be significantly influential between transformational leadership and academic performance.

The prior literature has defined teacher leadership as the ability of an individual teacher to encourage the colleagues for adoption of change, to act in the way which is not usually taken and not possible to perform without the influence of the leader. Similarly, it has also been defined that teachers are considered as leaders when they perform beyond the classrooms, contribute towards the community, encourage the learning, influence the others towards the academic performance and improvement in quality of education. It has been also argued that collective leadership among which teachers develop expertise through working collaboratively as non-traditional perspective. There are different roles that are associated with leadership skills of teachers including leadership of students or other teachers as facilitator, as a coach, as a mentor, as a trainer, creation of new approaches, leading group studies, curriculum specialist, leadership of operational tasks, keeping the school organization according to the goals, the different roles such as head of department, researchers, mentor for specific tasks, effective

decision-making capabilities to improve the performance, to enhance the commitment and to attract the clients through effective strategy development (Muijs & Harris, 2003).

The following mediating hypotheses are derived based on arguments and above literature

H6: Teachers’ self-efficacy mediates the relationship between Transformational Leadership academic performance of students in the higher educational institutes of Iraq

H7: Teachers’ leadership mediates the relationship between Transformational Leadership academic performance of students in the higher educational institutes of Iraq

Research Framework

This section demonstrates the Figure 1 the research framework of the current research, the hypothesized statements are identified by highlighting the relationships.

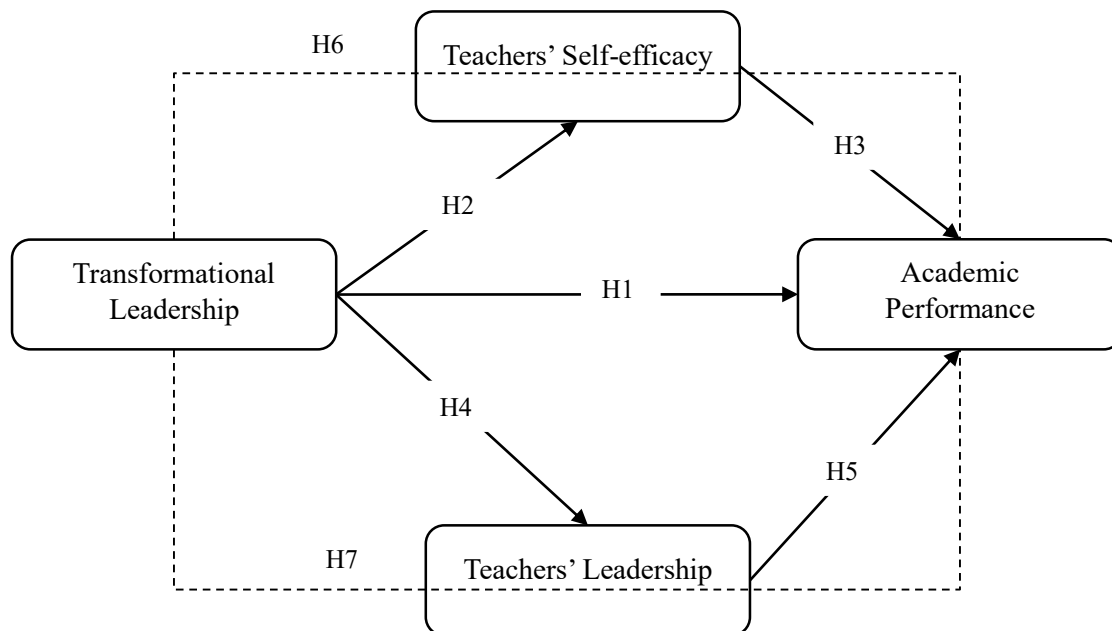


Figure 1. Research Framework

Research Methodology

This section of the study entails the research methodology, research design, population and sampling technique and measurement scales of each construct. This study is quantitative in nature, as data was collected cross-sectional through questionnaires. The correlation research design is opted for the achievement of the objectives of the study to assess the relationship between constructs as shown in the Figure 1 above. The quantitative method is considered as suitable method for assessing the relationship through effective approach of correlation between the variables (Creswell, 2012). The sample must contain the similar traits of population and to ensure the accurate results, so that generalization must be secured (Polland, 2005). The population for this study was teachers from the different provinces of the Iraq including Bassra, Nesserite, Maysan and Diwaniya. At first cluster sampling technique was opted, as each province is considered as individual cluster, and the questionnaire was distributed on simple random sampling to ensure the unbiased response. The sample of 274 was drawn through applying the Krejcie and Morgan (1970) table. In total 201 useable responses were received for data analysis.

Data analysis and Results

This section entails the data analysis and results, first section assesses the construct reliability and validity through utilization of measurement model of Smart-PLS 4.0, in the second phase the relationship is tested through utilization of structural model assessment of Smart-PLS 4.0.

Measurement Model assessment

This section measures the reliability and validity of the constructs through assessing the Cronbach alpha, and convergent validity is assessed on the base of average variance extracted. The Table 1 below presents the construct reliability and validity.

Table 1: Reliability and Validity

Constructs	Alpha α	AVE
AP	0.813	0.512
TeachSE	0.873	0.601
TeachL	0.948	0.521
TL	0.926	0.534

Note: academic performance (AP), teachers' self-efficacy (TeachSE), Teach (Teachers' leadership), Transformational Leadership

Discriminant validity

This section presents the discriminant validity of constructs based on the criteria of Fornell and Larcker (1981). The diagonal value must remain higher than remaining values, that means square root of AVE must remain higher than the correlation values of other constructs. Table 2 presents the DV:

Table 2: Discriminant validity

Constructs	AP	TeachSE	TeachL	TL
AP	0.716			
TeachSE	0.342	0.776		
TeachL	0.432	0.453	0.722	
TL	0.123	0.324	0.641	0.731

Note: academic performance (AP), teachers' self-efficacy (TeachSE), Teach (Teachers' leadership), Transformational Leadership

Measurement Model Assessment

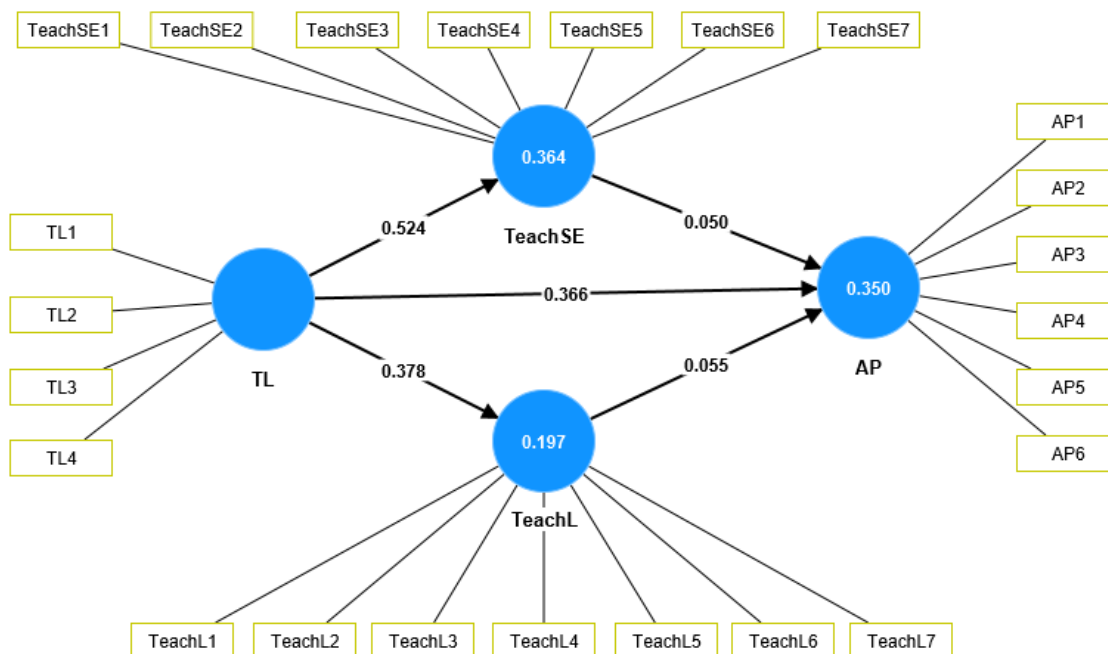


Figure 2: Measurement Model

Note: academic performance (AP), teachers' self-efficacy (TeachSE), Teach (Teachers' leadership), Transformational Leadership

Structural Equation Model (SEM)

This section provides the hypothesized relationship testing as depicted in hypotheses development and demonstrated in Figure 1.

The bootstrapping method is used of Smart-PLS for assessing the relationship, the relationship is assessed on the base of β value, t-statistics and p-value, the β value shows the direction of relationship, the t-value must remain higher than 1.96 and p-value must be lower than 0.05 for acceptable significance of the relationship. The Table 3 presents the hypothesized relationships test results.

Table 3: Direct Relationship testing

Constructs	β	t-statistics	p-value
TL→AP	0.366	5.442	0.000
TL→TeachSE	0.534	6.945	0.000
TeachSE→AP	0.050	0.485	0.628
TL→TeachL	0.378	4.197	0.000
TeachL→AP	0.055	0.556	0.578

Note: academic performance (AP), teachers’ self-efficacy (TeachSE), Teach (Teachers’ leadership), Transformational Leadership

The above table shows that the relationship between transformational leadership and academic performance is reported as statistically significant, the relationship between transformational leadership and teachers’ self-efficacy is also reported as significant, and the relationship between transformational leadership and teachers’ leadership is statistically significant. However, the relationship between teachers’ self-efficacy and academic performance is reported as insignificant, similarly the insignificant relationship is reported between teachers’ leadership and academic performance.

SEM Model

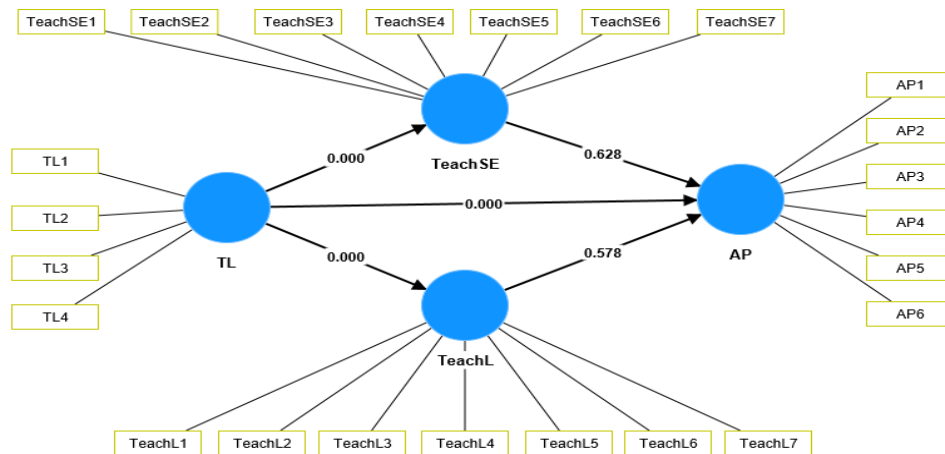


Figure 3: SEM

The study also intended to assess the mediating role of teachers’ self-efficacy and teachers’ leadership between transformational leadership and academic performance. The Table 4 below demonstrates the mediating hypothesized relationship testing.

Table 4: Mediating testing

Constructs	β	t-statistics	p-value
TL→TeachSE→AP	0.556	2.012	0.031
TL→TeachL→AP	0.521	2.001	0.003

Note: academic performance (AP), teachers’ self-efficacy (TeachSE), Teach (Teachers’ leadership), Transformational Leadership

The above table shows the mediating results of the study, the significant mediating role of teachers' self-efficacy is reported between transformational leadership and academic performance. Similarly, the teachers' leadership plays significant mediating role between transformational leadership and academic performance is reported.

Future Research Avenues

This study revealed that transformational leadership is important at higher education sector in Iraq to take innovative initiatives that impact the academic performance. The transformational leadership is suggested to be opted for influencing the teachers' self-efficacy and teachers' leadership, that further has the impact on the performance related outcomes. The study was limited in various aspects, the future research should be conducted on larger sample size and should conduct the comparative study between female and male teachers and their influence and contribution towards academic performance. The future research may be conducted on the different leadership styles for assessing the variance between different styles.

Conclusion

This research paper focused on the academic performance in higher education sector of Iraq influenced by the transformational leadership. The study incorporated the teachers' self-efficacy, and teachers' leadership as mediators between transformational leadership and academic performance. The study revealed that transformational leadership is statistically significant in influencing the academic performance, teachers' self-efficacy and teachers' leadership. That means the affective and suitable leadership style is transformational leadership style in highly turbulent environment of higher education sector of Iraq that has faced the worst financial turmoil due to war and internal conflicts. So therefore, in recovering situation transformational leadership is considered as suitable leadership style in order to achieve the academic performance. The teachers' self-efficacy and teachers' leadership is considered as an important factor that contributes in the academic performance.

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