## An Application of The Sustainable Transformational Leadership Dimensions on Teacher's Performance: A Social Network Analysis

Aymen Qaradaghi .Komar University of Science and Technology <u>aymen.maaroof@komar.edu.iq</u> Razan Kerkukli .Komar University of Science and Technology <u>razan.hasan@komar.edu.iq</u> Riazuddin Ahmed .Komar University of Science and Technology <u>riazuddin.ahmed@komar.edu.iq</u>

#### **Doi:** <u>https://doi.org/10.36473/ahyj3h60</u>



Copyright (c) The Authors. This work is licensed under a Creative Commons

Attribution 4.0 International Licenses

How to Cite

An application of the sustainable transformational leadership approach aimensions on teacher's performance: A social network analysis. (n.d.). ALUSTATH JOURNAL FOR HUMAN AND SOCIAL SCIENCES, 63(4). https://doi.org/10.36473/ahyj3h60

Received date:	30/05/2024
review:	02/09/2024
Acceptance date:	19/11/2024
Published date:	15/12/2024

### Abstract

Teacher's performance is one of the arguable issues in the organization. Sustainable Transformational leadership and its dimensions play a big role to change the nature of teacher's performance in the organization. In this study, sustainable transformational leadership dimensions were discussed and examined through (SNA) social network analysis as a tool to analyze and understand results. Data collection were conducted and 30 respondents participated in the questionnaire. Organizations are educational sectors and they are 3 organizations and mentioned as symbols in the study. This study, shows that both sustainable occupational training SOT and sustainable social training SST as dimensions of sustainable transformational leadership approach able to enhance and engage teachers if the method of applying the dimensions is correct to keep improving sustainably. Organizations A and B are positive regarding the SOT and SST; however, organization C is negative regarding the SOT and SST.

**Keywords**: Sustainable transformational leadership, teacher's performance and Social network analysis.

# Introduction

Teaching is important and challenging professions. Teachers' personality requires creative mindset. Teacher's tasks include sustained interaction with learners (Guo, 2024). Teachers are sustainably under the pressure of schooling to attain all educational experience. Expectations match what teachers offer to fulfill gaps (Fue et al; 2022). Regarding job-burnout, teachers drown in this spiral "job-burnout". This generates teacher's burnout. When the degree of burnout is high, a negative influence on teachers may occurs. Job-burnout impacts on teacher's well-being mental health, satisfaction will be difficult and it impacts on the mentality and learner's Performance (Klusmann et al; 2016).

Transformational leadership and its dimensions sustainably change individuals and it is called self-renewal (Li & Liu, 2020). The influence that transfer from negative situation to positive situation it is called sustainable TL dimensions. TL is a supportive resource for teachers' "subordinates". It motivates individuals toward achieving personal development (Perko et al; 2016). This type of leadership and its dimensions attain best working method, mental-health, psychological effect that change the cognition toward attaining objectives, positive support that arises loyalty of individuals and social competences (Harbi et al, 2019; Zedin, 2023). In this study, we discuss the main aspects of how the transformational leadership sustainably related to teacher's performance and enhancing learning. TL is one of the styles that change the organizational environment and supporting each other. The main goal of this study is to investigate the sustainable TL by examining its dimensions and they are sustainable occupational training and sustainable social training to reveal the teacher's performance.

# 2. The importance of the study

The importance of the study lies in the sustainability that characterizes TL. This study focuses on sustainable TL and its application to individuals in the organization. Currently, impermanence has been observed in several aspects within the literature. The concept of sustainability presents itself within the leadership approach in this study and indicates the importance of modernity of this concept elevate the performance of individuals.

# 3. The problem statement

The basis of this study is sustainability in transformational leadership dimensions. Because of the modernity of the concept of sustainability in leadership and its dimensions, several aspects are ambiguous, specially, in the literatures, researchers did not address decisively and concretely the importance and effects of sustainable TL except slightly. In this study, the most important aspect that has been worked on is the practical or apply the sustainable transformational leadership dimensions. The application through independent dimensions reveals the teacher's performance and clarify the fundamental aspects that affect performance.

## 4. The framework and hypotheses of the study

In this study transformational leadership approach impacts on teacher's performance to create a positive learning. The learning climate is the environment of the organization. This environment accommodates individuals including their skills and social interactions. This study, shows that through the main questions:

- 1- What is the degree of centralization of the sustainable occupational training that select teacher's performance?
- 2- What is the degree of centralization of the sustainable social training that select teacher's performance?

Both questions refer to the importance of training individuals' organizations. TL dimensions are (sustainable occupational training and sustainable social training). Teacher's performance is dependent variable. Sustainable occupational training and sustainable social training are independent variables.

Hypothesis 1: The degree of centralization of sustainable occupational training as a dimension of transformational leadership approach is high and effectively impact on teacher's performance.

The concept of centralization refers to the rate of response to the independent variable by the dependent variable. If the response is high, it refers to the high degree of centralization and it means that it supports the hypothesis 1. If the response is low, it means the centralization is low and the teacher's performance is unaffected by the independent variable and it does not support the hypothesis.

Hypothesis 2: The degree of centralization of the sustainable social training as a dimension of transformational leadership approach is high and effectively impact on the teacher's performance.

In the hypothesis 2, the concept of centralization refers to the rate of response to the independent variable by the dependent variable. If the rate of the response is high, it refers to the high degree of centralization and it means that it supports hypothesis 2. If the rate of response is low, it means the centralization is low and teacher's performance is unaffected by the independent variable and it does not support the hypothesis.

# 5. Theoretical background

### 5.1 What is the transformational leadership approach?

Bass (1985) indicated that TL leads subordinates to interact with each other to attain objectives and morality. Bass refers to the process of connecting both sides; first leaders and second subordinates who work in organizations. Tucker & Russell (2004) indicated that TL is to arise inspiration to a new vision compared with old vision. Researchers have showed that TL approach concentrate on job-performance, and teacher's commitment. These aspects are commitment of the TL sustainably (Hatter & Bass, 1995). Avolio (1993) stated that TL always focuses on what is needful and desirable, and Dumdum et al (2013) agreed with Avolio and said that TL approach is related to the personal outcomes. It positively provides what the personal needs and wants.

## 5.1.2 Sustainable occupational training (SOT):

Individuals in the organizations are resources including practices that impact on the performance (Singh et al, 2019). Frequently, the good performance in the organizational environment based on how to qualify needs and wants occupationally (Ogbeibu et al, 2020: Piwowar, 2021). Nowadays, the world "sustainability" is one of the crucial concepts that organizations accommodate it in their approaches. Training became aligned with the sustainability to improve the way of conducting functions. Training sustainably means a "systematic elevation of knowledge required by a person to perform tasks" (Schmidt, 2007, p.483). The best methods are to "engaging individuals in green" (Ahmad, 2015; jeronimo et al, 2020). According to this dimension of the TL approach, the following hypothesis refers to:

Hypothesis 1: The degree of centralization of sustainable occupational training as a dimension is high and effectively impact on teacher's performance.

## 5. 1. 3 Sustainable social training (SST)

Teachers as individuals in the organization can be promoted socially and emotionally through the interactive activities and interpersonally. Nowadays, SST concentrates on activities from teacher's side. These activities build confidence and learning (Ferreira et al, 2020). Social training sustainably is one of the effective methods on "harmonious" balance among imperatives (Ferguson et al 2021; Zedin 2023). Sustainability as an important concept indicates the long-term development effectively "eco-system" (Mahdi, 2024). According to this dimension of the TL approach, the hypothesis refers to:

Hypothesis 2: The degree of centralization of the sustainable social training as a dimension is high and effectively impact on the teacher's performance.

### 5.2 What is teacher's performance?

Teaching is one of the stressful professions. Teacher's performance is the ability of the teacher to contribute and accomplish goals. The opposite of high teaching performance is job-burnout that decline teacher's performance and conduct educational functions ineffectively (Schonfield & Skaalivik, 2016), and attaining the ability of renewal qualification though transformational leadership approach (Fue et al; 2022). Bass (1985) stated that achieving TL approach by conducting contribution sustainably through its dimensions between individuals in order to arise job-performance. It means teaching process can be transferred from isolated process and under the job-burnout to collaborating process and developing knowledge.

### 5.3 Transformational leadership and teacher's performance:

Bass (1985) was one of the researchers who declare TL and its importance, this style of leadership appears in moments of personal and cognitive development. Bass pointed that TL transfers individuals from one situation to another situation, but always toward development, nor decline. In his study, Bass has shown that TL attain progress in the performance. One the other side, Tucker and Russell (2004) have shown that TL able to accomplish inspiration. It means that TL attracts individuals with high performance to be loyal. Then, it motivates individuals to exploit what might be beneficial and positive for them by helping each other (Howell and Avolio, 1993; tucker and Russell, 2004; Howell and Avolio, 1993)

One of the studies was conducted on TL. Yu, Leithwood and Jantzi (2002) have discussed the importance of TL. TL arises the commitment. Commitment can be achieved through encouragement and collaboration. Instead of complaining, cooperation occurs by transforming fruitless work into productive and motivated- work. Dumdum et al (2013) have studied TL and its effect on individuals' characteristics. They found that TL has positive influence and can make changes toward better performance. It stimulates trust and develop commitment coupled with loyalty, advanced commitment (Bass, 1985) and attraction or inspiration (Tucker and Russell, 2004).

Bass and Avolio (1990) in their study stated that TL positively affect job-satisfaction. They found that job-satisfaction can be achieved through TL. It is reflection of positive motivational and cooperation on the part of leadership and is reflected directly. Job-satisfaction is the outcome of improving collaboration. Regarding the behavior, Mackenzie et al (2001) pointed that TL enhances the behavior of individuals. Always positive outcomes can be generated by positive behavior. In another words, positive vision and mission leads to desired results. Transformational leadership arises the degree of positiveness in individual's behavior. Additionally, Zaccaro and Blanks (2001) argued that "organizational vision" is reflected from TL approach.

Lai et al (2020) pointed that TL impacts on job-performance by changing the way of behavior and collaboration. TL encourages to achieve moral and behavioral collaboration. Gumus et 1 (2018) said that studies have proven the TL impacts on teacher's performance. Teacher's outcomes may damage learning area and students, if there is no procedure prevent it.

Pieterse et al (2010) pointed that TL improves "trust and loyalty". They are essential due to their effect on organizational outcomes. Al Harbi et al (2019) showed that TL encourages creativity instead of opacity, dependency and exclusivity in decisions. One of the important aspects that damage learning climates is teacher's burnout. It refers to "the degree of physical and mental fatigue and exhaustion than an individual perceives to associated with his/her work" (Lai et al; 2010, p939), teaching process is stressful functions in the educational process (Sabvita and Pakarinen, 2021; Dieibig et al; 2017).

Barbieri et al (2019) have proven that TL has a social support on teachers. TL qualifies teachers to align with new circumstances. TL makes teachers deal with what makes their functions changing. Montano et al (2017) have pointed that TL impacts on "mental-health". Barbieri et al (2019) mentioned that TL supports the social side in the learning, and agree with that "mental-health" can be changed due to TL approach. It makes teachers mentally satisfied before functionally. TL has only a negative influence on job-burnout. Harms et al (2017) stated that TL can negatively influence on teacher's job-burnout. This case decline performance. TL reduces job-burnout and increase job-satisfaction through social support. Hutagalong et at (2021) have examined TL and stated that it has relationship with individual's performance. He clarified that TL is an essential for job-performance. TL socially and mentally influence on teacher's performance. TL directs individuals through development. TL qualifies individuals to be able to perform tasks effectively (Ali and Haider,2017).

Ozdemir and Goven 2020; Alghamdi et al, 2023 have defined teacher's performance in their study and it is contribution to the process of attaining educational objectives. Teacher's performance based on TL approach. Khan (2023) has pointed that teacher's ability to accomplish good performance based on the "multidimensional" and it can be generated through TL. It develops individuals to be multiskilled and qualified to deal with stresses, TL transfers teacher's performance to high level (another nature), and makes teachers contributes to organizational activities with high quality of performance (Khan, 2023). Vermeulen et al (2022) showed that in TL no authority and power.

Lion and tan (2013) showed that TL can build a trust that leads to high performance. TL supports trust as an essential aspect in the organization. Bass et al (2003) found that TL can through trust improves performance and correlation between TL and teacher's performance. Mansor et al (2021) stated that TL supports trust and it is the foundation for "school effectiveness". Ghamrawi 2013; Khan, 2023 stated that the lack of trust and team learning negatively waste energies, and cannot increase performance. Kilinc et al

2024; lai et al, 2020 examined TL and found that the rate of commitment in teachers can be increased through TL by providing support and trust.

Alghamdi et al, 2023; Vermeolen et al 2022 discussed the technology is crucial to elevate teacher's performance and It facilitates tasks. Vincent and Jacotin (2019) stated that teacher's outcomes are the students who is a future society. Then, learning is interrelated to teacher's outcomes and it arises creativity. Learning climate is an environment that accommodate individuals (Bertels et al, 2011). Positive learning supports practices and develop teacher's performance (Meijer et al, 2016).

# 6. Methodology

Several literatures found that TL and its relationship to teacher's performance was proven that it is positive. TL is a renewal approach. The research methodology consists of several stages. In order to conduct the study and verify it, applying sustainable TL is needed. The process of examining the study is through social network analysis UCINET software. Social network analysis is used to for data analysis. The procedure of the tool as a methodology starts with discussing the scope of the study, collecting data and analyzing it. Then, discussing the results and their reasons that led to this, after that, discussing recommendations and proposals.

Figure 1 (study structure): made by authors.



# 6.1 What is social network analysis UCINET?

Social network analysis SNA is a software and analytical tool to understand relationships between variables and examine reasons to verify the purpose and originality of each result (Borgatti, Everett & Freeman, 2002). SNA shows network and statistical description as results. Each network indicates the specific organization and each statistical description is belong to its network of the organization. Relationships are important in social network analysis and its originality (reasons of creating the relationships between individuals through independent variables that led to dependent variable). Social network analysis is simple tool to examine data by showing them through network visually and statistically.

## 6.2 Research design and procedures:

The procedures of the study consist of steps that were prepared by authors. In the following figure, the procedures were clarified. Figure 2: made by authors.



# 6.3 Scope of the study

The area of the study is limited and specified within the 3 organizations. The social network analysis is used within 3 organizations that are specialized in teaching. The scope of the study was conducted in the educational organizations. Due to the privacy issue, the 3 organizations are mentioned as symbols in order to maintain the privacy according to their request. First organization is A, second organizations is B and third organization is C. This study highlights on the outcomes of the sustainable transformational leadership approach dimensions on the teacher's performance. The data were collected by survey and the respondents are 30.

Table: 1. Participants demographics.

Ages	respondents
Age 27-35	20
Age 35-45	10

Table: 2. In every position consist of 1 individual in the organization.

Position	Abbreviation
Mathematics	М
Arabic language	AL
Kurdish language	KL

English language	EL
Geography	G
History	Н
Arts	А
Physics	Р
Chemistry	С
Sport	S

Table: 3. Work-period.

Work period	respondents
6  months - 3  years	20
3-6 years	10

### Data collection and entry in social network analysis

Data for this study collected from 3 organization within the area of the study, specially within 10 types of specialization or positions of the pre-selected organization. To conduct that, the following stages are observed:

- 1. To gather data, an ego-centric approach is used, in which each ego or node is asked to declare his/her directly related contact with the independent variable "dimensions of sustainable transformational leadership" (Burt, 1984; Knoke & Yang, 2008).
- 2. The data was collected from 30 respondents from organizations A, B and C.
- 3. In the survey, the respondents (participants) were asked to declare that if he/she is correlated with the sustainable transformational leadership dimensions approach in the organization if the approach is strongly available and support individuals.
- 4. Also, the reasons of weakness and strength if available in each organization regarding the dimensions of sustainable transformational leadership.

The survey questions are as follows:

- 1- Is there a sustainable occupational training system that takes into account your presence in the organization to develop your performance occupationally?
- 2- Is there a sustainable social training system that takes into account your presence in the organization to develop your performance socially?

The first question refers to the sustainable occupational training as a first question in the questionnaire. It belongs to the first hypothesis and first research question. Second question refers to the sustainable social training as a second questions in the questionnaire. It belongs to the second hypothesis and second research question.

## Data analysis

Social network analysis UCINET is one of the software to examine data and demonstrate results (Borgatti, Everett & Freeman, 2002). This tool generates networks including nodes and ties. This tool shows results in networks and clarify each network and its case in order to understand if it is positive or negative according to the hypotheses. SNA highlights on relationships between dependents and independents variables and shows the nature of the connections if it is strong, centralized and match the hypotheses or not. It clarifies reasons of the results.

One of the aspects in SNA is degree centralization Everett and Borgatti (2005). It refers to the correlations between independents and dependents nodes. In this study. If the dependents nodes are centralized in independents nodes, it means positive based on the hypothesis 1 and 2. If the dependents nodes are not centralized in independents nodes, it means negative. High degree of centrality means individuals are centralized in group (cluster) in one node that is independent such as sustainable occupational training or sustainable social training as sustainable dimensions of transformational leadership approach. Low degree of centrality means individuals do not participate or engage within the sustainable training occupationally or socially, and it refers to the negative and do not match the hypotheses. Another aspect in social network analysis is degree of density. It is only a supportive tool to ensure the rate of relationships between independent and dependent variables. Density is the total number of the ties (connections) between nodes (individuals).

## Results

The results are distributed on three parts. First part is organization A, second part is organization B and third part is organization c.

### **Organization** (A) analysis:

### Sustainable occupational training SOT of the organization A:

In the organization A, map shows the connection between individuals in red color and the SOT of the TL in the blue color that the organization follow as a systematic approach to develop performance in the figure 3.



The map shows that red color (individuals) connect with the blue color (SOT). The relationship is direct between both sides. Teachers in order to develop their performance based on their specialization, they connect with the SOT as a dimension of sustainable TL an approach in the organization A. If they do not connect, or some of individuals do not connect, it means that those individuals cannot participate within the approach of the organization due to systematic or managerial issues including lack of justice and poor distribution of services. Table 4, the statistical description shows the degree of centralization as a basic in the organization A.

Descriptive statistics: Table 4

-	1	2	3
	Degree	NrmDegree	Share
1 Mean	9.000	100.000	0.100
2 Std Dev	0.000	0.000	0.000
3 N of Obs	10.000	10.000	10.000

Network Centralization = 100 % Density = 100 %

- 1- The red color are individuals and the blue color is the dimension of TL that the organization follow as a system to develop its individuals sustainably.
- 2- Network centralization in the organization is the essential requirement in the study and refers to the centralized ties from red color (individuals) to blue color (SOT). All teachers connected with the SOT. The rate of centrality is 100% and this value supports the hypothesis 1, which states that the degree of centralization is high (all teachers seek to elevate performance occupationally) in table 4 and figure 3.
- 3- Density refers to the number of connections in a network and it is 100%. This value of density indicates the total participation of all individuals.

Sustainable social training SST of the organization A:

In the organization A, map shows the connection between individuals in red color and the SST of the TL in the blue color that the organization follow as a systematic approach to develop performance in the figure 4.



The map shows that red color (individuals) connect with the blue color (SST). The relationship is direct between both sides. Teachers in order to develop their performance based on their specialization, they connect with the SST as a dimension of sustainable TL as an approach in the organization A. If they do not connect, or some of individuals do not link, it means that those individuals cannot participate within the approach of the organization due to systematic or managerial issues including systematic or managerial issues including lack of justice and poor distribution of services. Table 5, the statistical description shows the degree of centralization as a basic in the organization A.

Descriptive statistics: Table 5

		1	2	3
		Degree	NrmDegree	Share
1	Mean	9.000	100.000	0.100
2	Std Dev	0.000	0.000	0.000
3	N of Obs	10.000	10.000	10.000

Network Centralization = 100 % Density = 100 %

- 1- In this type of dimension SST that was conducted in the organization A, it shows that same results with SOT in same organization A. The red color are teachers and the blue color is the dimension of TL that all teachers centralized in it and the organization follow as a system to develop its individuals sustainably.
- 2- Network centralization in the organization refers to the centralized ties from red color (individuals) to blue color (SST). The rate of centrality is 100% and this value support the hypothesis 2, which states that the degree of centralization is high (all teachers seek to elevate performance occupationally) in table 5 and figure 4.

3- Density refers to the number of connections in the map and it is 100%. This value indicates the full participation of teachers and it supports the degree of centrality in table 5 of organization A.

#### **Organization (B) analysis:**

#### Sustainable occupational training SOT of the organization B:

In the organization B, the map shows the connection between individuals in red color and the SOT of the TL in the blue color that the organization follow as a systematic approach to develop performance in the figure 5.



The map shows that red color (individuals) connect with the blue color (SOT). The relationship is direct between both sides. Teachers in order to develop their performance based on their specialization, they connect with the SOT as a dimension of sustainable TL as an approach in the organization B. If they do not connect, or some of individuals do not connect, it means that those individuals cannot participate within the approach of the organization due to systematic or managerial issues including lack of justice and services. Table 6, the statistical description shows the degree of centralization as a basic in the organization B.

Descriptive statistics: Table 6

	1	2	3
	Degree	NrmDegree	Share
<ol> <li>Mean</li> <li>Std Dev</li> <li>N of Obs</li> </ol>	9.000	100.000	0.100
	0.000	0.000	0.000
	10.000	10.000	10.000

Network Centralization = 100 % Density = 100 %

1- The red color are teachers and the blue color is the dimension of TL that the organization follow as a system to develop its individuals sustainably. Teachers

are centralized in the red color (SOT) and it means they totally seek to develop their performance.

- 2- Network centralization refers to the centralized ties from red color (individuals) to blue color (SOT). The rate of centrality is 100% and this value supports the hypothesis 1, which states that the degree of centralization is high (all teachers seek to elevate performance occupationally) in table 6 and figure 5.
- 3- Density refers to the number of connections in a network and it is 100%. This value indicates the full participation of teachers and it supports the degree of centrality in table 6 of organization B.

#### Sustainable social training SST of the organization B:

In the organization B, the following map shows the nature of the connection between individuals in red color and the sustainable social training of the transformational leadership approach in the blue color that the organization follow as a systematic approach to develop performance in the figure 6.



The map shows that red color (individuals) connect with the blue color (SST). 3 of the teachers are not connected to SST in blue color. The relationship is direct between 7 teachers and SST as it is shown in the figure 6. Teachers in order to develop their performance based on their specialization, they connect with the SST as a dimension of sustainable transformational leadership as an approach in the organization B. If they do not connect, it means that those individuals cannot participate within the approach of the organization due to systematic or managerial issues including systematic issues including lack of distribution in services. In the following table 7, the statistical description shows the degree of centralization as a basic in the organization B.

	1	2	3
	Degree	NrmDegree	Share
1 Mean	2.800	31.111	0.100
2 Std Dev	2.182	24.242	0.078

3 N of Obs 10.000 10.000 10.000

Network Centralization = 70 % Density = 70%

- 1- The red color are individuals and the blue color is the dimension of TL that the organization follow as a system to develop its individuals sustainably.
- 2- Compared with the SOT in organization B, SST was weaker and 3 teachers as it is shown in the map, they are not connected with SST. It means that SST in organization B can cover 7 individuals and 3 are not included.
- 4- Network centralization is essential and refers to the centralized ties from red color (individuals) to blue color (SST). The rate of centrality is 70% and this value supports the hypothesis 2, which states that the degree of centralization is high but (not all teachers seek to elevate performance occupationally due to the lack of justice and poor distribution services) in table 7 and figure 6.
- 5- Density refers to the total connections in a network and it is 70%. This value indicates the participation of teachers and it shows that 3 teachers are not connected. This value of density supports the degree of centrality in table 7 of organization B.

#### **Organization** (C) analysis:

#### Sustainable occupational training SOT of the organization C:

In the organization C, the following map shows the nature of the connection between individuals in red color and the sustainable occupational training of the transformational leadership approach in the blue color that the organization follow as a systematic approach to develop performance in the figure 7.



The map shows the 6 teachers are not connected with the blue color (SOT). Only 4 teachers are connected with SST as it is shown in figure 7. The relationship is direct between 4 individuals and SOT. Teachers to develop their performance based on their specialization, they connect with the SOT as a dimension of sustainable transformational leadership as an approach in the organization C. If they do not connect,

it means that individuals cannot participate within the approach of the organization due to systematic or managerial issues including lack of justice and poor distribution of services. Table 8, the statistical description shows the degree of centralization as a basic in the organization C.

#### Descriptive statistics: Table 8

-	1	2	3
	Degree	NrmDegree	Share
<ol> <li>Mean</li> <li>Std Dev</li> <li>N of Obs</li> </ol>	1.200	13.333	0.100
	1.470	16.330	0.122
	10.000	10.000	10.000

Network Centralization = 40 % Density = 40 %

- 1- The red color are individuals and the blue color is the dimension of TL that the organization follow as a system to develop its individuals sustainably.
- 2- Network centralization refers to the centralized ties from red color (individuals) to blue color (SOT). The rate of centrality is 40% and this value does not support the hypothesis 1, which states that the degree of centralization is high but (not all teachers seek to elevate performance occupationally due to the lack of justice and poor distribution services and only 4 teachers are connected and 6 are not connected) in table 8 and figure 7.
- 3- Density refers to the number of connections in a network and it is 40%. This value of density is low.

#### Sustainable social training SST of the organization C:

In the organization C, map shows the connection between individuals in red color and the SST of the TL in the blue color that the organization follow as a systematic approach to develop performance in the figure 8.



The map shows the red color and only 3 individuals connect with the blue color (SST) without intermediaries. 7 of teachers are not connected to SST in blue color. Teachers to develop their performance based on their specialization, they connect with the SST as a dimension of sustainable TL as an approach in the organization C. If they do not connect, or some of individuals do not link, it means that those individuals cannot participate within the approach of the organization due to systematic or managerial issues including systematic or managerial issues including lack of justice and poor distribution of services. The organization C, especially in SST is poor and does not gather all teachers to support and develop their performance socially. Table 9, the statistical description shows the degree of centralization as a basic in the organization C.

Descriptive statistics: Table 9

	1	2	3
	Degree	NrmDegree	Share
1 Mean	0.400	4.444	0.100
2 Std Dev	0.663	7.730	0.166
3 N of Obs	10.000	10.000	10.000

Network Centralization = 30 % Density = 30 %

- 1- The red color are individuals and the blue color is the dimension of TL that the organization follow as a system to develop its individuals sustainably.
- 2- Compared with the SST in previous (organization B), SST in the organization C is weaker and 7 individuals as it is shown in the network, they are not connected with SST approach. It means that SST in organization C can cover 30% of individuals and 70% are not included due to the poor distribution of services and lack of justice.
- 3- Network centralization in the organization is important and refers to the centralized ties from red color (individuals) to blue color (SST). The rate of centrality is 30% and this value does not support the hypothesis 2, which states that the degree of centralization is high but (not all teachers seek to elevate performance occupationally due to the lack of justice and poor distribution services and only 3 teachers are connected and 7 are not connected) in table 9 and figure 8.
- 4- Density refers to the whole connections in a network and it is 30% in table 9 of organization C. This value of density is low.

The findings show that organization A, B and C are vary between each other. The table 10

(SOT) shows the comparison between organizations:

organizations	Centralization	Density
А	100%	100%

В	70%	70%
С	40%	40%

Table 10 shows that SOT organization A has a higher rate than B and C of response regarding the centralization and density. Organization B is second and C is third. Details are discussed next sections.

The findings show that organization A, B and C are vary between each other. The table 11 (SST) shows the comparison between organizations:

organizations	Degree of centralization	Degree of density
А	100%	100%
В	100%	100%
С	30%	30%

Table 11 shows that SST organization A and B has a higher rate than C regarding the response of the centralization and density. Organization C is weak and the rate of response to the sustainable social training is low. Details are in next sections.

# Discussion

Sustainable TL and dimensions as a newly emerging approach rooted in the idea of leadership as a general concept, which established a sustainable development and transformation from one stage to another within the organizational goals. Compared with the traditional leadership of the old views, the new sustainable approach is the new vision towards individuals as human beings and not as tools only. The sustainable TL as an emergent concept emerges from interaction between individuals and the approach that elevate performance. This approach cannot emerge from one side (organization). The approach that consists of two main dimensions such as; sustainable occupational training and sustainable social training. The dimensions based on interactive role of individuals toward the approach and vice versa. This research bridges the gaps by applying social network analysis method to TL approach.

The findings reveal that teachers' organizations interacts with the sustainable TL dimensions to promote the performance occupationally and socially. Several teachers in organization B and C do not interact with the approach from the organization. The reasons for the given situation are lack of justice, poor in distribution services, lack of motivation between individuals and delayed realization of the approach as it is shown

in the maps of organization B and C. it means that degree of centralization is low and not all teachers connected with the SOT and SST in the blue color. The organization A has strong situation. The reason for the given situation is all teachers are connected with the SOT and SST approach as dimensions. The organization B only in SOT, all teachers are connected with the SOT, but as we mentioned above in SST the organization B also not all teachers are connected with the SST. The reasons become obstacles to delay the benefits of the dimensions or become an intermediary makes a gap between teachers and sustainable TL. These reasons emerge from the organizations toward teachers.

# Conclusion

The present study fills gaps and contribute theoretically and methodologically by implementing social network analysis into sustainable TL concept and its dimensions. Additionally, dimensions of sustainable TL are examining with the social network analysis as another contribution of the present study. The present study has also some managerial implications. First, the quality of the connections between individuals and the sustainable TL dimensions may be increased in order to develop the rate of centralization that distribute the services of development. Second, the attention of individuals may increase toward the dimensions as an approach to develop their performance. Third, individuals may motivate each other to increase the rate of attention and participation in the process of development occupationally and socially. Therefore, organizations able to benefit from the advantage of sustainable TL such as occupational and social advantages between individuals and the organization itself. The results of this study provide that, it is significant to integrate sustainable TL and its dimensions for achieving pre-defined sustainable goals. specifically, for survival, the educational organizations can be aware from such delayed realization toward development, achieving sustainable objectives, promoting performance and protecting from poor services, and agree upon empowerment sustainably in order to develop performance. On the other hand, the present research focuses only on the role of sustainable TL dimensions and teacher's performance as outcomes in the organization occupationally and socially.

# Recommendations

The present study recommends that it is significant to focus on the teacher's performance that deliver the knowledge to students. And what intermediaries can make bridges to fill gap among teachers and students. Then, focusing on if the sustainable TL if it has a black side that may impact on teacher's performance and the development process or not. For such future work, sustainable TL dimensions become a trend or pervasive vision to be dominated on the organizational structure as a systematic approach.

### References

- Ahmad, S. (2015). Green human resource management: Policies and practices. *Cogent business & management*, 2(1), 1030817. https://www.tandfonline.com/doi/abs/10.1080/23311975.2015.1030817
- Alzaidi, j, R. S. (2024). The Strategic leadership among middle school principals and its relationship to administrative creativity and quality of work. *ALUSTATH JOURNAL FOR HUMAN AND SOCIAL SCIENCES*-41,(1)63, .60 <u>https://doi.org/10.36473/v1hc1y97</u>
- Alghamdi, R. S., Mohamed, A. M., & Shaaban, T. S. (2023). Artificial Intelligence and teachers' sustainability: Preschool teachers' perceptions of conditions and level of support for Professional Development in Early Childhood Special Education. *Alustath Journal for Human and Social Sciences*, 62(4), 332-357. <u>https://doi.org/10.36473/ujhss.v62i4.2272</u>
- Al Harbi, J. A., Alarifi, S., & Mosbah, A. (2019). Transformation leadership and creativity effects of employee's psychological empowerment and intrinsic motivation. Personnel Review, 48(5), 1082–1099. <u>https://doi.org/10.1108/pr-11-2017-0354</u>
- Ali, A., & Haider, S. Z. (2017). Developing a Validated Instrument to Measure Teachers' Job Performance: Analyzing the Role of Background Variables. Journal of Educational Research, 20(1), 21. <u>https://jer.iub.edu.pk/journals/JER-Vol-20.No-</u> <u>1/2 Developing a Validated Instrument.pdf</u>
- Avolio, B. J., Bass, B. M., & Jung, D. I. (1999). Re-examining the components of transformational and transactional leadership using the Multifactor Leadership. *Journal of occupational and organizational psychology*, 72(4),441-462. https://bpspsychub.onlinelibrary.wiley.com/doi/abs/10.1348/09631799916678
- Avolio, B. J., Walumbwa, F. O. & Weber, T. J. (2009). Leadership: Current theories, research, and future directions. *Annual review of psychology*, 60, 421-449.
   https://www.annualreviews.org/doi/abs/10.1146/annurev.psych.60.110707.163

https://www.annualreviews.org/doi/abs/10.1146/annurev.psych.60.110707.163 621

- Barbieri, B., Sulis, I., Porcu, M., & Toland, M. D. (2019). Italian teachers' wellbeing within the high school context: Evidence from a large scale survey. Frontiers in Psychology, 10(1926). <u>https://doi.org/10.3389/fpsyg.2019.01926</u>
- Borgatti, S., Everett, M., & Freeman, L. C. (2002). Ucinet 6 for Windows: Software for Social Network Analysis [Computer Software]. Harvard, MA: Analytic Technologies.
- Bass Bernard, M. (1985). Leadership and Performance Beyond Expectations: New York: A Division of Macmillian. <u>https://www.academia.edu/download/70684182/3c08a7312f01048b773d002f6</u> <u>8e1d589a38a.pdf</u>
- Bertels, H. M., Kleinschmidt, E. J., & Koen, P. A. (2011). Communities of practice versus organizational climate: Which one matters more to dispersed

collaboration in the front end of innovation?. *Journal of Product Innovation Management*, 28(5), 757-772. https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1540-5885.2011.00836.x

- Chen, C. C. (2011). FACTORS AFFECTING HIGH SCHOOL TEACHERS'KNOWLEDGE-SHARING BEHAVIORS. Social Behavior & Personality: an international journal, 39(7). <u>https://search.ebscohost.com/login.aspx?direct=true&profile=ehost&scope=sit</u> <u>e&authtype=crawler&jrnl=03012212&AN=63535826&h=ezeVfkZvrzR1g%2</u> <u>BhnbJvIkT39uEt6USjAJvfijWWCiNpNHWRd07NGB9IopQTCMnFTPDdX</u> <u>FGBwdX1PAP5Bi%2FFPJg%3D%3D&crl=c</u>
- Day, C., Gu, Q., & Sammons, P. (2016). The impact of leadership on student outcomes: How successful school leaders use transformational and instructional strategies to make a difference. *Educational administration quarterly*, 52(2), 221-258. <u>https://journals.sagepub.com/doi/abs/10.1177/0013161x15616863</u>
- Diebig, M., Bormann, K. C., & Rowold, J. (2017). Day-level transformational leadership and followers' daily level of stress: A moderated mediation model of team cooperation, role conflict, and type of communication. European Journal of Work and Organizational Psychology, 26(2), 234–249. <u>https://doi.org/10.1080/1359432x.2016.1250741</u>
- Dumdum, U. R., Lowe, K. B. & Avolio, B. J. (2013). A meta-analysis of transformational and transactional leadership correlates of effectiveness and satisfaction: An update and extension. In *Transformational and Charismatic Leadership: The Road Ahead 10th Anniversary Edition* (pp. 39-70). Emerald Group Publishing Limited. <a href="https://www.emerald.com/insight/content/doi/10.1108/S1479-357120130000005008">https://www.emerald.com/insight/content/doi/10.1108/S1479-357120130000005008</a>
- Everett, M., & Borgatti, S. (2005). Ego network betweenness. Social Networks, 27(1), 31-38. <u>https://doi.org/10.1016/j.socnet.2004.11.007</u>
- Fu, Y., Ren, W. T., & Liang, Z. R. (2022). Perceived academic stress and depressive symptoms among Chinese adolescents: A moderated mediation analysis of overweight status. Journal of Affective Disorders, 296, 224–232. https://doi.org/10.1016/j.jad.2021.09.060
- Ferreira, M., Martinsone, B., & Talić, S. (2020). Promoting sustainable social emotional learning at school through relationship-centered learning environment, teaching methods and formative assessment. *Journal of Teacher Education for Sustainability*, 22(1), 21-36. https://sciendo.com/article/10.2478/jtes-2020-0003
- Ferguson, T., Roofe, C., & Cook, L. D. (2021). Teachers' perspectives on sustainable development: the implications for education for sustainable development. *Environmental Education Research*, 27(9), 1343-1359. https://www.tandfonline.com/doi/abs/10.1080/13504622.2021.1921113
- Ghamrawi, N. (2013). Teachers helping teachers: A professional development model that promotes teacher leadership. *International Education Studies*, 6(4), 171-182. <u>https://eric.ed.gov/?id=EJ1067641</u>

- Gumus, S., Bellibas, M. S., Esen, M., & Gumus, E. (2018). A systematic review of studies on leadership models in educational research from 1980 to 2014. *Educational Management Administration & Leadership*, 46(1), 25-48. https://journals.sagepub.com/doi/abs/10.1177/1741143216659296
- Harms, P. D., Crede, M., Tynan, M., Leon, M., & Jeung, W. (2017). Leadership and stress: A meta-analytic review. Leadership Quarterly, 28(1), 178–194. https://doi.org/10.1016/j.leaqua.2016.10.006
- Hatter, J. J. & Bass, B. M. (1988). Superiors' evaluations and subordinates' perceptions of transformational and transactional leadership. Journal of Applied Psychology, 73, 695-702. <u>https://psycnet.apa.org/record/1989-13808-001</u>
- Hetland, H., Skogstad, A., Hetland, J., & Mikkelsen, A. (2011). Leadership and learning climate in a work setting. *European Psychologist*. <u>https://econtent.hogrefe.com/doi/full/10.1027/1016-9040/a000037</u>
- Howell, J. M., & Avolio, B. J. (1993). Transformational leadership, transactional leadership, locus of control, and support for innovation: Key predictors of consolidated-business-unit performance. *Journal of applied psychology*, 78(6), 891. <u>https://psycnet.apa.org/journals/apl/78/6/891/</u>
- Hutagalung, D., Admiral, A., Nuryanti, Y., Asbari, M., & Novitasari, D. (2021). Managing tacit knowledge sharing: From charismatic leadership to psychological safety climate. *Inovbiz: Jurnal Inovasi Bisnis*, 9(1), 108-119. <u>http://ejournal.polbeng.ac.id/index.php/IBP/article/view/1888</u>
- Jensen, U. T., & Bro, L. L. (2018). How transformational leadership supports intrinsic motivation and public service motivation: The mediating role of basic need satisfaction. *The American Review of Public Administration*, 48(6), 535-549. <u>https://journals.sagepub.com/doi/abs/10.1177/0275074017699470</u>
- Jerónimo, H. M., Henriques, P. L., de Lacerda, T. C., da Silva, F. P., & Vieira, P. R. (2020). Going green and sustainable: The influence of green HR practices on the organizational rationale for sustainability. *Journal of business research*, *112*, 413-421. https://www.sciencedirect.com/science/article/pii/S014829631930712X
- Katz, S., & Dack, L. A. (2014). Towards a culture of inquiry for data use in schools: Breaking down professional learning barriers through intentional interruption. *Studies in Educational Evaluation*, *42*, 35-40. https://www.sciencedirect.com/science/article/pii/S0191491X13000503
- Khan, F. (2023). Transformational leadership and teacher work performance: Mediating effect of job autonomy and trust in school principal–insights from senior secondary school data in India. *Educational Management Administration*

& *Leadership*, 17411432231172359. https://journals.sagepub.com/doi/abs/10.1177/17411432231172359

- Kılınç, A. Ç., Polatcan, M., Savaş, G., & Er, E. (2024). How transformational leadership influences teachers' commitment and innovative practices: Understanding the moderating role of trust in principal. *Educational Management Administration & Leadership*, 52(2), 455-474. https://journals.sagepub.com/doi/abs/10.1177/17411432221082803
- Klusmann, U., Richter, D., & Lüdtke, O. (2016). Teachers' emotional exhaustion is negatively related to students' achievement: Evidence from a large-scale Assessment study. Journal of Educational Psychology, 108(8), 1193–1203. <u>https://doi.org/10.1037/edu0000125</u>
- Lai, F. Y., Tang, H. C., Lu, S. C., Lee, Y. C., & Lin, C. C. (2020). Transformational leadership and job performance: The mediating role of work engagement. *Sage Open*, *10*(1), 2158244019899085. <u>https://journals.sagepub.com/doi/abs/10.1177/2158244019899085</u>
- Leithwood, K., & Jantzi, D. (2006). Transformational school leadership for large-scale reform: Effects on students, teachers, and their classroom practices. *School effectiveness and school improvement*, *17*(2), 201-227. https://www.tandfonline.com/doi/abs/10.1080/09243450600565829
- Li, A. N., & Tan, H. H. (2013). What happens when you trust your supervisor? Mediators of individual performance in trust relationships. *Journal of Organizational Behavior*, 34(3), 407-425. <u>https://onlinelibrary.wiley.com/doi/abs/10.1002/job.1812</u>
- Li, L., & Liu, Y. (2020). An integrated model of principal transformational leadership and teacher leadership that is related to teacher self-efficacy and student academic performance. Asia Pacific Journal of Education, 1–18. <u>https://doi.org/10.1080/02188791.2020.1806036</u>
- MacKenzie, S. B., Podsakoff, P. M., & Rich, G. A. (2001). Transformational and transactional leadership and salesperson performance. *Journal of the academy of Marketing Science*, 29, 115-134. <u>https://link.springer.com/article/10.1177/03079459994506</u>
- Mahdi, S. S. (2024). Unveiling Preferences in Translation Training: A Comprehensive Exploration of Collective and Individual Approaches. *Alustath Journal for Human and Social Sciences*, 63(1), 45-60. https://doi.org/10.36473/kp6ggk29
- Mansor, A. N., Abdullah, R., & Jamaludin, K. A. (2021). The influence of transformational leadership and teachers' trust in principals on teachers' working commitment. *Humanities and Social Sciences Communications*, 8(1), 1-9. <u>https://www.nature.com/articles/s41599-021-00985-6</u>
- McCarley, T. A., Peters, M. L., & Decman, J. M. (2016). Transformational leadership related to school climate: A multi-level analysis. *Educational Management Administration & Leadership*, 44(2), 322-342. <u>https://journals.sagepub.com/doi/abs/10.1177/1741143214549966</u>

- Nikolova, I., Van Ruysseveldt, J., De Witte, H., & Van Dam, K. (2014). Learning climate scale: Construction, reliability and initial validity evidence. Journal vocational *Behavior*. 85(3). 258-265. of https://www.sciencedirect.com/science/article/pii/S0001879114000943
- Ogbeibu, S., Emelifeonwu, J., Senadjki, A., Gaskin, J., & Kaivo-oja, J. (2020). Technological turbulence and greening of team creativity, product innovation, and human resource management: Implications for sustainability. Journal of Cleaner Production. 244. 118703. https://www.sciencedirect.com/science/article/pii/S0959652619335735
- Piwowar-Sulej, K. (2021). Human resources development as an element of sustainable HRM-with the focus on production engineers. Journal of cleaner production. 278. 124008. https://www.sciencedirect.com/science/article/pii/S0959652620340531
- Perron, G. M., Côté, R. P., & Duffy, J. F. (2006). Improving environmental awareness training in business. Journal of Cleaner Production, 14(6-7), 551-562. https://www.sciencedirect.com/science/article/pii/S0959652605001733
- Perko, K., Kinnunen, U., Tolvanen, A., & Feldt, T. (2016). Investigating occupational well-being and leadership from a person-centred longitudinal approach: Congruence of well-being and perceived leadership. European Journal of Work and Organizational Psychology, 25(1), 105–119. https://doi.org/10.1080/1359432x.2015.1011136
- Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. The leadership quarterly, 15(3), 329-354. https://www.sciencedirect.com/science/article/pii/S1048984304000207
- Schmidt, S. W. (2007). The relationship between satisfaction with workplace training and overall job satisfaction. *Human resource* development quarterly, 18(4), 481-498.

https://onlinelibrary.wiley.com/doi/abs/10.1002/hrdq.1216

Singh, S. K., Del Giudice, M., Tarba, S. Y., & De Bernardi, P. (2019). Top management team shared leadership, market-oriented culture, innovation capability, and firm performance. IEEE Transactions on Engineering 2544-2554. Management, 69(6),

https://ieeexplore.ieee.org/abstract/document/8884097/

- Saloviita, T., & Pakarinen, E. (2021). Teacher burnout explained: Teacher-, student-, and organization-level variables. Teaching and Teacher Education. 97(5), 103221. https://doi.org/10.1016/j.tate.2020.103221
- Schneider B (2000) The psychological life of organizations. In: Ashkanasy NM, Wilderom CPM and Peterson MF (eds) Handbook of Organizational Culture & Climate. Thousand Oaks: SAGE, pp. xvii-xxi. Retrieved from https://books.google.com/books?hl=en&lr=&id=AUt1i9ZEa48C&oi=fnd&pg=PA1& dq=Schneider+B+(2000)+The+psychological+life+of+organizations.+In:+Ashkanasy +NM,+Wilderom+CPM+and+Peterson+MF+(eds)+Handbook+of+Organizational+C ulture+%26+Climate.+Thousand+Oaks:+SAGE,+pp.+xvii%E2%80%93xxi.&ots=Z Wsn4P-dYr&sig=V 8HqN-g4b7nWQ 8F6VT8FM7XaQ
- Tian, Y., & Guo, Y. (2024). How does transformational leadership relieve teacher burnout: role and emotional the of self-efficacy

intelligence. *Psychological Reports*, 127(2), 936-956. https://journals.sagepub.com/doi/abs/10.1177/00332941221125773

- Tucker, B. A. & Russell, R. F. (2004). The influence of the transformational leader. *Journal of Leadership & Organizational Studies*, *10*(4), 103-111. https://journals.sagepub.com/doi/abs/10.1177/107179190401000408
- Vermeulen, M., Kreijns, K., & Evers, A. T. (2022). Transformational leadership, leader-member exchange and school learning climate: Impact on teachers' innovative behaviour in the Netherlands. *Educational Management Administration & Leadership*, 50(3), 491-510. https://journals.sagepub.com/doi/abs/10.1177/1741143220932582
- Vincent-Lancrin, S., Urgel, J., Kar, S., & Jacotin, G. (2019). *Measuring Innovation in Education 2019: What Has Changed in the Classroom? Educational Research and Innovation*. OECD Publishing. 2, rue Andre Pascal, F-75775 Paris Cedex 16, France. <u>https://eric.ed.gov/?id=ED592814</u>
- Zaccaro, S. J., & Banks, D. J. (2001). Leadership, vision, and organizational effectiveness. *The nature of organizational leadership: Understanding the performance imperatives confronting today's leaders*, 85, 181-218. Retrieved from
   <a href="https://books.google.com/books?hl=en&lr=&id=wUGDLOX4jW4C&oi=fnd">https://books.google.com/books?hl=en&lr=&id=wUGDLOX4jW4C&oi=fnd</a>

   &pg=PA181&dq=Zaccaro,+S.+J.,+%26+Banks,+D.+J.+(2001).+Leadership,+

   vision,+and+organizational+effectiveness.+The+nature+of+organizational+le

   adership:+Understanding+the+performance+imperatives+confronting+today%

   E2%80%99s+leaders,+181-218.&ots=McuxSPZtOV&sig=IpxNa3K6C\_f3 
   xfgR1poM1WTqSw
- Zedin, F. K. (2023). Leadership skill and its relationship to optimism bias among educational counselors. *Alustath Journal for Human and Social Sciences*, 62(4). <u>https://doi.org/10.36473/ujhss.v62i4.2252</u>

تطبيق أبعاد منهج القيادة التحويلية المستدامة على أداء المعلمين: تحليل الشبكات الاجتماعية

أيمن قاراداغي جامعة كومار للعلوم و التكنلوجيا، قسم إدارة الاعمال aymen.maaroof@komar.edu.ig

رازان كركوكلي جامعة كومار للعلوم و التكنلوجيا، قسم إدارة الاعمال razan.hasan@komar.edu.iq

رياض الدين احمد جامعة كومار للعلوم والتكنلوجيا، قسم إدارة الاعمال riazuddin.ahmed@komar.edu.iq

الملخص:

يعد أداء المعلم أحد القضايا المثيرة للجدل في المنظمة. تلعب القيادة التحويلية المستدامة وأبعادها دورا كبيرا في تغيير طبيعة أداء المعلم في المنظمة. في هذه الدراسة تمت مناقشة ودراسة أبعاد القيادة التحويلية المستدامة من خلال تحليل شبكات التواصل الاجتماعي كأداة لتحليل وفهم النتائج. تم جمع البيانات وشارك 30 شخصا في الاستبيان. المنظمات هي قطاعات تعليمية و هي 3 منظمات وذكرت كرموز في الدراسة. توضح هذه الدراسة أن كلا من التدريب المهني المستدام والتدريب الاجتماعي المستدام كأبعاد لنهج القيادة التحويلية المستدامة قادرة على تعزيز وإشراك المعلمين إذا كانت طريقة تطبيق الأبعاد صحيحة لمواصلة التحسن بشكل مستدامة قادرة إيجابية فيما يتعلق بالتدريب المهني المستدام ومع ذلك، فإن المنظمة C سلبية فيما يتعلق بالتدريب الاجتماعي المستدام.

الكلمات المفتاحية: ابعاد منهج القيادة التحويلية المستدامة، أداء المعلم وتحليل الشبكات الاجتماعية