

Transformational Leadership Scale: Development and Validation in the context of high school Teachers in Kerala, India

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ABSTRACT

Transformational leaders are those who can make a real influence and change the society, leaders with exceptional charisma, loyal to their followers being a good example of an honest transformation to improve any situation. “Transformational leaders help followers grow and develop into leaders by responding to individual followers’ needs by empowering them and by aligning the objectives and goals of the individual followers, the leader, the group, and the larger organization” (Bass & Riggio, 2006, p.4). In the educational field, an effective leadership teaching is essential for good academic results, that is why, inside the educational administration it is necessary to propose actions that motivate teachers to be real leaders to innovate in their classroom practices offering students environments that promote high quality education. In the same way, Greimel et al. (2023) affirmed that “a transformational leader is open to change and willing to adopt an individual leadership style. Continuous feedback is thus a valuable indicator for adjusting motivation and leadership style” (p.8), the leadership process can transform and improve the environment of any school; only positive changes can really transform situations and enhance motivation and results. Thus, this article presents the development and validation of transformational leadership scale in context and reality of high school teachers from India according to their background and educational system, acknowledging the value of the role of teachers as true leaders offering a high-quality education following the most appropriate education goals for their academic, personal and professional improvement.

Keywords: Leadership, Transformational Leadership Scale, High school teachers, Education.

INTRODUCTION

The concept or definition of Transformational Leadership was introduced by James MacGregor Burns in his book *"Leadership"* (1978). He defined transformational leadership as a process in which leaders inspire and motivate followers to achieve extraordinary outcomes developing their own leadership capacities engaging in a mutual support. Transformational leaders are visionary, inspiring and concerned with good leading qualities to demonstrate a sense of purpose and commitment with their followers, having high level of significance about vision, moral integrity and transformative impact for changing, fostering development and inspiring followers to achieve their fullest potential not only individually but collectively.

After Burns, author Bernard M. Bass (1985) expanded the concept of transformational leadership with his book *"Leadership and Performance Beyond Expectations,"* explained the operationalize idea of transformational leadership applicable to organizational settings, as a style of leadership which can be learned and measured emphasizing in high levels of performance, satisfaction, and motivation. Then, transformational leaders not only focus on managing tasks and rewards but achieving extraordinary outcomes and fostering long-term growth and development transforming followers into leaders themselves.

Owusu-Agyeman (2021) presented this definition referencing other authors: “Transformational leadership is defined as a leadership style that allow leaders to challenge their staff through different activities such as; providing them with a sense of mission and vision and allowing them to work towards group goals and objectives (Avolio, Walumbwa, & Weber, 2009; Dóci & Hofmans, 2015; Fitzgerald & Schutte, 2010; Føllesdal & Hagtvet, 2013)” (p.696), in same way, many other

researchers have studied this type or style of leadership with the sense or “transformation” which refers to “change”, improve or evolve any process in benefit of a group, work-team or community.

Leadership concept:

Leadership has been studied extensively over the years, it is one of the most complex and multidimensional phenomena taking great importance today in an increasingly globalized world. The definition of leadership still continues generating many academic debates due to its complexity (Benmira & Agboola, 2021). A concept and purpose of Leadership is well known by everyone but a concrete definition depends on personal and epistemological perspectives. Mostly, being a successful and effective leader means to get excellent skills to achieve successful results having a clear vision, being a leader who become an inspiration at people’s service. A well-known expert, author and speaker about leadership John C. Maxwell (1993) defined “Leadership is influence. That’s it. Nothing more, nothing less.” (p.1) in his book, *Developing the Leader Within You*” popularized this sentence as famous quote or definition about leadership. This author emphasized that leadership is not related about titles or positions but about the ability to influence others within a true leadership inspiring and guiding other towards common goals or objectives more than assume a formal role or authority just giving commands or orders. Everyone can influence someone in many ways or aspects of life then everyone has the potential to be a good leader. Leadership can be learned with the honest intention to develop and improve qualities of a good leader like talent, respect, charisma, team-work and responsibility.

“Leadership is a process whereby an individual influences a group of individuals to achieve a common goal” (Northouse, 2021, p.5), then, leadership as a result of the correct behavior of a leader has a directly influence in all work environment, objectives, mission, vision and purposes in any organization or company. In Education, teacher must be a leader who can educate with their own example, leadership in educational field is not only mandatory as part of teaching-learning process but it is a quality required within a professional well qualified educator who can understand the importance of updating, improving and contributing to schools. A real leader teacher inspires students to the acquiring of knowledge, inspire to be good human beings with human values and more significant, a real leader teacher inspires to do the correct with integrity.

Main characteristics of a transformational leader:

In general, being a leader means to get or develop certain qualities to be a real “leader”, about a transformational leader some specific traits and behaviours frame the main characteristics to inspire and drive significant positive changes in followers and organizations:

Visionary: James MacGregor Burns (1978) claimed that a transformational leader has a clear vision for the future focusing on long-term goals, thinking forward and seeing beyond any challenge. This characteristic help leaders to get a vision guiding followers, providing direction and purpose. Transformational leaders assume a compelling vision to communicate effectively with their followers, providing direction and meaning, motivating to work toward a common goal.

Inspirational: Bernard M. Bass (1985) highlighted that a transformational leader is highly motivational, using enthusiasm, passion and energy to inspire followers to commit to the vision, using powerful communication to connect emotionally with work team. This characteristic help transformational leaders inspire and motivate their followers by providing clear and attractive vision, enthusiasm, optimism, meaning and challenge to their work, encouraging to exceed their own expectations.

Empathetic and Supportive: Bass (1985) described that transformational leader is deeply attuned to the needs and aspirations of followers, understanding potentials of each individual and addressing their unique challenges, providing personalized support and mentorship, helping individuals grow both personally and professionally. This characteristic help transformational leaders to build strong and trusting relationships. providing personalized attention and support to their followers, acting as mentors or coaches, fostering an environment where followers feel valued and empowered.

Innovative and Creative: Bass and Avolio (1994) claimed that a transformational leader encourages creativity and innovation by challenging existing norms and encouraging followers to think critically and solve problems in new ways, new ideas, fostering an environment where followers feel free to explore and experiment. This characteristic help transformational leaders to challenge conventional thinking and stimulate intellectual ideas to innovative solutions and continuous improvement.

Role Model: Burns (1978) and Bass (1985) noted that a transformational leader leads by example, exhibiting high standards of ethical and moral conduct, demonstrating integrity, ethical behaviour and consistency in their actions being a role model for followers to commit values and principles inspiring others to align their behaviour accordingly. This characteristic help transformational leaders to earn respect, trust and admiration, setting a standard behaviour that others can follow, emulating their behaviour.

Empowering: Kouzes and Posner (2002) expanded the idea that transformational leader empowers their followers by delegating responsibility, encouraging autonomy, trusting them to take ownership of their tasks and providing opportunities for personal development. This characteristic help transformational leaders to build confidence in their team members, empowerment leads to a greater sense of ownership and accountability among followers, enabling them to take initiative, make decisions, and contribute meaningfully to the organization.

Change-Oriented: Ichy and Devanna (1986) pointed out a transformational leader is proactive agent of change rather than simply reacting, identifying the need for change, creating a vision to guide the change process and inspiring followers to embrace and implement changes. This characteristic help transformational leaders to be comfortable with ambiguity and uncertainty, encouraging their followers to embrace change as an opportunity for growth, leading their organizations through transitions and overcoming resistance to change.

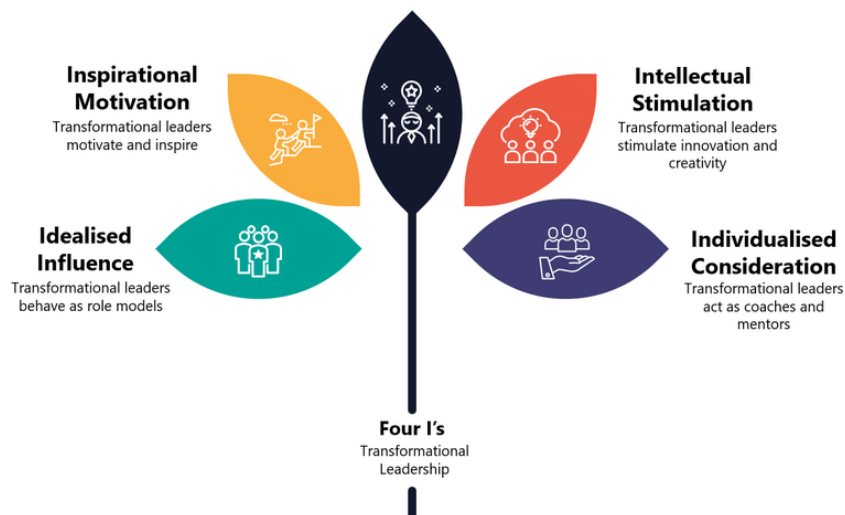
Emotionally Intelligent: Bass (1985) explained that a transformational leader has high emotional intelligence, understanding and influencing the emotions of others allowing them to navigate complex interpersonal dynamics effectively. This characteristic help transformational leaders to being able to manage their own emotions and contributing to high emotional intelligence in followers building strong and cohesive teams.

Conceptual and Empirical Literature on Transformational Leadership

Taking ideas from James MacGregor Burns (1978), the researcher Bernard M. Bass presented Theory of Transformational Leadership (1985) explaining that transformational leaders through trust, respect and admiration can influence positively on their followers, then, transformational leadership can be defined based on its impact inspiring and motivating followers to achieve extraordinary results, exceptional outcomes by transforming their behavior, attitudes, beliefs and values in any organization, group or community.

This theory had influenced the leadership training and development programs in many companies or organizations, emphasizing the importance of inspiring and motivating people rather than merely give commands, managing tasks or following a boss. For organizational success, applying transformational leadership demonstrated higher levels of employee satisfaction, commitment and performance where they are truly motivated and inspired by true leaders. Other scholars, authors and researchers have worked refined the theory, exploring its application in other contexts, in other cultural and organizational fields. Also, author Bass presented four main components of transformational leadership known as the four “I” framed the sense of a leadership that can “transform” work environments with honest influence, motivation and recognition of human talent about intellectual growing and individual qualities, inspiring, nurturing and developing their followers. These four elements were named: Idealised Influence (II), Inspirational Motivation (IM), Intellectual Stimulation (IS) and Individualised Consideration (IC).

Theory of transformational leadership by Bass. The four main elements of transformational leadership:



The fours I's of transformational leadership (Bass, 1985, 1990, 1995, 2008) taken from Google images web site:
<https://images.app.goo.gl/VK6J8zgLJPRq1mwZ8>

Idealized influence:

Transformational leaders are model for followers to trust and respect, acting as role model, earning deeply respect and admiration due to the example setting for others. This leader provides a clear vision and a sense of belonging encouraging individuals to work and achieve organisation goals or objectives. This leader has a powerful role model, demonstrating high standards of ethical and moral behavior, inspiring others to follow, copy or imitate, emulating individual and internal ideals getting a great deal of commitment. Groups led by this type of leader tend to be successful and loyal, taking care deeply about the group's abilities, talent and ideas to accomplish goals.

Inspirational motivation:

Transformational leaders play an important role in inspiration and motivation improving performance, articulating a clear vision of the future, encouraging and motivating followers to commit to the organization's goals, working to raise team morale through motivational strategies or techniques acting as inspiration. This leader with a high level of charisma can also help followers to experience the same level of passion and motivation through emotional appeals and enthusiastic communication to inspire and gain their commitment to organizational team beliefs. Groups led by this type of leader tend to experience a real motivation and inspiration for a work, task or job with a genuine commitment for the mission, vision and purpose of any organization.

Intellectual stimulation:

Transformational leaders create a diverse, open environment to encourage innovation, creativity, intellectual growing and new ideas for the organisation exploring new ways to do work, tasks or job and new opportunities to learn. This leader help followers to think critically and creatively where innovative ideas are valued and rewarded, looking for other paths to achieve goals from norms but pushing others to challenge their own beliefs and values. Groups led by this type of leader tend to improve cognitive processes, enhancing the human talent and stimulating new intellectual learnings in benefit of an organization.

Individualized consideration:

Transformational leaders work to create a diverse and supportive environment where individual differences are respected and celebrated, knowing each one of their followers providing personalized support and mentorship recognizing their unique needs and potential, investing in individual development helping and encouraging to achieve personal and professional growth. This leader keeps lines of communication open to listen any concerns or needs that their team members may have, feeling free to share ideas offering immediate recognition of unique contributions. Groups led by this type of leader tend to support each other acting as mentors and coaches for all team members, working to develop, empower and inspire them to achieve more and to be more individually and collectively.

METHOD

Construction of the Transformational Leadership Scale:

The researchers decided to take as main reference two relevant authors Burns (1978) and Bass (1985) who explained the most important aspects about Transformational leadership style. The process of item writing and editing for Transformational leadership Scale started with the adaptation of examples and questionnaires about transformational leadership from authors Escortell et al. (2020) in six components: Job satisfaction, Idealized influence, Inspirational motivation, Intellectual stimulation, Innovative climate and Individualized consideration. Initially, 30 items or questions were considering including the major elements from leadership in schools and transformational leadership, however, it was decided to reduce the items in 20 statements for a short practical survey.

Referencing Likert scale (1932) for rating the responses from participants five-points scale was chosen in the type of Agreement: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree with a scoring scale of (1 = Strongly disagree to 5 = Strongly Agree)

Procedure:

Using probability sampling, simple random technique for collecting data supporting a quantitative approach and survey method, the investigators selected the state of Kerala in four different districts: Thiruvananthapuram, Idukki, Malappuram and Kozhikode with data collected from 19 high schools including government and private schools. In social sciences research, especially in the qualitative approach, The Likert scale is one of the essential rating scales used as a measurement tool, but it is necessary a systematic process to clarify how data is obtained from Likert questionnaires and apply the appropriate statistical analysis for that data (Tanujaya, et al., 2022), in same way, in education field, this type of questionnaires or surveys can demonstrate opinions and attitudes from educational communities and members. The data collected was subjected to item analysis by using SPSS.

Participants:

In total, 309 high school Indian teachers answered the survey in person in physical papers. The sample distribution is given in Table 1.

Table 1: Sample Distribution

Sl. No	District of Kerala	N.
1	Thiruvananthapuram	146
2	Idukki	65
3	Malappuram	89
4	Kozhikode	9
Total		309

Measures:

Investigators can accept or reject items or statements with Item Analysis while process or writing and editing to get the final draft or tool. Item analysis is a powerful procedure for revealing the difficulty level and discriminating value of each item, especially valuable in improving items used to eliminate ambiguous or misleading questions or statements in a single test administration.

The quality of any test item is determined by the ability of that item to differentiate answers and ascertain establishing the difficulty and discrimination indices through a systematic analysis process (Kinuthia, 2023).

T-test

For Item analysis of Transformational Leadership Scale, using SPSS, *t* test was used for the statistical analysis using the following formula to check the numerical values of the mean responses of 20 items:

$$t = \frac{\bar{x}_1 - \bar{x}_2}{\sqrt{(s^2(\frac{1}{n_1} + \frac{1}{n_2}))}}$$

The t-test examines the difference between two independent population means. Denote M1 and M2, s₁ and s₂, and n₁ and n₂ as the sample means, sample variances, and sample sizes of two groups.

Cronbach’s alpha

Ma’rifah et al. (2022) expressed “Reliability can be interpreted as a measuring device that has the implication that the test result has relatively the same at different times with the same measuring instrument” (p.650).

The most common metric way to quantify reliability is Cronbach’s α (1951) based on inter-item correlations and it is one of the most widely used and reported of psychological and behavioral measures (Hussey et al., 2023). The formula for Cronbach’s alpha:

$$\alpha = \frac{N * \bar{c}}{\bar{v} + (N - 1) * \bar{c}}$$

Where:

N = number of items

\bar{c} = mean covariance between items

\bar{v} = mean item variance

Using SPSS, one of the most common statistical applications for digital work, the investigator calculated the Cronbach’s alpha for analysing the Transformational leadership Scale. Cronbach’s alpha ranges from 0 to 1, zero indicates that there is no correlation between the items at all in a set or group but frequently, analysts accept 0.7 as a good value for Cronbach’s alpha showing that the items are sufficiently consistent to indicate the measure is reliable.

RESULTS

Item Selection

The item test was modified and adapted depending on the result of the t-value, following: If $t > 1.96$, the item is accepted and if $t < 1.96$, the item is rejected, those items with less than 1.96 were discarded. The item analysis of Transformational Leadership Scale from India is showed in Table 2.

Table 2 Item Analysis Transformational Leadership Scale, India

Item N.	t-value	Remarks
1	11.994	Accepted
2	7.191	Accepted
3	11.994	Accepted
4	6.311	Accepted
5	7.816	Accepted
6	9.014	Accepted
7	7.672	Accepted
8	6.828	Accepted
9	7.313	Accepted
10	6.735	Accepted
11	10.000	Accepted
12	9.099	Accepted
13	9.099	Accepted
14	8.418	Accepted
15	8.048	Accepted
16	8.048	Accepted
17	6.650	Accepted
18	8.562	Accepted
19	9.099	Accepted
20	6.735	Accepted

Then, no any item was rejected and all 20 items were accepted for Transformational Leadership Scale in India. Using Cronbach Alpha, the reliability of Transformational leadership Scale is presented in below Table 3.

Table 3 Reliability: Transformational Leadership Scale, Indian teachers

Cronbach's Alpha	N. of Items
0.948	20

The final tool Transformational Leadership Scale with 20 accepted items, assesses and measures the main elements about transformational leadership style of high school teachers from India.

The component wise distribution of items in the final form of Transformational Leadership Scale is presented in table 4:

Table 4 Component wise items: Transformational Leadership Scale India (Final form of tool)

SI. No	Components	Serial Number of Item	Total number of Items
1	Job Satisfaction	1,12	2
2	Idealized influence	2,13,19	3
3	Inspirational motivation	4,6,11,15	4
4	Intellectual stimulation	5,7,8,16	4
5	Innovative climate	3,17,18,20	4
6	Individualized consideration	9,10,14	3
	TOTAL		20

Item samples in each component of the final tool Transformational Leadership Scale are showed below:

Job satisfaction

1. Working atmosphere should fulfil professional expectations.
2. Leaders should ensure the job satisfaction of teachers.

Idealized influence

1. The organizational work culture enables leadership behavior.
2. Leaders should generate positive attitude among teachers.

Inspirational motivation

1. There must be an inspirational motivation between teachers and head masters
2. Leaders should be inspiration for improving the teaching practices.

Intellectual stimulation

1. Leadership behavior can contribute for intellectual growing.
2. Leaders should be providing opportunities for professional development of teachers.

Innovative climate

1. Leaders should foment a positive environment work.
2. Leaders should work with society for the development of the school

Individualized consideration

1. Leaders should recognize efforts of teachers.
2. Leaders should be empathetic with teachers.

The final tool of Transformational Leadership Scale was composed of 20 items including six components: Job satisfaction, Idealized influence, Inspirational motivation, Intellectual stimulation, Innovative climate and Individualized consideration, measuring the most important aspects about high school teachers' perceptions from India. Validity and reliability indicators are appropriate.

DISCUSSION

Transformational leadership is taking high significance in humanities subjects as one of the most effective styles of leadership. In Education, the need to lead new strategies and activities in classrooms can motivate teachers to improve teachings practices, a true leader teacher also can inspire students to be leaders in all life aspects. During the last three decades, new models of leadership have been studied and high correlations with transformational leadership presented it like a model of social influence, a model of inspiration for a positive change in behaviors (Deng et al., 2023).

Transformational Leadership Scale was used as a tool to collect data from high school teachers in India in relation with their leadership style and knowledge about transformational leadership in particular. "Transformational leadership tested positive and significant with employee performance" (Hakro & Siddiqui, 2022, p.8). Likert Scale was designed to get measurable information in a quantitatively way to apply the appropriate statistical analysis, rating the participants responses.

Pesämaa et al. (2021) explained that validity is the extent for measuring a construct correctly in quantitative studies. Reliability and validity are the result of a good model specification and a good choice of sample respondents representing the population that the theoretical framework is designed to study. Transformational Leadership scale was revised to fulfil with validity and reliability procedures following the research method and objectives. Content validity process is a set of actions to determine the accuracy of the instrument used as a measurement tool, that tool should be able to measure accurately and systematically the content of the research instrument. An instrument has good validity obtaining as result high level of reliability. Therefore, content validity is crucial for judging and validate tool items, preserve the strength of the study design and also, it is a relevant part to do honest research (Sidek et al., 2022).

The significance of a research scale prepared to measure high school teachers is based on the need to listen, take into account and recognize their effort and good job. Unfortunately, in many schools, there is no any activity which recognize the circumstances that a teacher must face. Despite of different socio-economic contexts, schools have the priority duty to offer high qualified education, contributing to the improvement and professional development of high qualified teachers. The need of an appropriate leadership in classrooms, teaching practices and in educational management demonstrate a good organizational citizenship behavior impacting directly on the teaching-learning process quality. Consequently, it is important to approach to teacher's experiences, ideas and conceptions in order to identify and analyze school work environments and realities.

CONCLUSION

For the investigators, it is a very important to contribute to a good high-quality education as a result of research searching for aspects to improve human development and welfare including school as one of the most important services for society. In fact, school must be research-based where practitioners and innovations can take place to be developed, presented and learned (Abun et al. 2021). Teachers should be researchers of Education explaining different kind of phenomena which can help and foment the development to new abilities and human knowledge. Research in Education also can be an answer to different situations and a possible solution for a variety of questions, conflicts or problems.

Research about teachers is an excellent opportunity to take part of the action for a solution in education matters, helping them in any aspect of their teaching profession like their role, performance, job behaviour, personal and academic skills. It is possible to get a sincere reflexion about the teacher's attitude towards their professional career about axiology, leadership, organizational behaviour and how they can improve their work considering the research results, suggestions and recommendations.

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