

PAPER • OPEN ACCESS

Actual and expected transactional and transformational leadership behaviors of project managers

To cite this article: A Andi *et al* 2021 *IOP Conf. Ser.: Earth Environ. Sci.* **907** 012025

View the [article online](#) for updates and enhancements.

You may also like

- [Is MLQ Instrument Applicable to Verify the Blue Ocean Leadership Traits?](#)
Wan Noordiana Wan Hanafi, Salina Daud and Nur Lyana Baharin
- [Transformational Leadership in Creating Good District Government](#)
Herman Dema, Andi Fadel Rusdi, Akhmad Yasin et al.
- [Effect of motivation, cultural organization, leadership and conflict management on participation in coastal environment conservation](#)
Hardin, I K Dewi, S Said et al.



The Electrochemical Society
Advancing solid state & electrochemical science & technology

242nd ECS Meeting

Oct 9 – 13, 2022 • Atlanta, GA, US

Abstract submission deadline: **April 8, 2022**

Connect. Engage. Champion. Empower. Accelerate.

MOVE SCIENCE FORWARD



Submit your abstract



Actual and expected transactional and transformational leadership behaviors of project managers

A Andi^{1,2}, K Sugianto¹ and A F Khoesasih¹

¹ Department of Civil Engineering, Petra Christian University, Surabaya, Indonesia

² Corresponding author: andi@petra.ac.id

Abstract. In order to ensure that construction team works toward the desired objective, it is important for a project manager to behave as an effective project team leader. This paper aims to investigate actual and expected leadership of project managers by comparing the transactional and transformational leadership behavior model. To accomplish the objective, the paper first briefly reviews the ways in which leadership, especially the two models, are approached. Data were collected through a survey to 63 construction team members in several ongoing projects in Indonesia. The results indicate that the project managers frequently use both transactional and transformational behaviors in leading their team, except the laissez-faire style. Results from analytical hierarchy process analyses interestingly show that the project team members expect the project managers to exhibit transformational leadership more than transactional leadership.

1. Introduction

Due to its unique nature, construction projects provide more challenges to all parties involved, especially to contractors as the party implementing the project construction. The contractor must be able to carry out sound management so that the project objectives can be achieved through the implementation of four basic management functions, namely: planning, organizing, leading and controlling.

As the leader of the construction team, a project manager must be able to carry out the aforementioned basic management functions. This paper will focus on one important management function that must be performed by project managers, i.e. leading. A good project manager should have the ability to lead, which is determined based on his character and sufficient competence. Previous researches have shown that proper leadership is associated with project success [1,2] and can build trust within the team [3,4].

Basically all project managers lead. Some serve well as leaders, while others do not. The effectiveness of the leader (project manager) to some extent, as evidence suggests, is determined by the adoption of an appropriate behavior/style [5,6]. The leadership behavior expected by the team being led is one measure of the effectiveness of the project manager's leadership [7]. If the behavior is carried out as expected, this will affect the project manager's leadership in the construction project to be better and be able to control or manage his subordinates in order to increase teamwork and other aspects of work, so as to increase the success of the construction project.

Sujana et al. [7] note that many researches on leadership behaviors have been conducted; however, few are directed to evaluate what the project team expects from their project manager. In particular, rarely research is attempted to measure which behavior is more expected compared to other behavior and by how much. This paper is intended to close this gap.



This paper aims to investigate leadership behavior of project managers. The focus is to assess the leadership behaviors exercised by the project manager in construction projects. In addition, the paper seeks to assess the expected leadership behavior of the project manager by their fellow subordinate in a project team. To accomplish the objective, it first briefly reviews the ways in which leadership behavior is approached. Secondly, results of a recently conducted survey are reported and discussed.

2. Leadership and leadership behaviors

Leadership is defined as the manner in which the project managers conduct themselves in their role in order to obtain the best performance from the people they are managing [8]. Leadership is a behavior that is applied by a leader to be able to communicate and influence group members to achieve a goal. Theoretically, leadership aims to organize and direct his subordinates to act and work towards the goals and objectives of the work that have been set [9]. Likewise, Robbins and Judge [10] describe leadership as the ability to influence a group to produce an achievement based on a defined vision and goals.

2.1. Leadership theories

Robbins and Judge [10] states that there are several leadership theories, namely Trait Theories, Behavioral Theories, Contingency Theories, and Neocharismatic Theories. Trait Theories see a leader based on several characteristics such as personality, social, intellectual, and physical. In contrast to Trait Theories, leadership based on Behavioral Theories is a theory that can be taught and learned. Meanwhile, Contingency Theories explains that group achievement depends on the interaction between leadership styles and the high need for control by the leader in certain situations [10].

Neocharismatic Theories include Charismatic Leadership, Transformational Leadership & Transactional Leadership, and Visionary Leadership. In Neocharismatic Theories there are three discussions. First, this theory emphasizes leader behavior that is symbolic and emotionally attractive. Second, this theory seeks to explain how certain leaders can achieve extraordinary levels of follower commitment. Finally, this theory emphasizes theoretical complexity and views leadership as more like the average human behavior in society to be able to judge a subject.

According to Bass [11] quoted from Natalius [12], transactional and transformational leaderships are able to accommodate the concept of leadership that has a broad spectrum, including a situational approach to behavior and a contingency approach. From their survey, Chan and Chan [13] find that the transformational and transactional leadership behaviors are significantly correlated with leadership outcomes of leader effectiveness. Therefore, these two leadership behaviors will be used to support this research.

2.2. Transactional leadership

Transactional Leadership is a leadership that focuses on the achievement of common goals that have been agreed upon without trying to develop the responsibility and capacity of followers. According to Natalius [12], transactional leadership is also a leadership that implements a reciprocal relationship based on the principle of a transaction or exchange between two parties, in this case the employer and the recipient of the job. The types of leadership used in this type of transactional leadership are Contingent Reward, Management by Exception (active), Management by Exception (passive), and Laissez-Faire.

Contingent Reward is leadership that provides direction and reward (reward) which in this case will certainly be proportional to the effort (contingent) to what extent followers can achieve the expected goals. Management by Exception (active) is a leadership that tends to monitor its workers and immediately provide corrective action if an error or deviation occurs. Management by Exception (passive) is leadership that avoids corrective action or disputes with followers and followers as long as mutually agreed goals can be achieved. Whereas Laissez-Faire is leadership that avoids being involved in leadership and in decision making [11]. Tabel 1 shows the criteria of transactional leadership behavior [14,15,16,17].

Tabel 1. Transactional leadership criteria.

<p>A. Contingent Reward</p> <ul style="list-style-type: none"> • Focussing and directing workers to the goals and results to be achieved • Provide salary for support and work results that are appropriate to the work results • Hold negotiations and make an agreement on the salary of the work • Provide certainty on time regarding salaries and bonuses • Provide bonuses for the work of workers • Shows satisfaction when workers do a good job
<p>B. Management by Exception (active)</p> <ul style="list-style-type: none"> • Overseeing, commenting on and providing corrections for errors or failures • No hesitating to give punishment if there are violations or irregularities that occur • Establishing assessment standards and regulations before starting work to prevent errors or failures by workers
<p>C. Management by Exception (passive)</p> <ul style="list-style-type: none"> • Not actively providing corrections as long as the target is reached and the system is running properly • Taking action and remedying after failing to achieve goals or when there is a serious problem • Saying more about the mistakes of subordinates rather than the results of the work done correctly
<p>D. Laissez-Faire</p> <ul style="list-style-type: none"> • Delegating tasks to subordinates during implementation and decision making • Giving a greater portion of responsibility and freedom to workers

2.3. Transformational Leadership

Transformational Leaders are leaders who provide individualized and charismatic intellectual stimulation and consideration. This leadership is defined by Burns [18] quoted from Natalius [12] as leadership that includes organizational change efforts that will lead to superior performance in organizations that are facing the demands of renewal and change. The types of leadership used in the transformational type are Charismatic, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration.

According to Bass [11], charismatic is a transformational leader who gives vision and mission to his subordinates and instills pride, and acts as a role model who earns respect and trust from his subordinates. Inspirational Motivation is a transformational leader who motivates and inspires his subordinates by clearly communicating high expectations, using various symbols of emotional stimulation to focus efforts or actions, and expressing important goals in simple ways. Intellectual Stimulation is a transformational leader who leads his work team by emphasizing intelligence, rationality, and careful problem solving to achieve success. Individualized Consideration, which is a transformational leader who pays special attention to each individual's need for achievement and development, by acting as a coach (coach) or mentor (advisor). Tabel 2 shows the criteria of transformational leadership behavior [14,15,16,17,19].

Tabel 2. Transformational leadership criteria.

<p>A. Charismatic</p> <ul style="list-style-type: none"> • Making team members feel comfortable, proud and trust each other in working with them • Acting according to values and become a role model in the team • Making team members believe in their prompt and correct decisions in coping the problem • Insisting on shared values, commitments and aspirations
<p>B. Inspirational Motivation</p> <ul style="list-style-type: none"> • Increasing the enthusiasm of team members to pursue high targets and enjoy working with him

-
- Being confident in saying things that are optimistic, motivating, and constructive
 - Giving an example through real action to simplify the problem happen
 - Inspiring to do more and find new opportunities, especially for a priority
-

C. **Intellectual Stimulation**

- Encouraging team members to think from multiple points of view and come up with logical new ideas
 - Understanding the strengths and weaknesses of personnel and appreciate the important things pointed out by the subordinate
 - Explaining difficult problems and shows how to achieve something together
 - Raising team awareness of important matters (work safety, fire, etc)
-

D. **Individualized Consideration**

- Giving attention and trust to workers personally
 - Knowing what workers want and training them helps achieve this
 - Giving praise / appreciation if doing a job well and satisfied if work meets existing standards
 - Discussing and listening to the views of the work team
-

3. Research method

The research employed questionnaire survey method to collect the required data. The targeted respondents were contractors' team members on several ongoing projects at the time of the survey in several cities in Indonesia. Due to pandemic situation during the survey, the research team used convenience sampling method to collect the required data.

The questionnaire consisted of three major parts. First part contained general information about the respondent and project. Second part was about leadership behaviors, i.e. transactional and transformational criteria shown in Tables 1 and 2. Respondents were asked to rate how often their project manager exhibited each criterion, using a six-rating scale from not at all (1) to always (6). The data would then be analyzed to obtain the mean values of each leadership behavior, which represent the actual leadership behavior of the project manager in the project.

The final part of the questionnaire assessed the expected leadership behavior of the project manager. It used pairwise comparison method for the assessment. The respondents were required to rate their expectation to the project manager's behavior in leading the project team, by comparing the transactional and transformational behavior and also between the main criteria (in each behavior) using a scale from 9 to 9 (17 scales). The middle value of the scales is 1, which indicates the two behaviors compared have the same importance (expectation). A scale more than 1 shows that one behavior is more important (expected) than the other paired behavior [20].

Analysis of the expected leadership behavior was performed using Analytical Hierarchy Process (AHP) technique [20]. It would give results of the weights of transactional and transformational leadership behaviors, and also the weights of the main criteria. By comparing the resulted weights, it would be able to gauge the expectation of the respondents toward how their project manager should behave in leading the project team.

4. Result and discussion

4.1. General information

The survey could gather 63 respondents from five different ongoing projects. Table 3 presents the general information of the respondents. Before conducting subsequent analyses, validity and reliability tests were performed, which show that the questionnaire was valid (all p-values < 0.01) and reliable (all cronbach's alpha values ≥ 0.94).

Table 3. General information of respondents.

Information	No of respondents (%)
<u>Education</u>	
High school	22
Diploma	5
Undergraduate	70
Graduate	3
<u>Work Experience</u>	
< 5	32
6-10	49
10-15	16
15-20	3

4.2. Actual leadership behavior

Table 4 shows the mean values of respondent perceptions toward the actual leadership behavior exercised by their project manager. It can be seen from the table that the project managers apply almost all behaviors in their projects, especially the transformational leadership behaviors (with almost all mean values more than 4). Only Laissez-faire style that is quite rarely conducted by the project managers (mean value of 3.09).

Table 4. Actual leadership behaviors of project managers.

Transactional	Mean Values	Transformational	Mean Values
Contingent Reward	4.37	Charismatic	4.44
Management by Exception (active)	4.26	Inspirational Motivation	4.38
Management by Exception (passive)	3.61	Intellectual Stimulation	4.44
Laissez-faire	3.09	Individualized Consideration	3.89

Chan and Chan [13] considered that transactional and transformational leadership are more likely to be displayed by the same individuals in varied amounts and intensities and these two leaderships are complementary to each other. They also reveal that Laissez-faire style is seldom used by building professionals in Hong Kong and has negative correlation with employee work outcomes.

4.3. Expected leadership behavior

Analysis of the expected leadership behavior was performed using AHP technique, which required the respondents be consistent with a ratio ≥ 0.1 [20]. The comparisons were carried out for the pairwise of transactional and transformational behaviors and then the pairwise among criteria in each behavior. To obtain the weights, the process first calculates the geometrical means and then the eigenvector values for each pairwise [20]. Results of the AHP analysis are in Table 5, which portrays the comparison of the weights of expected transactional and transformational leadership behaviors, and their respective criteria.

Table 5. Expected leadership behaviors of project managers.

Leadership Behavior	Weight (%)	Leadership Behavior	Weight (%)
Transactional	42.20	Transformational	57.80
Contingent Reward	33.15	Charismatic	32.25
Management by Exception (active)	25.97	Inspirational Motivation	28.00
Management by Exception (passive)	22.02	Intellectual Stimulation	21.33
Laissez-faire	18.86	Individualized Consideration	18.42

As can be seen from the calculated weights, the respondents expect their project manager to use more transformational than transactional behavior, with the weights of 57.80% and 42.20% respectively. Under the transformational leadership, the charismatic and inspirational motivation are two criteria that have the highest weight. Whilst under the transactional leadership, the two criteria with highest weight are contingent reward and management by exception (active).

The results of actual and expected leadership behaviors in the current study are similar to the findings of previous study by Chan and Chan in Hong Kong [13] and also concur that, although both leadership behavior are complementary each to each other, transformational leadership behavior is more superior than transactional behavior. Chan and Chan mention that transformational leadership can augment transactional leadership to produce greater synergistic effects on the employees' work outcomes than either transformational or transactional leadership in isolation. However, transactional leadership cannot augment transformational leadership to the same extent.

Overall, Tables 4 and 5 suggest that the surveyed project managers have shown actual leadership behaviors that are expected by their project team members. It may indicate that the project managers have performed effective leadership. The findings in this study also give guideline to the project managers to proportionally use more transformational behavior than transactional behavior in leading their team. This may be able to increase team performance [13]; however further studies in the context of Indonesian construction are needed to confirm this hypothesis. One research is currently on going to evaluate the influence of leadership behaviors upon safety behavior.

5. Conclusion

This study has been conducted to investigate the actual and expected leadership of project managers using transformational and transactional leadership behaviors. The conclusions of the study can be summarized as follows.

- The project managers exhibit both leadership behaviors in their project but to different degrees and intensities. They use transformational leadership more frequently than transactional leadership in their work.
- Laissez-faire style is seldom used by the project managers.
- Charismatic (under transformational leadership) and contingent reward (under transactional leadership) are two most frequent behaviors acted by the project managers.
- The project team members expect the project managers to exhibit transformational leadership more than transactional leadership.
- The project team members perceive that expected and actual behaviors of their project managers are effective. In other words, what project managers have been behaving as leader are corresponding to the project team expectation.

References

- [1] Toor S U and Ofori G 2008 Taking leadership research into future: A review of empirical studies and new directions for research *Engineering, Construction and Architectural Management* **15** 4 352-71

- [2] Limsila K and Ogunlana S O 2008 Performance and Leadership Outcome Correlates of Leadership Style And sub-ordinate Commitment *Engineering, Construction and Architectural Management* **15** 164-184
- [3] Andi et al 2004 Basic, Actual, and Effectiveness of Leadership Styles of Construction Project Managers in Surabaya *Civil Engineering Dimensions* **6** 1 32-39
- [4] Andi et al 2008 Modeling The Influence of Project Manager Trustworthy Leadership Behavior Upon Construction Team Trust *Civil Engineering Dimensions* **10** 2 109-117
- [5] Bresnen M J et al 1986 Leader Orientation of Construction Site Managers *Journal of Construction Engineering and Management ASCE* **112** 3 370-386
- [6] Fiedler F E and Chemers M M 1984 *Improving Leadership Effectiveness: The Leader Match Concept* 2nd ed
- [7] Sujana et al 2013 Sifat dan Gaya Kepemimpinan Manajer Proyek yang Diharapkan oleh Tim Proyek pada Perusahaan Kontraktor, *Konferensi Nasional Teknik Sipil 7*, Semarang, K127-132
- [8] Walker A 1996 *Project Management in Construction*, 3rd Ed., Blackwell Science
- [9] Aryani F and Wahyuni V 1998 *Peranan kepemimpinan mandor dalam meningkatkan kualitas hasil produksi* (Surabaya: Universitas Kristen Petra)
- [10] Robbins S P and Judge T A 2015 *Organizational Behaviour* 16th ed (Harlow: Pearson)
- [11] Bass B M 1985 *Leadership and Performance Beyond Expectations* (New York: Free Press)
- [12] Natalius F 2011 *Analisa Kepemimpinan Transaksional dan Transformasional untuk Meningkatkan Kerjasama Tim dan Kinerja Waktu Proyek*. Tesis Universitas Indonesia
- [13] Chan A T S and Chan E H W 2005 Impact of Perceived Leadership Styles on Work Outcomes: Case of Building Professionals *Journal of Construction Engineering and Management* **131** 4 413-422
- [14] Bass B M 1990 "From Transactional to Transformational Leadership: Learning to Share the Vision" *Organizational Dynamic*, p. 22. New York: American Management Association
- [15] Avolio B and Bass B 2007 *MLQ: Self Evaluation Report* MindGarden
- [16] Danu B 2011 *Pengaruh Tipe Kepemimpinan Transaksional dan Transformasional terhadap Kepuasan Kerja Karyawan pada Proyek Konstruksi* Tesis (Yogyakarta: Universitas Atma Jaya Yogyakarta)
- [17] Nofalia Y 2018 *Pengaruh Sikap Kepemimpinan Mandor Terhadap Produktivitas Kinerja SDM Pada Proyek Konstruksi* Diploma Thesis (Padang: Universitas Andalas)
- [18] Burns J M 1978 *Leadership* (New York: Harper & Row)
- [19] Cheung et all 2001 "A Satisfying Leadership Behavior Model for Design Consultants" *International Journal of Project Management* **19** 421-429
- [20] Saaty T L 1994 *Fundamentals of decision making and priority with Analytical Hierarchy Process* (Pittsburgh: RWS Publication)