Abstract: Understanding and analyzing the difference between transformational and transactional leadership is crucial in getting the whole concept of leadership theories in organizations. Transformational leadership is the most popular theory which has evolved from the elements of leadership such as traits, situational and transactional leadership that focuses on the role of organization and group performance. In transactional leadership, rewards and punishments are contingent upon the performance of the followers. On the other hand, transactional leadership makes clear that what is required and expected from their subordinates. If subordinates perform well, they receive reward. When they don't perform well, a punishment may apply. This method is not very often used in organizations In this research, first we have compared the transformational and transactional leadership theories and their applicability to the higher education institutions by integrating the characteristics of each model into the single instructor and having him to apply the assigned techniques to the class. Secondly, based on performance-productivity metrics and examination results, we have found that both transformational and transactional leadership techniques have their own strengths and weaknesses. Therefore, in this paper we proposed a hybrid approach which combines the best of each technique, which also provided better performance and productivity results. The findings are also deeply interpreted.

Keywords: transformational and transactional leaders, management of higher education, leadership

1. Introduction

Leadership is one of the most complex human behaviors. Psychological tests have been used to show what characteristics are most likely noted among successful leaders in organizations. Seeing different leadership characteristics enhance us to learn about the key traits of acknowledged leaders. They are also used for developmental purposes in order to support managers gain insight and develop their leadership skills. Thus, if one wants be a successful leader, he or she needs study more than one leadership model or theory so that the needs of leadership can be understood. Recognizing different leadership enable us to understand clearly, what leadership is, and what constitutes effective leadership (McMahon, 2010).

By definition, leadership is taking responsibilities and making choices on your own. It’s not a responsibility that was thrust upon you by someone. An important part of leadership is to influence the people around you so that they can understand and value your expressions. However, the influence of a leader can depend upon many factors including their personality and the power of your leadership skills (Low, 2010).

It is known that confident leader wants to use authority to influence others’ behavior in order to reach organizational goals. These goals can only be accomplished with a good team working and the power of leadership skills. The interaction style or how you motivate others toward action is a major part of using leadership skills effectively. In order to be powerful and effective, you need develop techniques in communication and manage disagreements. This could be visible or invisible, but they must be relevant to the motivations of the power recipients (Low, 2010).

Successful organizations usually rely on the effective management of its leader and subordinates. In the collaboration of academicians and psychologists, main styles of leadership, transformational and transactional, have been developed and adopted by formal and informal organizations. The most effecting styles is known to be transformational leadership which leads to positive changes by inspiring and motivating followers. Meanwhile, transactional leaderships assume that reward and punishment motivate people positively. In this type of leadership, goals and objective are clearly identified and set for the followers.
Transformational leadership is the most popular theory of leadership. It is a type of leadership style that leads to positive changes in those who follow. The concept itself focuses on a leader who actually changes the needs of organizations. It also motivates the followers to perform high level performance as well as it helps them to improve their own leadership potential. The obvious characteristics of transformational leaders are generally energetic and passionate. In this leadership style, the leader enhances the motivation, moral and performance of his follower group (Carter, 2009).

By definition, transformational leadership theory is about leadership with values and meaning that focus on high order needs. Also, the theory has evolved from the elements of leadership such as traits, situational and transactional leadership. Transformational leaders care about followers and their personal needs and development. Because transformational leaders have strong beliefs about their followers, they have higher levels of performance and satisfaction than groups led by other types of leaders. Thus, they inspire and motivate their followers to go beyond normal levels of performance. There are four major components of transformational leadership. They are Idealized Influence, Inspirational Motivation, Individualized Consideration and Intellectual Stimulation (Carless, 1998).

2.1 Idealized influence

Idealized influence is an important part of the transformational leadership model espoused by Bass, and Avolio. Idealized influence is basically building confidence and trust as well as providing a role model that followers seek to emulate. In this type of leadership, leaders are admired, trusted. They also have enough confidence that provides a foundation for accepting organizational change. Thus, followers who are sure of the capabilities of their leader will be less likely to resist proposals for change from her/him (Avolio & Bass, 1999).

Idealized leadership consists of two-component conceptualization of idealized attributes and idealized behaviors. This conceptualization is used because idealizing leadership is open to individual and external practical behaviors. Idealized leadership tends to influence his/her follower because leaders show followers an optimistic vision of the future in order to convince them to believe in their own prospects (Carless, 1998).

Charisma is directly related to idealized influence. The relationship between charismatic and transformational leadership is very obvious during times of crisis within an organization. For example: When Lee Iacocca, a charismatic leader, took over Chrysler Corporation, it was a fresh start for the company. The company was on the edge of going out of business. They lost millions of dollars due to recalls of its Dodge Aspen and Plymouth Volare. He began rebuilding the entire company by starting from laying off many workers as well as selling the loss-making Chrysler Europe division to Peugeot, and bringing in many former associates from his former company. He had charisma that is the quality that makes people wants to follow him. He used his skills to inspire former employers who worked for Ford Motor Company. People followed him because they trusted him (Ruggieri, 2009).

2.2 Inspirational motivation

Inspirational motivation is the ability for a leader to provide meaning and context to the work of those under him/her. Idealized influence shows similarities with inspirational motivation whereas charisma is used to motivate individuals whereas inspirational leadership is about motivating the entire organization to come up with new ideas. Transformational leaders try the best to see the future as well as offering his/her followers the opportunity to see meaning in their work, and challenge them with high standards. By doing motivational speeches and highlighting positive outcome which stimulates the team work, followers become the part of the overall organizational (Carter, 2009).

Motivation changes from one day to another one. Different situation creates different motivations on human beings. People are motivated towards something they can relate to and something they can believe in. For example: Martin Luther King’s “I have a dream” speech is an exceptional example of this characteristic. Even today, King’s speech is cited and widely showed by media sources (Ruggieri, 2009).
2.3 Intellectual stimulation

Intellectual stimulation is the ability for a leader to keep those following him or her thinking about the task at hand, asking questions, solving problems and finding alternatives if needed. Leaders with intellectual stimulation feature encourage creativity for their followers. They train and develop people who are capable of thinking independently. For such a leader, unexpected situations are seen as opportunities to learn. The followers learn from mistakes, they don’t suffer from their mistakes. They also ask questions and investigate to find alternative ways to execute their tasks (Avolio & Bass, 1999).

As a leader, you should have the courage to lead and accept responsibility all the time. Good leaders should not fear failure. In case they fail, they should know how to stand up again. Naturally, courage divides into two parts: physical and moral. Although physical courage is only a plus for leaders, moral courage is a fundamental requirement of all effective leaders. Moral courage is a commitment to doing what is right (Forck, 2011).

The concept itself is in the middle of lives. In our relationships, the loves is built on love and trust, we have happy and unhappy moments. However, a relationship can become unsatisfactory to either partner on the grounds of intellectual incompatibility. This happens when dissimilarities arise. I think if one is having a problem like this, the person is lacking the intellectual stimulation.

2.4 Individualized consideration

Overall, the organizations need individuals to fulfill the requirements. The personalities of these individuals show diversity and they cannot be altered much. For example: As a human being, we cannot be more intelligent, but possibly we can become more educated. We cannot become more attentive, or less impatient, or more optimistic. As a result, there are certain physical characteristics that are determined by our brain structure (Gulati & Puranam, 2009).

Individual consideration is the ability of a leader to mentoring and coaching to the needs of each individual person. This type leader gives his/her full support and keeps communication open. Individualized consideration can be looked into two parts: developmental leadership and supportive leadership. Developmental leadership has the most benefits for followers. It also has a strong effect on job satisfaction and career certainty. Developmental leadership is a major transformational behavior because it lets employee to show his/her skills (Avolio & Bass, 1999).

Even though supportive leadership is strongly related to job satisfaction, it does not correlate with motivation or performance at all. As Bass discussed, individualized consideration occurs when a leader pays attention to the differences among followers and discovers what motivates each individual. Also, individualized attention allows leaders to become familiar with followers, enhances communication and improves information exchange (Avolio & Bass, 1999).

1. Transactional leadership

Leadership style is a very important element in the development of an organization. Transactional leadership is of the leadership style that is used by many successful companies. It focuses on the role of organization and group performance. This theory of leadership was introduced us by Max Weber who is a sociologist. In transactional leadership, rewards and punishments are contingent upon the performance of the followers. Transactional leadership makes clear that what is required and expected from their subordinates. The leader values the relationship between managers and subordinates as an exchange, in return to you give something for him or her. If subordinates perform well, they receive reward. When they don’t perform well, a punishment may apply (Hartof & Koopman, 1997).

Basically, transactional leadership is based on the fact that reward or punishment is dependent on the performance. Even though researchers have criticized the limitations and functions of it, it is still used by many employers. More companies seem to be adopting transactional leadership to increase the performance and productivity of its employees (Avolio & Bass, 1999).
3.1 Contingent reward

Contingent reward is an exchange process between leaders and his/her followers in which efforts by followers is exchanged for specified rewards. In contingent rewarding behavior, leaders tend to make specific assignments about what needs to be done in exchange for implicit or explicit rewards. An example would be the relationship between a parent and child negotiating how much TV the child can watch after doing his/her homework assignment. If the child studies well for the day, then he/she will get the chance of watching TV as the exchanged reward of his effort (Hartof & Koopman, 1997). Contingent reward behavior has a strong relationship with some leader effectiveness such as charisma. Charisma added unique variance beyond of contingent-reward behavior for understanding leader effectiveness. On the other hand, contingent-reward behavior had no effect beyond that of charisma. Also, the present studies examined the impact of contingent rewards on perceived autonomy, which was measured in terms of reports (Avolio & Bass, 1999).

3.2 Active management-by-exception

Active management by exception occurs when goals are set and they are not being met so that corrective action may be required. It also consists of some items that encourage the leader focusing on monitoring task execution for any mistakes before any problems arise. For example: Mistakes of products cost time in terms of revisions and customer complaints. Managers should correct those mistakes before their consequences occur. This would save some time whereas it should increase the productivity in the organization (Avolio & Bass, 1999).

3.3 Passive management-by-exception

Passive management-by-exception type of leaders intervenes only when standards of the work are not satisfactory or expected the performance is below the limits. They can even use punishment as a response to unacceptable performance. We see this kind of behavior in sport games such as soccer or basketball. For example: If a soccer player does not perform well continuously, the team manager can start him as a substitute in the next games. This would impact player’s budget as most soccer players are getting incentives such as bonuses for each game he plays. This is a certain punishment for the player (Rowold, 2006).

3.4 Laissez-faire

Laissez-Faire is a French term that translates as "let things alone". The term is originated by the Physiocrats, who did not agree with the trade restrictions that supported older economic systems such as mercantilism (Ruggieri, 2009). Laissez-faire leadership is a type of leadership style in which leaders use hands-off approach and allow group members to make their own decision. This leadership type is also known as a delegative leadership. This type leadership may lead to the lowest productivity among group member (Ruggieri, 2009).

1. Study

A study was performed to measure the impact of transformational and transactional teaching style on a Robotic class project that is formed by four pop quizzes, eight homework assignments, two comprehensive exams, four laboratory works, one final report. The due dates were set for each assignment. The class of fifty two students was divided into three different groups in which random selection process took place with a single instructor. Group 1 was supervised by implementing transformational style of leadership’s requisites whereas group 2 was approached by transactional leadership style. Group 3 consisted of mix method with transformational and transactional styles. By measuring alternative approaches to student’s project, we aimed to discover the optimal teaching style for future classes.

The first group, transformational type, was strictly examined by the instructor. A group member was selected among students with democratic voting system who was responsible for the empowering of each member of the team for efficient group work. Each group member was motivated towards the achievement of the team, thus they are built trust and confidence. The instructor showed passionate about the project. “Hands on” approach was utilized to help students whenever they need aid on solving problems or seeking alternatives. Each student is mentored individually to keep communications open and strong.
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Group 2 is taught by transactional leadership model that is based on rewards awarding in exchange to work. The rules and procedures were strict. Group members met and exchanged ideas occasionally with the supervision of the instructor. The initial group leader candidate was nominated by the students. Following group leaders were selected based upon the peer evaluation and instructor's overall observation. In each group leadership period that lasts twenty work days, the student was rewarded an extra of 10% of his or her final lab report grade. When the weekly goals are not met or the deadline passed, the group leader is withdrawn and the award is revoked unless the instructor is notified beforehand.

The third method, hybrid, is adopted for the mixed group in which reward and “hands on” approaches were utilized under the same roof. Each student had a chance to be the team leader as the name list orders in the roster. The group leader was awarded an extra of 5% of his or her total final lab report when the goals were met. No time allowance was given for the late work unless it was already discussed with the instructor. The meeting days were determined by the group itself within the instructor’s office hours.

A fair amount of each characteristic is inserted into the teaching model for each group as it can be seen in Figure 1.

![Figure 1: The distribution of characteristics to teaching models](image)

5. Findings and results

In order to distinguish the performance among the groups, the average assignment scores were calculated to weight the positive and negative aspects of each style.

**Table 1: Average assignment scores of three groups**

<table>
<thead>
<tr>
<th>Assignment(s)</th>
<th>Transformational Group Avg Scores</th>
<th>Transactional Group Avg Scores</th>
<th>Hybrid Group Avg Scores</th>
</tr>
</thead>
<tbody>
<tr>
<td>Quizzes (4)- 10%</td>
<td>74</td>
<td>64</td>
<td>69</td>
</tr>
<tr>
<td>Homework (8)-15%</td>
<td>88</td>
<td>79</td>
<td>80</td>
</tr>
<tr>
<td>Exams (2)-30%</td>
<td>59</td>
<td>53</td>
<td>55</td>
</tr>
<tr>
<td>Laboratory work (4)-20%</td>
<td>81</td>
<td>86</td>
<td>85</td>
</tr>
<tr>
<td>Final lab report (1)-25%</td>
<td>83</td>
<td>89</td>
<td>89</td>
</tr>
<tr>
<td>Total</td>
<td>76.4</td>
<td>77.1</td>
<td>79.7</td>
</tr>
</tbody>
</table>
5.1 Transformational group

The group was well organized and motivated towards the achievement of class. They participated in instructor’s meetings and mentored other group members when needed. These regular meetings enhanced students to perform well in the written examinations. On the other hand, the group was reluctant about the laboratory work and final lab. The average quiz, homework and exams scores showed that “hands on” approach can push students to one side while ignoring other parts. Because the students are more likely teacher oriented and driven by some real life issue, they go far for external research and go outside of the topic, thus they struggle to understand some conceptual issues that are asked in written assignments.

5.2 Transactional group

The group had some irregular, but useful meetings. The contribution of the instructor was quite similar to transformational group. The group was mainly focused on the reward that was given on the final lab report; however there was no punishment for the bad piece of work. Because the students are goal oriented, they had no time to go outside of the lectures and meetings so do some external research. Thus they failed to solve some complicated problems in written examination. The competition for the reward reflected positively into grades. As expected, reward increased the performance in final lab report in which the question and goals were clear and simple whereas the performance dropped in other assignments.

5.3 Hybrid group

The group has semi strictly rules and procedures with little flexible deadlines. They had regular meetings and interactive study environment in order to discuss some internal and external research opportunities for the project. The competition among students was quite low because everybody had a chance to prove himself or herself as a team leader. Thus, the grades for written examination increased compared to transactional group in which the student were only final lab report oriented for the extra 10%. We’ve come across to better results in our hybrid group. The weight of the reward was set accordingly to keep the competition alive but also stabilize the degree of it at an acceptable level in order to get the best result. The issues with the written exam scores in transactional group carried on to our hybrid group. In spite of the fact that the averages rise about 3% to 4%, we could not reach the expected rise of 10%. Based on our findings, it can be claimed that a study group can be a positive learning experience which can be created with the vision of a transformational type of leader, because connecting with other students would enhance the quality of studying skills. Providing feedback throughout the work process would be another crucial suggestion. Our transactional group received detail feedback about their project whereas the transformational group had no desire to get more of a feedback that could be beneficial for the assignment. While providing feedback, it was essential to tell them about the reward that they could receive for their efforts. Unfortunately, we found this very risky due to fact that some students could get away from the purpose of the whole class. We have also come to a conclusion that both transformational and transactional instructors were lack in teaching in a steady, lasting way due to high motivation and over load features in both teaching styles. While the instructor can show enthusiasm for teaching, the next day, he or she can be overwhelmed because of adapting to an unusual teaching style. Thus, students’ performances vary along with the leader’s or instructor’s fluctuates in motivation and changes in daily life activities. Instructors should balance the teaching power in a way that they can alleviate stress off the students. Depending upon the class atmosphere and individual, the teacher should be able to alter and adjust the load of both transformational and transactional leadership teaching styles in an allowable zone that stay in the limits of each technique.

It is also found out that some students have negative thoughts about the “team work” word especially in the hybrid group. It sounded like an obligation or restriction to them. However, based on the teacher’s in-class observation, single opinion minds usually failed after a point because they could not resist any other ideas other than his or hers. It is like manufacturing various car models with same exterior and interior design models. You would not get much interest on your product because your work is uninspiring and predictable. (Carter, 2009). Thus, we strongly recommend that a class hour should be spent to teach the importance of team working before the initial lectures.

In this paper, we reviewed the effects of different teaching styles on a project class. Nowadays, traditional classroom style has started to shift to online teaching system. Therefore, the interactive classroom atmosphere is limited to technological advancements. We believe that implications of...
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transactional teaching style can be harsh meanwhile the transformational model can be quite light. The hybrid model is a great role model for online teaching in which hands on and reward features are combined and integrated into one single system.

References


