LEADERSHIP STYLE OF PHARMACEUTICAL AND ENGINEERING COMPANY EMPLOYEES

Jashvantbhai Devda* Dr. S. M. Makwana**

ABSTRACT

Aim of the research is to find out the “leadership style among pharmaceutical and engineering company employees” to study by researcher selected three variables one is type of organization, second is category was employee and third of education qualification. The groups have 300 employs. In each group has 150 pharmaceutical employees and other one groups has 150 engineering employees. Scale was use for data collection is personal datasheet and leadership style scale developed by L. I. Bhushan (2005), 2x2x3 factorial design was used and data were analysis by ‘F’ test. Result show, there was significant difference of leadership style between pharmaceutical and engineering company employees, the leadership style scores of engineering company employee is higher than pharmaceutical company employee. There was significant difference of the leadership style between manager and worker of pharmaceutical and engineering company employees, the leadership style scores of manager is higher than worker. There was no significant difference of the leadership style between post-graduate, graduate and diploma degree holder of pharmaceutical and engineering company employees. There was no significant interaction effect of the leadership style between types of organization and category of employees of pharmaceutical and engineering company employees. There was no significant interaction effect of the leadership style between types of organization and education qualification of pharmaceutical and engineering company employees.

*M.Phil researcher Scholar, Dept. of Psychology, Saradar Patel University, Vallbh vidhyanagar-388120 Gujarat  **Associate Professor, Department of Psychology, Sardar Patel University, Vallbh vidhyanagar-388120 Gujarat
There was significant interaction effect of the leadership style between category of employee and education qualification of pharmaceutical and engineering company employees. There was significant interaction effect of the leadership style between types of organization, category of employees and education qualification of pharmaceutical and engineering company employees.

1. Introduction

The word “leader” appeared in the English language at about the year 1300 (Oxford English Dictionary, 1933) and the “Leadership” at about 1800 A.D. (Stogdill, 1974).

However, the issues of leadership are as old as the human civilization. As soon as some individuals started dominating others, organizing people to fight aliens, and protecting their own people, they emerged themselves as leaders. Even some animals are known for dominating and leading their flock. Earlier, heads to tribal groups, kings and warriors were recognized as the leaders. They were superiors and masters. Later on similar superiority was noticed in other areas where religions preaches and reformists, political figures, mafia kings and Godfathers, intellectual grants, industrialists, revolutionaries, sports genius, artists and the top men in almost all spheres of the society were respected as leaders.

The principal’s role is to serve as a democratic leader than to be a dictator or autocratic giver of orders. In no other area of the management of the school is democratic leadership, more important than in the improvement of instructions of the development of curriculum materials. Principals, as well as leaders in other areas, may be not expect loyalty and strict “followership” unless they involve teachers in planning institutional improvement and earn the position of leadership which the office tentatively allows them. Leadership which is achieved is more dynamic than that which is ascribed.

During the past couple of decades there has been a serious attempt to study and determine what makes for good leadership. The Students of public administration and business administration have analyzed the factors which go to make up leadership. Social psychologists have also carried out many analytical studies of leadership and have conducted experimental studies of democratic and authoritarian groups, particularly with children. More recently, school of education have been carrying on studies of leadership in education both independently and as a result of the other stimulus provided by the cooperative study of educational leadership.
Definitions of leadership

The following are the views of different authors on leadership:

- Dubin (1952) says, “Leadership is the exercise of authority and the making of decision.”
- According to George R. Terry (1960:442), “The will to do is triggered by leadership and lukewarm desires for achievement are transformed into burning passion for successful accomplishment by the skillful use of leadership.”
- In the words of Peter Drucker (1970:159), “Leadership is lifting man’s vision to higher sights, the rising of man’s performance to a higher standard, the building of man’s personality beyond its normal limitations.”
- Alford and Beatty (1951:111), define “Leadership as the ability to secure desirable actions from a group of followers voluntarily without the use of coercion.”
- According to Keith Davis (1967:96), “Leadership is the ability to persuade others to seek defined objectives enthusiastically. It is the human factor which binds a group tighter and motivates it towards goals.”
- Hemphill (1954), “The initiation of acts that in a constant pattern of group interaction directed toward the solution of mutual problems.”
- According to Stogdill (1948), “Leadership is the process of influencing group activities toward goal setting and achievement.”

For the purpose of present study Hemphill’s (1949) definition of leadership has been chosen as the simplest and is most appropriate. In this one sentence he summed up the basic definition and dynamics of all leadership- the directing of group activities, the implications of leadership suggest that a dichotomy between the leader as super ordinate and the follower as subordinate as far as roles and functions are concerned. However, regardless of the obvious, the effective leader must dynamic leadership to facilitate the instructional process.

It is undoubtedly clear that different types of situations call for different types of behavior. There is no guarantee whether one leadership behavior will always be effective or not. But it should be understood that any leadership behavior utilized by the leader while administering the affairs of his office is likely to have an effect on organizational performance, be it positive or negative.
Types of Leadership

People are exposed to a broad and ever growing variety of theories that explains the concept and the practice of leadership, albeit, today’s leadership experts still can’t dare ignore theorists like, Maslow, Smith, Barnard, Deming, Mayo, Fayol, Weber, Hamel, etc… who have crafted the most fundamental definitions of leadership and its countless characteristics. Some of the types of leadership were selected to help leadership students and readers understand this concept with a little more clarity. My main purpose here is to provide a brief overview of the more dominant types of leadership. It is important to note that this submission attempts to single out some types of leadership models not all. It is not intended to introduce any new theory. It is posted to help some of you who had requested my opinion about different types of leadership.

- **Autocratic Leadership:** The autocratic leader is given the power to make decisions alone, having total authority. They stand in master of the people and impose their wills and no one is allowed to challenge them. On the other end, this leadership style is seems to be good for employees that need close supervision to perform certain tasks. Creative employees and team players resent this type of leadership, since they are unable to enhance processes or decision making, resulting in job dissatisfaction (Lewin, Lippitt, & White, 1939).

- **Bureaucratic leadership:** The bureaucratic leader believes more in very structured procedures and tends to bend over the pre-established measures rather it was successful or not. This type of leadership has no space to explore new ways to solve problems and is usually slow paced to ensure adherence to the ladders stated by the company. Leaders ensure that all the steps have been followed prior to sending it to the next level of authority. Universities, hospitals, banks and government usually require this type of leader in their organizations to ensure quality, increase security and decrease corruption. Leaders who would like to speed up the process will experience frustration and anxiety and are not welcome (Weber, 1905).

- **Charismatic leadership:** The charismatic leader leads by infusing energy and eagerness into their team members. A charismatic leader is someone who is often on the run. S/he is not someone who feels pleased with any type of stationary situation. This type of leader
has to be committed to the organization for the long run. If the success of the division or project is attributed to the leader and not the team, charismatic leaders may become a risk for the company by deciding to resign for advanced opportunities. It takes a company time and hard work to gain the employees’ confidence back with other type of leadership after they have committed themselves to the magnetism of a charismatic leader (Weber, 1905).

- **Democratic leadership:** The democratic leader listens to the team’s ideas and studies them, but hold the responsibility to make the final decision. Team players contribute to the final decision therefore increasing people satisfaction and ownership, feeling their input was considered when the final decision was taken. When changes arises, this type of leadership helps the team assimilate the changes better and more rapidly than other styles, knowing they were consulted and contributed to the decision making process, minimizing Julio Warner Loiseau, BSc. MPA resistance and intolerance. A shortcoming of this leadership style is that it has difficulty when decisions are needed in a short period of time or at the moment (Lewin, Lippitt, & White, 1939).

- **Laissez-faire leadership:** The laissez-faire leader gives no continuous feedback or supervision because the employees are highly experienced and need little supervision to obtain the expected outcome. This type of style is also associated with leaders that don’t lead at all, failing in supervising team members, resulting in lack of control and higher costs, bad service or failure to meet deadlines. In government this is what the type of leadership which may drive to anarchy (Lewin, Lippitt, & White, 1939).

- **People-oriented leadership:** The people-oriented leader is the one that, in order to comply with effectiveness and efficiency, supports, trains and develops his personnel, increasing job satisfaction and genuine interest to do a good job (Fiedler, 1967).

- **Servant leadership:** The servant leader facilitates goal accomplishment by giving its team members what they need in order to be productive. This leader is an instrument employees use to reach the goal rather than a commanding voice that moves to change. This leadership style, in a manner similar to democratic leadership, tends to achieve the
results in a slower time frame than other styles, although employee engagement is higher (Greenleaf, 1977).

- **Task-oriented leadership:** The task-oriented leader focuses on the job, and concentrates on the specific tasks assigned to each employee to reach goal accomplishment. This leadership style suffers the same motivational issues as autocratic leadership, showing no involvement in the teams needs. It requires close supervision and control to achieve expected results (Fiedler, 1967). Another name for this is deal maker and is linked to a first phase in managing change, enhance, according to the “organize with chaos” approach (Rowley & Roevens, 1999).

- **Transactional leadership:** The transactional leader is given power to perform certain tasks and reward or punish for a team’s performance. It gives the opportunity to the manager to lead the group and the group agrees to follow his lead to accomplish a predetermined goal in exchange for something else. Power is given to the leader to evaluate, correct and train subordinates when productivity is not up to the desired level and reward effectiveness when expected outcome is reached (Burns, 1978).

- **Transformational leadership:** The transformation leader motivates its team to be effective and efficient. Communication is the base for goal achievement focusing the group in the final desired outcome or goal attainment. This leader is highly visible and uses chain of command to get the job done. Transformational leaders focus on the big picture, needing to be surrounded by people who take care of the details. The leader is always looking for ideas that move the organization to reach the company’s vision (Burns, 1978).

- **Environmental leadership:** The environmental leader is the one who nurtures group or organizational environment to affect the emotional and psychological perception of an individual’s place in that group or organization. An understanding and application of group psychology and dynamics is essential for this style to be effective. The leader uses organizational culture to inspire individuals and develop leaders at all levels. This leadership style relies on Julio Warner Loiseau, BSc. MPA creating an education atmosphere where groups interactively learn the fundamental psychology of group
dynamics and culture from each other. The leader uses this psychology, and complementary language, to influence direction through the members of the inspired group to do what is required for the benefit of all (Carmazzi, 2005).

2. Aims of the study:

1. To study of leadership style among pharmaceutical and engineering company employees.
2. To study of leadership style among manager and worker of pharmaceutical and engineering company employees.
3. To study of leadership style among post-graduate, graduate and diploma degree holder of pharmaceutical and engineering company employees.
4. To study of the effect of interaction on leadership style among type of organization and category of employee of pharmaceutical and engineering company employees.
5. To study of the effect of interaction on leadership style among type of organization and education qualification of pharmaceutical and engineering company employees.
6. To study of the effect of interaction on leadership style among category of employee and education qualification of pharmaceutical and engineering company employees.
7. To study of the effect of interaction on leadership style among type of organization, category of employee and education qualification of pharmaceutical and engineering company employees.

3. Hypothesis:

1. There is no difference between the leadership style among pharmaceutical and engineering company employees.
2. There is no difference between the leadership style among manager and worker of pharmaceutical and engineering company employees.
3. There is no difference between the leadership style among post-graduate, graduate and diploma degree holder of pharmaceutical and engineering company employees.
4. There is no interaction effect of the leadership style among types of organization and category of employees of pharmaceutical and engineering company employees.
5. There is no interaction effect of the leadership style among types of organization and education qualification of pharmaceutical and engineering company employees.
6. There is no interaction effect of the leadership style among category of employee and education qualification of pharmaceutical and engineering company employees.

7. There is no interaction effect of the leadership style among types of organization, category of employees and education qualification of pharmaceutical and engineering company employees.

4. Methodology:

Research design:

This research will be adopted 2×2×3 factorial design as well as 1st is type of organization (Pharmaceutical and Engineering), 2nd is type of employees (Manager and Worker) 3rd is education qualification (Post-Graduate, Graduate and Diploma).

| Education Qualification | Pharmaceutical (A1) | Engineering (A2) |
|-------------------------|---------------------|-----------------|
|                         | Manager (B1)        | Worker (B2)     |
|                         | 25                  | 25              |
| Post-Graduate (C1)     | 25                  | 25              |
|                         | 25                  | 25              |
|                         | 100                 | 100             |
| Graduate (C2)          | 25                  | 25              |
|                         | 25                  | 25              |
|                         | 25                  | 25              |
|                         | 100                 | 100             |
| Diploma (C3)           | 25                  | 25              |
|                         | 25                  | 25              |
|                         | 25                  | 25              |
|                         | 100                 | 100             |

- A1- Means pharmaceutical company.
- A2- Means engineering company.
- B1- Means Manager.
- B2- Means Worker.
- C1- Means post-graduate education qualification.
- C2- Means graduate education qualification.
- C3- Means diploma education qualification.

Sample:

The sample comprised of total 300 employees of pharmaceutical and engineering companies. The sample selected randomly from the various pharmaceutical and engineering companies.
Tools used:

The following tools were used in the present study:

- **Personal Datasheet:**
  
  A Personal data sheet developed by investigator will used to collect information about types of organization, category of employee and education qualification.

- **Leadership Preference Scale**
  
  Developed By L.I. Bhusan (2005).
  
  This likert type 30 items scale measures authoritarian vs. democratic, leadership scale for adults.

Reliability:

In order to ascertain the reliability of the scale, both the internal consistency and temporal stability were determined. Using the responses from 100 students, the coefficient of internal consistency as corrected by Spearman-Brown formula was found to be 0.74. The retest was done after four weeks on 50 subjects and the test-retest reliability coefficient was found to be 0.79 which was significant at 0.01 level of significant.

Validity:

The author has reported satisfactory validity of the questionnaire.

Scoring method:

Leadership style scale contains 30 items. Each item has five optional response, i.e., strongly agree, agree, undecided, disagree and strongly disagree. The respondent has to select one option out of the given five responses: there are 16 positive item and 14 Negative items. The positive item scored as 5,4,3,2,1 and negative item scored as 1,2,3,4,5 for the responses strongly agree, agree, undecided, disagree and strongly disagree.

Statistical analysis:

In this study ‘F’ test was used for statistical analysis.
5. Result and Discussion:

Leadership style with reference type of organization, category of employees and education qualification

The main objective was to study pharmaceutical and engineering organization employees having category manager and worker also having educational qualification of post-graduate, graduate and diploma degree differ in overall leadership style. In this context, 7 null hypotheses (no.1to7) were constructed. For this purpose 2x2x3 factorial design was framed. To examine these null hypothesis statistical techniques of F- ANOVA was used. The results obtained are presented in table 1, 2, and 3.

**Table no. 1**

(N=300)

Means and SDs of overall leadership style with reference type of organization, category of employees and education qualification.

| Independent variable | Post-Graduate | Graduate | Diploma |
|-----------------------|---------------|----------|---------|
| Pharmaceutical        |               |          |         |
| Manager               | Mean 116.73   | 110.60   | 103.36  |
|                       | SD 8.63       | 14.61    | 13.55   |
|                       | N 25          | 25       | 25      |
| Worker                | Mean 101.52   | 100.12   | 110.72  |
|                       | SD 10.87      | 9.86     | 16.64   |
|                       | N 25          | 25       | 25      |
| Engineering           |               |          |         |
| Manager               | Mean 117.24   | 120.16   | 124.60  |
|                       | SD 10.63      | 8.59     | 8.30    |
|                       | N 25          | 25       | 25      |
| Worker                | Mean 120.04   | 118.08   | 118.96  |
|                       | SD 9.63       | 11.00    | 8.70    |
|                       | N 25          | 25       | 25      |
Table no.2
(N=300)

ANOVA summary of overall leadership style with reference type of organization, category of employees and education qualification.

| Source of variance                        | Sum of squares | df  | Mean sum of squares | F    | Sign. Level |
|-------------------------------------------|----------------|-----|---------------------|------|-------------|
| Type of Organization                     | 12467.85       | 1   | 12467.85            | 99.55| 0.01*       |
| Category of Employee                     | 1001.01        | 1   | 1001.01             | 7.99 | 0.01*       |
| Education Qualification                  | 253.82         | 2   | 126.91              | 1.01 | NS          |
| Type of Organization x Category of Employee | 367.41     | 1   | 367.41              | 2.93 | NS          |
| Type of Organization x Education Qualification | 288.09    | 2   | 144.05              | 1.15 | NS          |
| Category of Employee x Education Qualification | 770.73   | 2   | 385.36              | 3.08 | 0.05**      |
| Type of Organization x Category of Employee x Education Qualification | 3127.93  | 2   | 1563.96             | 12049| 0.01*       |
| SSW (Error)                              | 36068.16       | 288 | 125.24              |      |             |
| SST                                       | 54345.00       | 299 |                     |      |             |

*P>0.01, **P>0.05, NS= Not Significant

Table no. 3
(N=300)
Difference between mean score of overall leadership style with reference type of organization, category of employees and education qualification

| Independent variable | N    | Mean (M) | Difference between mean |
|----------------------|------|----------|------------------------|
| Pharmaceutical(A1)  | 150  | 107.05   | 12.9(A1 x A2)          |
| Engineering(A2)     | 150  | 119.95   |                        |
| Manager(B1)         | 150  | 115.33   | 3.66(B1 x B2)          |
| Worker(B2)          | 150  | 111.67   |                        |
| Post-Graduate(C1)   | 100  | 113.85   | 1.61(C1 x C2)          |
| Graduate(C2)        | 100  | 112.24   | 2.17(C2 x C3)          |
| Diploma(C3)         | 100  | 114.41   | 0.56(C1 x C3)          |

❖ Leadership style with reference to type of organization:-

When F test was applied to check the impact of leadership style on type of organization, significant F value was found. The F value (table no.2) is 99.55 which are statistically significant on level 0.01. Table no.3 reveals that the mean scores of leadership style of pharmaceutical and engineering company employees are 107.05 and 119.95 respectively and the difference between two is 12.9 which is very high and not negligible. Hence the null hypothesis 1 was rejected and it was concluded that there was significant impact of leadership style on pharmaceutical and engineering company employees.

❖ Leadership style with reference to category of employee :-

When F test was applied to check the impact of Leadership style on Category of Employee, significant F value was found. The F value (table no.2) is 7.99 which are statistically significant on level 0.01. Table no.3 reveals that the mean score of leadership style of manager and worker are 115.33 and 111.67 respectively and the difference between two is 3.66 which is very high and not negligible. Hence the null hypothesis 2 was rejected and it was conclude that there was significant impact of leadership style on manager and worker.

❖ Leadership style with reference to education qualification:-

When F test was applied to check the impact of leadership style on education qualification, no significant F value was found. The F value (table no.2) is 1.01 which is
statistically insignificant. Table no. 3 reveals that the mean scores of leadership style of post-graduate, graduate and diploma are 113.85, 112.24 and 114.41 respectively and the difference between two is 1.61 (C1 x C2), 2.17 (C2 x C3) and 0.56 (C1 x C3) which is very low and negligible. Hence the null hypothesis 3 was maintained and it was concluded that there was not any significant impact of leadership style on post-graduate, graduate and diploma degree holders.

- **Leadership style with reference to interaction effect of type of organization and category of employee:**
  
  When F test was applied to check the interaction effect of leadership style on type of organization and category of employee, no significant interaction effect was found. The F value (table no. 2) is 2.93 which are statistically not significant. Hence the null hypothesis 4 was maintained and it was conclude that there was no significant interaction effect of leadership style on type of organization and category of employee.

- **Leadership style with reference to interaction effect of type of organization and education qualification:**
  
  When F test was applied to check the interaction effect of leadership style on type of organization and education qualification, no significant interaction effect was found. The F value (table no. 2) is 1.15 which is statistically not significant. Hence the null hypothesis 5 was maintained and it was conclude that there was no significant interaction effect of leadership style on type of organization and education qualification.

- **Leadership style with reference to interaction effect of category of employee and education qualification:**
  
  When F test was applied to check the interaction effect of leadership style on category of employee and education qualification, significant F value was found. The F value (table no. 2) is 3.08 which are statistically significant on level 0.05. Hence the null hypothesis 6 was rejected and it was concluded that there was significant interaction effect of leadership style on category of employee and education qualification.

- **Leadership style with reference to interaction effect of type of organization, category of employee and education qualification:**
  
  When F test was applied to check the interaction effect of leadership style on type of organization, category of employee and education qualification, significant F value was
found. The F value (table no.2) is 12.49 which are statistically significant on level 0.01. Hence the null hypothesis 7 was rejected and it was concluded that there was significant interaction effect of leadership style on type of organization, category of employee and education qualification.

6. Conclusion:

1. There is significant difference between the leadership style among pharmaceutical and engineering company employees.
2. There is significant difference between the leadership style among manager and worker of pharmaceutical and engineering company employees.
3. There is no significant difference between the leadership style among post-graduate, graduate and diploma degree holder of pharmaceutical and engineering company employees.
4. There is no significant interaction effect of the leadership style among types of organization and category of employees of pharmaceutical and engineering company employees.
5. There is no significant interaction effect of the leadership style among types of organization and education qualification of pharmaceutical and engineering company employees.
6. There is significant interaction effect of the leadership style among category of employee and education qualification of pharmaceutical and engineering company employees.
7. There is significant interaction effect of the leadership style among types of organization, category of employees and education qualification of pharmaceutical and engineering company employees.

References:

- Julio Warner Loiseau (2003), Different types of Leadership
- Sushil Kumar Dubey (2012). A Comparative Study of Leadership Styles of Principals of Secondary Schools, Ph.D. Thesis Education, Published Bhavnagar university, bhavanagar, Gujarat
- Vatts, I. P. (1997).Leadership Role in Educational Administration, Ph.D. Thesis Education, Published Punjab Uni. Chandigarh
Website:

- http://etheses.saurashtrauniversity.edu/
- http://shodhganga.inflibnet.ac.in/
- http://www.changingminds.org/disciplines/leadership/styles/leadership_styles.htm