AGE, GENDER, EDUCATION, WORK-EXPERIENCE 
INFLUENCE ON THE LEADERSHIP STYLES

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ABSTRACT

The study investigated the different leadership styles of the workers in the Chittoor Sugar factory located at the Chittoor town of South India. It was also studied how the factors like age, gender, years of work experience and education influence the leadership styles of the workers. The study mainly concentrated on the three interesting leadership styles that are at the top, bottom and the middle of the leadership authority hierarchy, namely the autocratic, democratic and the laissez-faire leadership styles. Upon study it has been understood that the demographic leadership style is more dominant among the workers. The study indicates that age, gender, education and work experience have their respective influence on the workers own leadership styles. The study reveals that with growth in any of these four variables, relatively lesser authority is exhibited by the workers.

Keywords – workers, leadership styles, worker’s Age, worker’s Gender, worker’s Education, worker’s Work-Experience.

INTRODUCTION

Various studies on leadership have investigated the influence of the change in - Age, Gender, Education and Work-Experience of the boss – on the followers’ behavior. But, in contrary to that the aim of this study is to investigate the influence of the four factors of employees - Age, Gender, Education and Work-Experience – on the worker’s own leadership styles.

Statement of the Problem

There has been no known research regarding the correlation between the employee’s leadership styles and the four variables - Age, Gender, Education and Work Experience, especially concerning the autocratic, democratic and laissez-faire leadership styles in the Chittoor sugar factory located at the Chittoor town, of south India. This study therefore aims to investigate and explore that relationship. Consequently, the research problem is defined as follows.

To study the Influence of Age, Gender, Education and Work Experience on the Leadership Style of the Workers in the Chittoor Sugar factory, located at the Chittoor town of Andhra Pradesh, South India.

Objectives of the Study

In terms of the discussion presented thus far, the broad objective of this research could be narrowed down to the duo on the sample of the study: 1) To Study the different Leadership Styles of workers 2) To study the Influence of the variables - Age, Gender, Education and Work Experience on the Leadership Style of the Workers.
Styles Chosen for the Study

The basic styles of leadership having been discussed above, for the purpose of this study, only the last three leadership styles are taken into account. The leadership styles chosen for this research study are: 1) Autocratic (authoritative) leadership style 2) Democratic leadership style and 3) Laissez-faire leadership style.

The reasons for choosing the above styles

The reason behind choosing the above said leadership styles for this study are discussed below:

1) The chosen leadership styles – the autocratic, democratic and laissez-faire fall at the top, the middle and the bottom in terms of exerting authority in the spectrum of the leadership styles.

   The autocratic leadership style is the one that has the maximum control on the group members, exerting peak levels of authority. The subordinates have nothing to share with their leader and their opinions are not cared for. Just they are followers. The laissez-fair leadership has the minimal or no authority on its group members, giving full freedom to the group. The democratic leadership comes in between these two exerting a balanced authority on its group members. It gives freedom to the group members as well controls them too.

   Naturally, it is interesting to study these three leadership styles and this is one of the reasons for choosing these in this research study.

2) Another reason for selecting these three styles for this study is this:

   According to sociology, the group psychology has as impact on all the group members too. The group members will acquire certain characteristics of the group without being aware of them.

   India is a democratic country and naturally we can expect from the above sociology theory that the individuals in India will acquire the democratic characteristics more or less. Hence, it is postulated that the democratic traits should be exhibited by many people than any other leadership trait. So, the democratic leadership style is included in this study.

3) The other styles, notably transformational and transactional – have been extensively studied by various researchers in different studies throughout the world. Hence, the other leadership styles were not considered for this study.

4) The questionnaires to test all the leadership styles are very costly and are not within the affordable reach of the researcher. This too is one amongst the reasons for the researcher to confine the study only to the selected three leadership styles.

RESEARCH METHODOLOGY

This is mainly survey research. This proposed research involves empirical testing of hypotheses set forth for the study. The hypotheses are given under the section under a different section below.

Research Universe and Sample

This research is focused on the Sugar factory at Chittoor town in the state of Andhra Pradesh, south India and the mother tongue of the local people is Telugu, a South Indian language. The population or universe represents the entire group of units which is the focus of the study and the firm under study employs 652 employees of whom around 36 employees hold a supervisory role.

The simple random sampling technique was used in the survey in this research study. Here, every unit in the universe has the equal chance of being chosen for the study. The researcher posed no
defining criteria in selecting the elements from the sample. The sample size of the research comprised 127 of the 652 workers and 16 of the 36 supervisors. The sample of 127 workers at the firm, were randomly selected (chosen) by the researcher at the firm. The researcher placed no requirements on the workers while taking the samples.

Data Collection

Only one data gathering techniques were employed in this research study and it is the survey method and the questionnaire was used to elicit necessary information. This method of data collection was utilized in order to overcome issues of cost and time. In an attempt to make it beneficial for both the researcher and the firm, and so as not to disrupt operations at the firm, the researcher visited the firm frequently and collected the data from the respondents by giving the questionnaires during the lunch break time.

The Leadership Questionnaire

The Leadership Questionnaire of the Sage Publications was used to determine the leadership style and potential of the employees. The questionnaire contains 18 statements that identify and measure the key aspects of leadership behavior and each statement in the questionnaire relates to either autocratic or democratic or laissez-faire leadership factors. The respondent is required to judge how frequently the behavior described in the statement is exhibited by him/her.

The Questionnaire uses a scale of 1 to 5, with the five numbers representing the following meanings - of the behavior described in the statements. The choice of ‘1’ indicates – **Strongly Disagree**, The choice of ‘2’ indicates – **Disagree**, The choice of ‘3’ indicates – **Neutral**, The choice of ‘4’ indicates – **Agree** and The choice of ‘5’ indicates - **Strongly agree**.

The leadership questionnaire had to be completed by the worker. In the questionnaire, the worker has to answer the questions that describe his/her own leadership style. While the respondents answer the questionnaire, if they find any difficulty or ambiguity the researcher attended them to solve their problem and got the needed data. Each rater was allowed a period of half an hour for the completion and return of the questionnaires.

Another important point is that, majority of the workers are not good at English language. So, the questionnaire involved in this study was translated in to the mother tongue of the workers, the *Telugu language* so that to make their task easier. In this way the need data was collected from the firms by the researcher personally present with the respondents and this data collection took a period of over a month.

Reliability and Validity of the Questionnaire

When evaluating or formulating a specific instrument, reliability and validity are two of the most important aspects to be considered. Reliability and validity are the criteria used to assess whether the research provides a good measure. The Leadership Questionnaire has been tested for reliability and validity in a number of settings, as stated in the official website of the Sage Publications. The reliability of the instrument has also been proven on many occasions through test-retest, internal consistency methods and alternative methods.

The Sage Publication’s leadership questionnaire is also a standardized tool. It is valid and reliable and has been used extensively worldwide. It has proven to be a strong predictor of leadership styles across a broad range of employees. Hence it has been concluded that the chosen questionnaire was reliable and valid for use in the present research.
Data Capturing

Once all the questionnaires were collected, the researcher coded the gathered data as needed for the study. These scores were then captured by the researcher into a Microsoft Excel spreadsheet for SPSS analysis. These scores were then imported into SPSS for analysis.

SPSS Analysis

The data was presented in a manner that allowed for easy analysis and testing using the Statistical Product and Service Solutions (SPSS). Once the data was imported into a SPSS spreadsheet, from the Microsoft Excel spreadsheet, the researcher proceeded to calculate the necessary leadership scores as per the respective scoring keys provided along with the questionnaires, by the respective organizations.

The cross tabulations were derived from the SPSS tool, for the different cases as needed in the study. Once this is done, the various statistical tests were done depending on the needs of the hypotheses and these different tests are included in the section under analyses.

Ethical Considerations

All the ethical rules of the research participants, has been met in this research study. These are: 1) voluntary participation 2) the right to privacy 3) Freedom and 4) Anonymity and Confidentiality.

Even if the employees are willing, the organization might not permit for data collection. The organization concerned, though willing to permit the researcher, it might not permit in practice, fearing that the researcher might waste the valuable time of their employees, during the working hours of the organization. After all, it is not the obligation of organizations to allow the researchers to experiment on their employees!

But, luckily in the present study, the concerned firm was very favorable to the researcher allowing him to collect the data from the worker. The managers of the firm permitted to collect the data strictly for the research purposes only upon the condition that the names of the workers should not be revealed though the data might be published anonymously and this was all in accordance with the organizational policies and rules.

Another ethical point in research is that of confidentiality. This is concerned with using the collected data for the promised use only and not for some other purposes. Unlike in the case of anonymity, in confidentiality the researcher could identify the respondent based on her response, but should not reveal the data in public. The respondents must be assured that the data collected from them must be used for the intended purpose only and not for something else, that could damage them in some or the other way.

The data collected for this research didn’t involve any confidential information to great degree, so luckily the researcher managed to collect the data from the workers of the firm with no difficulty.

In order not to take away the valuable time of the workers, and not to disrupt the work of the firm, as advised by the managers of the firm, the researcher visited the workers during the time of lunch breaks and collected the data with minimal possible interruption. The researcher believes that, during this research work no one was affected against the ethics of research and privacy.
RESPONSE RATES

Out of the 127 leaders (workers) surveyed in the sample, 112 completed the questionnaires and have been included in the analysis amounting to a response rate of approximately 88%. Of the 16 supervisors surveyed in the sample, all of them completed the questionnaires and have been included in the analysis amounting to a response rate of approximately 100%. Finally, the total sample size including leaders and their corresponding raters equals 128 employees, amounting to a total response rate of approximately 90%.

HYPOTHESES TESTING

All the hypotheses proposed for this study are null hypotheses only and these will follow now along with the relevant tests and interpretations.

Hypothesis One

H1 – There will be no significant difference in the number of employees with their inherent leadership styles.

<table>
<thead>
<tr>
<th>Number of employees -Vs- Leadership Styles</th>
<th>Cross tabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Leadership styles</strong></td>
<td></td>
</tr>
<tr>
<td>Autocratic</td>
<td>12</td>
</tr>
<tr>
<td>democratic</td>
<td>70</td>
</tr>
<tr>
<td>Laissez-faire</td>
<td>30</td>
</tr>
<tr>
<td><strong>Total No., of employees</strong></td>
<td>112</td>
</tr>
</tbody>
</table>

The table presented above reveals that among the sample studied the employees with democratic leadership traits are more (70) compared to the other two. The Laissez-faire leadership traits occupy the second place with count of 30 employees and the autocratic leadership style occupies the end position with 12 employees.

From this we can conclude that there is significant variance in the leadership styles exhibited by different employees in the firm, with most of them favoring the democratic leadership style. Hence, we can reject the null hypothesis.

From this study, as assumed before the democratic leadership has been proved to be the leadership styles exhibited by the majority of the employees, compared to any other style.

Hypothesis Two

H2 - There will be no significant difference between Male and Female employees in terms of Leadership styles.
The above table shows that the significant difference between the male and female respondents in terms of exhibiting their leadership styles. It is found that the \( t - \text{value} \) is significant at 0.05 levels.

Hence the above null hypothesis stating that – there will be no significant difference between the male and female respondents’ in terms of Leadership styles. Hence the null hypothesis is rejected. The study proved that there is some difference in leadership styles exhibited by the male and female employees in the firm.

**Hypothesis Three**

**H3** - There will be no significant variance among respondent’s educational qualifications in terms of Leadership styles.
The above table reveals that there is no significant variance among respondents’ educational qualifications in terms of leadership styles. The leadership styles exhibited by the well educated (with at least a degree) and those who are educated less. It has been found that the value of ‘F’ is not significant at any level. From this we can conclude that the null hypothesis “there will be no significant variance among educational qualifications of employee’s in terms of leadership styles” is accepted.
The above mentioned cross tabulation between *educational qualification* and *leadership styles* states that, with increasing educational qualification the employees develop more the democratic leadership characteristics.

**Hypothesis Four**

H4 - There will be no significant variance among respondents age in terms of Leadership styles

<table>
<thead>
<tr>
<th>Age</th>
<th>Leadership styles</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Autocratic</td>
<td>Democratic</td>
<td>Laissez-faire</td>
<td>Total</td>
</tr>
<tr>
<td>Up to 25 yrs</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>26 to 35 yrs</td>
<td>5</td>
<td>14</td>
<td>2</td>
<td>21</td>
</tr>
<tr>
<td>36 to 45 yrs</td>
<td>3</td>
<td>22</td>
<td>10</td>
<td>35</td>
</tr>
<tr>
<td>46 and above</td>
<td>4</td>
<td>32</td>
<td>18</td>
<td>54</td>
</tr>
<tr>
<td>Total</td>
<td>12</td>
<td>70</td>
<td>30</td>
<td>112</td>
</tr>
</tbody>
</table>

**ANOVA - Leadership styles**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df= n – 1</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>245.403</td>
<td>3</td>
<td>81.801</td>
<td>2.114</td>
<td>NS</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4179.312</td>
<td>108</td>
<td>38.697</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4424.714</td>
<td>111</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The above cross tabulation depicts the relation between the variables Age and Leadership styles. The table gives interesting results. It states that up to 25 – years the employees are displaying more of the democratic leadership trait and after from that up to the year 35 they display the autocratic leadership style and then again the democratic leadership style dominates.
It is interesting to see that the democratic leadership is the dominant one among the three leadership styles under study.

The above ANOVA table reveals that there is no significant variance among employees age group in terms of leadership styles. The older people exhibit different leadership behavior then those who are relatively younger to them.

It has been found that the value of ‘F’ is not significant at any level. From this analysis we can conclude the null hypothesis “there will be no significant variance among the different age groups of employees in terms of leadership styles” is accepted.

**Hypothesis Five**

**H5 - There will be no significant variance among respondents experience in terms of Leadership styles**

<table>
<thead>
<tr>
<th>Experience levels - Vs- Leadership styles ~ Cross tabulation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
</tr>
<tr>
<td>Yrs. of exp</td>
</tr>
<tr>
<td>Exp-level</td>
</tr>
<tr>
<td>5</td>
</tr>
<tr>
<td>10</td>
</tr>
<tr>
<td>15</td>
</tr>
<tr>
<td>20</td>
</tr>
<tr>
<td>25</td>
</tr>
<tr>
<td>Total</td>
</tr>
</tbody>
</table>

The one way ANOVA analysis given in the table below reveals that there is no significant (0.327) variance among respondents experience in terms of Leadership styles. The leadership behavior exhibited by the employees depending on their experience levels. The employees with lesser experience exhibit different leadership behaviors then those who are relatively less experienced.

It has been found that the value of ‘F’ is not significant at any level. From this analysis we can conclude that the null hypothesis “there will be no significant variance among the employee experience in terms leadership styles” is accepted.
**FINDINGS OF THE STUDY**

The findings of this research study, based on the cross tabulations and statistical tests are presented in this section.

1) This study has concluded that all the leadership styles are not equally inherently present in the employees. The democratic leadership style is more dominant among the employees, the Laissez-faire comes next and the autocratic style of leadership is exhibited by the least number of employees. 2) There will be some significant difference between the male and female employees in terms of exhibiting their leadership styles in the sample studied. The female employees are more autocratic to some extent than the male employees as per the study. 3) The study states that the more educated employees and the lesser educated employees differ in terms of exhibiting their leadership styles. With increasing educational qualifications the employees exhibit more of the democratic leadership tendencies and those who are educated less are inclined towards the autocratic leadership style. 4) The study shows that the age too affects the leadership styles of the employees. The individuals start with more of the autocratic leadership style and then move towards democratic in their middle ages and then at the later stages turn towards the laissez-faire leadership style. 5) People transit from one leadership style to the other with passage of time. It implies that with increasing age people understand others better and tend to give more freedom to others. 6) The study state that with increasing work experience, the employees exhibit different leadership styles. The lesser experienced exhibit the autocratic style more then move toward the democratic and then they finally move towards the laissez-faire leadership trait.

**Discussions on the Findings**

This section is going to discuss, how the findings of this research work are relating to the other findings already established in different studies. It is good news that that are no contradicting findings out of this study and all the finding are in congruent with the established facts of leadership and performance. At first the findings in relation to the leadership styles are discussed and after that will follow the discussions regarding the performance related findings.

1) This study has concluded that all the inherent leadership styles are not equally present in the employees, investigated. The democratic leadership style is more dominant among the employees, the autocratic style comes next and the Laissez-faire leadership is exhibited by least number of employees.

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**ANOVA - Leadership styles**

<table>
<thead>
<tr>
<th></th>
<th>Sum of Squares</th>
<th>Df= n - 1</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>185.733</td>
<td>4</td>
<td>46.433</td>
<td>1.172</td>
<td>NS</td>
</tr>
<tr>
<td>Within Groups</td>
<td>4238.981</td>
<td>107</td>
<td>39.617</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>4424.714</td>
<td>111</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The modern psychology says that, certain traits or customs followed in the group or by the leaders of the group will be easily acquired by the group members. The above finding is in conformity with this sociological principal and as India a democratic country, the citizens of India will naturally get the democratic traits. Hence, it is no wonder that the employees studied in this research too, are inclined more towards the democratic style of leadership.

Another point is that, as this study itself indicates, there is a transition from one leadership style to the other style with growing age, experience, or educational qualifications. The majority of the employees studied in this research do have of these, namely: more age, or more educational qualification or more experience. Hence, it is natural that many of the employees are exhibiting the democratic style of leadership. This finding is in agreement with the findings (2010) of Gholamreza Taleghani, Davood Salmani and Ali Taatian, based on their study on the leadership styles survey in different cultures.

2) The study indicates that, there is some significant difference between the male and female employees in terms of exhibiting their leadership styles in the sample studied. The female employees are more autocratic to some extent than the male employees as per the study.

Emotionally, there is some significant different between the male and female employees, according to psychology (Goleman, 1995) and the leadership theories have proved that emotional intelligence has its impact on the leadership style. So, it is natural that the male and female employees exhibit different leadership styles, in conforming to the established principles of psychology and leadership theories.

3) According to this study, the more educated employees and the lesser educated employees differ in terms of exhibiting their leadership styles. With increasing educational qualifications the employees exhibit more of the democratic leadership tendencies and those who are educated less are inclined towards the autocratic leadership style.

This is in conformity with the norms of the educational psychology. In fact, the modern education is based on the fact that people will become more knowledgeable, understanding, broad minded, more adjusting to the environment and less brutal. This principal states that due to the increase in education, the employees will naturally become more capable of understanding their fellow men. Hence, they will use less of their authority on the others and it indicates that they are using less of the autocratic styles and more of the democratic styles. And this finding is in compliance to the already established rules of scientific knowledge, especially with the work of Baron (1996).

4) The study says that the age too affects the leadership styles of the employees. The individuals start with more of the autocratic leadership style and then move towards democratic in their middle ages and then at the later stages turn towards the laissez-faire leadership style.

This is in agreement with the established principles of educational psychology. As already noted in the previous finding, with growing education individuals tend to be more flexible, more broad minded, adjustable to surrounding and capable of understanding others more. With increasing age, knowingly or unknowingly individuals acquire more knowledge and naturally according to the above scientific principal, people tend to be more flexible and less assertive. So, they will exhibit less and less of authority on their fellow beings. Another reason is that with growing age physically individuals start to depend on others for some type of help and this too might affect their psychology and this will affect their leadership styles. This finding is in agreement with the work (2009) of Per Erik Solem on ‘Age Changes in Subjective Work Ability’.
LIMITATIONS OF THE STUDY

Some of the limitations of this research study are: 1) only a sample is studied and not all the workers were studied in this research. 2) Only the select firm and not all other firms and industries at Chittoor were examined for this study. 3) The study is limited is geographically confined to a particular place. 4) Only a select few and not all leadership styles were examined in this study 5) in any research study the finance is the main financial constraint, the easily available questionnaires are used for this study. The leadership questionnaire and the performance questionnaire used in this study are the free versions available on-line. The other complex questionnaires are costly to purchase. So, the questionnaires used might have some inherent in-efficiencies. 6) Due to the above reasons the findings may not be true in general.

CONCLUSIONS

This is to conclude that the four variables chosen for this study indeed have their respective influence on the leadership styles of the workers. With increase in any of these four factors - Age, Gender, Education and Work-Experience – of the worker will bring out a change in the leadership style of the employee, change towards exhibiting lesser authority.

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