TRANSFORMATIONAL LEADERSHIP IN SECONDARY SCHOOL TEACHERS WITH RESPECT TO DEMOGRAPHIC FACTORS

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ABSTRACT

This paper attempts to find a potential relationship between demographic factors and transformational leaderships, with a belief to establish a better way of achieving school targets by hiring right teaching staff and help increase student achievement. A survey was conducted in 10 secondary schools of NCR area, capturing responses from 100 teachers. Statistical analysis was done on the responses and significant difference was observed between in transformation leadership in elder and experienced teaching staff with that of in younger and less experienced teaching staff. Paper concludes that age and teaching experience as demographic factors had a direct impact on teachers’ collective outcome and hence suggests that hiring right teaching staff in the first place itself is necessary for increasing transformational leadership.

Keywords: Transformational leadership, Gender, Age, Teaching Experience, Staffing

1. INTRODUCTION

I would like to start with an intuition and then will build on top of it to formally define the term transformational leadership. In our contemporary world, Corporates have been a great witness to transformational leaders where they changed the entire organization, it’s ways of working and went on to changed the entire industry. In fact, it did not stop here and continued changing the human life, their belief and their ways of living. For example, Google founder - Larry page, Facebook founder - Marc Zuckerberg and Amazon founder - Jeff Bezos, just imagine our lives without these three websites today. Creating an analogy with education field, and starting with a prehistoric era, teachers have played an unparalleled role in human civilization. Since the very inception, teachers have shaped the future of world by inculcating values and imparting education amongst their pupils. Had it not been Aristotle’s teaching abilities, world would have not seen Alexander the great, to quote as one significant example from history. The trend has continued and teachers’ role in human society has further augmented with contemporary changes. Today informal paathshalas and gurukuls have changed into commercial organizations where annual targets for teachers are set and student achievement is at the center of idea.

Taking this idea forward, schools are run as organizations and teachers work there as employees. Teachers strive to achieve targets and help increase student achievement by employing latest teaching methods and resources. Organizations also invest heavily in hiring right staff which match their needs. It leads us to the point that if correct teaching staff is not put in place, it would be a challenge for schools to meet their objectives. Other side
of it is that with proper hiring of teaching staff a school could achieve a competitive edge over others. Hiring of teachers could be made more effective by narrowing down on demographic factors and a school could decide whether they have a perfect resource mix in place or not to achieve better outcome.

Researches have been done on determining Transformational leadership in different setups in different parts of the world. Taking note of this, researcher set out to discover Transformational leadership of secondary school teachers with respect to demographic factors.

**Transformational Leadership** as an idea was first proposed by in 1978 by James McGregor Burns, later expanded by Bernard Bass (Liontois, 1992). Although they based their work on business executives, army officers and political leaders, the principles of transformational leadership can be extended to schools (Liontois, 1992). The stakeholder theory views business firms as being composed of various constituencies (workers, managers, customers, suppliers, and so forth), all of whom have a legitimate strategic and moral stake in the organization but may have different values, beliefs and so forth. Therefore, in order to achieve an organization that will be beneficial to every shareholder, the people must come together and cooperate on the basis of values, interests and social choice (Bass and Steidlmeier, 1998). In schools, it deals with finding a way to become successful in collaboratively defining the essential purpose of teaching and learning and then empowering the entire school community to become energized and focused (Liontos, 1992).

Review of related literature in this context led researcher to believe that majority of the work has been done by researchers outside of India and in context of Indian conditions, it would be interesting to see that how demographic factors and transformational leadership relate together in private schools of Delhi-NCR area specifically.

2. **OBJECTIVES**

The researchers framed following objectives to conduct the study:
1. To explore the present status of transformational leadership in secondary school teachers.
2. To explore the present status of demographic factors in secondary school teachers.
3. To find out the relationship between Demographic factors and Transformational Leadership

3. **HYPOTHESES**

1. There is no significant relationship between transformational leadership of male and female teachers of secondary school teachers at 0.5 level.
2. There is no significant relationship between transformational leadership of Graduate and Post-graduate teachers of secondary school teachers at 0.5 level.
3. There is no significant relationship between transformational leadership of less than 10 years experienced and more than 10 years experienced teachers of secondary school teachers at 0.5 level.
4. There is no significant relationship between transformational leadership of 40 years old teachers and more than 40 years old teachers of secondary school teachers at 0.5 level.
4. RESEARCH DESIGN

The purpose of the study was to answer the research questions that relate to demographic factors of secondary teachers such that the collected responses could be processed and analyzed further to find out the significant difference with transformational leadership. Following research design was put in place to conduct the study:

1.1. Research Method

This study tool mainly uses Descriptive Survey cum t-Test method. The survey method enabled the researcher to reach a bigger and more extensively distributed sample of teachers in Ghaziabad and NCR areas. To address diversity in an investigation, a quantitative method using survey questionnaires is intelligent enough to provide a degree of freedom to respondents to freely act in response to the questions.

1.2. Variables of the Study

This study uses following 2 variables –

1) Demographic factors – This is an independent variable with following four dimensions to measure transformational leadership:
   a. Gender – Male or Female
   b. Academic Qualification – Graduate or Post-graduate
   c. Experience – Less than 10 or more than 10 year
   d. Age – Less than 40 or more than 40 year

2) Transformational Leadership – This is dependent variable.

1.3. Sample

Researcher chose random-convenience sampling to collect the samples. Selection of sample from list of schools is done randomly and then willing teachers were taken for the research sample. Sampling process is as follows:

Fig 1 – Sampling Process

1.4. Tools employed in the study

The researcher used following two tools for the present research:

1. Transformational Leadership Scale (Self-Constructed): A Likert type and summated scale was constructed to measure transformational leadership. Four dimensions were taken on the basis of reviewed literature and experts’ opinion. There are 20 items finalized in scale.

   Reliability - The reliability of the scale was determined using Split Half method which was found to be 0.85, suggesting that scale is highly internally consistent (reliable).

   Validity - Expert Judgment was used for tool validity (valid)
2. **Demographic factors**: A data collection tool. Following four dimension were taken on the basis of reviewed literature and experts’ opinion. There were 4 items finalized in tool – Age, Gender, Experience and Academic Qualification.

5. **FINDINGS AND DISCUSSION**

In order to interpret results and draw conclusions following statistical treatments were used:

- Descriptive Statistics
- t-Test

1.1. **Descriptive Statistics**

Researcher collected responses from tools, processed them through coding and performed a descriptive statistics analysis to understand and describe the nature of responses collected. First level of analysis was done on demographic factors of respondents and following were the observations

![Fig 2 – Tabular representation of Demographic Factors](image)

Gender wise categorization indicated that respondents included 81 females and 19 males. While on the Age factor, there were 66 respondents who were less than 40-year-old and there were 34 respondents who were more than or equal to 40-year-old. Education wise it is observed that mostly teachers were post-graduates counting to a whopping number 92 out of a total 100 and only 8 were graduates. On the teaching experience side, 52 teachers were less than 10 year experienced and 48 were holding more than 10 year of teaching experience.

Responses for Transformational leadership were presented for descriptive statistics analysis and following result was obtained.

![Transformational Leadership Normality Test](image)
Fig 3 - Descriptive Statistics of TL and Probability Density Function of TL Scores

With a mean value of 74.95 and mean value of 77.09 we can interpret that data is pretty much indicating towards a normal distribution. Also the standard deviation of 10.82 is okay with a standard error value of only 1.08. Probability density functional also does not show any lept or meso kurtosis characteristics with a value of .19. On the skewness side, with a value of -0.69 that graph has a longer tail on the left side with a negative value i.e. negatively skewed. It means that most of the respondents cluttered around average value and there are very less respondents who agreed with the extreme choices on survey.

1.2. t-Test

Researcher submitted these scores to Two Tailed t-Test for finding any significant difference between Transformational Leadership and Demographic factors. Following results were obtained -

t-Test for TL Scores with Demographic Factor – Gender (Male and Female)

t-Test results between Gender and TL show that Mean of TL for Male and Female has a difference and so does the standard deviation. At a hypothesized mean difference of 0, while t Stat shows a value of negative 5.075, the value of p is 0.66 at 95% C.I which is greater than Alpha value of 0.05 and hence null hypothesis cannot be rejected. Hence it can be concluded that there is no significant difference between TL of male and female teachers of secondary schools at .05 significance level.

<table>
<thead>
<tr>
<th>Gender</th>
<th>Observations</th>
<th>Obs. with missing data</th>
<th>Obs. without missing data</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>19</td>
<td>0</td>
<td>19</td>
<td>39.000</td>
<td>87.000</td>
<td>70.789</td>
<td>13.510</td>
</tr>
<tr>
<td>Female</td>
<td>81</td>
<td>0</td>
<td>81</td>
<td>49.000</td>
<td>92.000</td>
<td>75.684</td>
<td>9.945</td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Difference</th>
<th>t (Observed value)</th>
<th>t (Critical value)</th>
<th>DF</th>
<th>p-value (Two-tailed)</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>-5.075</td>
<td>-1.863</td>
<td>1.944</td>
<td>83</td>
<td>0.006</td>
<td>0.05</td>
</tr>
<tr>
<td>Female</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

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<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age&lt;40</td>
<td>66</td>
<td>0</td>
<td>66</td>
<td>48.000</td>
<td>92.000</td>
<td>76.439</td>
<td>9.768</td>
</tr>
<tr>
<td>Age≥40</td>
<td>34</td>
<td>0</td>
<td>34</td>
<td>39.000</td>
<td>92.000</td>
<td>71.912</td>
<td>12.224</td>
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</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Difference</th>
<th>t (Observed value)</th>
<th>t (Critical value)</th>
<th>DF</th>
<th>p-value (Two-tailed)</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age&lt;40</td>
<td>4.528</td>
<td>2.012</td>
<td>1.944</td>
<td>65</td>
<td>0.047</td>
<td>0.05</td>
</tr>
<tr>
<td>Age≥40</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

| Age    | difference of 0, while t Stat shows a value of 4.528, the value of p is 0.047 at 95% C.I. which is less than Alpha value of 0.05 and hence null hypothesis can be rejected. Hence it can be concluded that there is a significant difference between TL of less than 40-year-old teachers and greater than or equal to 40-years-old teachers of secondary schools at .05 significance level.

<table>
<thead>
<tr>
<th>Age</th>
<th>Difference</th>
<th>t (Observed value)</th>
<th>t (Critical value)</th>
<th>DF</th>
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<th>alpha</th>
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</tbody>
</table>
t-Test for TL Scores with Demographic Factor – Academic Qualification (Graduate/Post-graduate)

<table>
<thead>
<tr>
<th>Academic Qualification</th>
<th>Observations</th>
<th>Obs. with missing data</th>
<th>Obs. without missing data</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Graduate</td>
<td>8</td>
<td>0</td>
<td>8</td>
<td>48000</td>
<td>66000</td>
<td>53000</td>
<td>12142</td>
</tr>
<tr>
<td>Post-graduate</td>
<td>92</td>
<td>0</td>
<td>92</td>
<td>36000</td>
<td>92000</td>
<td>75065</td>
<td>10757</td>
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</tbody>
</table>

### Table 1

<table>
<thead>
<tr>
<th>Difference</th>
<th>t (Observed value)</th>
<th>LL (Critical value)</th>
<th>DF</th>
<th>p-value (Two-tailed)</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.065</td>
<td>-0.516</td>
<td>1.984</td>
<td>93</td>
<td>0.607</td>
<td>0.05</td>
</tr>
</tbody>
</table>

The t-Test results between Education level and TL show that Mean of TL for Graduates and Post-graduates has a difference and so does the variance. At a hypothesized mean difference of 0, while t Stat shows a value of negative 2.065, the value of p is 0.607 at 95% C.I. which is greater than Alpha value of 0.05 and hence null hypothesis cannot be rejected. Hence it can be concluded that there is no significant difference between TL of Graduate and Post-graduate teachers of secondary schools at .05 significance level.

### 4.3.1.2 t-Test for TL Scores with Demographic Factor – Experience (Less than 10 and more than 10)

<table>
<thead>
<tr>
<th>Experience</th>
<th>Observations</th>
<th>Obs. with missing data</th>
<th>Obs. without missing data</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exp&lt;10</td>
<td>82</td>
<td>0</td>
<td>82</td>
<td>57000</td>
<td>82000</td>
<td>76462</td>
<td>8968</td>
</tr>
<tr>
<td>Exp&gt;10</td>
<td>48</td>
<td>0</td>
<td>48</td>
<td>36000</td>
<td>92000</td>
<td>75208</td>
<td>12459</td>
</tr>
</tbody>
</table>

### Table 2

<table>
<thead>
<tr>
<th>Difference</th>
<th>t (Observed value)</th>
<th>LL (Critical value)</th>
<th>DF</th>
<th>p-value (Two-tailed)</th>
<th>alpha</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.253</td>
<td>1.512</td>
<td>1.984</td>
<td>93</td>
<td>0.134</td>
<td>0.05</td>
</tr>
</tbody>
</table>

The t-Test results between Teaching Experience level and TL show that Mean of TL for less than or equal to 10-years experienced teacher and greater than 10-years experienced teachers have a difference with a minimal variance. At a hypothesized mean difference of 0, while t Stat shows a value of 3.253, the value of p is 0.134 at 95% C.I. which is less than Alpha value of 0.05 and hence null hypothesis can be rejected. Hence it can be concluded that there no significant difference between TL of less than or equal to 10-year experienced teachers and greater than 10-years experienced teachers of secondary schools at .05 significance level.

### 6. CONCLUSION

Results of the research indicate that Teaching Experience as a demographic factor significantly affects Transformational Leadership. Teachers who were less than 40 years in age, had higher Transformational leadership in comparison to teachers older to them. This was a surprising element and pointed that teachers at young age tend to be more transformational and as they grow in their lives with more responsibilities this element tends to diminish and they get adjusted into system without expecting much of change. It also indicates to the point that as the age of a teacher grows so does the teaching experience and a similar response to transformational leadership should be exhibited. This point was proven with the findings of t-Test between Teaching Experience and Transformational leadership where teachers with more than 10 years of teaching experience showed a lower transformational leadership than those who had more teaching experience. This fact vindicates the believe that as teachers spend more time in system they get used to it and their will to lead from front diminishes. On the other hand, Gender and Education level did not create any significant impact on
Transformational leadership, which in principal sounds right as transformational leadership is more about achieving school objective with new transformational ideas and leading from front.

Researcher concludes this research with an understanding that school management who are working on improving transformational leadership should put more emphasis on hiring young teaching staff, while gender and post-graduate level remain insignificant factors.

REFERENCES


