

# Relationship of Demographic Variables with Public School Heads' Transformational and Transactional Leadership

Ehsan Mahmood\* Riaz Hussain Malik\*\*

## ABSTRACT

This study aimed at determining relationship of demographic variables with heads' self perception of transformational and transactional leadership styles. The data were collected including both boys and girls public primary schools in the eight districts of the Punjab. Two instrument i.e. Multifactor Leadership Questionnaire (MLQ) and Demographic Variable Measurement Instrument (DVMI) were used to collect data from 467 heads. Data were analyzed by employing 'independent sample t-test' and 'one way ANOVA' statistical techniques. Transformational leadership emerged as the most preferential leadership style of public school heads. Female heads found to be most transformational as compared to male heads. Whereas, male heads demonstrated more transactional leadership style as compared to female heads. School locale showed no effects on heads' perception of their leadership style. Heads' academic and professional qualification did not affect heads leadership style. However age level affected heads transformational leadership style and heads having age group 51-60 years found more transformational leaders.

**KEYWORDS:** Demographic Variables, Transformational Leadership, Transactional Leadership

This article can be cited as:

Mehmood A., Hussain R., (2015). Relationship of Demographic Variables with Public School Heads' Transformational and Transactional Leadership, Journal of Arts and Social Sciences, 2 (1). 45-56<sup>1</sup>

## INTRODUCTION

Leadership has always been a subject of immense interest since the early days when people used to work in groups for the accomplishment of shared goals (Robbins & Sanghi, 2006). It is a process of social influence in which deliberate influence is exerted by one person over the other to constitute several activities in a group or an organization (Northouse, 2010; Yukl, 2010). Besides the influence factor, leadership has been defined in terms of group process, role clarification, specific behaviors, interactions, compliance and goal achievement (Luthan, 2008). The leader directs the people and lets them have awareness about the standards and the goals of the organization. Leader also demands from the subordinates to have the personality and qualities that might facilitate him to perform the tasks efficiently (Robbins & Coulter, 2006). While defining leadership Wolinski (2010) stated that leadership is a relationship that involves mobilizing, influencing, and guiding others toward desired goals.

---

\*Ehsan Mahmood , principle, Islamabad Modal College for Boys 1-10/1 Islamabad. [abusamit@hotmail.com](mailto:abusamit@hotmail.com)

\*\*Riaz Hussain Malik, Principle, Govt. Higher Secondary School, Hafizabad. [malikriazdr@gmail.com](mailto:malikriazdr@gmail.com)

The leadership concept started with the emergence of trait theories of leadership which focused on universal personality traits possessed by the leaders; then researchers turned their attention towards the behaviors of the leaders which focused on the actual behaviors displayed by the leaders in performing leadership practices and this era of behavioral leadership theories moved towards the contingency models and emphasized on the situational aspect of leadership (Bateman & Snell, 2002). In recent years, researchers have been conceptualized leadership from the perspective of new approaches. Among these approaches the transformational and transactional leadership are most prominent (Sivanathan & Fekken, 2002). The concept of transformational and transactional leadership has its origin in work of James McGregor Burns (1978); it was further extended and refined by Barnard M. Bass (1985) to build a full range leadership model which focuses on complete range of leadership i.e. transformational, transactional and laissez-faire leadership (Avolio & Bass, 2004; Hoy & Miskel, 2008). Transformational leaders focus upon beliefs, values, and pay attention to their followers' personal needs (Luthans, 2008). In transformational leadership, leaders and followers work collectively for the achievement of higher order common goals (Bass & Riggo, 2006). Whereas, transactional leadership is mutual nature of leadership, in which leaders provide benefits to the subordinates and in return leaders get benefits from them in a social exchange called a transaction (Lunenburg & Ornstein, 2004).

Since the emergence of transformational and transactional leadership theory many researchers showed great interest in exploring transformational and transactional leadership and elucidated its impact on organizations' performance and employee related factors. Numerous studies have predicted the effects of demographic variables i.e. gender, age, qualification etc on leaders' perception of transformational and transactional leadership. So, consistent with the recent studies, effort has been made in this study to explore the effects of demographic variable on heads' self perception of transformational and transactional leadership styles.

## **LITERATURE REVIEW**

Transformational leadership model was anticipated by James McGregor Burns (1978), and was further developed by Bass (1985), who explained Burns' idea of transformational and transactional leadership more clearly (Hoy & Miskel, 2008). In transformational leadership, leaders and their subordinates are joined to achieve some higher order common goals, and this occurs when "one or more persons engage with others in such a way that leaders and followers raise one another to higher levels of motivation and morality" (Burns, 1978, p. 20). Transformational leadership motivates the subordinates to transcend their interests for the welfare of the organization and it creates extra ordinary effects on subordinates' concerns (Robins, Judge, & Sanghi, 2009). Transformational leadership inspires subordinates to execute more than what they actually think possible by addressing motivation and inspiring subordinates' needs, values and esteem (Sarros, Gray, & Densten, 2002). On the other hand, the transactional leadership is a type of mutual nature of leadership, in which leaders grant benefits to the subordinates and in return leaders get benefits from them in a social exchange called a transaction (Lunenburg & Ornstein, 2004). Transactional leadership is an exchange between leader and subordinates, and it is based on an agreement in which leader and subordinates contract with each other to work and get rewards (Antonakis, Avolio, & Sivasubramaniam,

2003). Transactional leaders guide and clearly clarify the subordinates roles and job requirements, and leaders only monitor and ensure that rules and standards are being implemented, and take corrective actions accordingly (Robbins, Judge & Sanghi, 2009).

Since the introduction of transformational and transactional leadership theory many researchers tried to investigate the effects of demographic variable on leaders' perception of their leadership styles. Gender has been given significance in many research studies from last past decades. Researchers have different views about what type of differences exist and to what extent they exist between male and female managers concerning leadership styles. After early 1990's, there is an increasing body of research emerged related to gender differences in leadership styles with numerous renowned management researchers, including Powell (1993) and Bass (1985) supporting this idea.

Fein, Tziner, and Vasiliu, (2010) conducted a study to investigate the effects of gender and age on perception of leadership styles. The study results demonstrated significant differences with regard to gender and age in perception of leadership styles. The results reported significant differences in demonstration of transformational leadership style regarding gender and found that female leaders' score on transformational leadership was better than male leaders. Similarly significant difference was found on transformational style with regard to age while no effect of age was found on transactional style. Campbell (2010) conducted a study on educational leadership by gender and race. Study results indicated significant differences with regard to age and concluded that female and African-American principals preferred transformational style than Caucasian and male principals. This study also investigated years of experience as a mediating variable, and results portrayed that effects of years of experience on leadership styles is less clear, though there was a minor increase in demonstration of Transformational leadership style with greater experience. Barbuto, Fritz, Matkin and Marx (2007) explored the relationship of gender, age and educational levels with leadership styles of 56 leaders. Data were collected from 56 leaders and 234 subordinates using Multifactor Leadership Questionnaire. Multivariate Results depicted that gender produced effects on demonstration of leadership style behaviors. Results also portrayed that the interaction of educational levels and gender showed consistent differences in leadership style. Jones and Rudd (2008) conducted a study to assess the leadership styles of College of Agriculture Academic Program Leaders (Deans). The results indicated that academic leaders in colleges of agriculture demonstrated more transformational than transactional leadership style. Results also reported that gender and ethnicity did not influence the demonstration of leadership style of the academic program leaders.

## **RESEARCH QUESTIONS**

Following two research questions were postulated to find out relationship between leadership styles and demographic variables.

1. What relationship does exist between heads' transformational leadership style and demographic variables of school locale, heads' gender, age, academic and professional qualification?
2. What relationship does exist between heads' transactional leadership style and

demographic variables of school locale, heads' gender, age, academic and professional qualification?

## **RESEARCH METHODOLOGY**

A survey was conducted to collect the data from the participants. This study was conducted in public primary schools of the Punjab province. Following procedural steps were adopted to conduct the study:

### **Population and Sample**

This study was conducted in eight districts of the Punjab and schools were randomly selected in each district. The population of the study included all the 45453 heads (22314 Male & 23139 Female) of public primary schools working in the Punjab (AEPAM, 2008). This study was conducted in 480 schools (240 Boys & 240 Girls) of eight districts of the Punjab, as beyond a certain point (N=5,000) the population size is almost irrelevant and a sample size of 400 is adequate (Gay, 1992). However, the selected sample (N=480) was planned to make study results more reliable. Sample was selected from the population in equal proportion of boys and girls school as they exist in the population (N=22314 Male) and (N=23139 Female) schools in the proportion of 49.1% & 50.9% respectively (AEPAM, 2008). Each selected district was treated as stratum consists of 60 schools which was further divided into two subgroups of 30 male and 30 female schools including 3 urban and 27 rural schools in the proportion of 10% and 90% as they approximately exist in the population (N=4314 Urban) and (N=41139 Rural) in the proportion of 9.5% and 90.5% respectively (AEPAM, 2008). The above sample selection procedure in 480 schools resulted in the responses of overall 467 heads. Overall, 467 heads (232 Male & 235 Female) responded the questionnaire and response rate remained 97%.

### **Instruments**

Two questionnaires Multifactor Leadership Questionnaire (5X-Short) and Demographic Variable Measurement Instrument were used to collect data from the heads. The Multifactor Leadership Questionnaire (5X-Short) was used in leader form to collect data from the heads about the self perception of their leadership style. The Multifactor Leadership Questionnaire (5X-Short) consists of 45 items which measures transformational, transactional, laissez-faire leadership and three factors of leadership outcomes. However, 32 items related to transformational and transactional leadership were included in the questionnaire and irrelevant items were deleted from the questionnaire. This instrument was developed on five point Likert scale having: not at all (0), once in a while (1), sometimes (2), fairly often (3) and frequently, if not always (4) as alternative responses. Information related to heads' demographic variables of school locale, heads' gender, age, academic and professional qualification were collected by administering Demographic Variable Measurement Instrument (DVMI).

## **ANALYSIS**

Table 1 portrayed the spectrum of public primary school heads' self perception of their leadership styles and depicted that heads' transformational leadership style (M=2.86) prevailed

over transactional leadership style ( $M=2.44$ ). The comparison of heads' leadership style on gender (Male/Female) and school locale basis was found by conducting independent sample t-test. The results portrayed that there is significant difference between the mean scores of transformational leadership style of male and female heads, as  $\rho = 0.002$  ( $\rho < 0.05$ ), for male heads ( $M=2.91$ ,  $SD = 0.41$ ) and for female heads ( $M = 3.01$ ,  $SD = 0.31$ );  $t(465) = -3.04$ . It is obvious that female heads' mean score is greater than male heads' mean score. There is also significant difference between the mean scores of transactional leadership style of male and female heads, as  $\rho = 0.01$  ( $\rho < 0.05$ ) and for male heads ( $M = 2.53$ ,  $SD = 0.41$ ) and for female heads ( $M = 2.43$ ,  $SD = 0.42$ );  $t(465) = -2.54$ . It showed that male heads' exhibited transactional leadership more than female heads (Table 2). Whereas, no significant difference was found between transformational and transactional leadership styles of urban and rural school heads. In case of Transformational Leadership Style,  $\rho = 0.56$  ( $\rho > 0.05$ ), for urban school heads ( $M = 2.93$ ,  $SD = 0.44$ ) and for rural school heads ( $M = 2.96$ ,  $SD = 0.34$ );  $t(465) = -0.59$ . Transactional Leadership Style, as  $\rho=0.59$  ( $\rho>0.05$ ) and for urban school heads ( $M=2.50$ ,  $SD=0.47$ ) and for rural school heads ( $M = 2.47$ ,  $SD = 0.41$ );  $t(465) = 0.53$ (Table 3).

The relationship of heads' academic qualification with their perception of transformational and transactional leadership styles was measured by categorizing heads into four groups on the basis of their academic qualification (Group 1: Matric, Group 2: F.A, Group 3: B.A / B.Sc, Group 4: M.A / M.Sc). No significant difference was found in mean gain scores between the groups; the F values 0.800 and 0.259 were not significant at probability values 0.494 and 0.855 for transformational and transactional leadership styles respectively (Table 4 & 5).

The relationship of heads' levels of professional qualification with their perception of transformational and transactional leadership style was measured by categorizing heads into four groups on the basis of their professional qualification (Group 1: PTC, Group 2: CT, Group 3: B.Ed, Group 4: M.Ed). No significant difference was found in mean gain scores between groups; the F values 0.850 and 0.616 were not significant at probability values 0.467 and 0.615 for transformational and transactional leadership styles respectively (Table 6 & 7).

The relationship of heads' levels of age with their perception of transformational and transactional leadership style was measured by dividing heads into four groups on the basis of their age (Group 1 : below 30 years, Group 2 : between 31 to 40 years, Group 3 : between 41 to 50 years, Group 4 : between 51 to 60 years). There significant difference was found in mean scores between groups; the F value 4.33 was significant at probability value 0.005. The difference was further explored among the groups by applying post hoc test and revealed that heads having age between 51 to 60 years showed significantly greater mean score than heads having age between 41 to 50 years (Table 8 & 8-A). However, the relationship of heads' levels of age with their perception of transactional leadership style with the same age levels showed no significant difference between groups; as F value 1.358 was not significant at probability value 0.255 (Table 9).

## CONCLUSION

The findings of the study revealed that transformational leadership emerged as the most prominent leadership style among public primary school heads. Results further portrayed that

female heads preferred transformational leadership style more than male heads. Whereas, male heads exhibited more transactional leadership style as compared to female heads. School locale (Urban/Rural) did not show any effect on heads' perception of their leadership style. Heads' academic and professional qualification did not also show significant effects on heads' perception of their leadership styles. However, age level showed effects on heads' transformational leadership style. The heads falling in age group of 51-60 years found more transformational as compared to other age groups. It depicted that heads having more experience found more transformational leaders as compared to those heads who are at early stages of age and have less experience.

## **DISCUSSION**

The study results portrayed that transformational leadership style of the public primary schools' heads prevailed over transactional leadership style. The theory of transformational leadership (Burns, 1978; Bass, 1985) authenticated the notion that transformational leadership style is the preferential style of efficient leaders. This is also consistent with Eagly, Johannesen-Schmidt, & Engen (2003). Bottery (2001) also pointed out that transformational leadership style is the most prevailing leadership style in educational setting. The study results also revealed that female heads preferred transformational leadership style as compared to male heads. It is consistent with the findings of Saidova (2009) which found that female leaders demonstrate higher score in transformational leadership than male leaders. Its result also contradicted the results of Jones and Rudd (2008) that male academic program leaders use transformational leadership style more than their female counterparts. The results rectified the findings of Daniel (2005) that principal's gender and age affect their leadership style. The study results also contradicted as well as rectified the findings of Barbuto, Fritz, Matkin and Marx (2007) which depicted that gender does not affect and educational levels affect the perception of leaders' leadership styles. However, superiority of female heads in transformational leadership may be due to their cooperative and caring nature of female; as the transformational leaders focus on basic needs of their subordinates and show deep concern about the personal problem of the subordinates. The superiority of male heads in transactional leadership showed that male heads provide benefits to the subordinates and in return get rewards from subordinates; as transactional leadership is based on exchange between leader and subordinates. It may be due to bold and strong personality of male heads that they contract with the subordinates to work and get rewards.

## **REFERENCES**

- Academy of Educational Planning and Management. (2008). *Pakistan Education Statistics 2006-07*. National Educational Management System. Islamabad: Ministry of Education.
- Avolio, B. J., & Bass, B. M. (2004). *Multifactor leadership questionnaire: Manual and sampler set* (3rd ed.). Redwood City, CA: Mind Garden Inc.
- Antonakis, j., Avolio, B. J., & Sivasubramaniam, N. (2003). Context and leadership: An examination of the nine-factor full-range leadership theory using the Multifactor Leadership Questionnaire, *The Leadership Quarterly*, 14, 261-295.
- Barbuto, J.E., Fritz, S.M., Matkin, G. S., & Marx, D.B. (2007). Effects of gender, education, and age upon leaders' use of influence tactics and full range leadership behaviors. *Sex Roles*, 56,

(1-2), 71-83.

Bass, B. M. (1985). *Leadership and performance beyond expectations*. New York: Free Press.

Bass, B. M., & Riggo, R. E. (2006). *Transformational leadership*. (2nd ed.). Mahwah, NJ: Lawrence Erlbaum Associates.

Bateman, T. S., & Snell, S. A. (2002). *Management competing in the new era* (5<sup>th</sup> ed.). Boston: MacGraw-Hill.

Bottery, M. (2001). Globalization and UK competition state: No room for transformational leadership in education? *School Leadership and Management*, 21(2), 199-218.

Burns, J. M. (1978). *Leadership*. New York: Harper & Row.

Campbell, S.B. (2010). A Comparative Study of Educational Leadership Behavior by Gender and Race. (Doctoral dissertation). Pro Quest LLC. 789 East Eisenhower Parkway. Ann Arbor, MI 48106-1346.

Daniels, K. N. (2005). *The influence of principal's leadership style on school variables in urban middle schools*. Doctoral thesis, UNC. Retrieved March 10, 2014, from <http://www.proquest.umi.com>.

Eagly, A. H., Johannesen-Schmidt, M. C., & van-Engen, M. L. (2003). Transformational, transactional, and laissez-faire leadership styles: A meta-analysis comparing men and women. *Psychological Bulletin*, 129, 569-591.

Fein, E.C, Tziner, A, & Vasiliu, C. (2010), Age cohort effects, gender, and Romanian leadership preferences. *Journal of Management Development*, Vol. 29, No. 4, pp. 364-376.

Gay, L. R. (1992). *Educational research: Competencies for analysis and application* (4th ed.). New York: Macmillan Publishing Company.

Hoy, W. K., & Miskel, C. G. (2008). *Educational administration: Theory, research, and practice* (8th ed.). New York: McGraw Hill, Inc.

Jones, D., & Rudd, R. (2008). Transactional, transformational, or laissez-faire leadership: An assessment of college of agriculture academic program leaders' (Dean) Leadership Styles. *Journal of Agriculture Education*, 49(2), 88-97.

Luthans, F.(2008). *Organizational behavior*.(10<sup>th</sup> ed). Boston: McGraw-Hill, Inc.

Lunenburg, F.C., & Ornstein, Allan .C. (2004). *Educational administration concepts and practices*. (5<sup>th</sup> ed.). Thomson Learning inc: Belmont.

Northouse, P. G. (2010). *Leadership, theory and practice* (5th ed.). Sage, Thousand Oaks, CA.

Powell, G.N. (1993). *Women and men in management*. (2<sup>nd</sup> ed.). Newbury Park, CA: Sage Publications.

Robbins, S. P., & Coulter, M. (2006). *Management*. (8<sup>th</sup> ed.). New Jersey: Prentice-Hall.

Robbins, S.P. & Sanghi, S. (2006). *Organizational behavior (1st ed)*. India: Dorling Kindersley (pvt) Ltd.

Robbins, S.P., Judge, T.A., Sanghi, S. (2009). *Organizational behaviour (13th ed)*. New Delh. Doring Kindersley pvt. Ltd.

Sarros, J.C., Gray, J.H., & Denstan, L. (2002). Australian Business leadership Survey, Management research series No. 1.

Saidova, P. (2009). *Headmasters' perception of practicing of effective transformational leadership*. Unpublished thesis, International Islamic University. Malaysia.

Sivanathan, N., & Fekken, G. C. (2002). Emotional intelligence, moral reasoning and transformational leadership. *Leadership and Organization Development Journal*, Vol. 23, No. 3/4, pp. 198-204.

Wolinski, S. (2010). Leadership defined. Retrieved March 7, 2014, from <http://managementhelp.org/blogs/leadership/2010/04/06/leadership-defined/>

Yukl, G. A. (2010). *Leadership in organizations* (7<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice-Hall.

Bastiani, J., Wolfendale, S., (1997) *Home-School Work in multicultural Settings*. David Fulton, London

Chavkin, N., (1993) *Families and Schools in Pluralistic Society*. University of New York Press, NY

David, M. E., Edge, A., Noden, P., West A., (1998) *Parental Involvement in Education in and out of School*. British Educational Research Journal, 24(4), 479, London, British Educational Research Association

Hughes. M., (1994) *Parents and their Children's Schools*. Blackwell, Oxford UK

Jowett, S., and Baginsky, M., (1991) *Building Bridges: Parental Involvement in Schools*.

Windsor, Nelson, London, NFER, Nelson

Mills. J., (1996) *Partnership in Primary Schools*. Routledge, London

Topping. K., Wolfendale. S., (1996) *Family Involvement in Literacy*. Cassell, Redwood Books,

GB