

Impacts of Power-Distance on Leadership-Styles: A Survey of Administrators in Gomal University, D. I. Khan, Khyber Pakhtunkhwa, Pakistan

by

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Abstract

When citizens have the feeling through the actions of political parties, political leaders, and a democratic government showing no consideration of masses and their issues, the power-distance between the governors and governed is established. The helplessness of citizens against the people and parties in power shows that the dictatorial regime is in power. In such a political environment, transactional (TRS) leadership is more popular as compared to transformational leaders (TRF). Low-Power Distance (LPD) is more supportive for TRF to prevail because this type of leadership is founded on the sharing power with the citizens, team-members instead of creating power-distance. Transactional leaders are more power-hungry because they prefer to rule with rules and regulations or simply by the book with High-Power Distance (HPD). The current study explores how HPD is associated with TRS and LPD with TRF. Through literature review, it has been hypothesized that power-distance positively explains the TRS while simultaneously predicting TRF negatively.

Keywords: Power-distance, Transactional-leadership, Transformational-leadership, etc.

Introduction:

The concept of culture refers to the lifestyle of individuals regarding their beliefs and practices in different aspects of life. Culture is affected by religion, language, customs, values, norms, and education of the community. It is very hard to understand the differences between several cultures however, Geert Hofstede (1997) developed a theoretical model to comprehend the diversity of cultures in a compact and explicit manner. The model consists of six factors power-distance, individualism vs. collectivism, uncertainty-avoidance, masculinity vs. femininity, long-term vs. short-term orientation, and indulgence (Hofstede & Minkov, 2010; Hofstede, 2011). Power distance is widely researched as a critical factor for its impact on the political dimensions of society (Daniels & Greguras, 2014; Kirkman et al., 2017). For example, High-PD cultures are positively associated with the 'Transactional' type of leadership while Low-PD societies prefer the 'Transformational' style of leadership. The current study tests these links through field study. (Beugelsdijk et al., 2018; Siddique & Nawaz, 2019a)

Transactional leadership is when leaders go as per cook-book and documented rules and regulations, methods, procedures, and defined modes of business or transactions (Bass, 1985). The relationship between the leaders and subordinates is robotic and formal through established standards and yardsticks. The leader keeps a strict and close watch on the workforce to confirm that everything is going as per the required standards. The focus on the administration, organization, and group performance and behaviors and not the individual worker and his/her performance. The motivation of employees is based on contingent rewards and punishments. Whoever performs well, gets well otherwise, punishment is the tool to motivate (Ahmed et al., 2016a; Siddique & Nawaz, 2019b).

In transformational leadership, leaders and followers think together, plan together, act, and get results together and face the consequences in collaboration with each other (Bass, 1985; Bass & Riggio 2006). A leader works as a member of the team and not something above the workforce.

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Everybody has the right to discuss, criticize, and influence the decision making process and decisions made (Han et al., 2016). The leader works as a role-model, (Saxena, 2014) motivates the employees optimistically, appreciates them on their creativity and innovations, and considers every individual employee separately as a unique asset for the organization (Ahmed et al., 2016b; Jiang et al., 2017). Transformational leaders are really followed by their subordinates as they demonstrate confidence, optimism, and recognition of the roles played by every single employee (Herman et al., 2013; Xin, 2017).

This study assumes that power-distance has a twisting relationship with TRS and TRF types of leadership in the sense that the higher the PD, the greater are chances that TRS will prevail while on the other side, TRF is adversely associated with High-PD but positively connected with Low-PD. These hypotheses have been tested using field data collected through a survey. Huge statistics with significant p-values vary the assumptions of a positive relation between PD and TRF as well as negative links between PD and TRF.

Research Design:

Philosophy and Approach:

Positivism is the philosophy adopted in this study, which suggests that knowledge can be verified through observational methods and recorded and communicated using standard concepts or terminologies. The researcher extracted the knowledge model (theoretical framework) from the literature and then verified it through field study to test the hypotheses emerging from the research model. The Survey approach has been used to conduct both literature and field surveys using representative samples of sources on the issue.

Tools and Techniques:

The literature was reviewed applying thematic-analysis to collect and analyze primary-themes, organizing-themes, and finally global-theme, which was used as the theoretical framework to conduct field surveys. For analyzing quantitative data from the questionnaire SPSS-21 assisted in conducting numerical analysis through correlation, regression, and tests of significance and thereby testing the hypotheses. For the reliability and validity of data and instruments, Cronbach Alpha and Factor analysis were applied to get the results for this purpose.

Reliability and Validity:

Table 1 Reliability Statistics

| | Variables/Items | N of Items | Cronbach's Alpha |
|---|-----------------------------|------------|------------------|
| 1 | Power distance | 9 | .968 |
| 2 | Transactional leadership | 9 | .780 |
| 3 | Transformational leadership | 8 | .917 |
| 4 | Questionnaire | 26 | .722 |

Validity-Statistics

a. Required Critical-values:

1. KMO test [Sampling Adequacy]: = or > 0.7
2. Bartlett’s test [test of Sphericity]: = or < 0.05
3. Factor-loading: = or > 0.4

b. Pretests [KMO & Bartlett]:

Table 2 Pretests

| | Power-Distance | Transactional Leadership | Transformational Leadership |
|-----------------|---|--|---|
| KMO test | .885 | .744 | .874 |
| Bartlett's test | Chi-square [2475.117] [df.36] p-value = .000 | Chi-Square [480.809] [df.36] p-value = .000 | Chi-Square [1024.770] [df.28] p-value = .000 |

c. Factor-Loadings:

Table 3 Factor Loading²

| Power-Distance | | Transactional Leadership | | Transformational Leadership | |
|----------------|-------|--------------------------|-----------------|-----------------------------|-------|
| Qs | Score | Qs | Score | Qs | Score |
| PD 1 | .987 | TRS1 | .922 | TRF 1 | .977 |
| PD 2 | .779 | TRS 2 | .387 | TRF 2 | .560 |
| PD 3 | .784 | TRS 3 | .214 | TRF 3 | .706 |
| PD 4 | .831 | TRS 4 | .480 | TRF 4 | .689 |
| PD 5 | .884 | TRS 5 | .579 | TRF 5 | .749 |
| PD 6 | .871 | TRS 6 | .568 | TRF 6 | .901 |
| PD 7 | .916 | TRS 7 | .706 | TRF 7 | .931 |
| PD 8 | .982 | TRS 8 | .739 | TRF 8 | .849 |
| PD 9 | .983 | TRS 9 | .769 | | |

Literature Review:

Power-Distance (PD):

The concept of power distance explains the perceptions or feelings of the citizens about the gap between the powerful and powerless (Hofstede, 1997, p. 52). Differences have been verified by the researchers between high-PD and low-PD citizens or communities. Individuals with high-PD, both in leaders and followers, have been found believing and practicing huge hierarchical gaps between rich and poor, elder and younger, governor and governed, and so on (Hofstede, 2011).

Thus, in this kind of culture centralized power structure exists, and high prestige is attached with status and rank (Daniels & Greguras, 2014). While Low-PD cultures are distinct in having close relations and interactions between the leaders and followers or officers and subordinates in the context of the organizational work environment. Most of the advanced countries have lower PD-Scores as compared to the developing and developed countries (Kirkman et al., 2017). At the moment the PD-Scores of Pakistan and some developed and developing countries are Pakistan (55), UK (35), the USA (40), and the Philippines (94) (Hostede-insights, 2019a; 2019b).

Hofstede (1997) conducted a survey (1967 to 1973) of IBM-employees working in fifty different countries and constructed a model for understanding cultural differences using five yardsticks including power-distance (high and low); individualism vs. collectivism; uncertainty avoidance vs. risk-taking; masculinity vs. femininity; long-term vs. short-term orientation; and Indulgence vs. intolerance (Hofstede & Minkov, 2010; Whalen, 2016). This study uses power-distance as an independent variable to determine the leadership styles preferred by employees with high and low power distance cultures (Beugelsdijk et al., 2018).

PD is the degree to which the less powerful members of organizations believe that power is not distributed equally (Hofstede et al., 2010). In High-PD culture, the relationships are authoritarian and dictatorial. Officers/leaders are more powerful and command the subordinates through hard and fast rules (Daniels & Greguras, 2014). Conversely, people in Low-PD cultures are share power with their bosses and leaders through giving subordinates some kind of participation in decision making and thus power-sharing (Kirkman et al., 2017).

Transactional Leadership (TRSL):

Transactional Leadership works on the ‘transactions’ exchanges between leader and followers. Transactional leaders believe that human relations are the chain of transactions between employees and management. This leadership style is founded on reward and penalty, economic and emotional exchanges, and other similar ‘transactions’. The leader leads by the organization by telling followers about what is their duty in exchange for the salaries they are given (Ahmed et al., 2016a). If employees perform as per requirements, they are rewarded and appreciated, and if otherwise, they are penalized. So this is the way a transactional leader leads his/her followers, which is obviously, as per book or rules and regulations, and little consideration of human elements in the workplace (Siddique & Nawaz, 2019a; 2019b).

The transactional leaders are also named as managerial leaders because their focus is not on the individuals rather organization, and group performance. Leaders observe the followers or employees during the performance and reward the good and punish the bad performers thereby encouraging the employees to work as per requirements to their best possible commitment and devotion. Transactional leaders don’t look for change or a futuristic view of the organizational or

² Note. Items with Factor loading less than 0.4 were excluded from analysis.

work procedures rather work hard to stick with the rules of the organization. (Hargis, 2001; Ahmed et al., 2016b).

Bass (1997) explains this leadership style with three leading attributes including, contingent rewards, active management by exception, and passive management by exception. Contingent rewards refer to the leader's behavior of rewarding and punishing conditionally. Employees with good performance get rewards while poor performance is penalized. Thus, rewards and punishments are the only sources or methods of motivating employees to work. Active Management by Exception means that leaders keep employees under strict observation and take action exactly as per performance. Passive Management by Exception implies that leaders take no action until the situation gets serious and needs attention because they reward and punish according to the output of employees (Siddique & Nawaz, 2019b).

Transformational Leadership (TRFL):

Transactional leaders lead by themselves rather than using only the rules and regulations of the organization as guidelines to motivate and make workers work. Here both leaders and followers motivate each other by having common interests and inspirations to work together (Burns 1978; Bass 1985; Bass & Riggio 2006). The followers are given the opportunity to rise above their low-level needs, as per Maslow's hierarchy of needs, and aspire for higher levels of respect and honor through working effectively in their work environment (Bass 1985, p. 22). Transformational leaders try their level best to create such work environments and work cultures which is inspiring for the employees (Han et al., 2016) who get ready to sacrifice for the best of the organization or collective purposes (Ahmed et al., 2016b). Thus, under this kind of leadership, sharing, cooperation, interdependence, and mutual support becomes the norm of the work, and the rest of the factors become less important (Herman et al., 2013; Xin, 2017).

Transformational leaders do not work on the basis of contingent rewards and active and passive management by exception, rather capitalize on the positive psychology of human beings (Jiang et al., 2017; Siddique & Nawaz, 2019a). Individuals are given more importance than groups or organizations, which automatically benefit when each individual is inspired in his/her own capacity. Following are tools of transformational leaders:

- i. Idealized influence or charisma suggests that the leader acts like a role model where subordinates admire and trust their leaders (Bass & Riggio, 2006).
- ii. Inspirational motivation refers to the fact that the leader acts optimistically and positively with confidence and sharing the future visions, and expectations, which inspire the subordinates to work for the leader, team, and organization attentively (Bass, 1985; Bass & Riggio 2006; Ahmed et al., 2016a).
- iii. Intellectual stimulation is focused on exciting the creativity and innovativeness of subordinates who are given the opportunity to question the assumptions and values of their organization, leaders, and themselves (Saxena, 2014). The employees discuss problems with leaders and collectively sort out new solutions for old problems as per new situations and innovative solutions (Han et al., 2016).
- iv. In individualized consideration is the most powerful and hard to practice dimension of transformational leadership. Leader talks and listens to every individual team member and not only to the group or section of people. For every individual worker leaders is a mentor, coach, and co-worker focusing on the issues of an individual and just as a member of the group only (Ahmed et al., 2016b; Jiang et al., 2017).

Theoretical Framework:

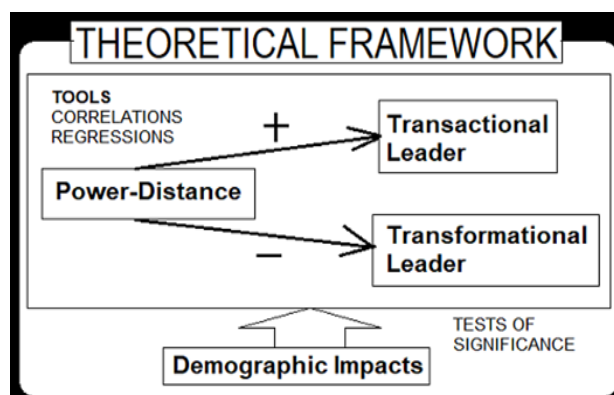


Figure 1 Theoretical Framework

The schematic diagram of the theoretical framework emerging from the above literature review shows that power-distance is positively connected with transactional leadership while its link with transformational leadership is negative. Likewise, the model includes the testing of hypotheses about the demographic impacts on the opinion of respondents regarding all three research variables.

Findings of the Study:

Descriptive Data:

Table 4 Experience

| | | Frequency | Percent | Valid Percent | Cumulative Percent |
|-------|-------|-----------|---------|---------------|--------------------|
| Valid | >20 | 70 | 47.6 | 47.6 | 47.6 |
| | <20 | 77 | 52.4 | 52.4 | 100.0 |
| | Total | 147 | 100.0 | 100.0 | |

Table 5 Descriptive Statistics

| | N | Minimum | Maximum | Mean | Std. Deviation |
|------------------|-----|---------|---------|--------|----------------|
| Power Distance | 147 | 2.00 | 5.00 | 3.5654 | .80449 |
| Transactional | 147 | 2.33 | 4.11 | 3.0718 | .43654 |
| Transformational | 147 | 1.00 | 4.00 | 2.7526 | .80152 |

Testing of Hypotheses:

Association Analysis:

Table 6 H 1. Power-distance is significantly associated with TRS and TRF

| Correlations (n=147) | | | |
|---|---------------------|----------------|---------------|
| | | Power Distance | Transactional |
| Power Distance | Pearson Correlation | 1 | .720** |
| | Sig. (2-tailed) | | .000 |
| Transactional | Pearson Correlation | .720** | 1 |
| | Sig. (2-tailed) | .000 | |
| Transformational | Pearson Correlation | -.661** | -.447** |
| | Sig. (2-tailed) | .000 | .000 |
| **Correlation is significant at the 0.01 level (2-tailed) | | | |

The hypothesis-1 is about the association of predictor (power-distance) with the criterion variables of transactional leadership and transformational leaders. Further, it was assumed that TRS is positive while TRF is negatively associated with the predictor variable. All these assumptions have been verified with statistical significance. The hypothesis-1 is accepted as correct.

Cause-n-Effect Analysis (Positive):

Table 7 H 2. PD significantly and positive predicts TRS

| Model Summary | | | | | | | |
|---------------|----------------|-----------------------------|-----------------|---------------------------|----------------------------|---------|-------|
| Model | R | R Square | Adjusted Square | R | Std. Error of the Estimate | F | Sig. |
| 1 | .720a | .518 | .515 | | .30406 | 155.933 | .000b |
| Coefficients | | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. | |
| | | B | Std. Error | Beta | | | |
| 1 | (Constant) | 1.679 | .114 | | 14.690 | .000 | |
| | Power Distance | .391 | .031 | .720 | 12.487 | .000 | |

b. Predictors: (Constant), Power Distance a. Dependent Variable: Transactional

The connection of High-PD is positive and strong with transactional leadership (r=0.518). It was assumed that transactional leaders rule through rules and regulations and not as a human

therefore High-PD will be linked positively with transactional leaders. R 2 is .518 tells that 52 percent of change in criterion variable of TRS. The hypothesis-2 is thus accepted as true.

Cause-n-Effect Analysis (Negative):

Table 8 H 3. TRF is negatively explained by the Power-distance

| Model Summary | | | | | | |
|---|----------------|-----------------------------|-------------------|----------------------------|---------|-------|
| Model | R | R Square | Adjusted R Square | Std. Error of the Estimate | F | Sig. |
| 1 | .661a | .436 | .432 | .60386 | 112.227 | .000b |
| Coefficients | | | | | | |
| Model | | Unstandardized Coefficients | | Standardized Coefficients | t | Sig. |
| | | B | Std. Error | Beta | | |
| 1 | (Constant) | 5.099 | .227 | | 22.461 | .000 |
| | Power Distance | -.658 | .062 | -.661 | -10.594 | .000 |
| a. Predictors: (Constant), Power Distance b. Dependent Variable: Transformational | | | | | | |

The R 2 of .436 shows that PD is responsible for a change of 44 percent in the dependent variable of transformational leadership however, as assumed, the link is negative (Beta-weight is negative and huge; -.656). ANOVA statistics of 112.227 are quite huge and greater than the required value of 4. So it verifies the ‘fitness of the regression model’ or explanatory power of the model. High-PD is negatively related to TRF. The hypothesis-3 is therefore accepted as substantiated.

Group-Mean Differences:

Table 9 H 4. Seniors are scoring higher on PD and TRS

| Group Statistics | | | | | | |
|--------------------------|------------------------|--------|--------|----------------|------------|------|
| | Experience | N | Mean | Std. Deviation | Std. Error | |
| Power Distance | >20 | 70 | 4.0317 | .52735 | .06303 | |
| | <20 | 77 | 3.1414 | .78000 | .08889 | |
| Transactional | >20 | 70 | 3.2873 | .38139 | .04559 | |
| | <20 | 77 | 2.8759 | .39034 | .04448 | |
| Transformational | >20 | 70 | 2.4589 | .64435 | .07701 | |
| | <20 | 77 | 3.0195 | .84001 | .09573 | |
| Independent Samples Test | | | | | | |
| | | F | Sig. | t | df | Sig. |
| Power Distance | Equal var. assumed | 17.168 | .000 | 8.026 | 145 | .000 |
| | Equal var. not assumed | | | 8.171 | 134.256 | .000 |
| Transactional | Equal var. assumed | .089 | .766 | 6.452 | 145 | .000 |
| | Equal var. not assumed | | | 6.459 | 144.235 | .000 |
| Transformational | Equal var. assumed | 6.557 | .011 | -4.506 | 145 | .000 |
| | Equal var. not assumed | | | -4.562 | 141.108 | .000 |

In hypothesis-4, it was assumed from descriptive data that seniors are scoring higher on predictor and one of the criterion variables: PD and TRS. Both assumptions have been substantiated. However, surprisingly, the third assumption that juniors have scored high on TRF has also emerged significant. The hypothesis-4 is thus, accepted and verified.

Discussions & Conclusions:

High power-distance makes the leader dictatorial who is more focused on the group, organization and productivity therefore treat the employees or followers through hard and fast rules and regulations while subordinates have no say in the decision-making process a transactional kind of leadership (Ahmed et al., 2016a; 2016b). However, transformational leaders emerge in low-PD cultures where the leader-follower relationship is characterized by a mutual dependence, an environment of creativity and innovations where everybody is given ample chance to share and contribute. This is a sort of democratic leadership style which is transformational in nature by having the capability to change quickly as per environmental requirements. These assumptions or theories have been statistically verified with strong statistics in both positive and negative directions of relationships (Siddique & Nawaz, 2019a,b).

The conclusion will be that the higher the power-distance, the greater are the chances of transactional leadership. Conversely, the lower the gap between leader and follower (power-distance), the higher are the chances that transformational leadership will prevail. Neither transactional nor transformational are good or bad in their model, it is rather the objectives and purposes of an organization that demands a particular type of leadership style. For instance, security organizations and financial institutions need strict rules and regulations therefore TRS is a dominant style to be followed. On the other hand, social and educational institutions need more transformational attitudes of leaders to give way to creativity and innovations emerge for the improvement of society. Where there is a need for low power distance, a transformational leader is best and vice-versa.

References

- Ahmed, Z. K., Nawaz, A. Dr., & Irfanullah. (2016b). The Leadership and Innovation: Prospects and Challenges. *Industrial Engineering Letters*, 6 (1): pp.1-4
- Ahmed, Z. K., Nawaz, A. Dr., & Irfanullah. (2016a). Leadership Theories and Styles: A Literature Review. *Journal of Resources Development and Management*, Vol 16, 1-7
- Amir, S. (2018). Characteristics of Future Military Leadership. *Electronic Research Journal of Behavioural Sciences* 1 (2018), pp. 5-16
- Bass, B. M. (1985). *Leadership and performance beyond expectation*, Free Press, New York, NY
- Bass, B. M. (1997). Does the Transactional - Transformational leadership paradigm transcend organizational and national boundaries? *American Psychological Association*. Vol. 52 (2), pp. 130-139
- Bass, B. M. (1999). Two decades of research and development in transformational leadership. *European Journal of Work and Organizational Psychology*, Vol. 8 No. 1, pp. 9-32
- Bass, B. M. and Bass, R. (2008), *The Bass handbook of leadership: Theory, research, and managerial applications*, Free Press, New York, NY
- Beugelsdijk, S., Kostova, T., van Essen, M., Kunst, V., & Spadafora, E. (2018). Cultural Distance and Firm Internationalization: A Meta-Analytical Review and Theoretical Implications. *Journal of Management*, 44 (1), pp. 89-130. <https://doi.org/10.1177/0149206317729027>
- Cummings, G. G., MacGregor, T., Davey, M., Lee, H., Wong, C. A., Lo, E., Stafford, E. (2010). Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *International Journal of Nursing Studies*, 47 (3), pp. 363–385
- Daniels, M. A. & Greguras, G. J. (2014). Exploring the nature of power distance: implications for micro- and macro-level theories, processes, and outcomes. *Journal of Management*, Vol. 40 No. 5, pp. 1202–1229
- Farida., Kristiawan, M., Fitria, H. (2020). The Influence of Teacher's Professionalism and School Principal Leadership on Teachers' Performance. *Electronic Research Journal of Social Sciences and Humanities* 2 (II), pp. 111-125
- Han, S. H., Seo, G., Yoon, S. W., Yoon, D. Y. (2016). Transformational leadership and knowledge sharing: Mediating roles of employee's empowerment, commitment, and citizenship behaviors. *J. Workplace Learn.* 2016, 28, pp. pp. 130–149.
- Herman, H. M., Huang, X., Lam, W. (2013). Why does transformational leadership matter for employee turnover? A multi-foci social exchange perspective. *Leadership. Q.* 24, pp. 763–776
- Hofstede, G. (1997). *Cultures and Organizations: Software of the Mind*, London: McGraw-Hill
- Hofstede, G. (2011). Dimensionalizing Cultures: The Hofstede Model in Context. *Online Readings in Psychology and Culture*, 2 (1). <https://doi.org/10.9707/2307-0919.1014>

- Hofstede, G., Hofstede, G. J., & Minkov, M. (2010). *Cultures and organizations: Software of the mind* (3rd Ed.). New York: McGraw-Hill
- Hostede-insights (2019a). Power-Distance scores of Pakistan and India. Retrieved March 1, 2019 from <https://www.hofstede-insights.com/country-comparison/india,pakistan/>
- Hostede-insights (2019b). Power-Distance scores of Pakistan, UK, USA, and Philippines. Retrieved March 1, 2019 from <https://www.hofstede-insights.com/country-comparison/pakistan,the-philippines,the-uk,the-usa/>
- Jegede, D., Ebio, L. A., Iroegbu, A. I. (2019). Challenges Facing the Administration of ICT Infrastructural Facilities in Public Primary Schools in Nigeria. *Electronic Research Journal of Engineering, Computer and Applied Sciences* 1, pp. 30-40
- Jiang, W., Zhao, X. & Ni, J. (2017). The Impact of Transformational Leadership on Employee Sustainable Performance: The Mediating Role of Organizational Citizenship Behavior. *Sustainability*, 9, 1567
- Kirkman, B. L., Lowe, K. B., & Gibson, C. B. (2017). A retrospective on culture's consequences: The 35-year journey. *Journal of International Business Studies*, 48: pp. 12-29
- Northouse, P. G. (2015). *Transformational Leadership. In Leadership theory and practices* (pp. 161-193). Los Angeles: Sage
- Ogunode, N. J., Jegede, D., Musa, A. (2020). Administration of Information Communication Technology (ICT) in the Nigerian secondary schools: Challenges and the ways forward. *Electronic Research Journal of Engineering, Computer and Applied Sciences* 2, pp. 50-63
- Qu, R., Janseen, O., & Shi, K. (2015). Transformational leadership and follower creativity: The mediating role of follower relational identification and the moderating role of leader creativity expectations. *The Leadership Quarterly*, 26, pp. 286-299
- Saxena, S. (2014). Are transformational leaders creative and creative leaders transformational? An attempted synthesis through the big five factor model of personality lens. *aWEshkar*, XVIII(2), pp. 30-51
- Siddique, M. & Nawaz, A. (2019a). Effects of participative decision making on leadership styles: a student survey at Gomal University, Pakistan. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 10 (11):pp. 1-8
- Siddique, M. & Nawaz, A. (2019b). The mediation of transformational leadership between transactional leadership and group management skills of academicians in HEIS of KPK, Pakistan. *International Transaction Journal of Engineering, Management, & Applied Sciences & Technologies*, 10 (5): pp. 607-615
- Whalen, J.M. (2016). *The Hofstede model and national cultures of learning: A comparison of undergraduate survey data*. Thesis. Department of English. In partial fulfillment of the requirements for the Degree of Master of Arts. Colorado State University. Fort Collins
- Xin, V. W. (2017). E-leadership in Practice: The Components of Transformational Leadership in Virtual Business Environments. *Education Doctoral*, Paper 323. Retrieved March 1, 2019 from https://fisherpub.sjfc.edu/education_etd