

Identifying the Factors Influencing Organizational Health: A Study of Pakistani Medical Colleges

Syed Harris Laeeque

Student, Department of Management Sciences, Bahria University, Islamabad

harris970@live.com

Abstract

Organizational health, particularly, organizational health of educational institutions, is an under-researched area in Pakistan. Despite of compelling evidence that organizational health has serious, positive consequences on the wellbeing, development, and performance of the employees, as well as the organization, very little research has been conducted on this construct. Using a descriptive and quantitative research approach, the present study intends to determine the key factors that influence the organizational health of Pakistani medical colleges (OHPMC). A questionnaire for determining the factors influencing OHPMC has been specifically designed keeping in view the contextual requirements. Two hundred faculty members from four medical colleges in Rawalpindi are selected as the sample subjects. Statistical tool and techniques such as, descriptive analysis, scale reliability analysis, factor analysis, correlation analysis, and multiple regression analysis are conducted on the collected data. The results achieved through all these analysis will help the academicians and practitioners to recognize the factors that influence the OHPMC and take necessary measures to enhance them.

Keywords:

Organizational health, Pakistani medical colleges, communication, rewards, administration, infrastructure

1. Introduction

In this day and age, universities around the globe are confronting various challenges such as decreasing number of admissions, keeping pace with the advancements in domain of information technology, trying to do more with the increasingly scarce resources, being more aware of the existing clients and attracting the potential ones, and the necessity to make their placement, research, and teaching programs highly global (Mercer, 2007). Just like the western countries, in Pakistan also, the higher education system has witnessed a considerable expansion, especially during the last 15 years. Earlier, only the elite class had access to the higher education institutions; however, today, these institutions cater to the needs of the masses of the country. Ever since the 1990s, there has been a sizable rise in both, the number of higher education institutions, and the number of students enrolled in them (Iqbal, 2004). According to the Pakistan Education Statistics report (2012), there are 1,384 degree colleges and 139 universities in, Pakistan and the number of students enrolled in them are as many as 18,169,51.

Pakistani higher education institutions are encountering various new forms of challenges such as increased checks and balances by government institutions, rise in the online course programs, demand for quality teaching and environment, easily available admissions, changing compositions of students and teachers, and new requirements of the employment market (Isani, 2001). Corresponding to all these challenges, Pakistani higher education institutions are required to be greatly adjustable and should consistently strive hard to enhance themselves if they aspire to flourish and be the forerunner in the highly fast-paced, aggressive, and capricious environment (Shami & Hussain, 2006). All these encounters require attentiveness towards the issues that make their growth and development easy, in addition to the intra-organization circumstances that get in the way of constructive organizational dynamics (Isani & Virk, 2005).

Taking into account the fundamental role of educational institutions in the development of a country and its people, it is imperative for them to be in an appropriate health. For analyzing the climate of educational institutions, the framework of organizational health (OH) is a very valuable tool (Hoy & Woolfolk, 1993). Organizational health is the capacity of an organization to carry out its operations of growth and development. Matthew Miles (1965) was the first one to put forward the concept of organizational health pertaining to the subject of schools. He used this concept in the form of metaphors regarding the environment of the schools. Through the help of metaphors, Miles portrayed the associations between administration, faculty, and students. Just like its employees, an organization can also be either healthy or unhealthy (Korkmaz, 2007). Organizational health depicts the wellbeing of the educational institutions from the psycho-sociological perspective. Organizations that are not good in health fail to execute their functions effectively, whereas, healthy organizations operate and achieve their targets successfully (Smith et al., 2001). Various researchers opine that the rate of success in carrying out the organizational operations and successful achievement of aims and objectives is highly correlated with the health of the organization (Hoy & Feldman, 1987). Organization health is also a crucial element that facilitates the organizations in maintaining peace and harmony, and managing change and reorganization easily (Hoy, 1996).

The little available literature that studies the educational institutions from the perspective of organizational health discusses that it is essential to determine the health of the educational institutions, not only because it helps to ascertain their current state of affairs, but, it also assists in formulating and executing their development plans and strategies appropriately (Mukadder & Tuncay, 2010). Rony et al. (2007) assert that a number of studies highlight that organizational health and the operations of educational institutions share a direct positive association. In accordance with those studies, for keeping the workforce motivated and to achieve high levels of performance, it is critical for the educational institutions to be healthy (Tsui et al., 1994).

The present study intends to determine the key factors that influence the organizational health of educational institutions of Pakistan. As mentioned above, there are over one thousand higher education institutions in Pakistan; each of which differs from the other in some manner. Therefore, in order to easily determine the factors that are present in all

organizations that influence the organizational health, the researcher has decided to investigate only those educational institutions that provide education in the field of medical sciences. Hence, the aim of this study is to determine the factors influencing the organization health of Pakistani medical colleges (OHPMC).

2. Research Design

Out of the little literature on the organizational health of educational institutions, majority of it focuses on the primary, middle, and high schools. The instruments developed by the researchers in those studies were designed specifically according to the needs, structure, and circumstances faced by these schools. This call for a need for designing a new instrument according to the context of medical colleges because the instruments developed in the prior studies are not fitting for the research at hand. To develop an entirely new research instrument for determining the factors affecting organizational health of Pakistani medical colleges, the researcher conducted a comprehensive review of all the past questionnaires measuring the health of organizations.

The process of developing a new questionnaire consisted of two steps. In the first step, the researcher prepared sixty-five statements by taking assistance from the works of Klingele and Leyden (2001), Miles (1969), Hoy and Forsyth (1986), and Hoy and Feldman (1987). In the second step, a panel comprising of five faculty members from the department of business management evaluated the content and construct validity of the instrument. Through the help of chi-square test, it was determined that how much the panel members agree or disagree with the statements. Finally, at the end of the second step, the thirty-nine statements, on which all the panel members unanimously agreed, were retained in the questionnaire, while, the rest of them were excluded. The purposely designed new questionnaire matches the system and conditions of the higher education institution providing education in the field of medical sciences. Out of the thirty-nine statements, thirty-one of them measure the eight variables that the researcher believes have an influence on the organizational health, and they are: employee compensation, organizational advancement, administration, infrastructure, rewards and incentives, nature of the organizational operations, inter-organizational communication, and organizational regulations and parameters. The remaining eight statements measure the dimensions of organizational health. The questionnaire is based on a five-point Likert scale; where (1) represents strong agreement and (5) represents strong disagreement. The survey participants have to indicate how much do they agree with the things mentioned in the statement takes place in their institution.

The population of the present study comprises of the faculty members of the medical colleges of Pakistan. There are total 91 medical colleges in Pakistan: 38 are public, while, 53 are private. According to the 2013 report of Pakistan Medical and Dental Council, there are about 10,000 faculty members employed in these institutions. Due to the budget and time restriction, it is not viable to collect data by visiting each of these colleges personally; therefore, only the medical colleges in Rawalpindi city are selected for the study. There are total 4 medical colleges in Rawalpindi, 2 public and 2 private; each of which has employed about 75 to 100 faculty members.

Table 1: Sample of the study

| Institution | Funding | Total no. of faculty members | No. of the faculty members selected for sample |
|---------------------------------------|---------|------------------------------|--|
| Army Medical College | Public | 115 | 50 |
| Foundation University Medical College | Private | 87 | 50 |
| Islamic International Medical College | Private | 92 | 50 |
| Rawalpindi Medical College | Public | 104 | 50 |

Before starting the main survey for the study, a pilot study was conducted with an intention to assess, amend, and revise the questionnaire on the basis of the results obtained through it. For the pilot study, only the two private medical colleges of Rawalpindi were targeted and 15 faculty members were selected from each of the colleges to fill the questionnaire. The results of the pilot study revealed that the developed questionnaire is fitting for the present study as it measures the construct very well. The final sample for the main survey comprises of 200 respondents; 50 faculty members from each of the 4 medical colleges of Rawalpindi were randomly selected. The table 1 provides a summary of the sampling procedure of the study.

To ascertain the reliability of the scales used in the questionnaire, Cronbach’s alpha coefficient and Guttman split-half coefficient is employed. The values of the alpha and Guttman split-half coefficient signify that the all scales of the study are rich in internal consistency. The summary of the scale reliability tests is presented in table 2.

Table 2: Scale reliability analysis

| Scale | Cronbach’s alpha coefficient | Guttman Split-half coefficient |
|---|------------------------------|--------------------------------|
| Organizational health | 0.864 | 0.855 |
| Employee compensation | 0.795 | 0.783 |
| Administration | 0.876 | 0.858 |
| Infrastructure | 0.765 | 0.759 |
| Rewards and incentives | 0.884 | 0.876 |
| Advancement | 0.725 | 0.718 |
| Nature of the organizational operations | 0.878 | 0.861 |
| Inter-organizational communication | 0.824 | 0.801 |
| Organizational regulations and parameters | 0.752 | 0.748 |

3. Results and Discussion

The data gathered through the survey about the demographic characteristics of the faculty members of medical colleges is summarized in table 3. The results reveal that out of the surveyed faculty members, 68.5% of them were males, while, only 31.5% of them were females. Majority of the faculty members, i.e. 33.5% were about 40 to 49 years old, followed by 30.5%, who were about 30 to 39 years old; while, very few of them were in their 20s. The results regarding the designation of the faculty members demonstrate that a vast majority, i.e. 39.5% of them, were lecturers. This was followed by assistant professors (34%), associate

professors (15.5%); while, a very small number of them were professors. The final classification of the faculty members was on the basis of their work experience. Most of the teachers, i.e. 75.5%, were in this profession from the past 5 to 16 years; whereas, only about 6.5% of them had an experience of more than 17 years.

Table 3: Demographic analysis

| Characteristic | Category | Frequency | Percentage |
|----------------|------------------|-----------|------------|
| Gender | Male | 137 | 68.5% |
| | Female | 63 | 31.5% |
| Age | 20-29 years | 25 | 12.5% |
| | 30-39 years | 61 | 30.5% |
| | 40-49 years | 67 | 33.5% |
| | 50-60 years | 47 | 23.5% |
| Designation | Lecturer | 79 | 39.5% |
| | Asst. Professor | 68 | 34% |
| | Assoc. Professor | 31 | 15.5% |
| | Professor | 22 | 11% |
| Experience | >5 years | 36 | 18% |
| | 5-10 years | 87 | 43.5% |
| | 11-16 years | 64 | 32% |
| | <17 years | 13 | 6.5% |

In order to put the factors of the research in a nutshell and to settle on the exact dimensions of organizational health of Pakistani medical colleges, it is essential to conduct an exploratory principal component analysis (EPCA). The implemented computations obtained through the Kaiser–Meyer–Olkin test ($KMO = 0.762$) revealed that the collected data has an appropriate internal coherence. Similarly, the Bartlett's test of sphericity highlighted that the data is statistically significant at the 0.01 level of significance. Researchers like Nelson and Thompson (2005) put forward that for conducting a good factor analysis, it is essential to obtain KMO values that are equal to or above 0.6, and a significance level of less than 0.05 in Bartlett's test.

By employing the Varimax rotation method, the variables of the research are grouped into eight factors that influence the organizational health of Pakistani medical colleges. The table 4 depicts the eight factors, in accordance with the criteria of Kaiser, which have an extracted Eigen values greater than one.

Table 4: Eigen values, variance and cumulative variance

| | Eigen values | Variance % | Cumulative variance % |
|---|--------------|------------|-----------------------|
| 1 | 3.84 | 14.35 | 14.35 |
| 2 | 3.64 | 12.65 | 27 |
| 3 | 3.27 | 10.56 | 37.56 |
| 4 | 2.86 | 9.33 | 46.89 |
| 5 | 2.47 | 9.62 | 56.51 |
| 6 | 2.14 | 7.88 | 64.39 |
| 7 | 1.66 | 7.06 | 71.45 |
| 8 | 1.25 | 4.54 | 75.99 |

Described below are the results obtained through the factor analysis of the dimensions of OHPMC:

1. The first factor influencing the organizational health of Pakistani medical colleges is intimacy. As compared to others, the factor of intimacy secured the largest Eigen value, i.e. 3.71. Besides, 11.88% of the total variation in the research variables is also explained by this factor. There are four statements that attempt to measure the dimension of intimacy: (a) the faculty members act in harmony and have shared aims; (b) the college frequently arranges get-togethers for faculty members; (c) members of the faculty are concerned about the wellbeing of each other; and (d) the faculty members do not always stand ready to assist and encourage each other. The factor loading for each of these four statements are 0.865, 0.823, 0.763 and 0.758 respectively.
2. The second factor influencing the organizational health of Pakistani medical colleges is innovativeness. The factor of innovativeness has secured an Eigen value of 3.52. Besides, 11.27% of the total variation in the research variables is also explained by this factor. There are four statements that attempt to measure the dimension of innovativeness: (a) the norms and rules established by the administration are often questioned by the faculty; (b) the faculty often designs new methods for enhancing their jobs; (c) the administration encourages the faculty to design new methods and processes; and (d) the faculty is reluctant to face challenges. Innovativeness speaks for the ability of the organization and its members to develop unique methods, strive to achieve new-fangled aims and objectives, and be more distinguished with the passage of time. The factor loading for each of these four statements are 0.831, 0.811, 0.772 and 0.706 respectively.
3. The third factor influencing the organizational health of Pakistani medical colleges is participation. The factor of participation has secured an Eigen value of 3.41. Besides, 10.92% of the total variation in the research variables is also explained by this factor. There are three statements that attempt to measure the dimension of participation: (a) the proposals and recommendations provided by the faculty are put into action by the administration; (b) the administration pays attention to and welcomes the ideas offered by the faculty; and (c) the views and opinions of faculty are seldom used by the administration. The factor loading for each of these three statements are 0.823, 0.800 and 0.763 respectively.
4. The fourth factor influencing the organizational health of Pakistani medical colleges is independence and cohesiveness. The factor of independence and cohesiveness has secured an Eigen value of 2.85. Besides, 9.13% of the total variation in the research variables is also explained by this factor. There are five statements that attempt to measure the dimension of independence and cohesiveness: (a) the faculty members are seldom absent from work and request transfer; (b) the faculty aspires to maintain its employment in the institution; (c) the faculty is honored to be a part of the institution; (d) the administration is not inclined to decentralize the institution; and (e) the administration often gets in the way of the faculty. The factor loading for each of these five statements are 0.852, 0.762, 0.734, 0.715 and 0.704 respectively.

5. The fifth factor influencing the organizational health of Pakistani medical colleges is goal path. The factor of goal path has secured an Eigen value of 2.74. Besides, 8.76% of the total variation in the research variables is also explained by this factor. There are three statements that attempt to measure the dimension of goal path: (a) the amendments in the organizational goals, plans and strategies are done without any preparation and planning; (b) the goals of the college are in accordance with those of the faculty; and (c) the jobs of the faculty members are scheduled by the administration. The factor loading for each of these three statements are 0.792, 0.769 and 0.724 respectively.
6. The sixth factor influencing the organizational health of Pakistani medical colleges is leadership. The factor of leadership has secured an Eigen value of 2.48. Besides, 7.91% of the total variation in the research variables is also explained by this factor. There are four statements that attempt to measure the dimension of leadership: (a) the dean creates an environment of concordance and peace; (b) the dean is hospitable and approachable; (c) the dean is aggressive and rude; and (d) everyone is equal in the eyes of the dean. The factor loading for each of these four statements are 0.823, 0.808, 0.742 and 0.727 respectively.
7. The seventh factor influencing the organizational health of Pakistani medical colleges is acclimatization. The factor of acclimatization has secured an Eigen value of 2.01. Besides, 6.41% of the total variation in the research variables is also explained by this factor. There are five statements that attempt to measure the dimension of acclimatization: (a) the college offers programs to assist its faculty to accept the changes; (b) the faculty quickly adjusts itself to the changes in the institutional operations, plans and strategies; (c) new perspectives and approaches for change are welcomed and encouraged by the college; (d) all members of the faculty are looked upon as equal stakeholders of the organization; and (e) the relationship between faculty and dean is characterized by dissention and disharmony. The factor loading for each of these five statements are 0.785, 0.736, 0.681 and 0.646 respectively.
8. The eighth and the last factor influencing the organizational health of Pakistani medical colleges is enhancement. The factor of enhancement has secured an Eigen value of 1.58. Besides, 4.03% of the total variation in the research variables is also explained by this factor. There are three statements that attempt to measure the dimension of enhancement: (a) the college offers programs for the development of its faculty; (b) the faculty feels that their job is secured in the college; and (c) there are prospects for professional development in the college. The factor loading for each of these four statements are 0.965, 0.921, 0.861 and 0.774 respectively.

As illustrated in table 3, the above-mentioned eight factors explain 75.99% of the total variation in the organizational health of Pakistani medical colleges. However, 24.01% of the variation in the OHPMC is left unexplained. This variation can be due to several other factors, like communication, structure, culture, information technology, external environment, and etc. The table 5 presents the results obtained when the ISDM (Interval of Standard Deviation from the Mean) formula is used to determine what the faculty has to say about the levels of organizational health of Pakistani medical colleges.

Table 5: OHPMC according to faculty’s view

| Category | Frequency | Percentage | Cumulative Percentage |
|---------------------|-----------|------------|-----------------------|
| Low OHPMC | 75 | 37.5 | 37.5 |
| Somewhat low OHPMC | 68 | 34 | 71.5 |
| Somewhat high OHPMC | 39 | 19.5 | 91 |
| High OHPMC | 18 | 9 | 100 |

The table shows that the organizational health of Pakistani medical colleges is ‘low’ and ‘somewhat low’ in the opinion of 37.5% and 34% of the faculty members respectively. Hence, it can be said that majority of the faculty members, i.e. 71.5% of them, are of the view that the OHPMC falls in the ‘low’ category. In contrast, 19.5% of the faculty members consider that the organizational health of Pakistani medical colleges is ‘somewhat high’; while, 9% of them consider it to fall in the ‘high’ category.

With the purpose of determining the strength and direction, and to establish the cause and effect relationship between the institutional factors and the organizational health of Pakistani medical colleges, Pearson correlation analysis and multiple regression analysis were carried out. Table 6 and 7 summarize the results obtained through the correlation and multiple regression analysis. The results are explained as follows:

Table 6: Pearson correlation analysis

| Criterion | Predictor | r | p |
|-----------|---|--------|------|
| OHPMC | Rewards and incentives, | 0.326 | 0.00 |
| | Infrastructure | 0.456 | 0.00 |
| | Inter-organizational communication | 0.398 | 0.03 |
| | Administration | 0.514 | 0.00 |
| | Nature of the organizational operations | 0.447 | 0.00 |
| | Employee compensation | 0.248 | 0.06 |
| | Advancement | 0.687 | 0.18 |
| | Organizational regulations and parameters | -0.021 | 0.12 |

Table 7: Multiple regression analysis

| Variable | B | t | p |
|---|-------|--------|------|
| (Constant) | - | - | - |
| Rewards and incentives, | 0.461 | 10.266 | 0.00 |
| Infrastructure | 0.341 | 8.695 | 0.00 |
| Inter-organizational communication | 0.259 | 8.147 | 0.00 |
| Administration | 0.237 | 4.238 | 0.00 |
| Nature of the organizational operations | 0.184 | 4.661 | 0.00 |
| Employee compensation | 0.242 | 1.914 | 0.06 |
| Advancement | 0.358 | 0.989 | 0.12 |
| Organizational regulations and parameters | 0.332 | 1.566 | 0.96 |

1. The value of the Pearson correlation coefficient (r) for the association between rewards and incentives and the organizational health of Pakistani medical colleges is 0.326; while, the unstandardized beta coefficient (β) is 0.461. The values of both these coefficients are statistically significant as their level of significance is less than 0.05.

- The value of the unstandardized beta coefficient infers that as the rewards and incentives provided to the employees increases by 1 unit, the organizational health of Pakistani medical colleges gets better by 0.461 units.
2. The value of the Pearson correlation coefficient (r) for the association between infrastructure and the organizational health of Pakistani medical colleges is 0.456; while, the unstandardized beta coefficient (β) is 0.341. The values of both these coefficients are statistically significant as their level of significance is less than 0.05. The value of the unstandardized beta coefficient infers that as the quality of infrastructure increases by 1 unit, the organizational health of Pakistani medical colleges gets better by 0.341 units.
 3. The value of the Pearson correlation coefficient (r) for the association between the inter-organizational communication and the organizational health of Pakistani medical colleges is 0.398; while, the unstandardized beta coefficient (β) is 0.259. The values of both these coefficients are statistically significant as their level of significance is less than 0.05. The value of the unstandardized beta coefficient infers that as the quality of the inter-organizational communication increases by 1 unit, the organizational health of Pakistani medical colleges gets better by 0.259 units.
 4. The value of the Pearson correlation coefficient (r) for the association between the administration and the organizational health of Pakistani medical colleges is 0.514; while, the unstandardized beta coefficient (β) is 0.237. The values of both these coefficients are statistically significant as their level of significance is less than 0.05. The value of the unstandardized beta coefficient infers that as the quality of the administration increases by 1 unit, the organizational health of Pakistani medical colleges gets better by 0.237 units.
 5. The value of the Pearson correlation coefficient (r) for the association between the nature of the organizational operations and the organizational health of Pakistani medical colleges is 0.447; while, the unstandardized beta coefficient (β) is 0.184. The values of both these coefficients are statistically significant as their level of significance is less than 0.05. The value of the unstandardized beta coefficient infers that as the quality of the organizational operations increases by 1 unit, the organizational health of Pakistani medical colleges gets better by 0.184 units.
 6. The organizational health of Pakistani medical colleges shares a positive, but statistically insignificant association ($p>0.05$) with employee compensation ($r=0.248$, $\beta=0.242$) and advancement ($r=0.687$, $\beta=0.358$). Besides, the organizational health of Pakistani medical colleges is negatively, but statistically insignificantly associated with organizational regulations and parameters ($r=0.021$, $\beta=0.332$, $p>0.05$).

4. Conclusions

The principal objective of the current study was to settle on the main factors that influence the organizational health of Pakistani medical colleges. The outcomes of the study reveal that the monetary factors (rewards and incentives, and infrastructure), managerial factors (inter-organizational communication and administration), and motivating factors (nature of the organizational operations) have a profound influence on the overall organizational health of

the Pakistani medical colleges. Effective interpersonal communication is regarded as the soul of the contemporary organizations. An increasing number of employees consider that communication is a vital aspect of their jobs. This is because in the present age, employees are no longer confined to their departmental boundaries and work with a specific set of people. Instead, employees belonging to different departments are often grouped together to form a functional team where they collaborate and use scientific methods for executing their tasks and achieving the group goals. Therefore, communication has become an integral and inevitable feature of the jobs.

A leading concern for the organizations in the service sector around the globe is keeping all sorts of their employees motivated, whether they are novice, experts or specialists. In contrast to the other workers, faculty members are the most crucial asset for any educational institution. The board of directors, deans, and the administration are required to pay adequate attention to the issues related to management, leadership, and motivation, so that they can keep the faculty intact, motivated and involved in their jobs. Instead of only relying on the financial payments, the educational institutions should use non-financial means to keep the faculty motivated and contented. It is an obligation on the management to shower rewards on those employees that perform their jobs in an excellent manner. The primary purpose of bestowing rewards is to determine how the system of rewards is classified by the organization, how the employees are communicated issues related to their jobs, and the management construes the connection between performance and rewards. The administration should view the faculty members as accomplished and focused people who should not be monitored tightly, so that they get enough freedom to carry out their jobs effectively.

5. References

- [1] Hoy, W. (1996). Organizational Health and Faculty Trust: A View from the Middle Level. *Research in Middle Level Education Quarterly*, 19(3), 21-39.
- [2] Hoy, W. K. & Forsyth, P. (1986). *Effective supervision: Theory into practice*. New York: Random House.
- [3] Hoy, W. K. & Woolfolk, A. E. (1993). Teachers' sense of efficacy and the organizational health of schools. *The Elementary School Journal*, 93(4), 355-372.
- [4] Hoy, W. K., & Feldman, J. A. (1987). Organizational health: The concept and its measure. *Journal of Research and Development in Education*, 20, 20-38.
- [5] Iqbal, A. (2004). *Problems and prospects of higher education in Pakistan* (Unpublished doctoral dissertation). University of Arid Agriculture, Rawalpindi.
- [6] Isani, U. A. (2001). *Higher education in Pakistan* (Unpublished doctoral dissertation). National University of Modern Languages, Islamabad.
- [7] Isani, U. A., & Virk, M. L. (2005). *Higher education in Pakistan: A historical and futuristic perspective*. Lahore: National Book Foundation.
- [8] Klingele, W. E. & Lyden, J. A. (2001). Organizational health and teacher education. *Teacher Educator*, 37(2), 100-116.
- [9] Korkmaz, M. (2007). The Effects of Leadership Styles on Organizational Health. *Educational Research Quarterly*, 30(3), 23-55.

- [10] Mercer, J. (2007). The challenges of insider research in educational institutions: Wielding a double-edged sword and resolving delicate dilemmas. *Oxford Review of Education*, 33(1), 1-17.
- [11] Miles, M. B. (1965). Planned change and organizational health: Figure and ground. In F. D. Carver & T. J. Sergiovanni (Eds.), *Organizations and human behavior: Focus on schools* (pp. 375–391). New York, NY: McGraw-Hill. Mobley,
- [12] Mukadder, B. O. Z., & Tuncay, Y. O. Z. (2010). Metaphors suggested by teachers and students on the concept of school health. *African Journal of Business Management*, 4(2), 191-202.
- [13] Nelson, S. J., & Thompson, G. W. (2005). Barriers perceived by administrators and faculty regarding the use of distance education technologies in pre-service programs for secondary agricultural education teachers. *Journal of Agricultural Education*, 46(4), 36-48.
- [14] Rony, K., Koleman, H., & Schlichting, K. A. (2007). Linking the organizational health of middle grades schools to student achievement. *NASSP Bulletin*, 91(4), 289-321.
- [15] Shami, P. A. & Hussain, K. S. (2006). *Development of education in Pakistan*. Academy of Educational Planning and Management, Ministry of Education, Islamabad.
- [16] Smith, P. A., Hoy, W. K., & Sweetland, S. R. (2001). Organizational Health of High Schools and Dimensions of Faculty Trust. *Journal of School Leadership*, 11(2), 135-51.
- [17] Tsui, K., Leung, T. W., Cheung, Y. S., Mok, H., & Ho, W. (1994). The relationship of teachers' organizational commitment to their perceived organizational health and personal characteristics in primary schools. *Journal of Primary Education*, 4(2), 27-41.