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Learning Organization Orientation in Gender-Based Categories of Schools

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A study by Akram, Watkins, and Sajid (2013), found that a statistically significant difference exists between boys and girls' schools in most of the dimensions of a learning organization. The current study is an extension of this previous research as it explores whether or not statistically significant differences exist among boys, girls and co-education schools on the dimensions of a learning organization. Using the Dimensions of Learning Organization Questionnaire (DLOQ) by Watkins and Marsick (1997), 100 sample cases were gathered by using the survey method, from a girls, a boys' and a co-education school in Karachi, Pakistan. The analysis of data revealed that statistically significant differences exist among the three gender-based categories of schools with the girls' school ranking first and the boys' school last in terms of the organizational learning orientation prevailing within the selected schools .

Key words: Organizational Learning, Learning Organization, Gender-Based Categories of Schools

Introduction

In an attempt to improve the quality of education, the government of Pakistan has vested its efforts in the capacity building of public schools through improving their physical conditions and providing professional development opportunities for the teachers and administrators (Iqbal, 2013; Malik, 2007). Considering that education is not solely the responsibility of the government, the private sectors emerged as the key players in the education system through the establishment of numerous different types of schools (Institute of Social and Policy Sciences [I-SAPS], 2010).

The rise of private schools increased the school access rate for school going children (Andrabi, Das & Khwaja, 2010) as well as the quality of education offered (I-SAPS, 2010; Ali & Khan, 2002). Unfortunately, except for meager successes in some areas in the educational landscape of Pakistan, none of the education reforms and interventions enabled the establishment of a sustainable mechanism where school personnel could learn from each other in both the formal and informal social contexts of the schools and contribute to the provision of quality education. Studies such as Abbass (2011) and the Ministry of Education [MoE], (2009) have highlighted that fact and give examples of the paucity in the quality of education across the country.

Organizational learning is an approach which motivates all the personnel in an organization to learn and thus can be considered an appropriate and effective method to promote quality education in schools of Pakistan. Khan, Tanveer and Saleem (2013) assert that individual learning is important but to get the synergy effect a whole organization must learn through processes which enable its personnel to share their knowledge and experiences and thus move the organization into learning as a

whole. This perspective suggests that to achieve their ultimate aim, schools should become learning organizations through the process of organizational learning. Garratt re-enforces this perspective by claiming that a school having greater learning than the rate of change in the surrounding environment is a learning organization (cited in Khan, et al., 2013).

If organizational learning is considered an indicator of the quality of schools, then it is imperative to investigate which of the school categories in Pakistan occupy the highest rank on the learning organization dimensions. The current research explores whether or not statistically significant differences exist between gender-based categories of private schools in terms of their organizational learning orientation and which of the school types can be ranked first.

Literature Review

The diversity of schools in Pakistan has tremendous implications for policy as the various categories differ from each other on a range of grounds (I-SAPS, 2010). A World Bank study, as reported by I-SAP, found that when compared with the public schools, grade 3 students from private schools performed significantly better in the Learning and Educational Achievement Test in Punjab Schools' (LEAP) project and marginally better in the Punjab Examination Commission (PEC) and the National Educational Assessment System (NEAS). Iqbal (2012) conducted 96 interviews of school stakeholders and found that when compared to private schools, public schools generally possessed better facilities, more spacious buildings, more highly qualified staff and operated out of a people-oriented leadership style. In contrast, Ahmed's (2010) study determined that private schools developed and implemented student behaviour management techniques more positively and effectively than was evidenced in the public sector schools. Other studies highlighted differences between and among schools using gender-based categories. For example, statistically significant differences were evident between boys and girls' achievement in Science at the lower secondary level in the District Pishin, Balochistan (Khilji & Bhutta, 2012). Students from the single-sex schools demonstrated more outgoing, participative, enthusiastic, lively, conscientious, rule bound, socially bold, spontaneous, individualistic, self-disciplined, socially precise, relaxed and un-frustrated behaviours while coeducation students tended to be more reserved, cool, sober, serious, group dependent, naive, sentimental, worried, casual, careless of social rules, tense and frustrated (Malik, 2013).

Organizational Learning and Differences among Schools

Organizational Learning

Organizational learning can occur at the individual, group, organizational and inter-organizational levels. Individual learning is a mechanism through which group or organizational learning takes place but it cannot contribute to group or organizational learning unless the knowledge acquired by individuals has become embedded in a supra-individual repository, such as routine or task-task network, transitive memory, member-task network. In this way knowledge becomes accessible to other members of the organization (Argote, 2013). The Public Service Learning Policy Directorate [PSLPD] (2007) drew two kinds of organizational learning from its review of available literature namely, corrective learning and transformational learning. The corrective learning, which is also called the single-loop learning, focuses on identifying and correcting errors and introducing improvements particularly in the areas of organizational processes, structures, procedures and practices without questioning the underlying values, assumption or causes. Transformational learning or double-loop learning on the other hand is a form of learning that questions the norms, procedures, practices, processes, systems and structures that corrective learning takes for granted. Yang, Watkins and Marsick (2004) categorized various concepts of organizational learning by identifying four perspectives which emerged from the literature. These include: (1) the systems thinking perspective which is identifying interrelations rather than linear cause-effect chains; (2) the learning perspective which entails seeing the organization as facilitating the learning of all members of the organization; (3) the strategic perspective which is concerned with understanding the strategic internal drivers that build an organization's learning capacity; and (4) the integrative perspective which considers

organizational learning as a continuous process integrated with parallel work.

Differences between Schools

Khan et al. (2013) compared private and public schools in Pakistan using the Dimensions of Learning Organization Questionnaire (DLOQ) (Yang et al., 2004) to investigate which if either of these streams of schools were organizational learning oriented. The researchers gathered data from 100 respondents and found that a significant difference did exist. Akram et al. (2013) likewise used the DLOQ in the Pakistani context to compare the learning culture of high and low performing high schools. Their data came from 164 public boys' and girls' schools. The results revealed that high schools categorized on a gender basis differed appreciably in all dimensions of a learning organization with particularly significant statistical differences found between high and low performing schools in the dimensions of strategic leadership and knowledge performance.

Theoretical Framework

The current research used the DLOQ model originally developed by Watkins and Marsick (1997) but critiqued and improved through its use in more than 70 published research studies undertaken in various contexts and cultures (Akram et al., 2013). According to the original designers of the instrument, organizational learning occurs at four levels termed as the individual, team or group, organizational and global levels which can be further categorised into seven dimensions as indicators of a learning organization. In other words, these seven dimensions are action imperatives through which an organization can transform itself into a learning organization that has the potential to be a continuous learning process. Table 1 presents these dimensions along with the definition of each.

Table 1

Dimensions of Learning Organization

Levels of Organizational Learning	**Dimensions of Learning Organization**	**Definition of the Dimensions of Learning Organization** (Marsick & Watkins, 2003)
Individual	Creating continuous learning opportunities	Opportunities are provided for ongoing growth and education on the job
Individual	Promoting inquiry and dialogue	The culture of the organization supports questioning, feedback and experiment so that people gain reasoning skills to express their views and listen and inquire into the views of others
Group/Team	encouraging collaboration and team learning	Groups learn and work together. Collaboration is valued and rewarded
School	Creates systems to capture and share learning	System to learning is created and integrated with work
School	Empowering people towards collective vision	People are involved in setting, owning and implementing vision. Responsibilities are distributed so that people are motivated to learn towards what they are held accountable for

School	Connecting organization to its environment	People are encouraged to see the impact of their work on the entire enterprise. people analyze the environment and use information to align their work practices with the environment
School	Providing strategic leadership for learning	Leaders model and support learning and uses learning for organizational outcomes
Key Outcome	Financial performance	Assessment of financial health and resources available for growth
	Knowledge performance	Enhancement of services and products due to knowledge capacity

Based on:

Akram, M., Watkins, K. E., & Sajid, S. A. (2013). Comparing the learning culture of high and low performing schools in Pakistan. *Literacy Information and Computer Education Journal (LICEJ). 4*(2), 1022-1028. Available online at: http://www.infonomics-society.org/LICEJ

Methodology

Research Instrument

Using the DLOQ (Watkins & Marsik, 1997) and adapted for schools in Pakistan by Akram and Watkins (Akram et al., 2013), data were gathered from three schools of Karachi. The original DLOQ consisted of 55 items covering the four levels of organizational learning as well as financial and knowledge performance levels. Except for the team/group level, each of the levels was sub-scaled into two learning dimensions, thus totaling seven dimensions of a learning organization. However, the DLOQ used for the current research consisted of 49 items representing four levels of organizational learning and one performance indicator, namely, knowledge performance. The respondents from three schools rated their responses on a six point scale measuring from 1 (Almost Never) to 6 (Almost Always). The overall internal consistency of the DLOQ used was very high (Cronbach's Alpha = .970, 49 items). Except for learning dimension 1, *School Creates Continuous Learning Opportunities for Teachers*, which had 7 items, all dimensions as well as the school's performance indicator had a total of 6 items. The internal consistency of each dimension and the school's knowledge performance indicator was high and ranged from Cronbach's Alpha =.841 to Cronbach's Alpha =.928. The correlation between the seven dimensions of organizational learning and the school's knowledge performance was also significant at the $\rho < 0.01$ level and ranged from .331 to .732. Thus, all seven dimensions and the school's performance indicator were considered relevant by the sample cases of the research.

Sample

In the month of October 2014, a total of 100 sample cases were gathered from single-sex and coeducation schools situated in Karachi. The selected schools included a girls' private school situated in Saddar area; a boys' private school situated in Saddar; and a co-education school situated in the area surrounding Saddar. A total of 36 cases were taken from the girls' school, 36 from the boys' school and 28 from the co-education school. The sample cases were teachers and/or coordinators of the schools.

Research Questions

The Akram et al. (2013) study found that a statistically significant difference existed between boys' and girls' schools on most of the learning organization dimensions. The current study is an extension of this previous research as it explores whether or not statistically significant differences exist among boys, girls and co-education schools on

the dimensions of a learning organization. While Akram et al. analysed the differences between gender-based categories of public schools, the current research focused on the differences among private schools. The following research question and subsidiary questions guided the study:

Main Research Question

RQ_1: Do the gender-based categories of private selected schools in Pakistan differ from each other in terms of organizational learning orientation?

Subsidiary Questions

$RQ_{1.1}$: Do the gender-based categories of selected private schools in Pakistan differ from each other in the dimensions of a learning organization?

$RQ_{1.2}$: Which of the gender-based categories of selected private schools is better in terms of organizational learning orientation?

$RQ_{1.3}$: Which of the gender-based categories of selected private schools in Pakistan contribute significantly to the overall differences between the schools?

Findings

Data gathered for the current research were analysed through the Statistical Package for Social Sciences (SPSS) version 22. As the data were free of missing values and univariate and multivariate outliers, all 100 cases were considered for analysis.

To answer the subsidiary research question $RQ_{1.1}$ "Do the gender-based categories of private schools in Pakistan differ from each other in the dimensions of a learning organization?", the following eight null hypotheses were postulated:

HO_1: The distribution of the school which creates continuous learning opportunities for teachers is the same across gender-based categories (boys, girls and co-education) of schools.

HO_2: The distribution of the school which promotes inquiry and dialogue among teachers is the same across gender-based categories (boys, girls and co-education) of schools.

HO_3: The distribution of the school which encourages collaboration and team learning for teachers is the same across gender-based categories (boys, girls and co-education) of schools.

HO_4: The distribution of the school which creates systems to capture and share learning is the same across gender-based categories (boys, girls and co-education) of schools.

HO_5: The distribution of the school which empowers people towards a collective vision is the same across gender-based categories (boys, girls and co-education) of schools.

HO_6: The distribution of the school which connects itself to its environment is the same across gender-based categories (boys, girls and co-education) of schools.

HO_7: The distribution of the school which provides strategic leadership for learning is the same across gender-based categories (boys, girls and co-education) of schools.

HO_8: The distribution of the school's knowledge performance is the same across gender-based categories (boys, girls and co-education) of schools.

Test of Normality

A small sample dataset needs to pass the test of normality before attempting to test a hypothesis. Therefore, to assess whether or not data collected for the current research were normally distributed, Kolmogorov-Smirnov (K-S) and Shaprio-Wilk (S-W) was conducted. The sample size for all three categories of schools was less than 50 [n (boys' schools) = 37, n (girls' schools) = 37, n (co-education schools) = 26], therefore the Independent Samples K-S and S-W tests were considered appropriate tests of normality for the study (Ghasemi & Zahediasl, 2012).

Table 2 presents the Kolmogorov-Smimov and Shapiro-Wilk test details for the selected schools. The highlighted ρ values are less than 0.05, indicating that data for most of the dimensions of learning organization were not normally distributed (Ghasemi & Zahediasl, 2012).

Table 2: Tests of Normality

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	Df	Sig.	Statistic	Df	Sig.
School's Knowledge Performance	0.114	100	0.003	0.943	100	0
School Creates Continuous Learning Opportunities for Teachers	0.086	100	0.062	0.973	100	0.035
School Promotes Inquiry and Dialogue	0.102	100	0.013	0.962	100	0.005
School Encourages Collaboration and Team Learning	0.073	100	.200*	0.976	100	0.069
School Creates Systems to Capture and Share Learning	0.129	100	0	0.952	100	0.001
School Empowers teachers towards a Collective Vision	0.109	100	0.005	0.961	100	0.005
School Connects itself to its Environment	0.082	100	0.093	0.976	100	0.059
School Provides Strategic Leadership	0.121	100	0.001	0.923	100	0

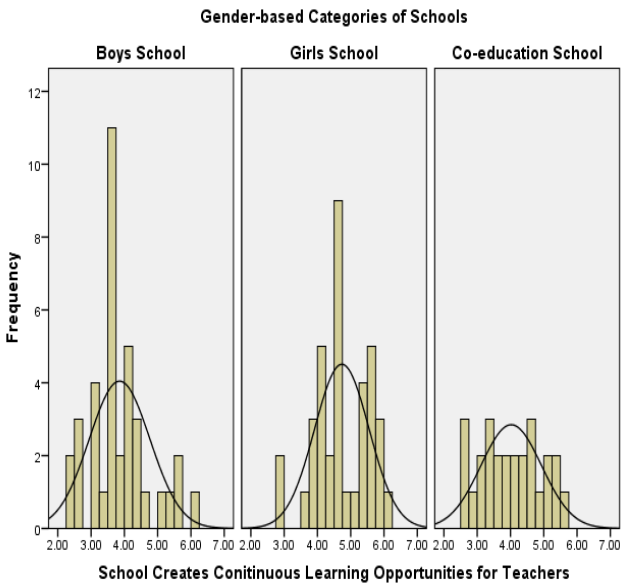
*. This is a lower bound of the true significance.

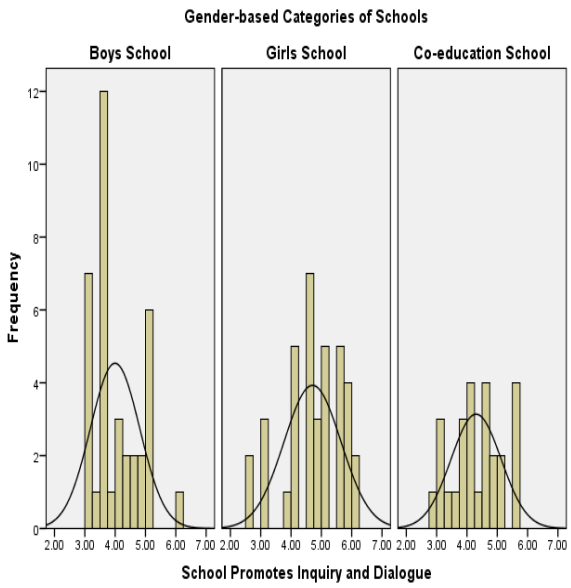
a. Lilliefors Significance Correction

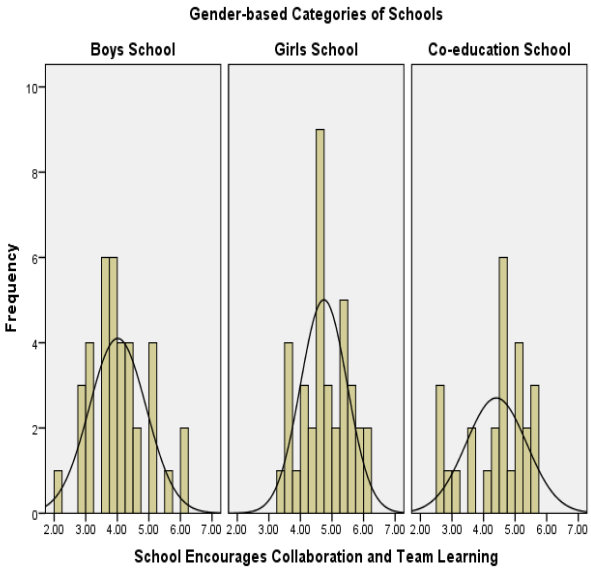
Hypotheses Testing

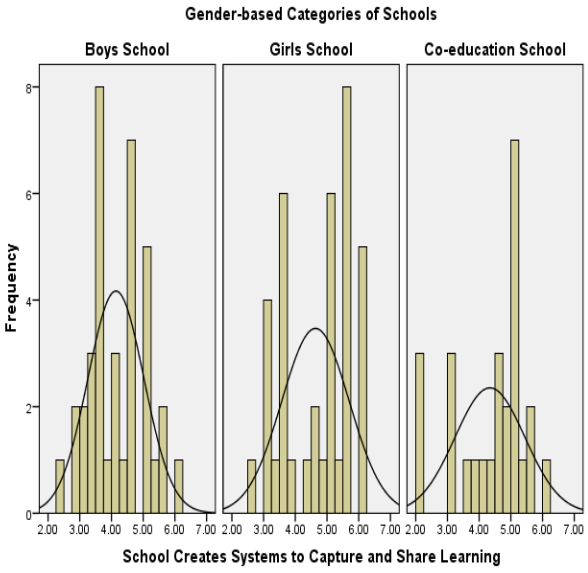
The data were not normally distributed therefore the Kruskal-Wallis (K-W), a nonparametric test was considered appropriate for testing the hypotheses postulated for the search in order to detect whether two or more samples came from the same distribution and whether or not the medians between groups were different (Zhang & Zhang, 2009). The K-W uses the ranks of ordinal data, such as the gender-based categories of schools in the current research, to perform an analysis of variance to identify whether or not the groups are similar to each other and K-W does not make the assumption of normality. What it does assume is that the observations in each group come from populations with the same shape (Neideens & Brasel, 2007). Figure 1 below shows that observation in each group had the same shape for all the learning organization dimensions which included the creation of continuous learning opportunities for teachers; promotion of inquiry and dialogue among teachers; encouraging collaboration and team learning for teachers; creating systems to capture and share learning; empowering people towards a collective vision; connecting itself to its environment; provision of strategic leadership; and the school's knowledge performance.

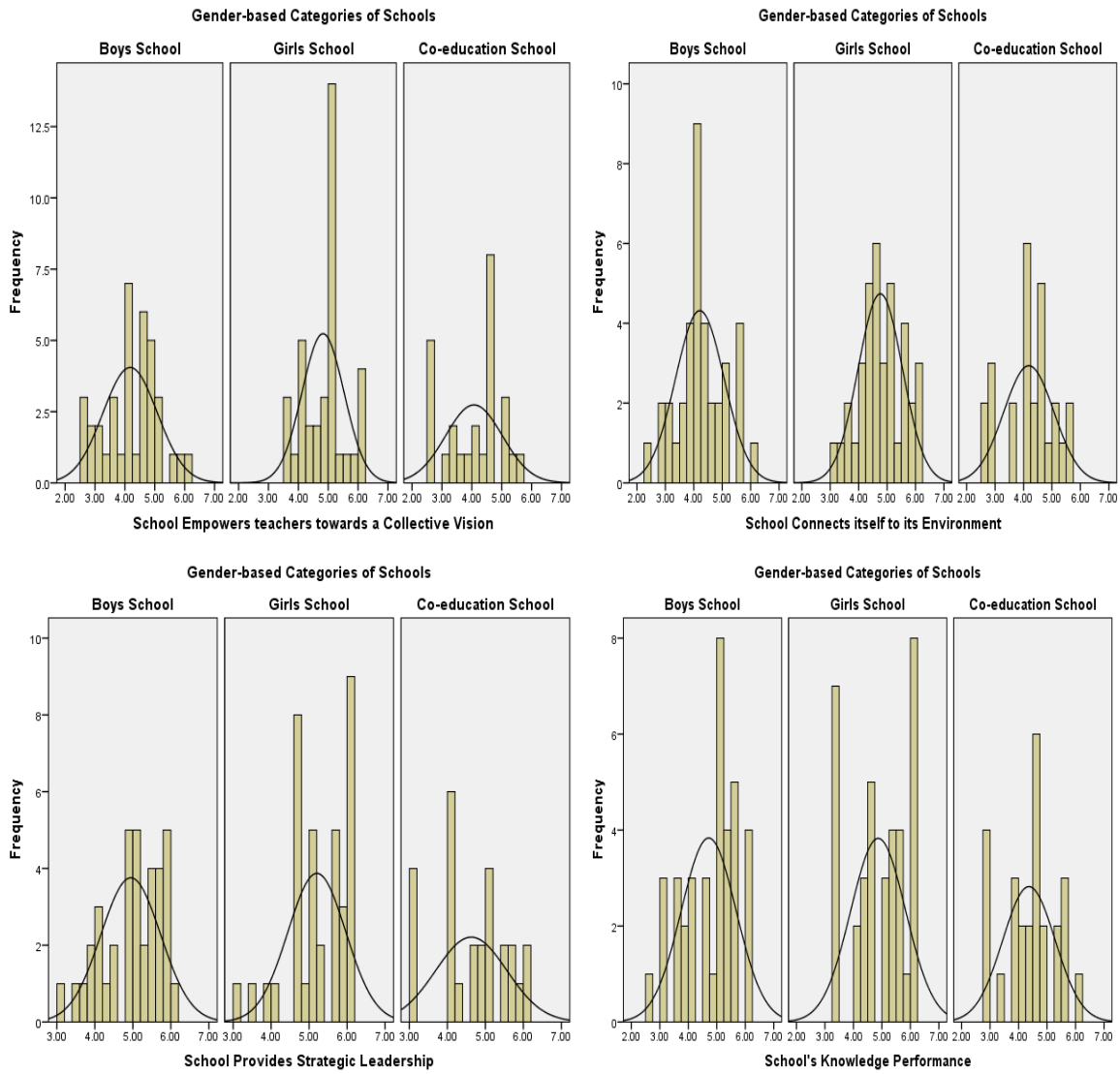
Figure 1: Shapes of the Responses


Gender-based Categories of Schools
Boys School
Girls School
Co-education School
Frequency
School Creates Conitinuous Learning Opportunities for Teachers


Gender-based Categories of Schools
Boys School
Girls School
Co-education School
Frequency
School Promotes Inquiry and Dialogue


Gender-based Categories of Schools
Boys School
Girls School
Co-education School
Frequency
School Encourages Collaboration and Team Learning


Gender-based Categories of Schools
Boys School
Girls School
Co-education School
Frequency
School Creates Systems to Capture and Share Learning



Summary of Hypotheses Testing

Figure 2 presents the summary of the hypotheses testing. It can be noted that the distribution of responses from the gender-based categories of schools were significantly different in six out of the seven dimensions of a learning organization. Therefore, the null hypotheses HO_1 (ρ = .000), HO_2 (ρ = .004), HO_3 (ρ = .002), HO_5 (ρ = .001), HO_6 (ρ = .006) and HO_7 (ρ = 0.039) were rejected. However, the distribution of responses from the gender-based categories of schools was not significantly different in one dimension of a learning organization as well as the knowledge performance of school. Thus the null hypotheses HO_4 and HO_8 ($\rho > 0.05$) were retained (See Figure 2).

Figure 2: Summary of Hypotheses Testing

	Null Hypothesis	Test	Sig	Decision
HO_1	The distribution of *the school creates Continuous learning opportunities for teachers* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.000	Reject the null hypothesis
HO_2	The distribution of *the school promotes inquiry and dialogue among teachers* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.004	Reject the null hypothesis
HO_3	The distribution of *the school encourages collaboration and team learning for teachers* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.002	Reject the null hypothesis
HO_4	The distribution of *the school creates systems to capture and share learning* is the same across gender-based categories (girls', boys' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.092	Retain the null hypothesis
HO_5	The distribution of the *school empowers people towards a collective vision* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.001	Reject the null hypothesis
HO_6	The distribution of *the school connects itself to its environment* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.006	Reject the null hypothesis
HO_7	The distribution of *the school provides strategic leadership for learning* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.039	Reject the null hypothesis
HO_8	The distribution of *the school's knowledge performance* is the same across gender-based categories (boys', girls' and co-education) of schools.	Independent-Samples Kruska-Wallis Test	0.106	Retain the null hypothesis

Asymptotio significances are displayed. The significance level is .05.

To answer the research question $RQ_{1.1}$ "Do the gender-based categories of private schools in Pakistan differ from each other in the dimensions of a learning organization?" it was able to be concluded that the gender-based categories of selected private schools in Pakistan were significantly different in six out of seven dimensions of a learning organization.

Mean Ranks

Table 3 presents the mean ranks of gender-based categories of schools. It is noticeable that the selected girls' private school has the highest mean ranks for all seven dimensions as well as for the outcome of a learning organization. On the other hand, except for two dimensions and the outcome of a learning organization, the boys' selected private school has the lowest mean ranks for all the dimensions of a learning organization.

To answer the research question $RQ_{1.2}$ "Which of the gender-based category of selected private schools is better in terms of organizational learning orientation?" it can be concluded that the girls' school can be ranked first and the boys' school last in terms of the organizational learning

orientation prevailing within the selected private schools of Pakistan (see table 3 below).

Table 3: Mean Ranks of Gender Based Categories of Private Schools

Dimensions of a Learning Organization	Gender-Based Categories of Schools (Mean Rank)		
	Boys Schools (N=37)	Girls Schools (N=37)	Co-education Schools (N=26)
School Creates Continuous Learning Opportunities for Teachers	38.53	66.69	44.5
School Promotes Inquiry and Dialogue	39.74	62.12	49.27
School Encourages Collaboration and Team Learning	38.18	61.47	52.42
School Creates Systems to Capture and Share Learning	43.36	58.04	49.92
School Empowers teachers towards a Collective Vision	43.19	64.39	41.13
School Connects itself to its Environment	42.97	62.59	44.00
School Provides Strategic Leadership	49.00	59.07	40.44
School's Knowledge Performance	51.55	56.30	40.75

Post Hoc Tests

The Rank Table (Table 3) indicates the difference between gender-based categories of schools in the dimensions of a learning organization. It does not indicate which groups differ statistically and which of them contribute significantly to the overall differences. To determine which groups were statistically different, post hoc Mann-Whitney tests were required. Since there were three groups (boys' school vs. girls' school, boys' school vs. co-education school and girls' school vs. co-education school), three post hoc tests were conducted (Walters, 2011).

Table 4 highlights the Mann-Whitney U tests conducted to identify differences between the three gender-based selected private schools. The table indicates that the boys' and girls' schools differ statistically in six out of seven dimensions of a learning organization. Similarly, the girls' and the co-education schools differ significantly in five out of seven dimensions as well as in knowledge performance of a learning organization.

Therefore, to answer RQ $_{1.3}$ "Which of the gender-based categories of selected private schools in Pakistan contribute significantly in the overall difference between the schools?", it can be concluded that the differences between boys' and girls', as well as girls' and co-education schools, make significant contributions to the overall differences between gender-based categories in relation to the organizational learning prevailing within them. The boys' and co-education schools were not statistically different in terms of organizational learning orientation prevailing within them (See Table 4a, 4b, 4c).

Table 4b: Difference between Gender-based Categories of Schools

Post Hoc Test 2: Difference between Boys and Co-education Schools								
Mann-Whitney U	423	372	350	403	450	470.5	393.5	370.5
Wilcoxon W	1126	1075	1053	1106	801	1173.5	744.5	721.5
Z	-0.812	-1.528	-1.834	-1.092	-0.434	-0.147	-1.226	-1.546
Asymp. Sig. (2-tailed)	0.417	0.127	0.067	0.275	0.664	0.883	0.22	0.122

Table 4c: Difference between Gender-based Categories of Schools								
Post Hoc Test 3: Difference between Girls and Co-education Schools								
Mann-Whitney U	267	340	400	388	268.5	301.5	307	338
Wilcoxon W	618	691	751	739	619.5	652.5	658	689
Z	-2.994	-1.974	-1.135	-1.305	-2.978	-2.512	-2.444	-2.005
Asymp. Sig. (2-tailed)	0.003	0.048	0.257	0.192	0.003	0.012	0.015	0.045

Conclusion

The current research analysed differences between the gender-based categories of schools in three selected private schools of Karachi. The research question RQ1 "Do the gender-based categories of private selected schools in Pakistan differ from each other in terms of organizational learning orientation?" was subdivided in three subsidiary questions which were statistically analysed. The result revealed that statistically significant differences exist between boys', girls' and co-education schools in six out of seven of the dimensions of a learning organization. It was also concluded that the girls' private schools can be ranked first and the boys' schools last when the three gender-based categories were compared in terms of organizational learning prevailing within them. Lastly, the differences between boys' and girls' as well as between girls' and co-education schools contribute significantly to the overall differences between the gender-based categories of schools in the private sector.

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Appendix A

Dimensions of the Learning

School Questionnaire

Developed by

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A learning school is one that learns continuously and transforms itself . . . . Learning is a continuous, strategically used process — integrated with and running parallel to work.

In the last decade, schools have experienced wave after wave of rapid transformation as global markets and external political and economic changes make it impossible for any business or service-whether private, public, or nonprofit-to cling to past ways of doing work. A learning school arises from the total change strategies that institutions of all types are using to help navigate these challenges. Learning schools

proactively use learning in an integrated way to support and catalyze growth for individual workers, teams and other groups, entire schools, and (at times) the institutions and communities with which they are linked.

In this questionnaire, you are asked to think about how your school supports and uses learning at an individual, team and school level. From this data, you and your school will be able to identify the strengths you can continue to build upon and the areas of greatest strategic leverage for development toward becoming a learning school.

Please respond to each of the following items. For each item, determine the degree to which this is something that is or is not true of your school. If the item refers to a practice which rarely or never occurs, score it a one [1]. If it is almost always true of your schools or work group, score the item as a six [6].

[1]

There are no right or wrong answers. We are interested in your perception of where things are at this time.

Thank you for completing this survey.

School's learning at Different Levels

Instruction: Place a tick (√) in an appropriate box provided against each statement below.

S #	**Statements**	**Almost Never → Almost Always**					
School's Learning at Individual Level		**1**	**2**	**3**	**4**	**5**	**6**
Ind1_1	In my school, teachers openly discuss mistakes in order to learn from them.						
Ind1_2	In my school, teachers identify skills they need for future work tasks.						
Ind1_3	In my school, teachers help each other learn.						
Ind1_4	In my school, teachers can get money and other resources to support their learning.						
Ind1_5	In my school, teachers are given time to support learning.						
Ind1_6	In my school, teachers view problems in their work as an opportunity to learn.						
Ind1_7	In my school, teachers are rewarded for learning.						
Ind2_1	In my school, teachers give open and honest feedback to each other.						

Ind2_2	In my school, teachers listen to others' views before speaking.						
Ind2_3	In my school, teachers are encouraged to ask "why" regardless of rank.						
Ind2_4	In my school, whenever teachers state their view, they also ask what others think.						
Ind2_5	In my school, teachers treat each other with respect.						
Ind2_6	In my school, teachers spend time building trust with each other.						
School's Learning at Team or Group Level		**Almost Never → Almost Always**					
		1	**2**	**3**	**4**	**5**	**6**
Team1	In my school, committees (e.g. curriculum development committee, professional development committee, helping society, school event committees, scientific society, cultural society etc) have the freedom to adapt their goals as needed.						
Team2	In my school, committees treat members as equals, regardless of rank, culture, or other differences.						
School's Learning at Team or Group Level		**Almost Never → Almost Always**					
		1	**2**	**3**	**4**	**5**	**6**
Team3	In my school, committees focus both on the group's task and on how well the group is working.						
Team4	In my school, committees revise their thinking as a result of group discussions or information collected.						
Team5	In my school, committees are rewarded for their achievements as a team/group.						
Team6	In my school, committees are confident that the school will act on their recommendations.						
School's Learning at School Level		**Almost Never → Almost Always**					

		1	2	3	4	5	6
Sch1_1	My school uses two-way communication on a regular basis, such as suggestion systems, or open meetings.						
Sch1_2	My school enables teachers to get needed information at any time quickly and easily.						
Sch1_3	My school maintains an up-to-date data base of teacher skills.						
Sch1_4	My school creates systems to measure gaps between current and expected performance.						
Sch1_5	My school makes its lessons learned (learning from past experiences) available to all teachers.						
Sch1_6	My school measures the results of the time and resources spent on professional learning.						
Sch2_1	My school recognizes teachers for taking initiative.						
Sch2_2	My school gives teachers choices in their work assignments.						
Sch2_3	My school invites teachers to contribute to the school's strategic directions.						
Sch2_4	My school gives teachers control over the resources they need to accomplish their work.						
Sch2_5	My school supports teachers who take calculated risks.						
Sch2_6	My school builds strategic directions across different levels and work groups.						
Global1_1	My school helps teachers balance work and family.						
Global1_2	My school encourages teachers to think from a global perspective.						
Global1_3	My school encourages everyone to bring the students' views into the decision making process.						
School's Learning at School Level		**Almost Never →**					**Almost Always**

		1	2	3	4	5	6
Global1_4	My school considers the impact of decisions on student morale.						
Global1_5	My school works together with the outside community to meet mutual needs.						
Global1_6	My school encourages teachers to get answers from across the school when solving problems.						
Global2_1	In my school, headmaster/headmistress generally supports requests for learning opportunities and training.						
Global2_2	In my school, headmaster/headmistress share up to date information with teachers about school directions.						
Global2_3	In my school, headmaster/headmistress empower others to help carry out the school's directions.						
Global2_4	In my school, headmaster/headmistress mentors those they lead.						
Global2_5	In my school, headmaster/headmistress continually looks for opportunities to learn.						
Global2_6	In my school, headmaster/headmistress ensures that the school's actions are consistent with its values.						

Measuring Learning School Results at the School Level

In this section, we ask you to reflect on the relative performance of the school. You will be asked to rate the extent to which each statement is accurate about the school's current performance when compared to the previous year. There are no right or wrong answers. We are interested in your perception of current performance. For example, if the statement is very true of your school, place a (√) under 6 in the answer section provided.

S#	School's Performance	Almost Never → Almost Always					
		1	2	3	4	5	6
Perf1*	In my school, teacher and student satisfaction is greater than last year.						
Perf2	In my school, the number of suggestions implemented is greater than last year.						

Perf3	In my school, the number of new programs or services is greater than last year.						
Perf4**	In my school, the number of professionally qualified teachers compared to the total number of teachers is greater than last year						
Perf5	In my school, the percentage of total spending devoted to technology and information processing is greater than last year.						
Perf6	In my school, the number of teachers who have learned new skills is greater than last year.						
*Statements concerning financial performance i.e 44 to 49 in the original DLOQ were excluded as they are irrelevant for the this research context. ** Adapted from the original DLOQ by Watkins and Marsick (1997).							

Additional Information

Instruction: Place a tick (√) in an appropriate box provided against each item.

a. Your experience as headmaster/headmistress or teacher

1. 0-2 years ☐
2. 2 ½ -5 years ☐
3. 5 ½ -10 years ☐
4. More than 10 years ☐

b. How many teachers are in your school?

1. 1 - 10 ☐
2. 11-20 ☐
3. 21-30 ☐
4. 31-40 ☐
5. 41 or more ☐

c. How many students are in your school?

1. 100-300 ☐
2. 301-600 ☐
3. 601-900 ☐

4. 901-1200
5. 1201 or more

d. Type of school?

1. Girls ☐
2. Boys ☐
3. Co-education ☐

e. School's overall result in (percent) by the end of the previous year.

1. 80 – 100 ☐
2. 70 – 79 ☐
3. 50 – 69 ☐
4. 40 – 59 ☐
5. Below 40 ☐

Code number of the respondent: ☐

Designation of the responded: _____

School: _____