

Impact of District Ranking System on Students' Achievement Score in PEC Exams

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Abstract *Data about functioning capability of schools and students' achievement is collected through program monitoring and implementation unit (PMIU). It shows satisfactory trends about the performance of schools and students' achievement scores in PEC exam. But, its correctness is questionable in many aspects because of having no auditing system or third-party validation. This paper investigates the influence of district ranking system on students' achievement score in PEC exam by using cheating in PEC exam as a mediator. The data were collected from 300 students who recently passed PEC exam from 10 schools by using a questionnaire developed by the researchers. 10 focus group interviews were also conducted from teachers of these schools. Hence mixed method approach was used in this study. Data was analyzed in SPSS and PROCESS. The results of the study reveal that district ranking system has significant positive influence on students' achievement score in PEC exam. District ranking system also has significant positive impact on cheating in PEC exam. Furthermore, cheating in PEC exam partially mediates the relationship between district ranking system and students' achievement score. The results suggest that quantitative target achieving behavior overlooks other important aspect of schools' performance and focus only on few indicators. Additionally, monitoring system and PEC assessment system have failed to provide accurate, valid, reliable, trustworthy and practical data over school and students' performance. These performance measuring systems need consistent audit and third-party validation to ensure the correctness of data.*

Key Words:

District Ranking System, Cheating in PEC Exam, Students' Achievement Score

Introduction

District Ranking System (DRS) has become the central point of attention for

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educational administration in all districts of Punjab. Most of the efforts in improving education at district level center on the target achievement of district ranking system indicators including teachers' presence, students' presence, school facilities level, district administration visits and non-teaching staff presence. Districts performance indicators are monitored on monthly basis and quarterly ranking is published (PESRP, 2018). Annual performance is also measured through PEC exam at primary and elementary level. Monthly performance of districts should reflect through annual performance in terms of students' achievement in PEC exam. However, the auditing of performance data used to create district ranking is not seen in these bureaucratic activities of data collection on performance indicators (AlifAilaan, 2017). The activity of auditing performance data is not merely involves verifying accuracy of data but it allows educational administration to evaluate whether performance measures are providing meaningful and useful information about performance indicators including students achievement or not. It also provides a greater understanding of processes and programs and test for accuracy, reliability and comparability of data. If performance measurement system fails to provide accurate information, the cost in terms of time, effort and training would be useless (Bohte & Meier, 2000; Bouckaert & Peters, 2002).

Now a days, the use of performance indicators to manage and improve performance in education is so wide spread across school education and higher education that it is difficult to imagine educational life without them. Policy-makers in the field of education always collected data on functioning capability of educational system to draw monitor system, identify trends and promote changes. (Dalton, 2017; Muriel & Smith, 2011; Ozga, 2003). It spurs political competition on government delivery of education, highlight disparities between provinces and within provinces (AlifAilaan, 2017).

With an objective of access, quality and governance in education sector, the government of Punjab in 2003, created the Punjab Education Sector Reform Program (PESRP) under the department of education. In 2010, the Punjab School Reforms Roadmap was initiated. It has shown greater efficiency. Under this unit government of Punjab provided schools with the new textbooks, recruit new teachers, collect data to measure the effectiveness of roadmap and provide scholarships for female students to fill the gender gap. PESRP created (PMIU) Program Monitoring and Implementation Unit. It is responsible to oversee it to support the roadmap. It performs duties including data collection to teacher training. PMIU collect quantitative data about different indicators on monthly basis and manage it. Districts are ranked on the basis of data provided by PMIU("PERSP,"). Quantifiable indicators appear to be straightforward and reliable and thus have greater importance and significance for public and policy-makers. These are easy to translate into targets and their progress shows trends over time in different indicators. However, their reliability and

straightforwardness are open to questions. They may be inadequate in describing the complexities of real world.

Empirical evidences show ambiguity in the data and places many questions on the performance of DRS and PEC and their relationship to students' achievement score (AS). First, quarterly rankings of different districts show asymmetrical trends (PESRP, 2015, 2016a, 2016b, 2016c, 2016d, 2017a, 2017b, 2017c, 2017d, 2018). The district capturing top position in one quarter may go at lowest level in the next quarter. On the other hand a district capturing lowest level in one quarter may achieve top position in the next quarter. While the nature of indicators measuring rankings of districts are not supported logically to these results. The overall system may not able to change all the indicators within a quarter. For example, what happen to the infrastructure and facilities of a top performing district within a quarter that it goes to lowest level in the next quarter? The same is with the other indicators. Teachers' presence, students' presence, non-teaching staff presence are in fact a matter of school culture. The facilities level at school has positive correlation with students' admission, presence and retention (AlifAilaan, 2017). These can't be changes within a single quarter. It seems a dysfunction and organizational cheating on behalf of some part of data collection process.

Secondly, there is a difference between the results of DRS and PEC results. Top performing districts in DRS performed low in PEC exam. On the other hand, many low performing districts appeared as top performer in PEC exam. For example in the district ranking issued by PERSP in academic year 2015-16 Okara was top performing (PESRP, 2015, 2016c, 2016d) but it performed Low at 53.2% in PEC exam in that year (PEC, 2016). On the other hand Layyah, Attock was middle performing but they performed as top districts at 55% and 64% respectively in PEC exam (PEC, 2016). The same trend was seen the year before. District Muzaffargarh was underperforming district in ranking system but it performed as top performer district in PEC exam at 64.67% (PEC, 2015). This difference creates confusion. How is possible for a district performing as top performer throughout year becomes under performer in the final assessment. It can be acceptable for some exceptional cases, but the trend is common in many districts.

Thirdly, there is a difference between PEC results and BISE's results. In 2014, the PEC result of 8th class in Punjab was 72% (PEC, 2016) but the same class result of 9th class next year in 2015 was 39.86% (BISE(Sahiwal), 2015). The same trend was observed in the next year. In 2015 the PEC result of 8th class was 74% (PEC, 2015) but the same class scored 51.43% (BISE(Sahiwal), 2016) and 50.93% (BISE(Lahore), 2016) next year in 9th class. Similarly in 2016 the PEC result of 8th class was 81% (PEC, 2016) in the Punjab but the same class result of 9th class next year in 2017 was 53.21% (BISE(Sahiwal), 2017) and 54.21% (BISE(Lahore), 2017). In 2017 the PEC result was 94.55% (PEC, 2017)

and in 2018 it was 95.72%(PEC, 2018) but the 9th class result is not expected so. What could be the reasons of this difference? Either both are different styles of students' assessment or one system is lenient than other and produce greater results than other.

Fourthly, the deteriorating learning level of students also place questions on the validity of data provided by DRS and PEC. As we see the performance of DRS indicators increasing including students' enrolment but the learning level is decreasing every year (ASER, 2015, 2017). ASER report in 2015 revealed that 30% of 5th class students could not read a story from 2nd class Urdu while in 2016 this percentage raised to 35% as compared to last year. Similarly, the percentage of class three students who could not read a story in Urdu rose from 72% to 73% in 2016 as compared to 2015. English learning level also deteriorated in 2016 with 43% of students of 5th class were not able to read sentences from 2nd class book as compare to 40% in 2015. The report also revealed that percentage of class three students who could not read 2nd class level sentences rose from 77% to 80% in 2016 as compared to 2015. Arithmetic learning level showed slight increase. In 2015, 41% of 5th class students could not do two digit divisions while in 2016 this level decreased to 40%. At the same time, in 2016, 77% of three class students were not able to do two digit divisions as compared to 80% in 2016 (ASER, 2015, 2017; Sheikh, 2017). We can see a gradual increase in Students' achievement scores in PEC exams but learning level in every field is deteriorating. The difference shows that the assessment data provided by PEC is suspicious.

Fifthly, the students at primary and elementary level openly admit that the cheating in the PEC exam has become both pervasive and expected. This is going to become a mindset of majority of students that they do not need to work hard to promote in their exams. It's the duty of teachers to facilitate them for cheating during exam. Senior students persuade their juniors for this act. Majority of students admit to cheat regularly; however, for a substantial minority the behavior is claimed only for once. Additionally, it was witnessed at PEC centers that teachers were involved in many means of cheating at their disposal to help students at PEC centers (Khan, 2018).

Lastly, the difference of results between PEC and BISE's results has created a state of confusion in secondary school teachers. They are regularly asked by their reporting authorities about the low level of results produced by them as compare to PEC. More over a situation of tension is exist between these two tiers. Secondary school teachers are not seen willing to accept students on the basis of PEC results. They faced a major problem at the time of subject selection for the students on the basis of score achieved in PEC exam.

Availability of reliable and valid data about functioning capability of schools and students' achievement through these available assessment systems seems difficult at this point of time. Keeping in mind above discussion I can

hypothesize that increased rate of students' achievement in PEC exam is due to lenient PEC assessment system and this relaxation in PEC exam is due to increased focus on the achievement of quantities performance indicators for district ranking. However, we have little empirical evidence about how much is contributed through cheating. Despite of having much importance very little literature is available on this issue. So, this study would fill this gap by providing empirical evidences about this issue and would provide a base line for further investigation in this field to explore different aspects of auditing data for performance measurement.

Objective of Study

General objective of this research was to investigate the mediating role of cheating in PEC exam (CPE) between district ranking system (DRS) and students' achievement score (AS).

District Ranking System and Students' Achievement Score:

Districts' performance is measured on different indicators which includes teachers' presence, students' presence, school facilities, school cleanliness, district administrations visits, non-teaching staff presence etc. ("School Education Department,"). School performance indicators have direct impact on students' performance (AlifAilaan, 2017). Teachers' presence and absenteeism level impacted students' performance (Fuller, 1987). Many studies have been conducted on assessing students' regularity and achievement. The results of different studies reveal that regular students perform well as compare to less punctual students in exams (Roby, 2004; Sheldon & Epstein, 2004). Facilities at school not only impacts students' achievement but also other factors including teachers' presence and students' presence (AlifAilaan, 2017). Furthermore, students need clean, safe, healthy and appropriate environment for learning.

In the pursuit of such an environment school facility level matters a lot and presence of appropriate nonteaching staff is also key requirement to maintain such environment (Earthman, 2002; Picus, Marion, Calvo, & Glenn, 2005; Uline & Tschannen-Moran, 2008). In the end, an effective command and control system is required to manage all these indicators to take part effectively in improving students' achievement score. Enough literature is available about the efficiency of good administration on students' achievement (Leithwood & Mascall, 2008; Nettles & Herrington, 2007; Waters, Marzano, & McNulty, 2003). Therefore, it can be hypothesized:

H₁: District Ranking System has a positive relationship with students' achievement score.

District Ranking System and Cheating Trend in PEC Exam

Performance measures on quantitative indicators have always been a problem for management as outcomes are seems dramatically increased. Artificial results are produced by disguising actual performance. As we see in DRS that districts are measured on different quantitative measured indicators. It provides an opportunity for schools to artificially show increased results instead of actual. Available studies on this issue show a relationship between performance measures and cheating in exam. To meet the quantitative targets teachers try to avoid actual performance by applying different including supporting cheating in exam(D. L. McCabe, Treviño, & Butterfield, 2001). Additionally, the bonus for position holder districts also contributed to this issue(Glewwe, Ilias, & Kremer, 2010). Teachers create artificial results by different techniques including giving easy tasks to students, by appearing only shining students in exams, telling answers of anticipated question to students and helping them on exam day etc (Anderman & Midgley, 2004; Butler & Shibaz, 2008; D. McCabe, 2005). Therefore, we designed a directional hypothesis:

H₂: District Ranking System has a positive relationship with students' cheating in PEC examination.

Cheating in PEC Examination and Students' Achievement

Cheating is all about to camouflage actual results and decay artificial results to achieve academic targets whether it is taken by students themselves or supported by institutions. The underlying intention behind cheating is to increase students' achievement score to achieve set of performance targets (D. McCabe, 2005; Murdock & Anderman, 2006). As the teachers have to meet high academic goal in terms of achievement score in annual results. In case of negative results teachers have to face show-cause notices for their poor performance. To avoid such departmental consequences, they adopt every mean at their disposal to help students in examination to cheat. Hence they produce increased results as compare to actual performance (Khan, 2018). Therefore, we designed directional hypothesis:

H₃: Cheating in PEC examination has a positive relationship with students' achievement.

Cheating in PEC Examination as a Mediator of District Ranking System and Students' Achievement

District Ranking System measures performance of districts by setting higher level goals on different performance indicators. Goal setting has been a

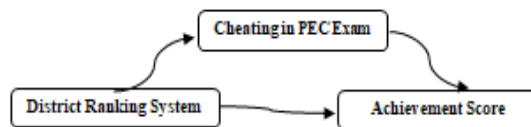
controversial issue between organizational behavior experts. There have been two different schools of thought. First group believe goal setting as a catalyst of increased performance by motivating employees, directing their attention to targets and increased their perseverance (Locke & Latham, 2002; Welsh & Ordóñez, 2014). While second body of research advocate the dark side of goal setting by linking high performance goals to unethical behavior (Barsky, 2008; Jensen, 2003; Ordóñez, Schweitzer, Galinsky, & Bazerman, 2009; Schweitzer, Ordóñez, & Douma, 2004).

Last few years showed a tremendous increase in the achievement score in PEC exams (PEC, 2015, 2016, 2017, 2018). Either this increase is due to increased students' performance or due to some other factors? Secondly DRS showed asymmetrical trends in quarterly and yearly ranking for different districts about performance indicators (PESRP, 2015, 2016a, 2016b, 2016c, 2016d, 2017a, 2017b, 2017c, 2017d, 2018). This situation is also questionable and seems that provided data is manipulated and wrongly interpreted. Goals also creates a culture of competition rather than cooperation (Ordóñez et al., 2009). As we can see a difference in PEC results and Secondary school results. Huge difference shows lack of collaboration and integration. DRS rely heavily on goal setting and erode the foundation of cooperation between different stages of education. Students passed with the help of unethical means in PEC exams create serious problems for the teachers of next stage.

This culture of target achievement is seen everywhere in the schools. This competition is also seen in PEC exams to achieve higher numbers at school level as well as at district level to achieve specific targets. Therefore, we could develop a directional hypothesis that:

H₄: Cheating in PEC examination mediates the relationship between District Ranking System and students' achievement.

Methodology



Population, Sample and Data

Our population for this study was all students who appeared in PEC exam in the current academic year 2017-18. Total 2,549,680 students appeared in this exam from all 37 districts of Punjab belonging to both private and public schools. Out

of total 1,480,366 students were from 5th class and 1,069,314 students were from 8th class (Sheikh, 2018).

As we observed that six class students who had recently passed PEC exam were not mature enough to answer the survey form. Therefore, we decided to target only 9th class students who recently appeared in the PEC exam. So, we collected data from ten randomly selected high/ higher secondary schools out of which five were boy schools and five were girl schools. 30 randomly selected students from every school participated in the survey. Hence, 300 survey forms were filled from 10 schools.

Similarly, for qualitative assessment we conducted 10 focus group interviews from each school. 6 teachers were randomly selected from each school for focus group. Quantitative data was analyzed through SPSS, mediation was calculated by PROCESS. Qualitative data was analyzed manually from field notes prepared during focused group discussions.

Approach

This study followed a mixed method approach (i.e. explanatory sequential) to express results in a better way. Mixed method approach is more suited to educational research (Mertens, 2014) because it produce more valid results of a research model and gain a deep and rich understanding of phenomenon (Creswell & Creswell, 2017; Johnson & Onwuegbuzie, 2004; Leech & Onwuegbuzie, 2009; McMillan & Schumacher, 2010).

Research Tool

This study used two types of questionnaire. First, a survey form was designed by the researchers to investigate 5 indicators of district ranking system (DRS) and cheating in PEC exam (CPE). Survey was comprised of 45 items. Out of totals, 2 items used for demographic information, 01 for achievement score in PEC exam, 30 items were used to investigate DRS and 12 items were used to investigate PEC assessment system. Students' achievement score (AS) was also measured by this survey form by asking their achieved marks in PEC exam.

Secondly, a semi-structured questionnaire was used for focused group interviews. We used a hard copy approach to collect data from students because email survey doesn't provide high response rate (Mertens, 2014).

Analysis

Interview Results

We conducted 10 focus group interviews from each school to confirm validity of the model and get rich understanding of the phenomenon under study. The

interviews helped us to explore and elaborate the relationship between DRS, CPE and AS. The interview was semi structured in nature and involved following questions.

1. What is your opinion regarding educational performance-based rankings of districts issued quarterly?
2. What is your opinion about trustworthiness of data used for district ranking?
3. Do you think there is any relationship between District Ranking System and students' achievement?
4. What is your opinion regarding increased pass percentage in PEC exams?
5. Why cheating is supported in PEC exams?

Answer 1: The first common reaction to this question was that present ranking system is useless in the sense that it does not measure educational performance in its true sense. It only measures some hard aspects like students' presence, teachers' presence, facilities level etc. It doesn't measure soft aspects like teaching quality, teaching culture, school culture, motivational level of teachers, attitude etc. Secondly, it set some unachievable standards in the present scenario about all indicators of DRS. For example, students' attendance more than 92%; more than 100 percent UPE targets. Seems funny but it happens in reality. Therefore, teachers deal with the situation by providing fake data.

Answer 2: It depends on nature of variable. So far as the level of facilities at school level is concerned, provided data is almost correct. On the other hand, schools provided data regarding different indicators including UPE survey, teachers' presence, students presence, LND test, non-teaching staff presence and district administrations visits is controversial. Less no of prospective students are mentioned in surveys. Students' presence is shown more than 90% but it doesn't happen in reality. Teachers also avail proxy casual leaves and short leaves. District administration authorities rarely visit schools. They just call headmasters to their offices with the required record and signed it there.

Answer 3: if we look at the real picture, ranking system indicators don't have any impact on students' achievement right now. It doesn't mean that the indicators have nothing to do with school performance but it means that their application is not appropriate in term of target setting, coaching, mentoring and facilitating to achieve them. As a result schools and even district authorities rely on fake data provided to achieve the targets of district ranking system indicators. So this habit has introduced an overall culture of organizational cheating and exam cheating too. Students' achievement score has been increasing for few years but it didn't happen due to achievement of ranking system indicators but due to increase in cheating in PEC exam.

Answer 4: Majority opinion regarding increase passing ratio of students is that it has nothing to do with students' performance. It actually due to the fact that PEC exams are managed at every stage including exam centers setting, invigilators management, cheating, paper checking etc. every step is managed to support gain maximum achievement rate. The most tragic thing is that monitoring staff is also involved in the whole procedure. We can say that overall education policy is to ruin the educational future of the whole nation.

Answer 5: Collective point of view about cheating in exam is that it has become part of exam culture to achieve big targets. It is fact that low income percentile of population is studying in public schools. Their priority is not education. They have many other problems to face including food and shelter. Having students of these type public school teachers cannot achieve high targets without supporting cheating. Otherwise in case of failure to achieve set targets teachers have to face departmental punish under PEEDA (Punjab Employees Efficiency, Discipline and Accountability) act.

Survey Results

Before getting into hypotheses testing we performed numerous screening tests including normality test and variance inflation test (VIF) etc. to achieve more statistically fruitful results.

Mean, S.D. and Normality

We performed skewness and kurtosis tests in SPSS to assess the normality in the data. The results shows that data is normally distributed as the values for each construct lies within the acceptable range ± 2 as recommended by (George & Mallery, 2010). Additionally, DRS has mean= 2.81 and SD=0.29, CPE has mean=2.99 and SD=0.35 and Achievement Score has mean=315.59 and SD=58 respectively.

Table 1. Mean, S.D. and Normality

	Mean	S.D.	Skewness	Kurtosis
DRS	2.81	.29	.33	-.90
CPE	2.99	.35	.40	-.68
Achievement Score	315.59	58.62	-.17	-.94

Multicollinearity

The existence of multicollinearity in the data indicates that IV don't explain an exclusive variance when the other IVs also tested in a specific model thus

variance explained by variables is overlapping. We performed VIF for achievement score, CPE and DRS and ran a multilevel regression test. The results don't show presence of multicollinearity issue in the data and each variable explains a unique variance in achievement score. The results shows all cutoff values for VIF are below ten as recommended by Hair (2010) and tolerance values for all factors are above 0.10 and closed to 1.0 indicating good results (Anwar, Khan, & Khan, 2018).

Reliability

Cronbach's Alpha was used to measure the internal consistency and the quality of being trustworthy collected data. Reliability value greater than 0.70 is recommended good (Pallant, 2013). Our results indicate all values greater than 0.70 showing an adequate internal consistency and reliable results. Cronbach's Alpha for the applied tool was .83 for CPE which had 10 items, and it was .87 for DRS which had 32 items.

Correlation

We used correlation here to provide earlier support to the hypothesis proposed in this study. The Pearson correlation results illustrate a statistically significant positive correlation among the variables. All determinants of DRS have positive correlation with CPE and AS. DRS has significant positive correlation with AS ($r=0.777$); CPE has significant positive correlation with AS ($r=0.680$) and DRS also has significant positive correlation with CPE ($r=0.791$). All values are significant at 0.01 level of significant. The correlation between all the factors is less than 0.08 which indicate that there is no issue of multicollinearity exists between different factors (Alin, 2010).

Table 2. Correlation Coefficients

	TP	SP	SF	SC	DAV	NTSP	CPE	DRS
SP	.476**	1						
SF	.502**	.555**	1					
SC	.508**	.482**	.538**	1				
DAV	.488**	.578**	.538**	.593**	1			
NTSP	.617**	.518**	.515**	.559**	.520**	1		
CPE	.549**	.588**	.641**	.606**	.672**	.651**	1	
DRS	.766**	.769**	.779**	.784**	.794**	.795**	.791**	1
AS	.595**	.595**	.603**	.601**	.614**	.635**	.680**	.777**

** . Correlation is significant at the 0.01 level (2-tailed).

Mediation

In this study we used “PROCESS” developed by Andrew F. Hayes to test the mediation. It does this simultaneously and don't need to perform each step separately (Bolin, 2014) as compared to the four steps proposed by (Baron & Kenny, 1986). Table 3 shows the influence of DRS on SA while ignoring the mediator (CPE). R² value indicates that 60.4% variance in the model can be explained by DRS. Coefficient value for this model is 4.92 and P=<0.01 shows that model is significant at five percent level of significance thus, supporting H1.

Table 3. District Ranking System and Students' Achievement Score

	Coeff.	S.E.	t	P	LLCI	ULCI	R²
DRS	4.9167	.2306	21.3177	.0000	.4.4628	5.3706	.6040

Table 4 shows the influence of DRS on CPE. R² value indicates that 62.6% variance in the model can be explained by DRS. Coefficient value for this model is 0.298 and P=<0.01 shows that model is significant at five percent level of significance thus, supporting H2. The results from table 3 and 4 also provide initial support for testing mediation in the model.

Table 4. District Ranking System and Cheating in PEC Exam

	Coeff.	S.E.	t	P	LLCI	ULCI	R²
DRS	.2987	.0134	22.3377	.0000	.2724	.3250	.6261

Table 5 depicts major results of the study, either CPE fully or partially mediates the relationship between DRS and AS. Coefficient value for CPE is 2.9 and P=<0.01. Similarly, Coefficient value for DRS in the presence of CPE is 4.05 and P=<0.01. The results reveal that after controlling for the mediator, DRS is again a significant predictor of AS at 5% level of significance. Therefore, it can be concluded that CPE partially mediates the relationship between DRS and AS thus supporting hypothesis 4.

Table 5. Mediating Role of Cheating in PEC Exam between District Ranking System and Students' Achievement Score

	Coeff.	S.E.	t	P	LLCI	ULCI	R²
CPE	2.8994	.9867	2.9386	.0036	.9576	4.8411	.6151
DRS	4.0507	.3724	10.8763	.0000	3.3178	4.7837	

Table 6 provides the total, direct and indirect effect of DRS on AS. Total effect of DRS on AS is 4.92; direct effect of DRS on AS is 4.05 and indirect effect of DRS on AS is 0.87 with a 95% confidence interval. LLCI and ULCI didn't include any zero value; that is to say that effect was significantly greater than zero at 5% level of significance.

Table 6. Total, Direct and Indirect Effects

	Effect	LLCI	ULCI
Total Effect	4.9167	4.4628	5.3706
Direct Effect	4.0507	3.3178	4.7837
Indirect Effect	.8660	.2413	1.4526

Discussion

The results of this study reveal that schools' performance on different indicators of DRS was good on the scale of agree but when we went for focus groups we found a difference of opinion between teachers and students. Teachers were not agreeing with the data they provided for DRS. The teachers' opinion is dominated because it is also supported by different private organizations reports including ASER and Alif Ailaan. We have discussed this difference in detail in introduction part. Hence this paper confirms the difference in the data collected by public and private organizations. In this study, it is argue that DRS has positive impact on AS. The results of the study proved this argument. H1 reveals that DRS significantly impact AS perceived by students. Teachers don't believe this directly. Teachers perceived that AS increase is not due to the focus on DRS indicators but it is resultant of manipulation of facts. Secondly this study argues that DRS positively impacts cheating in PEC exams. Results of this study from both quantitative and qualitative sources collectively support this argument. Study reveals that DRS positively impacts cheating in PEC exam. Finally major argument of this study is that CPE mediates the relationship between DRS and AS. This study also proves this hypothesis from both qualitative and quantitative sources that CPE partially mediates the relationship between DRS and AS.

Conclusion

Using mixed method approach, data for this research were collected through a survey form designed by the researcher to assess students' perception regarding DRS indicators, CPE and their AS. 300 students selected as respondents from 10 randomly selected schools. 10 focused group interviews of teachers were also conducted from these 10 schools. The results of this study show a significant relationship and support to the model. The findings indicate that DRS has a statistically significant relationship with AS. Additionally, DRS also has statistically significant relationship with CPE. Major finding of this study reveals that CPE partially mediates the relationship between DRS and AS.

Recommendations

Hence this study discussed an indigenous problem which has getting deep in our school system for few years; therefore it presented many recommendations for

future researchers and policy makers working in the field of assessment and performance measurement.

- Target achieving behavior overlooks other important features of students' performance (e.g. extracurricular activities, character building, social interaction, personality, motivation, innovation etc). Throughout the year school focus only on achieving DRS and Exams targets and overlook all other necessary aspects of students' performance.
- Target achieving behavior also overlooks some important features of schools' performance e.g. teaching quality at classroom level, school community relationship, school health programs, public awareness etc. As a result, schools are stick to a culture with only produce numbers on few indicators and neglect many important ones.
- It produces a culture where schools don't have autonomy in decision making. They are to follow few preset standards and strive for achieving those goals only. While it is obvious that different districts and even within districts different schools operating in different indigenous environment. Every culture demand some autonomy of schools in decision making at local level and set targets accordingly but this system places equal targets for every situation.
- We should rethink our monitoring system because it has totally failed to collect useable, valid, reliable and trustworthy data on different performance indicators. We have a provincial level hierarchy to monitor performance through MEAs on monthly basis. This is a rigorous and consistent effort but has proved useless.
- Third party validation can be a good technique to audit correctness of collected data through DRS and PEC. Many national and international NGOs are working in the field. Their data sources can be utilizes to find existing gap.
- The most important thing which I would recommend is that universities should initiate research on indigenous educational problems rather than copying those problems which are useless for our system at this stage; otherwise government should force them to do so. Universities can have their own data source in this field and a dynamic data collection mechanism to collect data on different educational indicators.
- There are always some motivational aspects of every human act. Motivational forces for this organizational and exam cheating should be investigated through a meticulous effort. An effective policy should be introduced which can minimize these motivational factors and address those problems with their solution.

References

- Alifailaan. (2017). Pakistan District Education Ranking 2017. Islamabad.
- Alin, A. (2010). Multicollinearity. *Wiley Interdisciplinary Reviews: Computational Statistics*, 2(3), 370-374.
- Anderman, E. M., & Midgley, C. (2004). Changes In Self-Reported Academic Cheating Across The Transition From Middle School To High School. *Contemporary Educational Psychology*, 29(4), 499-517.
- Anwar, M., Khan, S. Z., & Khan, N. U. (2018). Intellectual Capital, Entrepreneurial Strategy And New Ventures Performance: Mediating Role Of Competitive Advantage. *Business & Economic Review*, 10(1), 63-94.
- Aser. (2015). Annual Status Of Education Report 2015.
- Aser. (2017). Annual Status Of Education Report 2016.
- Baron, R. M., & Kenny, D. A. (1986). The Moderator–Mediator Variable Distinction In Social Psychological Research: Conceptual, Strategic, And Statistical Considerations. *Journal Of Personality And Social Psychology*, 51(6), 1173.
- Barsky, A. (2008). Understanding The Ethical Cost Of Organizational Goal-Setting: A Review And Theory Development. *Journal Of Business Ethics*, 81(1), 63-81.
- BISE (Lahore). (2016). *Result Gazette, Secondary School Certificate (9th Class), Annual Examination*. Lahore.
- BISE (Lahore). (2017). *Result Gazette, Secondary School Certificate (9th Class), Annual Examination*. Lahore.
- BISE (Sahiwal). (2015). *Result Gazette, Secondary School Certificate (9th Class), Annual Examination*. Lahore: Retrieved From [Http://Bisesahiwal.Edu.Pk/](http://Bisesahiwal.Edu.Pk/).
- BISE (Sahiwal). (2016). *Result Gazette, Secondary School Certificate (9th Class), Annual Examination*. Lahore: Retrieved From [Http://Bisesahiwal.Edu.Pk/](http://Bisesahiwal.Edu.Pk/).

- BISE (Sahiwal). (2017). *Result Gazette, Secondary School Certificate (9th Class), Annual Examination*. Lahore: Retrieved From [Http://Bisesahiwal.Edu.Pk/](http://Bisesahiwal.Edu.Pk/).
- Bohte, J., & Meier, K. J. (2000). Goal Displacement: Assessing The Motivation For Organizational Cheating. *Public Administration Review*, 60(2), 173-182.
- Bolin, J. H. (2014). Hayes, Andrew F.(2013). Introduction To Mediation, Moderation, And Conditional Process Analysis: A Regression- Based Approach. New York, Ny: The Guilford Press. *Journal Of Educational Measurement*, 51(3), 335-337.
- Bouckaert, G., & Peters, B. G. (2002). Performance Measurement And Management: The Achilles' Heel In Administrative Modernization. *Public Performance & Management Review*, 25(4), 359-362.
- Butler, R., & Shibaz, L. (2008). Achievement Goals For Teaching As Predictors Of Students' Perceptions Of Instructional Practices And Students' Help Seeking And Cheating. *Learning And Instruction*, 18(5), 453-467.
- Creswell, J. W., & Creswell, J. D. (2017). *Research Design: Qualitative, Quantitative, And Mixed Methods Approaches*: Sage Publications.
- Dalton, B. (2017). Rti Press.
- Earthman, G. I. (2002). School Facility Conditions And Student Academic Achievement.
- Fuller, B. (1987). What School Factors Raise Achievement In The Third World? *Review Of Educational Research*, 57(3), 255-292.
- George, D., & Mallery, P. (2010). *Spss For Windows Step By Step. A Simple Study Guide And Reference* (10. Bask1): Boston, Ma: Pearson Education, Inc.
- Glewwe, P., Ilias, N., & Kremer, M. (2010). Teacher Incentives. *American Economic Journal: Applied Economics*, 2(3), 205-227.
- Hair, J. F. (2010). Black, Wc, Babin, Bj, & Anderson, Re (2010). *Multivariate Data Analysis*, 7.

- Jensen, M. C. (2003). Paying People To Lie: The Truth About The Budgeting Process. *European Financial Management*, 9(3), 379-406.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed Methods Research: A Research Paradigm Whose Time Has Come. *Educational Researcher*, 33(7), 14-26.
- Khan, W. A. (2018). Fake Assessment And Punjab Examination Commission Retrieved June 5, 2018, From [Http://Www.Khanwaqas.Com/Fake-Assessment-Punjab-Examination-Commission/Articles.Html](http://www.khanwaqas.com/fake-assessment-punjab-examination-commission/articles.html)
- Leech, N. L., & Onwuegbuzie, A. J. (2009). A Typology Of Mixed Methods Research Designs. *Quality & Quantity*, 43(2), 265-275.
- Leithwood, K., & Mascal, B. (2008). Collective Leadership Effects On Student Achievement. *Educational Administration Quarterly*, 44(4), 529-561.
- Locke, E. A., & Latham, G. P. (2002). Building A Practically Useful Theory Of Goal Setting And Task Motivation: A 35-Year Odyssey. *American Psychologist*, 57(9), 705.
- Mccabe, D. (2005). Cheating: Why Students Do It And How We Can Help Them Stop. *Guiding Students From Cheating And Plagiarism To Honesty And Integrity: Strategies For Change*, 237-242.
- Mccabe, D. L., Treviño, L. K., & Butterfield, K. D. (2001). Cheating In Academic Institutions: A Decade Of Research. *Ethics & Behavior*, 11(3), 219-232.
- Mcmillan, J. H., & Schumacher, S. (2010). Research In Education: Evidence-Based Inquiry, Myeducationlab Series. *Pearson*.
- Mertens, D. M. (2014). *Research And Evaluation In Education And Psychology: Integrating Diversity With Quantitative, Qualitative, And Mixed Methods*: Sage Publications.
- Murdock, T. B., & Anderman, E. M. (2006). Motivational Perspectives On Student Cheating: Toward An Integrated Model Of Academic Dishonesty. *Educational Psychologist*, 41(3), 129-145.
- Muriel, A., & Smith, J. (2011). On Educational Performance Measures. *Fiscal Studies*, 32(2), 187-206.

- Nettles, S. M., & Herrington, C. (2007). Revisiting The Importance Of The Direct Effects Of School Leadership On Student Achievement: The Implications For School Improvement Policy. *Peabody Journal Of Education*, 82(4), 724-736.
- Ordóñez, L. D., Schweitzer, M. E., Galinsky, A. D., & Bazerman, M. H. (2009). Goals Gone Wild: The Systematic Side Effects Of Overprescribing Goal Setting. *Academy Of Management Perspectives*, 23(1), 6-16.
- Ozga, J. (2003). *Measuring & Managing Performance In Education*: Citeseer.
- Pallant, J. (2013). *Spss Survival Manual*: Mcgraw-Hill Education (Uk).
- PEC. (2015). *Punjab Examination Commission Report On Grade 5 & 8 Examination*. Lahore: Retrieved From http://www.pec.edu.pk/system/files/pec%20report%20r7_0.pdf.
- PEC. (2016). *Punjab Examination Commission Report On Grade 5 & 8 Examination*. Lahore: Retrieved From Downloads\Documents\Pec_Exam_Analysis_Report_2016.Pdf.
- PEC. (2017). *Result Gazette, Annual Examination*.
- PEC. (2018). *Result Gazette, Annual Examination*.
- Pesrp. Retrieved June 3, 2018, From <http://www.pesrp.edu.pk/home>
- Pesrp. (2015). District Education Ranking 2nd Quarter 2015-16.
- Pesrp. (2016a). District Education Ranking 1st Quarter 2016-17.
- Pesrp. (2016b). District Education Ranking 2nd Quarter 2016-17.
- Pesrp. (2016c). District Education Ranking 3rd Quarter 2015-16.
- Pesrp. (2016d). District Education Ranking 4th Quarter 2015-16.
- Pesrp. (2017a). District Education Ranking 1st Quarter 2017-18.
- Pesrp. (2017b). District Education Ranking 2nd Quarter 2017-18.
- Pesrp. (2017c). District Education Ranking 3rd Quarter 2016-17.
- Pesrp. (2017d). District Education Ranking 4th Quarter 2016-17.
- Pesrp. (2018). District Education Ranking 3rd Quarter 2017-18.
- Picus, L. O., Marion, S. F., Calvo, N., & Glenn, W. J. (2005). Understanding The Relationship Between Student Achievement And The Quality Of Educational Facilities: Evidence From Wyoming. *Peabody Journal Of Education*, 80(3), 71-95.
- Roby, D. E. (2004). Research On School Attendance And Student Achievement: A Study Of Ohio Schools. *Educational Research Quarterly*, 28(1), 3-16. School Education Department. Retrieved July 1. 2018, From https://schools.punjab.gov.pk/district_ranking

- Schweitzer, M. E., Ordóñez, L., & Douma, B. (2004). Goal Setting As A Motivator Of Unethical Behavior. *Academy Of Management Journal*, 47(3), 422-432.
- Sheikh, A. (2017). Rural Punjab Enrolment Up But Standards Deteriorate *The Express Tribune*. Retrieved From https://epaper.tribune.com.pk/displaydetails.aspx?eni_id=11201709140030&en_id=11201709140016&emid=11201709140006
- Sheikh, A. (2018, April 1, 2018). More Than 80% Pass Pec Grade 5, 8 Examinations, *Tribune*. Retrieved From <https://tribune.com.pk/story/1674420/1-80-pass-pec-grade-5-8-examinations/>
- Sheldon, S. B., & Epstein, J. L. (2004). Getting Students To School: Using Family And Community Involvement To Reduce Chronic Absenteeism. *School Community Journal*, 14(2), 39-56.
- Uline, C., & Tschannen-Moran, M. (2008). The Walls Speak: The Interplay Of Quality Facilities, School Climate, And Student Achievement. *Journal Of Educational Administration*, 46(1), 55-73.
- Waters, T., Marzano, R. J., & Mcnulty, B. (2003). Balanced Leadership: What 30 Years Of Research Tells Us About The Effect Of Leadership On Student Achievement. A Working Paper.
- Welsh, D. T., & Ordóñez, L. D. (2014). The Dark Side Of Consecutive High Performance Goals: Linking Goal Setting, Depletion, And Unethical Behavior. *Organizational Behavior And Human Decision Processes*, 123(2), 79-89.