



## A Comparative Analysis of Quality of Intermediate Education and its Impact on Academic Achievement of Students

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**Abstract-** The study is comparative, quantitative and descriptive in nature. It aims to analyze and compare the quality of education at intermediate level between public sector higher secondary schools and colleges. It also works on to see its impact on academic achievements of the students of Intermediate in districts of south region of Khyber Pakhtunkhwa. The population of the study included all inter-level students and teachers of Government Institutes. A sample of 80 teachers and 480 students was selected by stratified multi-stage sampling technique from all inter-level public sector Schools and colleges of four southern districts of KP. Both the questioners were made valid and then were made reliable by using Cronbach Alpha at the 0.05 level of significance. The data was analyzed through descriptive (mean, median & standard deviation and inferential statistics i.e. an independent t-test. The study concluded that Government colleges showed better results than Government higher secondary schools. Infrastructure, staff competence and physical facilities i.e. Laboratories, libraries, computer labs, wide and green environment of colleges were comparatively found better than that of schools.

**Keywords:** Quality Education, Intermediate level, Comparative Analysis, Public Sector colleges and Schools, Academic Achievement

### I. INTRODUCTION

Basically, the standard of education is a critical component of any progressive society that must adapt to the inevitable changes. It is a revolutionary method of transition of civilization and social growth. The definition of educational quality is broad but complex. The (UNESCO 2004) found that there is a global need for high-quality education for the advancement of every community. According to the Pakistani Government Policy of 2009, education is very important for growth. It develops various skills such as productivity and individual performance, as well as human capital and financial support for long-term growth. Noonan, B.W and Yackulic, R.A (2015), spoke about academic success in terms of various quality-indicators that can be interpreted and used in practice. They are becoming increasingly popular around the world due to the availability of quality education and improved academic programs. Quality education is a mechanism or a procedure that specifies the clear guidelines for products and services of an educational institution.

Inter Level Education provides a pathway to Higher Education, therefore, the concept of teachers and students towards quality learning is ought and mandatory at inter level that would be quite helpful for students while attaining quality knowledge at higher level; so inter level education is the back bone for higher education (Chisti et al., 2011). Quality of education is badly effected in Pakistan at inter level due to lack of basic facilities, teachers' education along with teachers' training as well as now and then changes in curriculum (Amir, Sharf & Khan, 2020). (Dilshad, 2010) found that there is need of updated new knowledge at inter and college levels in this modern era for which textbooks or curricula need to be changed according to the need of the day, society and students so that better and quality teaching-learning environment may takes place and quality of education may be ensured by producing talented manpower including quality Ph.D. Doctors, Engineers, Teachers, Professors, and Students etc. Quality of education can be easily improved by linking curriculum, teachers' training, textbooks and examination system in the better and standardized way, likewise, overlapping of concepts in curricula and overcrowding ought and mandatory to be removed at Inter and College levels in Pakistan (Ahmad et al., 2014).

In Pakistan, an intermediate program is presented as part of Higher secondary school education. It is largely determined by the level of education at the FA / F.Sc. by the humanities, inter science, pre-engineering and pre-medical categories. Arts and sciences institutions are embodied in Pakistani higher secondary schools and colleges, which serve as a foundation for further educational and occupational

training. Experts in various fields including the economy, social life, and political life of the country determine the quality of higher secondary-education. Inter-level education, as a result, is fundamentally paradoxical. It increases motivation and provides a lot of functions in the transformation from elementary to higher education. Intermediate education is expected to take part in a transitional and final role in ensuring the country's growth. The out-put of secondary education is the development of the country, which involves those who wish to join the workforce and thus queue for already scarce job opportunities. According to UNESCO (2004), important factor leading and human rights are associated to the best quality indicators. The UNESCO framework gives the necessary five dimensions of high-quality education. The first is associated with the learner's characteristics. It takes into account students' aptitude, motivation, and willingness to go to school, as well as previous knowledge, learning barriers, and various demographic variables. The second dimension is context, which comprises educational opportunities for people with parental assistance, various national-standards, different labour market demand, various cultural, social, and religious influences, peer effect, and a schooling schedule with accessible and home-work assignments. The third dimension is enabling Inputs, assisted a variety of learning and teaching resources, critical human capital, a variety of teaching and learning materials, as well as extensive accommodations and infrastructure. The fourth aspect is teaching and learning, which includes learning time, teaching techniques, measurement and evaluation, and classroom space. The last factor is outcomes, which includes various literacy skills, numeracy, and life-skills.

### **Statement of the Research Problem**

Students, parents, and teachers have conflicting opinions about the standard (quality) of education in government colleges and higher secondary schools. Someone believes that college education is superior to that of higher secondary schools, while others claim the opposite. The aim of this study is to determine which government institute produces high-quality education and its impact on achievement of students. This was a comparative study conducted to see whether the colleges or schools delivering quality of education in southern zone of Khyber Pakhtunkhwa. Secondary education occupies a unique position in Pakistani educational system. In colleges and Higher Secondary Schools, both in the intermediate classes are also entertained.

### **Objectives**

- To find the quality of intermediate-level education between government Higher Secondary Schools and Colleges in southern districts of Khyber Pakhtunkhwa.
- To determine the quality of education in both Institutions in terms of quality indicators such as teaching staff, infrastructure, curricula and management etc
- To compare the quality of Intermediate education in terms of student's academic achievement of both Institutions.

### **Questions of the Study**

- Is there any difference in quality of education delivered at Inter-level schools and colleges?
- Which school & college based-factors determine the educational quality and their academic-achievements in both Institutions at Intermediate-level?

### **Hypotheses of The Study**

**H<sub>01</sub>** There is no significant difference of quality of intermediate education and in Govt. Colleges & Higher secondary Schools.

**H<sub>02</sub>** There is no significant difference of quality of intermediate education in terms of quality indicators such as management, infrastructure, teaching staff and curricula etc. of both types of institutes.

**H<sub>03</sub>** There is no significant difference in the quality of Intermediate Education on academic achievement of Govt. Higher Secondary Schools and the Govt colleges in South region of the Districts of the Khyber Pakhtunkhwa province.

### **Significance of the Study**

Higher Secondary schools and inters colleges provide higher secondary education. For any growing and progressive institution, the quality of intermediate education is critical. The purpose of the researcher in this study was to analyse quality of education at the Inter-level institution in terms of effectiveness. This research study will assist other researchers and investigators in determining their priorities and targets, in addition, Principals of Government Colleges and Higher Secondary Schools in making appropriate plans for efficient teaching & learning and improved academic achievement. The study will assist the Board of Intermediate and Secondary Education in reviewing their Examination system and ensuring the standard of education for all affiliated Institutes to achieve successful academic achievement. It would also be helpful for policymakers to adjust their strategies in such a way that they can better resolve the problems and enhance the standard of intermediate education in the future.

## II. LITERATURE REVIEW

Saeed, Raza, D, Amran, A., Haron, and Khalid (2010) conducted research on Pakistan's "current scenario/status of Higher Secondary Education." Its main purpose is to assess the existing situation of secondary schools in areas such as infrastructure, staff and budgetary allocation, review the transition rate from grade XII to senior secondary school, and determine how many secondary schools are suitable for accessible in such a location, approach, and facilities to understand the relationship between time of enrolment and transfer rates to HSSC Class XII and to compare the academic performance of boys and girls in college and college. This was most likely due to a shortage of teachers, and there was no difference in student achievement levels between the time of enrolment in class XI and the time of passing the higher secondary school certificate in class XII. Big classrooms, a shortage of teaching staff, frequent principals, and other factors may be to blame. Yasin (2001) examined student achievement in FA / F.Sc. programs in a report titled "Comparative Study of Higher-Secondary Schools and Inter- Colleges. The comparison of physical facilities at schools and college level and to compare student academic achievement in terms of FA / F.Sc level. It was also a prerequisite to measure student academic achievement in SSC and HSSC, and to compare the physical facilities of schools and colleges at the higher secondary level.

Zahra , Dahar , and Lateef (2016) conducted a study on the same theme and concluded that in-service teachers and heads to be updated with new methods and techniques for obtaining maximum educational achievements of male and female students. The study also reported that capacity building would also improve their understanding and academic achievement. Scannell, D.P (2014), define quality of education as concert has a real concern. Its key objective is to improve and encourage learning at the elementary and secondary school levels. The idea of providing quality education to the majority of students was inspired by the rapid rise in classroom enrollments. Scannell, D.P. (2014), conducted a study and reported that the quality of education is considered as a prime hub by the teachers, students and other communities. Education is a way of life that involves a persistent and ongoing reconstruction of experiences, according to Jhon Dewey in the twentieth century. It is the phase of an individual's existence developing all those dimensions that enable him to accomplish tasks. According to Baker, M.C. (2016, p.17), this description means that the adolescent has certain inherent potentialities. Generally, education is not a one-time event, but rather a lifetime and continuous development. Shordt.K, Snel.M., & Graaf. S. D. (2011) explored & emphasised importance of the advancement of quality education in terms of various human progressive parameters.

### ***Education at Higher Secondary Level and its Quality***

Wondyifraw Tefera, Johnstone, B. & Teferra, D. (2017, p. 211) suggest that the quality of senior secondary education is achieved through the interaction of three teachings & learning process.

*Quality of teaching staff and Non teaching staff:* It focuses on developing the teaching staff associated with various faculties and departments.

*Development of Faculty:* It discussed and focuses on the different skills, knowledge and teaching and learning methodology of faculty staff.

*Growth of Organization:* This involves changing the structure, guidelines, and atmosphere of the organization.

*Learning Development:* This is a structured approach to learning content, lesson, course creation, implementation & assessment, and curriculum in the classroom.

The time it takes to update or revise curricula, it is required to refine textbooks, and ensure effective curriculum delivery for the quality education records and academic achievements.

Yackulic and Noonan (2001) assessed 34 indicators of education quality at the inter-disciplinary level in Canada. These indicators are highly rated by various groups of respondents. In India, Batool and Qureshi (2008) investigated that indicators of the quality assurance mean all the designed process and the system which is run and implemented by the management is properly served and consumed. The quality assurance was reported by the European Commission a comprehensive term that refers to an ongoing evaluation process. Similarly Knight & Nestor (2000,p.33) discuss that various indicators of quality education can also be taken into account & practiced by security systems that are increasingly being used around the world for the availability of high-quality academic programs at the intermediate level. Quality assurance investigates that systems and processes are created and applied to ensure that its products and services are of high quality comply with uniform standards and are constantly being improved.

### ***Academic Achievement***

. According to the Richardson, Michelle, and Abraham (2012), the Quality of education leads to an increase in educational outcomes. As a result, it is crucial for students to choose their desired career

paths. Better academic performance is a symbol of well-refined students in the all sorts of areas. Academic achievement is notable that demonstrates magnitude to which the different apprentice can obtain the certain aims that have been the emphasis of efforts in the educational process and important in academic institutions. As the Inter-level education is a significant and crucial, therefore it links a strong relation from primary to inter-level education for students to determine the ambitions of their career path, and its validity also lies in the fact that this is the final stage. Yasin(2001) performed research to measure and evaluate the educational outcomes at the HSSC level. The purpose of the research was aimed to investigate the physical resources in Inter-level schools and colleges in relation to the comparison of the academic achievement of students at F.A / F.Sc level results.

### III. RESEARCH METHODOLOGY

This is a descriptive study which was consisted of different parameters like other responses of the respondents and statistical. As nature of the current research study was quantitative, therefore, survey design was used. Clark and Creswell (2007), presented the quantitative work and make the implantation of enormous parameters such as percentage, mean, median and t-test of significance.

#### *Population of Study*

Overall strength of the Government Institutions were 107, having 2639 teachers (Subject Specialists & Lecturers) and 51424 Students declared as a population of the research-study.

Total population of the Teachers (Lecturers & Subject Specialists) = 372 + 2267 = 2639

Total population of Candidates (College/H.S.School Students) = 16234 + 25190 = 51424

All population of the current study = **54063**

Source: EMIS of E & SE Deptt (2018-19)

EMIS of Higher Edu: Deptt (2018-19)

#### *Sample of Study*

Curry & Dr Jhon (2007); declared the population specification that size of the sample will be One Percent (1%) of Entire population if population is more than 10,000. Therefore, total size of the given sample for this research-study @ 1%, was come to to 540 which is calculated as.

Size of the Sample became  $\rightarrow 1 / 100 \times 54063 = 540$

**Overall size of the Sample = 480 Students + 80 Teachers (Lecturers/Subject Specialists) = 560**

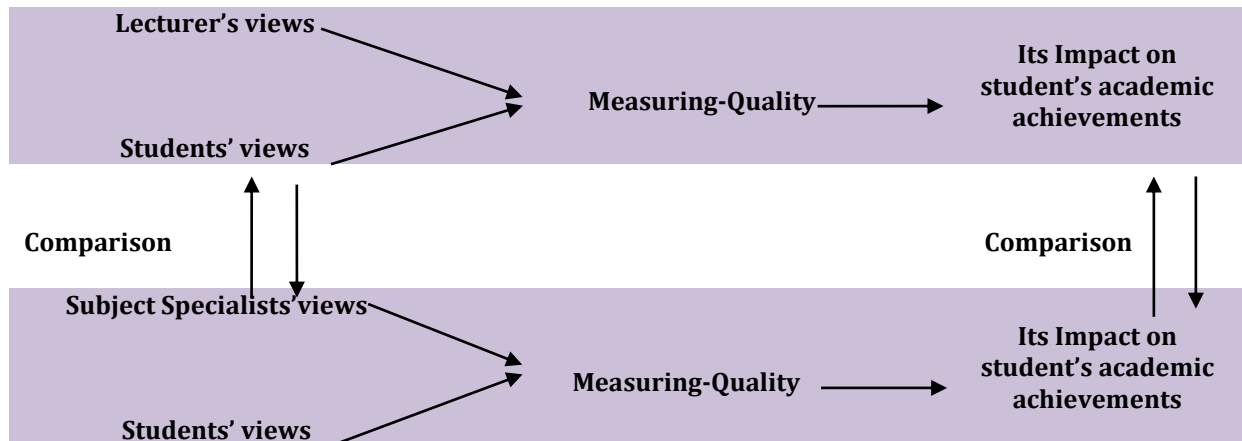
The multi-staged stratified sampling technique was used by the researcher. In the first level, two male and two female Inter-level Government Colleges and Schools from the each south region zone of KPK were chosen at random.

In the second level, a data producing sample of 5 teachers was chosen from the each institution. As a result, all eighty (80) teachers from the Sixteen (16) Inter-level Schools and Colleges were chosen as a complete size of the sample. The investigator chose thirty (30) students at randomly from each institution in the third level. As a result, 560 respondents from the current study including eighty (80) teachers and four hundred eighty (480) students from the Inter-level selected Colleges & Schools were used as the sample of the current particular study.

#### *Conceptual-Framework*

The conceptual framework shows the representation of one or more variables and their relationships. This term refers to the relationship between cause and effect. According to John Aluko Orodho(2014), it is the presentation of all research studies in which the researcher diagrammatically or graphically

demonstrates the relationship between dependent and independent variables. Figure depicts the conceptual framework used for this research.



#### *SAMPLING TECHNIQUES*

In this research study, a Multi-stage Stratified Random sampling technique was used since the total population was comprised on both teachers and inter-level male and female students.

#### *INSTRUMENTATION*

With the cooperation of the honorable supervisor, the researcher created self-administered questionnaires that were structured using a five-point Likert type scale. The researcher collected the primary data by distributing questionnaires to both teachers and intermediate-level students. It was a survey study conducted by a researcher who went to Government colleges and H.S.Schools of the four (04) south region of districts of KPK included DIKhan, Bannu, Lakki and Tank.

Academic achievement of Intermediate-students of Inter-level Govt. Schools and Colleges in four (04) south region districts was measured using two years annual results from two different Boards. Cronbach's Alpha was used to measure the reliability of both questioners at the Level of significance at 0.05.

#### IV. COLLECTION OF DATA AND ITS ANALYSIS

The analysis of the evidence, according to Akhtar, K., and Jahan Zaib, M. (2005), provides interpretation and knowledge for constructing what has been composed to make inferences. The data was analyzed using inferential statistic T-test and also with descriptive tools (mean median & standard deviation). Researcher used two types of the categories with the answering rate and respondents in this research study, which are summarized in table 1<sup>st</sup> & 2<sup>nd</sup>. According to the data in table No.1, the students returned 435 of the 480 questionnaires. Similarly, 67 of the 80 questionnaires sent to lecturers and Subject Specialists were properly filled in. The responses rate for students and teachers were also very high, with 86.5 percent from students and 83.7 percent from teachers (SS/Lecturers). In other words, maximum of the questionnaires (more than half) were returned to the researcher for the data analysis.

Table# 4.1: Respondents' Response Rate

Distribution of Questionnaire in 1 <sup>st</sup> Attempt				Distribution of Questionnaire in 2 <sup>nd</sup> Attempt		
Both of Respondents	Issued Questionnaires	Returned Questionnaires	% of Return Rate	Issued Questionnaires	Returned Questionnaires	% of Return Rate
Teachers	80	67	83.7	13	13	100
Students	480	435	86.5	45	45	100

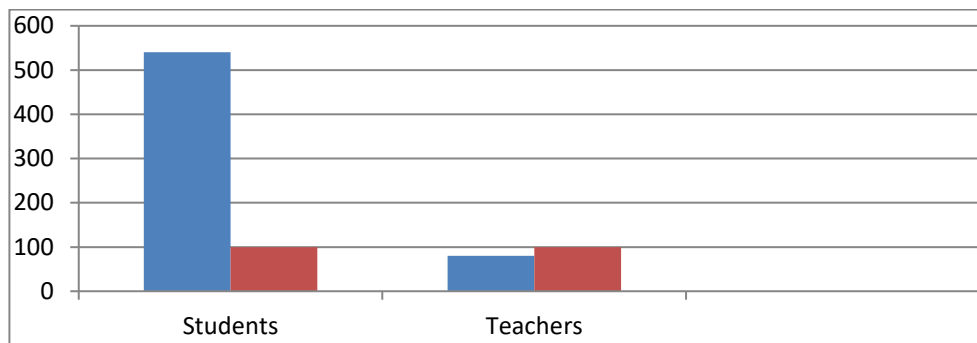


Table 4.2 Descriptive-Statistic showing Students of Govt. Higher Secondary Schools and the Govt.Colleges

Valid	Frequency	Percent	Valid per	C.P
Students of H.S.School	240	50	50	50.00
Students of College	240	50	50	50.00
Total-Strength	480	100	100	

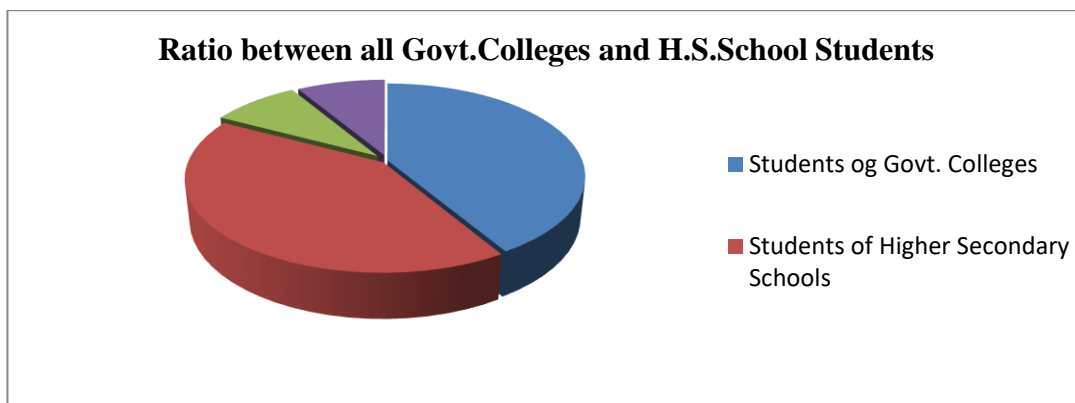


Table # 4.2 and its graph described that in the south region of districts of KPK, there were the total of 240 (50 percent) students of Colleges and 240 (50 percent) students of Schools at Intermediate level. The total number of students who completed the summative assessment was 480.

Table#4.3 COMPARATIVE GROUP CROSS TABULATION

Respondents	Counter Points	Groups		Total Percentage
		Government Colleges.	Government H.S.Schools.	
Teachers (Lecturers & S.S)	Counted Value	040	040	080
	Estimated Count	040.0	040.0	080.0
	Gender Percentage	50.0%	50.0%	100.0%
Intermediate Students	Counted Value	0240	0240	0480
	Estimated Count	240.0	240.0	480.0
	Gender Percentage	50.0%	50.0%	100.0%
Total-Strength	All counted Value	280	0280	0560
	All Estimated Count	280.0	280.0	560.0
	All Gender Percentage	50.00%	50.00%	100.0%

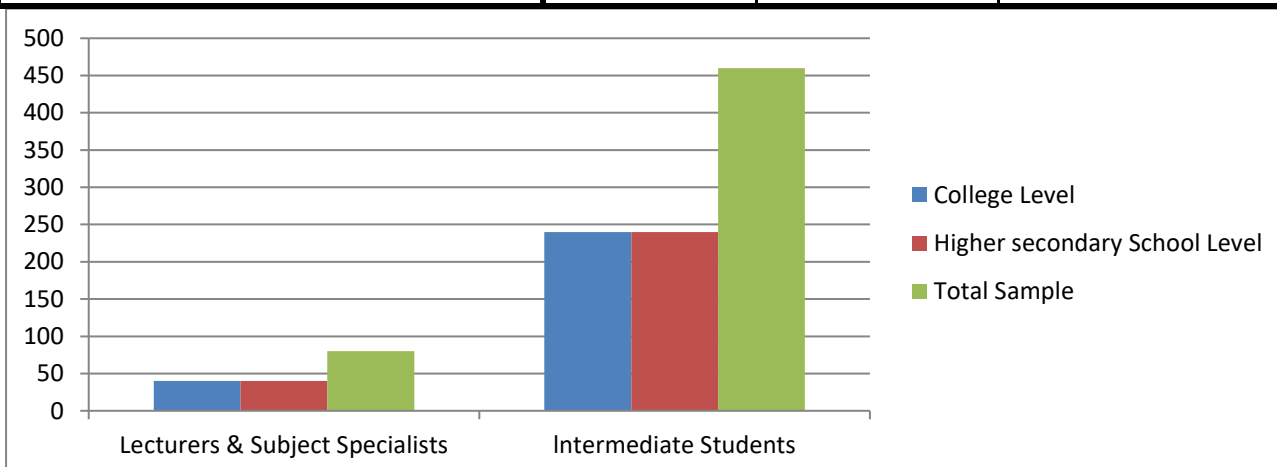


Table # 4.3 & its graph showing the complete relationship between the Inter-level Government Colleges and Schools in south zone of districts of KPK province. In the first group, there were two hundred and forty (240) students of the Govt.Colleges and also two hundred & forty (240) students of the G.H.S.schools, while in the second group, there were forty (40) lecturers and forty (40) subject specialists. Overall sample size became 560 in this study. Tabulation and a Pai graph were used to display the entire sample size.

Table .4.4: Mean-difference between the quality of Inter-level Education and also its impact on the intermediate student's achievement between the Govt.H.S.Schools and government colleges of the south region districts of the province of Khyber Pakhtunkhwa.

Groups	N	Mean	S.D	T.test	D.f	P
Govt.H.S.Schools	280	11.25	4.1	1.0650	558	0.025
Govt.Colleges	280	13.50	2.3			

The above table (4.4) shows that  $t=1.065$ ,  $p=0.025$  is less than 0.05, indicating a significant difference between the two institutions. In the south region of KP, it was found that quality of inter-level education and its impact of student's achievements in government colleges was much better than government higher secondary schools. Therefore it was resulted that qualitative stander of college students was superior to Higher Secondary Schools.

Table # 4.5: Mean difference of the Inter-level Quality of education in both type of Government Institutions (Colleges & H.S.Schools) in terms of quality Indicators such as administration, Infrastructure, facilities, teaching staff and curricula.

Groups	N	Mean	SD	T	D.f	P
Govt.H.S.Schools	280	15.3	2.35			
				1.1500	558	0.071
Govt.Colleges	280	12.8	3.21			

Above Table # 4.5 indicates  $t=1.1500$ ,  $P=0.071$  that No substantial difference is present in the quality of intermediate education in different terms of the quality measures such as teaching personnel, administration, infrastructure, other facilities and curricula in the both types of government institutions in South zone of the districts of KPK province.

#### Academic Achievements of Students

Result-Gazettes were showing the academic achievements of students of Intermediate in south region districts of the KPK province including Bannu, Tank, DIKhan and Lakki. With the full cooperation of both Controllers of Examination and I.T record sections, the HSSC result gazettes were collected from the BISE Bannu and BISE DIKhan.

All of the tabulated and analyzed data exposed that the academic performance of Government colleges was superior to in Government higher secondary-schools in south region districts of KPK province.

#### (Prior 2-Year Results of Intermediate Examination)

Table 4.6: showing the academic achievements of the Students of Intermediate level in south zone of four districts of KPK province included Bannu, Tank, DIKhan and Lakki

Govt. Colleges & Govt. Higher Secondary Schools	Previous Results of the Intermediate Examination Session 2018(A) & 2019(A) BISE BANNU & BISE D I KHAN			Mean
	PERCENTAGE OF THE MARKS	No. of Students in Government Colleges	No. of Students in Government Higher-Secondary-Schools	
1	Below FORTY % And Passing Marks	01	12	6.5
2	FORTY % and Below 50 %	15	73	44.0
3	FIFTY % and Below 60 %	22	79	50.5
4	SIXTY % and Below 70 %	121	39	80.0
5	SEVENTY % and Below 80 %	55	27	41.0
6	EIGHTY % And Above	26	10	18.0
<b>TOTAL</b>	<b>=====</b>	<b>240</b>	<b>240</b>	<b>240.0</b>

The reliability of the Board's results (BISE DIK & BISE BANNU) and the questionnaire were searched by using the Cronbach's-Alpha (reliability of the omitted elements). According to the Berthoud (2010), the



level of satisfaction with the reliability should be at least 0.60. The questionnaire's reliability for the Students & Teachers for teachers and students was 0.781 and 0.822 respectively, while reliability for the two-year BISE scores was 0.891 and 0.782 for academic achievements of the Students.

**Table 4.7: Reliability Results of BISE (DIKhan & Bannu)**

BISE Results (DIKhan & Bannu) 2018 (Annual)	0.891
BISE Results (DIKhan & Bannu) 2019 (Annual)	0.782

#### V. RESULTS AND DISCUSSION:

The results showed that there were significant differences between the two groups. As a result, the quality of education in terms of academic achievement by College students in Government institutions was higher than that of H.S.Schools in southern-districts. That's why, it is justified and stated that the government colleges do significantly better than Government higher secondary schools (see Table#4.2).

The study supports that the performance of colleges is better than that of higher secondary schools as Government colleges showed better results than Government higher secondary schools. Infrastructure, staff competence and physical facilities i.e. Laboratories, libraries, computer labs, wide and green environment of colleges were comparatively found better than that of schools. Whereas Idrees (2015) worked on the same area in Punjab Province of Pakistan and found contradictory results as compared to the present study. The performance of Higher Secondary Schools satisfactory as results of students of higher secondary schools was good. The study concluded that deficiencies which cause hurdles for sustaining quality of education may be minimized. The deficiencies are non-availability of well qualified staff especially in science subjects in far flung areas, lack of accommodating sufficient number of students in these institutions. The study also recommended facilitating the staff with refresher courses for their professional grooming keeping in view the modern scientific skills of 21<sup>st</sup> century. Human resources and international funds should be fully utilized for ensuring quality education at Inter and College level while science laboratories and science kits should be well-equipped under the umbrella of latest technology (Kremer, Brannen & Glennertter, 2013). The deficiency of mathematics, languages and science teachers should be removed at Inter and College level. It is the responsibility of the government and education department to organize separate units regarding the betterment and improvement in teaching-learning process at Provincial and Federal levels in Pakistan through different seminars, workshops, trainings and other educational activities due to which quality of education is improved (Corcoran, 2018)

#### VI. CONCLUSIONS & SUGGESTIONS

Based on data analysis and research results, it was concluded that students studying at Govt. colleges performed better in academic achievements. It can be concluded that the Inter-level government colleges performed significantly better than Inter-level Schools in the south zone of districts of KPK province.

Researchers note that it is very important to build research laboratories, separate libraries, and other physical-facilities & research-environments in government colleges and H.S.schools. Most institutions do not have adequate policies and have different problems including lack of well-equipped libraries, computer laboratories, and science laboratories & their infrastructure. It is recommended to encourage good teacher-student relationships through counseling to enhance collaboration during class and other activities. In addition, career counseling is very important. It will very helpful for the students to choose their career. It is further additional that the Education Ministry should provide-sufficient textbooks, training, and other teaching materials, science and computer rooms, and safe and hygienic drinking water in various Governments College and higher Secondary Schools. It may provide effective learning, high-quality of education and better academic performance for students. The study suggests that quality of education may be improved by facilitating the educational institutions in terms of physical resources and provision of well-trained and qualified staff. The staff needs to be provided training for their professional grooming in-light of the demand of skills of 21st century.

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