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Learning Support in Universities: Analysis of Students' Perceptions from the Perspective of their Achievement

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ABSTRACT

The universities are currently highly emphasizing supporting their students in learning. This is mainly due to the reason that learning support plays a significant role in promoting students' learning experiences and their achievement. The research from the perspective of learning support is scarce in the context of universities of Southern Punjab, Pakistan. The purpose of this study was, consequently, to examine learning support provided by the universities to their students as perceived by them from the perspective of their achievement and demographic variables. This descriptive study used survey and correlational research designs. All students from three public sector universities of Southern Punjab, Pakistan were selected as a population. Of these, 671 students were selected as a sample using multistage cluster and stratified sampling

techniques. For this study, a questionnaire was designed as a research tool. The questionnaire contained 18 statements, which were further divided in three sub-section as a measure of learning support. The CGPAs of students were taken as a measure of their achievement, along with the demographic information of students to measure gender- and discipline-based differences. The questionnaire was found to be highly reliable with reliability coefficient of 0.825. This research found that students were highly satisfied with the support related to studies and learning, followed by the provision of guidance and counselling, and least satisfied with the physical environment and with the provision of resources. It was found that female students were significantly more satisfied than the male students with learning support provided to them by their universities. It was also found that students' achievement was significantly correlated with learning support provided to them, although this relationship positive and very low.

1. Introduction

Learning support plays a significant role in promoting students' learning. Provision of support to students for learning is, therefore, also being highly emphasized in literature (Dzakiria, 2008; Okwuduba, Zulnaidi, Abd Rauf, & Nwosu, 2022; Simpson, 2002, 2018; Zuhairi, Karthikeyan, & Priyadarshana, 2019). Learning support refers to the system of support intended to improve and enhance students' learning (Dzakiria, 2008). Learning support usually encompasses setting up and designing of physical spaces, availability of resources, and relationships with peers and teachers, and provision of support (Beghetto & Kaufman, 2014; Richardson & Mishra, 2018). Students need learning support for issues such as decisions related to studies, lack of motivation for studies, time management, tackling assignments, social interaction, use of information and communication technologies, provision of resources, learning techniques, etc. (Dzakiria, 2008; Richardson & Mishra, 2018; Simpson, 2002). Further, universities are expected to support their students with facility of educational guidance and counselling; provision of resources or studying arrangements; and through support in their learning-

related tasks or organization of learning experiences (Jelas, Azman, Zulnaidi, & Ahmad, 2016; Sahaidak, Chorna, Balahura, & Bykhovchenko, 2021; Slutskiy & Blanchard, 2021; Vasylchenko, 2021).

Students' Guidance and Counseling

One of the key aspect of supporting students' learning in universities is to support them through provision of guidance and counselling on matters related to their studies, learning experiences, and personal, and professional development. Seeing the importance of guidance and counselling for students, Earwaker (1992) asserted that it was an integral component of learning process rather than an additional or element of education. The guidance and counselling may be related with supporting students in resolving their behavioral problems (Onyango, Aloka, & Raburu, 2018), and helping students in raising awareness of the future planning (Wong & Yuen, 2019). Similarly, Devi, Devaki, Madhavan, and Saikumar (2013) asserted that that the guidance and counselling plays very supportive role in solving social and emotional problems of the students. In the same way, Ortiz and Levine (2022) have elaborated that the guidance and counselling services are generally focused on students' learning and career exploration but may also include helping students with problems of stress, anxiety, and depression.

The literature also demonstrates linkage between provision of guidance and counselling to students and their academic performance, and behavior management. For example, Nweze and Okolie (2014) conducted study in Nigeria and found that provision of guidance and counseling helped students in improving their understanding and academic performance. On the same note, Onyango et al. (2018) also found a significant relationship between provision of guidance and counseling to students and their behavior management. They further found that guidance and counseling services were moderately effective in managing students' behaviors. Similarly, Kivlighan et al. (2021) argued that guidance and counseling was highly beneficial for academic success of students. Getachew (2019) conducted a study on university students and found that guidance and counseling services assisted students in developing study habits and in increasing their academic achievement.

Provision of Resources and Studying Arrangements

The literature demonstrates that another way of supporting students' learning in universities is to make appropriate arrangement for studying, along with the provision of resources to students for this purpose. These arrangements include tools and equipment related to ICT (Information and Communication Technologies), availability of internet, databases, books, physical spaces, libraries, supplies, laboratories, etc. (Ghazal, Al-Samarraie, & Aldowah, 2018; Richardson & Mishra, 2018; Warner & Myers, 2009). These arrangements are also referred as service quality in literature and include

provision of resources and technical support, effectiveness, reliability, and usefulness of the system (DeLone & McLean, 2003; Lwoga, 2014; Thabet & Kalyankar, 2014). The quality services are timely, efficient, and are offered in a professional way (Jaradat & Smadi, 2013; Saeed, Hwang, & Mun, 2003) and support creativity among students, with a focus on their learning (Richardson & Mishra, 2018; Warner & Myers, 2009).

The rapid changes in higher education and advent of technology has emphasized on supporting students' learning through integration of ICT in teaching and learning processes in universities (Ghazal et al., 2018; Richardson & Mishra, 2018; Warner & Myers, 2009). The same has also been emphasized by Alsabawy, Cater-Steel, and Soar (2016), who believe that wide use of ICT is essential to integrate technology in teaching and learning. Consequently, universities have taken measures to promote self-regulated learning among students by giving them more access to technology, improving student-teachers interactions, and by engaging them (Ahmed, 2010; Ghazal et al., 2018). Likewise, the physical space, such as workspaces, libraries, laboratories, and furniture also likely to support creativity among students (Ghazal et al., 2018). Similarly, universities are also expected to ensure the quality of internet services (Wang & Teo, 2020).

It is also evident from the literature that provision of resources and physical arrangements for study are also likely to enhance students' academic performance and address their behavioral issues. For example, the results of research studies show that provision of resources to students have been observed to shape university students' intention toward online mode of learning (Cheng, 2012; Ghazal et al., 2018; Ramayah & Lee, 2012). For example, Ahn, Ryu, and Han (2007) established that provision of resources to students assisted them in resolving their problems well in time. Colvard, Watson, and Park (2018) asserted that provision of open-resources were likely to improve students' grades as well as address issues of affordability. Likewise, Clark, Nong, Zhu, and Zhu (2021) argued that provision of resources were likely to reduce inequality among students. On the same mote, Sirakaya and Cakmak (2018) found that use of technology helped students to improve their scores, enriched learning environments, and increased students' levels of motivation towards their learning.

Support in Learning Related Tasks

One of the most central component of learning support is to support students in learning related tasks. The literature shows that some of the ways through which students need to be supported in learning related tasks include: supporting students in achieving learning outcomes, teaching through the use of diverse and active modes of teaching; engaging students in academic activities, and provision of feedback (Hattie & Timperley, 2007; Hillmayr, Ziernwald, Reinhold, Hofer, & Reiss, 2020; Mayer, 2014; Van der Kleij,

Feskens, & Eggen, 2015). Nøhr-Jensen (2019) conducted an action research project and effectively achieved students' learning outcome of improving skills. Likewise, Bettencourt (2015) argued that supporting students' learning experiences helps in achieving their learning outcomes and provides opportunities for their learning. Similarly, Giorgdze and Dgebuadze (2017) conducted a research study and found that interactive teaching is highly likely to engage students with active learning, which is more enduring. On the same note, provision of feedback to students has also been a powerful tool for enhancing students' learning (Hattie & Timperley, 2007; Tomaszewski, 2021; Van der Kleij et al., 2015).

The literature also demonstrates that support of students in learning related tasks is highly likely to be related with or have an impact on students' achievement. For example, Bettencourt (2015) examined the relationship between students' learning outcomes', learning activities, and their achievement and found the moderate positive relationship. Similarly, Giorgdze and Dgebuadze (2017) found that interactive teaching helps students to achieve their learning outcomes, allows them to acquire knowledge, develops skills, ensures participation, and enables them to evaluate diverse views. Likewise, provision of feedback to students has a good positive effect on their learning, both in the traditional classrooms (Hattie & Timperley, 2007) and in online modes of learning (Van der Kleij et al., 2015). Hillmayr et al. (2020) found that provision of supporting learning environments to students, by engaging them in activities and interactive learning, has a positive effect on their achievement.

It is also evident from research that supporting students' learning through use of online learning technologies also influences students' achievement. For instance, Ellis and Bliuc (2019) stated that online learning technologies affect students' learning, along with level of engagement. The students who keep themselves more engaged with the learning technologies are more likely to adopt deep approach to learning and perform better. On the other hand, students who keep themselves less engaged with the learning technologies are more likely to adopt surface approach to learning and perform less comparatively (Kovanović et al., 2019). Some other studies also heve showed that the use of online modes of education enhances students' learning experiences and affect their achievement positively (Hillmayr et al., 2020; Kovanović et al., 2019; Lust, Collazo, Elen, & Clarebout, 2012). Some studies have observed differences in provision of learning support on the basis of demographic variables, such as gender and discipline-wise difference (Hillmayr et al., 2020; Lust et al., 2012; Onyango et al., 2018).

It is clearly evident from the literature cited above that various modes of learning support provided to university students play very important role in enhancing students' learning experiences and their achievement. Very dominant aspects of learning support for students in this regard include

provision of guidance and counselling, provision of resources or study arrangements; and provision support in their learning-related tasks or in organization of learning experiences. It is further evident that the provision of learning support to students also affects their achievement. The literature further demonstrates that differences may exist in provision of learning support on the basis of demographic variables, such as gender and discipline. The research from these perspective is scarce in the context of the universities of Southern Punjab, Pakistan and there is a need to examine these variables. The purpose of this study was, therefore, to examine perceived learning support provided by the universities to their students from the perspective of their achievement and demographic variables.

I. Objectives of Research

The purpose of this study was to analyze the perceived learning support provided by universities to their students from the perspective of their achievement. Key objectives of this study were as follows:

1. To examine the extent that students perceive their universities provide them learning support.
2. To measure the difference in perception of the male and female students regarding the learning support their universities provide them.
3. To measure the difference in perception of students of social sciences regarding the learning support their universities provide them.
4. To examine the difference in the perceptions of high achiever, average, and low achiever students about learning support provided to them by their universities.
5. To examine the relationship between learning support provided to students by their universities and their academic achievement.

II. Research Methodology

A. Design of Research and Respondents

This descriptive study used survey and correlational research designs. This study was delimited to the three public sector universities of southern Punjab, Pakistan, including one university of women. These three universities include: Multan campus of University of Education, Lahore; the Women University, Multan; and Bahauddin Zakariya University, Multan. The study was further delimited to the Faculty of Sciences and the Faculty of Arts and Social Sciences, from above mentioned three universities. First of all, 14 departments were randomly selected from Bahauddin Zakariya University, Multan, 10 from Faculty of Arts and Social Sciences and four from Faculty of Science. Likewise, two departments were randomly selected from the Women University, Multan, one each from Faculty of Sciences and Faculty of Arts and Social Science. Finally, two departments were randomly selected from

the Multan campus of the University of Education, Lahore, one each from Faculty of Sciences and Faculty of Arts and Social Science. Overall, total 18 departments were randomly selected from three public sector universities of Southern Punjab using proportionate random sampling technique at this stage. Of 18 randomly selected departments from three public sector universities of Southern Punjab, one undergraduate class was randomly selected. Finally, all students of 18 randomly selected classes were selected as a sample using multistage cluster sampling technique. The total number of students studying in these 18 classes were 671, and all of them served as a sample. All students from the Faculty of Sciences and Faculty of Arts and Social Science served as a population of this study. The reason behind the selection of more classes (14) from Bahauddin Zakariya University, Multan, in comparison with the other two universities (2 classes from each university) was its huge size. Likewise, the reason behind the selection of more classes (12) from the Faculty of Arts and Social Sciences in comparison with the Faculty of Sciences (6 classes) was the greater number of departments and availability of access to students in the science discipline.

B. Research Tool

For this study, questionnaire was designed as a research tool. For this purpose, related literature was reviewed, mostly related to three aspects of learning support, such as provision of guidance and counselling; physical environment, equipment and resources; and support related to studies and learning (Dzakiria, 2008; Okwuduba et al., 2022; Richardson & Mishra, 2018; Sahaidak et al., 2021; Vasylchenko, 2021). The questionnaire comprised two sections. The key purpose of the first section of questionnaire was to seek demographic details of students, including their CGPAs as a measure of their achievement. The second section of the questionnaire contained 18 statements, which were further divided in three sub-section as a measure of learning support.

The first sub-section of the second section of questionnaire comprised of three statements to seek opinions of students about the provision of guidance and counselling services by the university. The second sub-section comprised of eight statements to seek opinions of students about the physical environment, including provision of equipment and resources to the students (also referred as studying arrangement), by the university. The third sub-section comprised of seven statements to seek opinions of students about the provision of support to them related to studies and learning, by university (also referred as studying organization). The second section of the questionnaire was designed on a five-point Likert scale, ranging from strongly disagree (SD=1) to strongly agree (SA=5). Reliability of the questionnaire was calculated by Cronbach's Alpha reliability coefficient. The questionnaire was found to be highly reliable with reliability coefficient of 0.825. The validity of the questionnaire was

established by consulting literature and experts who ensured that all 18 statements were related to learning support provided to students by their universities in Pakistan.

C. Collection of Data and Analysis

Before administration of the questionnaire, an informed consent was also sought from students. The questionnaire was administered to a sample of 671 students from the Faculty of Sciences and Faculty of Arts and Social Sciences of the three selected universities of southern Punjab, Pakistan. The questionnaire was administered personally by the researchers to the 671 students of 18 classrooms. On the days of data collection, some students were either not available in classes or they didn't participate in the study, and consequently 513 students filled the questionnaire. So the rate of the return for the filled questionnaires was 76.45%. Of these 513 questionnaires, 276 students were male and 237 were female. On the other hand, 373 questionnaires were filled by students in the Faculty of Social Sciences and 140 by the students from the Faculty of Sciences. For measure of students' achievements, their cumulative grade point averages (CGPAs) were taken.

In aligned with the objectives, the data were analysed by descriptive and inferential statistics. The mean and standard deviation were computed as a measure of descriptive statistics. As measure of inferential statistics, independent sample t-test and one-way ANOVA were used to measure group differences, and the Pearson correlation for measuring relationship. The Cronbach Alpha reliability coefficient was also calculated to measure the reliability of the research tool. To examine the difference between high achievers, average, and low achiever students about the learning support provided to them by university, the CGPAs of the students was taken as a categorical score for measure of achievements. To examine relationship between learning support provided to students by their university and their achievements, the CGPAs of students were taken as continuous score. The results of this research study are presented in the following section.

III. Results

In response to the objectives, following four sub-sections present results. First subsection presents results about the extent of learning support provided by universities to their students as perceived by them. The second subsection presents results about the difference between male and female students about the learning support provided to them by their universities as perceived by them, followed by the difference between learning support provided to students of social sciences and sciences by their universities, as perceived by them. Third sub-section presents results about the difference in perceptions of high achiever, average, and low achiever students about learning support provided to them by their universities. The final subsection presents results about the relationship between perceived learning support provided to students by their universities and their academic achievement.

A. Learning support provided students by universities

To examine the extent of learning support provided by universities to their students, opinions were sought from students on three aspects of learning support, namely, provision of guidance and counselling, physical environment (i.e., provision of equipment and resources) and support related to students' studies and learning. For analysis of data, the mean and standard deviations were calculated, and Table 1 presents results about the provision of guidance and counselling to students as an indicator of learning support.

Table 1

Provision of guidance and counselling

Summary of Statements	Mean	SD
Opportunity to seek guidance about learning difficulties	3.80	1.14
Sufficient information about study-related matters	3.94	0.91
Guidance to overcome issues of bullying	3.70	0.98
Overall (N=513)	3.81	1.01

Table 1 indicates that the values of mean for all three statements are either 3.70 or greater than this. These mean values show that university students believe that guidance is provided to them on matters related to their learning difficulties (mean=3.80). They further believe that sufficient information is provided to them about the matters related to their studies (mean=3.94) and they haven't noticed anyone being bullied at the campus (mean=3.70). It is also evident from Table 1 that overall value of mean is 3.81 and of standard deviation is 1.01. It shows students highly believe, with a good level of agreement, that guidance and counselling is provided to them by their universities, and thus learning is supported. Table 1 presents results about the provision of guidance and counselling to the students as an indicator of learning support. Table 2 presents results about the opinions of students about physical environment (i.e., provision of equipment and resources) as an indicator of support related to students' studies and learning.

Table 2

Physical environment, provision of resources and equipment

Summary of Statements	Mean	SD
Provision of sufficient tools and equipment	3.72	0.86
Tools and equipment are working conditions	3.71	0.88
Availability of teaching aids	3.88	1.01
Guidance about the use of tools and equipment	3.70	0.92
Availability of IT-related services (Email and software)	3.68	0.92
Computers and networks are in functioning	3.57	0.98
Guidance related to IT	3.79	0.92
Organized classroom	3.92	0.96
Overall (N=513)	3.75	0.93

Table 2 shows that mean values of all eight statements falls between 3.50 and 4.00. These mean values show that although students are satisfied with learning support provided to them by their universities to a good extent, but they least satisfied with functioning of institution's computers and network and with opportunities to use IT (Email and software) at the institution. However, students believe that help is provided to them in the use of equipment whenever they need. It is also evident from Table 2 that students believe that required tools/equipment are available at institution and these equipment work properly. It is further evident from Table 2 that students are highly satisfied with the teaching aids and with classroom arrangements. Overall mean of 3.75 and standard deviation of 0.93 also show that students believe that good level of learning support is provided to them by their universities by ensuring supportive physical environment, provision of resources, and by providing equipment to them. Table 3 presents analysis of data about the support provided to students related to their studies and learning.

Table 3

Support related to studies and learning

Summary of Statements	Mean	SD
Support for achieving leaning outcomes	3.99	0.93
Appropriate number of students in groups	3.93	1.03
Variety in teaching methods (collaborative work)	4.02	0.96
Provision of sufficient feedback on studies	3.85	0.98
Feedback on teaching and courses	3.95	1.06
Guidance on multicultural learning environment	4.03	0.98
Participate in diverse activities	4.15	0.96
Overall (N=356)	3.99	0.99

Table 3 indicates that mean values of four statements is just below 4.00, whereas values of the remaining three statements is just above 4.00. These values demonstrate that students believe that their universities support them in achieving outcomes and provide opportunities for group work with peers. They further believe that variety of teaching methods are used by teachers. It is further evident from data that students believe that sufficient feedback is provided to them on their studies, along with opportunity to give feedback on teaching. Students further believe that their universities provide opportunities to them to work in multicultural environment and to participate in different activities. Overall mean of 3.99 also confirms these results and it is therefore concluded that students are highly satisfied with the level of support provided to them by their universities on matters related to their studies and learning, such as quality of teaching, feedback, and opportunities for active participation. Overall value of standard deviation is 0.99, which shows that students are highly satisfied with learning support provided to them, and that too with a good level of consensus. Table 4 presents results about the overall learning support provided to students, along with comparison of indicators of learning support.

Table 4

Overall learning support provided to students

Indicators of Learning Support	**Mean**	**SD**
Provision of guidance and counseling	3.81	1.01
Physical environment, provision of equipment and resources	3.75	0.93
Support related to studies and learning	3.99	0.99
Overall Learning Support (N=356)	3.85	0.98

It is evident from the Table 4 that the highest value of mean is for the support related to studies and learning (3.99), followed by the values of the provision of guidance and counselling (3.85) and then least value for the physical environment and for provision of resources (3.75). It shows that students are foremost and highly satisfied with the support related to studies and learning, followed by the provision of guidance and counselling, and then least satisfied with physical environment and with the provision of resources. Overall mean of 3.85 and standard deviation of 0.98 shows that students are satisfied with all indicators of learning support to a good extent, but with a high level of agreement.

B. The Gender- and discipline-based difference among students about the learning support provided by universities

To examine gender-based and discipline-based differences among students about the learning support provided to them by their universities, an independent sample t-test was used. Table 5 shows the results about the differences between learning support provided to male and female students by their universities as perceived by them.

Table 5

Gender-based differences in the perceived provision of learning support

Involvement Nature	Gender	n	Mean	t	df	p-value
Guidance and counselling	Male	276	11.09	-3.44	511	.001
	Female	237	11.82	-3.45		
Physical environment and resources	Male	276	29.54	-2.54	511	.011
	Female	237	30.48	-2.57		
Support in studies and learning	Male	276	27.51	-2.34	511	.020
	Female	237	28.41	-2.36		
Overall learning support	Male	276	68.14	-3.35	511	.001
	Female	237	70.71	-3.37		

Table 5 shows that mean values for female students are greater than male students in all three indicators of learning support as well as for overall learning support as perceived by them. The p-value for overall learning support, along with three indicators of it, is also less than .05, which indicates significant difference between students' perceptions on the basis of their gender about learning support provided to them. It is thus concluded that female students are more satisfied with provision of guidance and counselling, physical environment and resources, the support in studies and learning and with overall learning support provided to them by universities than male students. Table 6 shows the results about differences between learning support provided to students of social sciences and sciences by their universities, as perceived by them.

Table 6.
Discipline-based differences in the perceived provision of learning support

Involvement Nature	Discipline	n	Mean	t	df	p-value
Guidance and counselling	Social Sciences	373	11.34	-1.46	511	.145
	Sciences	140	11.69	-1.39		
Physical environment and resources	Social Sciences	373	30.45	4.24	511	<.001
	Sciences	140	28.71	4.16		
Support in studies and learning	Social Sciences	373	28.23	2.56	511	.011
	Sciences	140	27.12	2.44		
Overall learning support	Social Sciences	373	70.01	2.89	511	.004
	Sciences	140	67.52	2.81		

Table 6 shows that mean value for the students of sciences is greater than the students of social sciences in the provision of guidance and counselling as an indicator of learning support. The p-value is, however, greater than 0.05, which shows that statistically not significant difference exists between the perceptions of students from social sciences and sciences about the learning support provided to them. Table 6 further shows that mean value for students of social sciences is greater than the students of sciences in other two indicators of learning support, along with overall learning support. The p-value for overall learning support, along with two indicators of it, is also less than .05, which shows statistically significant difference between the perceptions of students from social sciences and from sciences about learning support provided to them. It is further concluded that students from social sciences are more satisfied with physical environment and resources; the support in studies and learning; and with overall learning support provided to them by their universities than students from the faculty of sciences.

C. Difference in perceptions of high achiever, average and low achiever students about learning support provided by universities

To examine the differences in perceptions of high achievers, average, and low achiever students about learning support provided to them by their universities, the mean and standard deviation were calculated. Achievement of students was measured by taking their cumulative grade point averages (CGPAs). For analysis of data, the students with CGPA range from 2.00 to 2.54 were termed as high achievers, students with CGPA range from 2.55 to 3.46 were termed as average, and the students with CGPA from 3.47 to 4.00 were termed as high achievers. Table 7 presents results.

Table 7

Learning support – Perceived by High Achievers, Average, and Low Achievers

Indicators of Learning Support	Low Achievers		Average		High Achievers	
	Mean	SD	Mean	SD	Mean	SD
Guidance and counselling	3.94	0.89	3.73	1.03	3.97	0.95
Physical environment/resources	3.79	0.76	3.75	0.92	3.72	0.97
Support in studies and learning	3.89	0.97	3.99	0.99	4.00	0.98
Overall (N=356)	3.87	0.87	3.83	0.98	3.90	0.97

Table 7 shows that the high achiever students believe that guidance and counselling services are provided to them the most (mean=3.97), followed by low achiever students (mean=3.94) and then to the average students the least (3.73). Table 7 further shows that the low achiever students are the most satisfied with physical environment/provision of resources (mean=3.79), followed by average students (3.75) and then high achiever students the least satisfied (3.72). Table 7 also shows that the high achiever students believe that the most support in studies and learning is provided to them (mean=4.00), followed by average students (mean=3.99) and then to the low achiever students the least (3.89). Overall analysis of all three indicators of learning support in Table 7 shows that the high achiever students believe that they are provided learning support the most (mean=3.90), followed by the low achiever students (mean=3.87) and then the average students the least (mean=3.83). Figure 1 shows the visual presentation of learning support, provided to students by their universities, as perceived by the high achievers, average, and low achiever students.

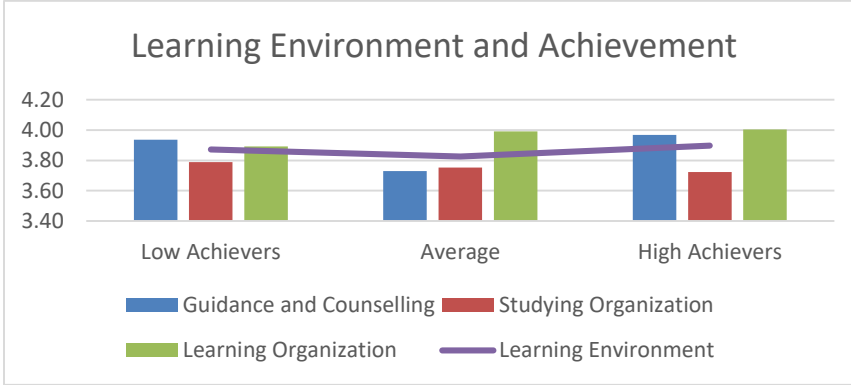

Figure 1. Learning support – Perceived by High Achievers, Average, and Low Achievers

Figure 1 also confirms the results of Table 7 through graphical presentation. Figure 1 shows that the high achiever students believe that guidance and counselling services are provided to them the most, followed by low achiever students and then to the average students the least. Figure 1 further shows that the low achiever students are the most satisfied with physical environment and provision of resources, followed by average students and then high achiever students the least satisfied. Figure 1 also shows that the high achiever students believe that the most support in studies and learning is provided to them, followed by average students and then to the low achiever students the least. Overall analysis of all three indicators of learning support in Figure 1 shows that high achiever students believe that they are provided learning support the most, followed by low achiever students and then the average students the least. To examine whether the differences in the perceptions of high achievers, average, and low achiever students about learning support provided to them by their universities are significant or not, one-way ANOVA was calculated and results are shown in Table 8.

Table 8.

Differences in learning support based on students' achievement

Learning Support	Level	n	Mean	SD	df	p
Guidance and counselling	Low Achievers	32	11.81	2.13	510	.007
	Average	335	11.19	2.48		
	High Achievers	146	11.90	2.22		
Physical environment and resources	Low Achievers	32	30.31	3.31	510	.753
	Average	335	30.02	4.20		
	High Achievers	146	29.78	4.34		
Support in study matters and students' learning	Low Achievers	32	27.25	4.94	510	.655
	Average	335	27.94	4.41		
	High Achievers	146	28.03	4.15		
Overall support in learning	Low Achievers	32	69.38	9.09	510	.815
	Average	335	69.16	8.80		
	High Achievers	146	69.71	8.55		

Table 8 shows that the mean values of overall learning support provided to students, along with all three indicators of learning support, are different for the high achievers, average, and for the low achiever students. It shows that high achievers, average and low achiever students perceive that

there is difference in learning support provided to them, along with in all three indicators of learning support. The p-value, however, for the provision of guidance and counselling to the students is less than 0.05, which shows that this difference is significant and the high achiever students are provided more support in the form of guidance and counselling than low achiever and the average students. The p-value, for the provision of overall learning support to students, along with the physical environment and in support related their studies and learning, is greater than 0.05, which shows that this difference is not significant and the high achievers, average, and low achiever students are provided same level of support in learning, as perceived by them.

D. Relationship between learning support provided to students by their universities and their academic achievement.

To examine the relationship between learning support provided to students by their universities and their academic achievement, the Pearson correlation was calculated and results are shown in Table 9.

Table 9

Relationship between provision of learning support to students and their achievement

Variables, and measures of relationship	1	2	3	4	5
1.CGPA as a measure of Achievement	-	.104*	-.030	.031	.030
2.Guidance and Counselling		-	.291**	.379**	.605**
3.Physical Resources and Environment			-	.548**	.834**
4.Support in studies and learning				-	.867**
5.Learning Support					-

*. Correlation is significant at the 0.05 level (2-tailed).

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

Table 9 shows that students' achievement (CGPAs) is statistically significantly correlated with learning support provided to them, although this relationship is very low but positive. Table 9 further shows that students' achievement is negatively correlated with the provision of physical resources, and positively correlated with support in students' studies, and with learning support, but the magnitude of these relationships are very low and insignificant. It is also evident from Table 9 that provision of guidance and counselling to students is significantly correlated with physical environment (low but positive), support in studies (moderate and low, but positive), and with overall learning support provided to them (high and positive), but this relationship is very low and positive.

It is further evident from Table 9 that provision of supportive physical environment to students is significantly correlated with provision of support to students in their studies (moderate/high but positive) and with overall learning support provided to them (high and positive), and this relationship is significant. Table 9 also shows that the provision of support to students in their studies is significantly correlated with an overall learning support provided to them (high and positive), and this relationship is significant.

IV. Conclusions and Recommendations

Five key conclusions were drawn from this research study in response to five objectives, and recommendations were made accordingly. First, this research found that students were highly satisfied with the support related to studies and learning, moderately by the provision of guidance and counselling, and least satisfied with physical environment and with the provision of resources. It is, therefore, recommended that universities need to focus more on improving physical environment of the university along with provision of resources. Second, it was found that female students were more satisfied with provision of guidance and counselling; physical environment and resources; support in studies and learning; and with overall learning support provided to male and female students by their universities and these differences were significant. It is, therefore, recommended that universities should also make arrangements for supporting male students.

Third, this study found that insignificant difference existed between the perceptions of students from sciences and social sciences and both perceive that same level of guidance and counselling is provided to them. It was however, found that students from social sciences were significantly more satisfied than students from the faculty of sciences with physical environment and resources; the support in studies and learning; and with overall learning support provided to them by their universities respectively. It is, therefore, recommended, that universities need to take measures for provision of resources to students from the faculty of sciences, especially technology- and lab-related equipment and tools. Fourth, it was concluded that insignificant difference existed among high achievers, average, and low achiever students, and all of them were provided same level of support in learning, as perceived by them.

Finally, this study found that students' achievement was statistically significantly correlated with learning support provided to them, although this relationship was very low but positive. It was also found that students' achievement was negatively correlated with the provision of physical resources, and positively correlated with support in students' studies, and with

learning support, but the magnitude of these relationships was very low and insignificant. It is, therefore, suggested that educators make arrangement to support students in consistent with the results of this study.

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