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Research Article

### A CROSS-SECTIONAL RESEARCH TO ASSESS THE PERSPECTIVE OF THE STUDENTS ABOUT THE PEDAGOGICAL/ANDRAGOGICAL ENVIRONMENT THROUGH DREEM

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**Abstract:**

**Objective:** To impartially evaluate whether the restorative training condition crosswise over Pakistan was at an adequate standard and to decide factors impacting its recognition.

**Methods:** The cross-sectional examination was led from July to December 2017 at Jinnah Hospital, Lahore which included six undergrad restorative foundations of Pakistan. The Dundee Ready Education Environment Measure (DREEM) stock having five subscales of an impression of learning, educators, climate, scholarly self-discernments and social self-observations was regulated secretly to all the consenting restorative understudies. Information was breaking down utilizing SPSS.

**Result:** Of the 3045 polls appropriated, 2084 (68.4%) were returned properly filled. Of the considerable number of respondents, 1311 (63%) were females. Generally speaking, mean score discovered positive was (105.0 ± 25.8) (Max: 200). Comparing scores in the subscales were: understudy's impression of learning (25.1 ± 7.2) (Max: 48); social self-observation (15.4 ± 3.9) (Max: 28); scholastic self-perception (17.2 ± 6.5) (Max: 32); view of educators needing some re-preparing (22.5 ± 7.1) (Max: 44); an impression of air as having numerous issues requiring a change (24.8 ± 7.0) (Max: 48). Female understudies and pre-clinical year understudies' apparent condition as more positive than male understudies (108.6 ± 23.0) versus (98.8 ± 28.9) [ $p < 0.001$ ] and understudies having a place with clinical years (108.0 ± 24.0) versus (93.3 ± 26.5) [ $p < 0.001$ ].

**Conclusion:** the Highest score was found in the space of understudy's social self-recognitions and least in the area of understudy's view of educators. Results can be utilized as a reason for arranging and executing healing estimates expected to enhance undergrad therapeutic training condition in Pakistan

**Keywords:** Perception, Undergraduate teaching, Educational environment, DREEM, Pakistan, Curriculum, Medical students.

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## INTRODUCTION:

Instructive condition (EE) grasps everything that is going on in a foundation and assumes an imperative job in deciding the accomplishment of undergrad medicinal education [1, 2]. Conduciveness of restorative organizations' instructive condition has a critical effect on therapeutic understudies' demeanours, information, abilities and behaviours with positive learning condition cultivating uplifting frames of mind towards studies [3 – 5]. The assemblage of writing in regards to the medicinal instructive condition is developing steadily [6, 7]. The learning condition is considered by the World Federation for Medical Education as one of the zones that ought to be surveyed while assessing restorative training programmes [8].

In Pakistan, the undergrad MBBS program is as yet conventional in a mode with not very many organizations grasping ideas of understudy focused exercises, issue-based learning, educational programs being network arranged, e-learning etc. [9]. Although the fuse of present-day ideas in the instructing of undergrad educational modules is required, however, changes in any part of the therapeutic instructive condition without clear heading can be upsetting for both staff and understudies. Being essential partners, understudies should be a piece of the exchange and the initial step might be to evaluate understudies' observations with respect to different EE segments to distinguish qualities and shortcomings before any real changes could be proposed. Understudies' view of the instructive atmosphere might be affected by the developing assorted variety of understudy populace, their desires, scholastic offices and different conditions of the establishments. This region, be that as it may, is under-inquired about in Pakistan and just a couple of studies directed so far are constrained by little example size and portrayal of a couple of establishments in one province [10,11].

The present investigation was intended to evaluate and look at understudies' observations for different EE parts in restorative foundations speaking to each of the four regions of Pakistan. We additionally planned to look at the observations based on sex and clinical years to recognize EE qualities and shortcomings.

## SUBJECTS AND METHODS:

The cross-sectional examination was led from July to December 2017 at Jinnah Hospital, Lahore which included six undergrad restorative foundations of Pakistan. Universities were situated in significant urban communities and all aside from one were open

division organizations. The number of inhabitants in the examination included understudies of all the five years who were available in the addresses on the times of information gathering of the investigation. Before the organization of the poll, the motivation behind the examination and insights about the Dundee Ready Education Environment Measure (DREEM) stock were disclosed to the understudies. Namelessness of the members was guaranteed. Understudies were allowed roughly 25 minutes to finish the stock, and surveys were gathered on the spot by the by the scientists.

The poll contained statistic data, and understudies' view of EE were surveyed by DREEM, a nonexclusive, multi-social multi-dimensional instrument being utilized worldwide for get-together EE data in therapeutic and associated institutions [5, 7, 12]. Since advancement at Dundee University, it has been effectively approved and utilized in created and creating nations, including Pakistan [7, 10, 13]. It contains 50 explanations estimating five elements of learning condition, including Students' Impression of Learning (SPL), Students' Perceptions of Teachers (SPT), Students' Academic Self-Perceptions (SASP), Students' Perceptions of Atmosphere (SPA) and Students' Social Self-Perceptions (SSSP). Reactions depend on the five-point liker-type scale. Two kinds of data were acquired by this stock; mean aggregate score for 50 things or every one of its 5 subscales, and singular thing means scores for every one of the 50 things.

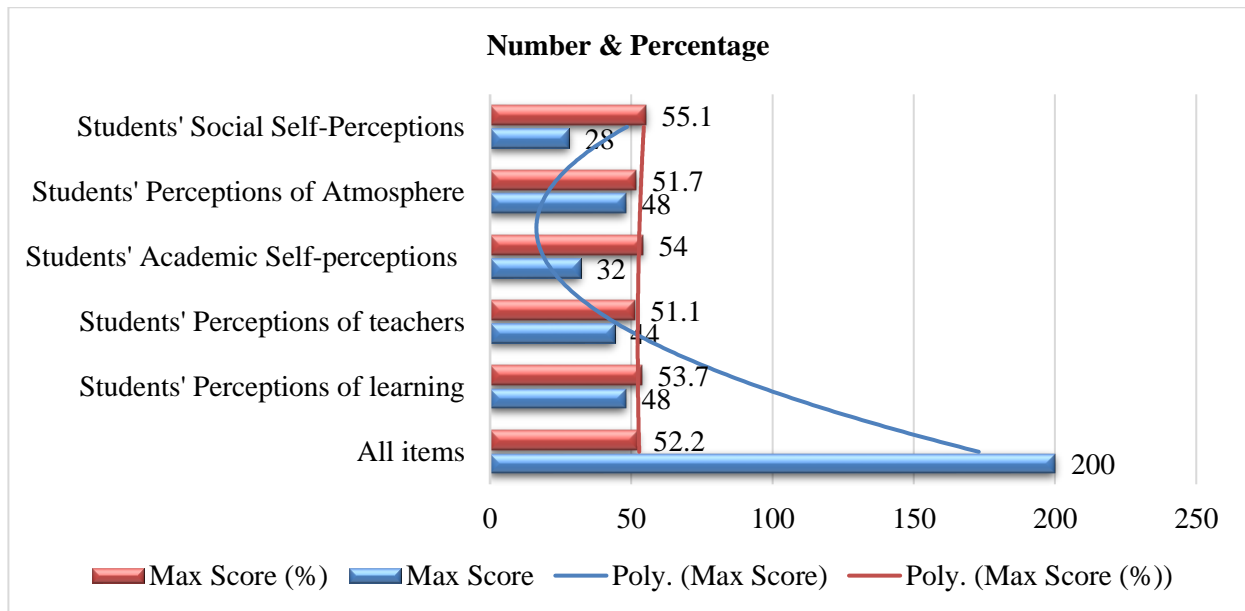
Information was breaking down by utilizing SPSS. Distinct measurements were utilized to ascertain mean and standard deviations (SD) of aggregate DREEM and the five subscales. The unpaired t-test was utilized to recognize factually huge contrasts between the subscales in the pre-clinical and clinical understudies and also between sexes. The dimension of factual essentialness was set at  $p < 0.05$ .

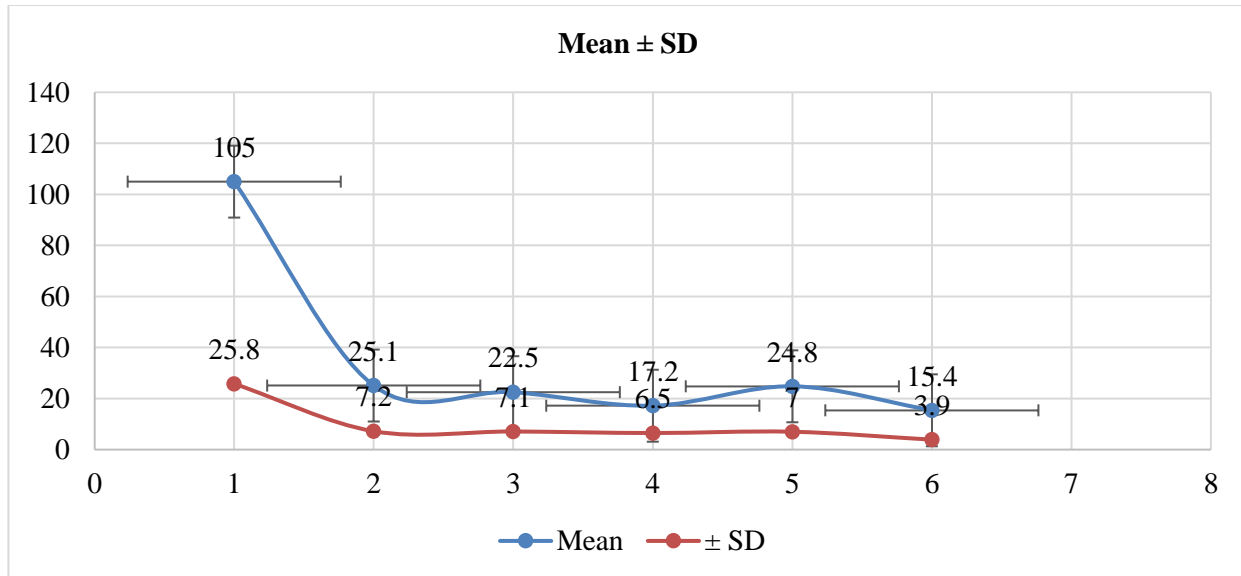
## RESULTS:

Of the 3045 questionnaires distributed, 2084 (68.4%) were returned duly filled. After excluding 4 (0.13%) questionnaires for missing data, the final study population stood at 2080 (68.3%). Of all the respondents, 1311 (63%) were females. Overall mean score found positive was  $(105.0 \pm 25.8)$  (Max: 200). Corresponding scores in the subscales were: student's perception of learning  $(25.1 \pm 7.2)$  (Max: 48); social self-perception  $(15.4 \pm 3.9)$  (Max: 28); academic self-perception  $(17.2 \pm 6.5)$  (Max: 32); perception of teachers.

Table – I: DREEM Scores and subscales

DREEM (Subscale)	Max Score	Max Score (%)	Mean	± SD	Interpretation
All items	200	52.2	105	25.8	More Positive Than Negative
Students' Perceptions of learning	48	53.7	25.1	7.2	A more positive perception
Students' Perceptions of teachers	44	51.1	22.5	7.1	In need of some retraining
Students' Academic Self-perceptions	32	54	17.2	6.5	feeling more on positive side
Students' Perceptions of Atmosphere	48	51.7	24.8	7	Many issues which need changing
Students' Social Self-Perceptions	28	55.1	15.4	3.9	Not too bad





\* McAleer S, Roff S. A Practical Guide to using the Dundee Ready Education Environment Measure (DREEM). [Available from URL: [www.gppro.co.uk/swacpo/document/dreems2.doc](http://www.gppro.co.uk/swacpo/document/dreems2.doc)] DREEM: Dundee Ready Education Environment Measure.

**Table – II:** Comparison of the educational environment of 6 medical colleges in four provinces of Pakistan (2083)

DREEM (Subscale)		All items	Students' Perceptions of learning	Students' Perceptions of teachers	Students' Academic Self-perceptions	Students' Perceptions of Atmosphere	Students' Social Self-Perceptions
Institute-I (Punjab, 731)	Mean	92.2	21.9	18.8	15.1	22.2	14.1
	$\pm$ SD	27.5	7.8	7.5	5.9	6.9	3.9
Institute-II (Sindh, 586)	Mean	114.4	25.8	25.4	18.8	28	16.3
	$\pm$ SD	20	5.7	5.6	4.6	6.2	4
Institute-III (Punjab, 232)	Mean	108	27.8	24.2	16.3	24.2	15.7
	$\pm$ SD	20	5.9	5.1	4.1	6	3.6
Institute-IV (KPK, 183)	Mean	124.8	30	26.9	21.1	29.4	17.3
	$\pm$ SD	21.5	5.9	5.9	13.1	6.2	3.6
Institute-V (KPK, 161)	Mean	104.8	26.1	21.8	19.3	21.7	15.8
	$\pm$ SD	22	6.7	6.4	5.2	6.3	3.5
Institute-VI (Baluchistan, 87)	Mean	93.7	22.4	19.4	16.2	22.6	14.1
	$\pm$ SD	22.5	7.1	5.7	4.5	6.4	3

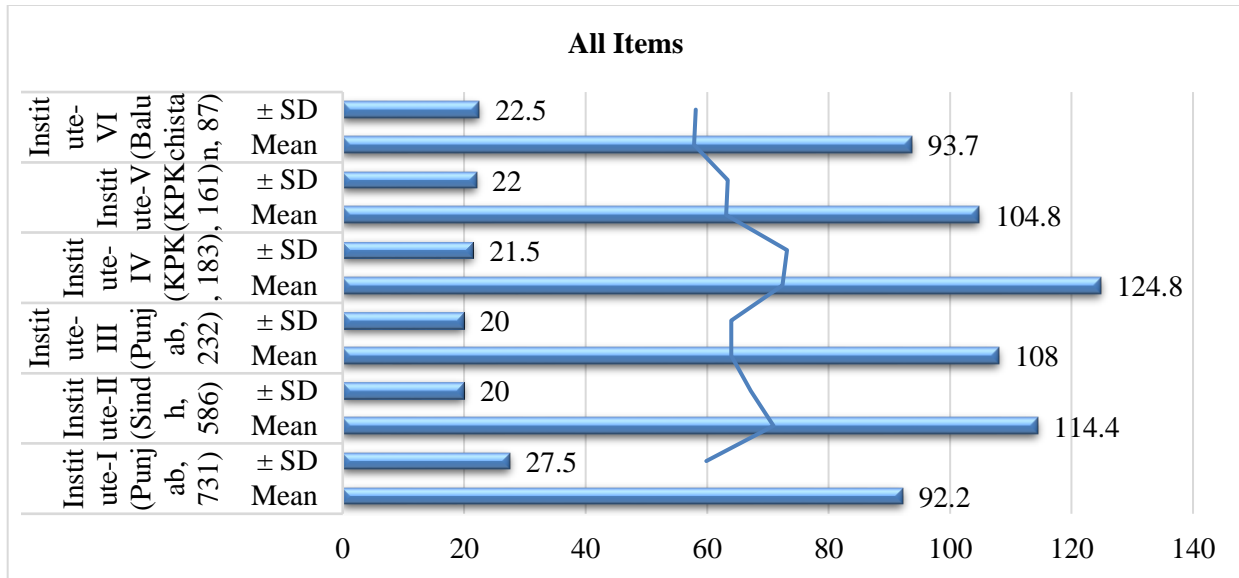


Table – III: Gender difference

DREEM (Subscale)	Males		Females		P value
	Mean	± SD	Mean	± SD	
All items	98.8	28.9	108.6	23	0.000*
Students' Perceptions of learning	23.7	8	25.8	6.6	0.000*
Students' Perceptions of teachers	20.3	7.8	23.8	6.3	0.000*
Students' Academic Self-perceptions	16.5	8.7	17.7	4.8	0.000*
Students' Perceptions of Atmosphere	23	7.5	25.9	6.5	0.000*
Students' Social Self-Perceptions	15.3	3.8	15.4	4	0.958

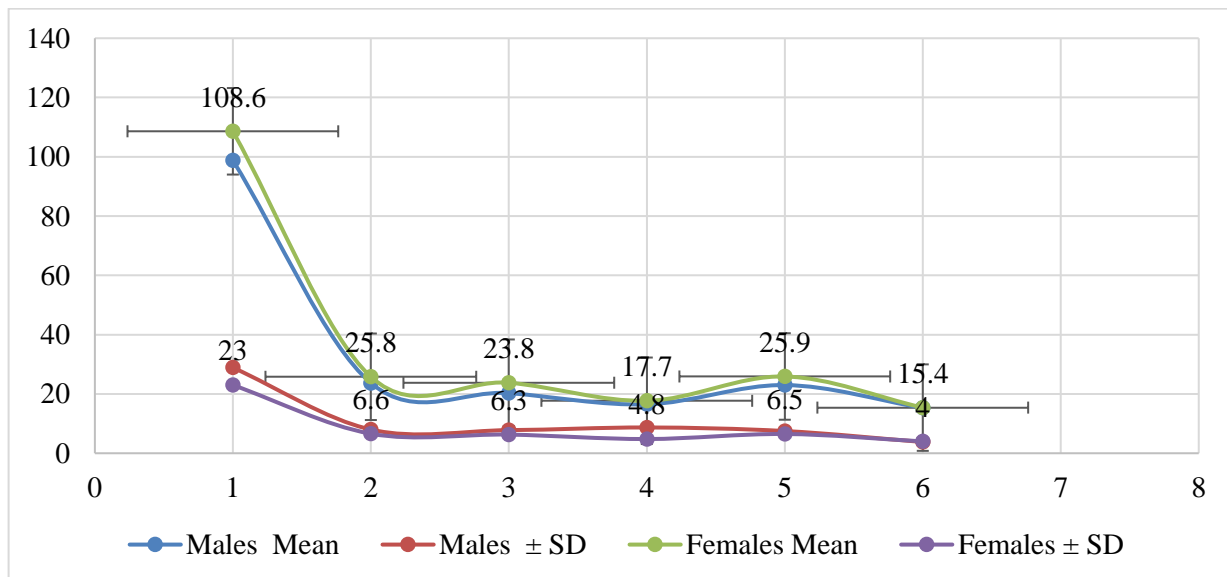
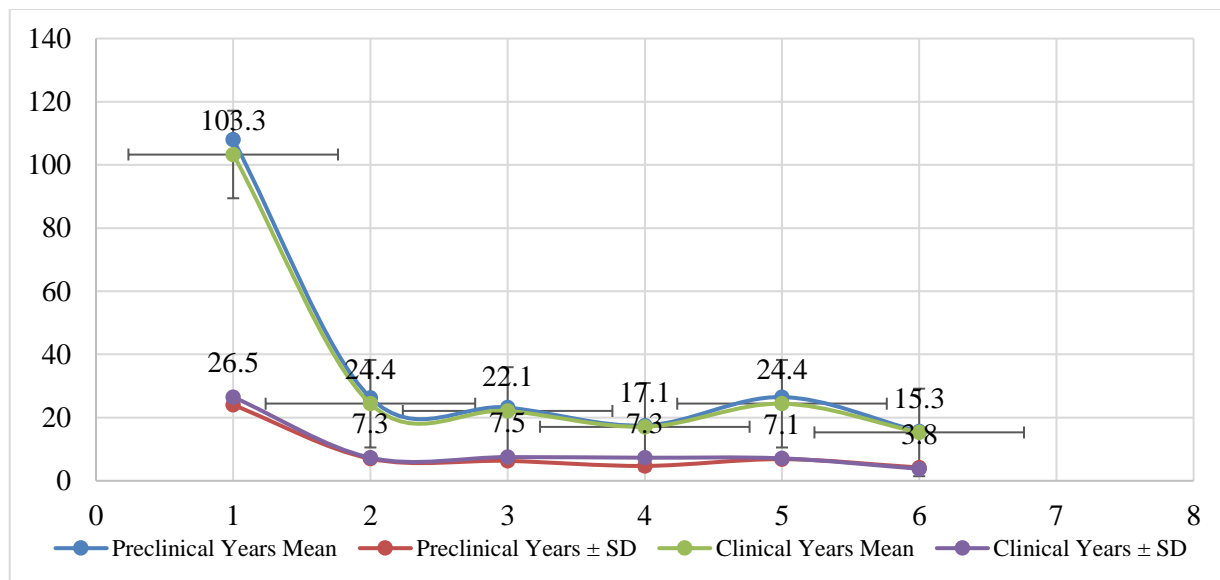


Table – IV: Pre-clinical and clinical years students

DREEM (Subscale)	Preclinical Years		Clinical Years		P value
	Mean	± SD	Mean	± SD	
All items	108	24	103.3	26.5	0.001*
Students' Perceptions of learning	26.3	7	24.4	7.3	0.155
Students' Perceptions of teachers	23.2	6.3	22.1	7.5	0.000*
Students' Academic Self-perceptions	17.5	4.7	17.1	7.3	0.000*
Students' Perceptions of Atmosphere	26.5	6.84	24.4	7.1	0.011*
Students' Social Self-Perceptions	15.6	4.2	15.3	3.8	0.519



### DISCUSSION:

A perfect medicinal instruction condition, separated from contributing towards enhancing passionate insight of understudies, should empower future doctors to gain the vital capabilities and aptitudes for their career [14]. The present examination is among the specific few from Pakistan concentrating on the essential part of the job of EE in medical education.

In our study, students surveyed by and large EE emphatically with a mean score of (105.0 ± 25.8) out of a greatest of 200, however, this was a long way from excellent [15]. Although there is no agreed worthy DREEM score from writing, yet restorative schools with conventional frameworks, for the most part, have seen to have DREEM scores near 120. Concentrates from different nations in the area like Iran, Sri Lanka and Bangladesh have detailed mean scores of 99.6, 107.4 and 110 respectively [16 – 18]. Our outcomes are additionally practically identical to a past report revealing mean DREEM score of 115 in broad daylight part therapeutic foundations in Punjab

[11]. One investigation saw that understudies in conventional restorative frameworks are less inclined to appreciate learning because of more teacher centred environment, and accentuation on real learning [19]. Traditional instructing is likewise seen to abandon a few understudies prohibited from the triangle of influence [20]. On the other hand, a lot higher DREEM scores and positive EE discernments have been accounted for from current, student centred frameworks like from the United Kingdom 139 and in addition from nations like Chile following educational programs changes stressed by World Federation for Medical Education (WFME) [8, 2]. Noteworthy degree for development in each of the five EE spaces was found in our investigation. The most minimal score was seen in understudies' view of educators, which is a reason for worry for the personnel. Educators are good examples for the understudies. Their activities, frames of mind and excitement will influence understudies by implication, in this manner they should put their time

and vitality in ordinary consistent medicinal training (CME) exercises. These discoveries likewise reflect the absence of staff improvement endeavours in medicinal foundations in Pakistan, which should be tended to sufficiently. Understudies' view of climate is another EE space that needs enhancement. It gives off an impression of being identified with foundation lacks. Offices with awkward seating, uproarious rooms, educating in cool or overheated rooms and so on make it troublesome for understudies to unwind and pay attention [20]. Many different investigations have additionally revealed most reduced scores in climate space of EE, proposing explicit significance to be given to great physical condition to encourage learning [19, 2 – 23].

Varieties in DREEM scores among various foundations were seen in our investigation with by and large impression of establishments with better understudy educator proportion, and late educational programs changes or adjustment in accordance with best worldwide works on being seen as having agreeable, progressively loose, positive EE. The instructive foundation of understudies from various locales may likewise clarify the outcomes. So as to guarantee consistency in instructive conveyance and to keep up top-notch EE regardless of understudies being educated at various showing foundations, one valuable apparatus might be the DREEM stock.

We additionally found factually critical sex explicit varieties with female understudies announcing more fulfilment than their male partners, a pattern detailed in some past studies [18, 23 – 25]. In sharp complexity are ponders where male understudies evaluated instructive milieu higher [3, 5, 26]. An examination from India did not demonstrate any sexual orientation explicit differences [27]. Findings of ladies having better relational aptitudes may clarify their progressively positive view of the instructive condition in our study [17].

Understudies in pre-clinical years in our investigation evaluated instructive condition more profoundly than understudies in the clinical years. Past examinations have indicated blended outcomes with medicinal and dental understudies in India detailing comparable results [27, 28] while understudies in clinical years from Iran seeing pre-clinical EE as more positive [16].

The consequences of the investigation should be found related to the restriction that despite the fact that DREEM is the most broadly utilized proportion of EE evaluation and aides in distinguishing qualities and shortcomings, yet it doesn't give us the hidden motivations to the equivalent. Subjective examinations incorporating into profundity interviews enhance understanding and investigate answers for the apparent reasons for understudies'

dissatisfaction [21]. Despite the confinement, the investigation has numerous qualities, including a vast example estimate, the portrayal of medicinal organizations of all the four territories prompting generalizability of results for open division establishments in Pakistan.

### CONCLUSION:

The results can be used to guide strategic planning. Certain areas that require remedial measures in EE were identified for effective management of learning especially in the students' perception of teachers and students' perceptions of atmosphere sub-domains. As a learning environment affects students' motivation and achievements, regular feedback from students as to how they perceive their EE is very important. Teaching methods, curriculum changes, student-centred learning, favourable atmosphere, good support system are areas to be considered as main segments for development of EE in Pakistan. Further research to identify the most appropriate interventions is also needed.

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