ASSESSING THE PSYCHOSOCIAL ENVIRONMENT OF PUBLIC SCHOOLS IN RURAL PAKISTAN-UNDERSTANDING THE CONTEXT BEFORE PROGRAM IMPLEMENTATION

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Abstract

Objective: To perform the translation adaptation and validation of the WHO psychosocial environment tool for assessing the qualities of the school environment in the Pakistani context and identifyingthe areas for improvement before the implementation of the EMRO School Mental Health Program (SMHP).

Study Design and Methods: This was a cross-sectional study conducted as part of the pilot implementation of the EMRO School Mental Health program in the public schools of Gujjar Khan.
The WHO psychosocial environment profile (PSE) tool was translated and adapted into Urdu by the forward and backward translation method recommended by WHOfollowed by data collection from 90 respondents (80 teachers, 10 school administrators) in ten schoolsselected for pilot implementation.

Results: After adaptation in the Pakistani context, the tool preserved the main dimension with good reliability (Cronbach's Alpha; 0.85, CR;0.89) and validity (AVE 0.67-0.86, satisfactory face validity and discriminant validity). Confirmatory Factor Analysis (CFA) indicated reasonable indices (normed Chi-square value ($\chi 2/df$)-1.692; SRMR - 0.70; RMSEA-0.056; CFI-0.843). Data was collected with a 100% response rate. Key findings were the non-availability of written policies in 80% of schools for the majority of areas except physical punishment, violence, bullying, and harassment. For available policies, there was no dissemination or enforcement according to 60-70% of respondents. Positive norms were the school's welcoming attitude towardnewcomers (92%), avoiding physical

punishment (92%), well-maintained discipline (100%) with clear enforcement of rules (93%), sense of belongingness of staff (92%), and support to parents for the child's educational needs (81%).

Conclusion: *The psychosocial environment of schools reveals a dearth of written policies and their enforcement. However, being small rural schools with possible better interconnectedness between students, teachers, and parents, there are many positive norms that can be strengthened through the establishment of formal policies and codes of conduct. Understanding these strengths and weaknesses and ensuring targeted evidenced-based measures are crucial for the improvement of the school environment and the well-being of children.*

INTRODUCTION

Child and adolescent mental health are an important global public health concern accounting for 16% of the global burden of diseases in the 10-19 years age group. Amongst mental illnesses, depression is the leading cause of illness and suicide is the third leading cause of death in 15-19 years adolescents.[1] Half of the adult mental disorders begin before 14 years and three fourth by mid-twenties[2] while socioemotional skills developed at this stage form the foundation for mental health. Hence, any unfavorable experience at this fundamental stage increases vulnerability to mental health issues.[3] The issue warrants more concern in low-middle income countries where 90% of the children reside and a higher burden of disease is coupled with poor resources and stigma.[4,5] Children's psychosocial environment at home, school, and community play a crucial role in shaping their socio-emotional well-being. The school environment forms a substantial part because children spend a significant amount of time at school.[6] A typical school environment encompasses social, psychological, and physical components which influence the health of students and teachers.[7-10] These components are created and maintained through the school's policies, management practices, and attitudes of school administration and teachers. An environment with positive attributes like a sense of connectedness and a rewarding learning atmosphere enhances socioemotional well-being while stress factors like physical punishment, violence, abuse, harassment, and discrimination

can act as barriers to school participation and other favourable mental health outcomes[11]. Understanding and promoting a positive school environment is a focus of global research but there is a dearth of evidence from low-income countries where no recognition and support is available to understand and improve school climate.[12]

Global evidence dictates that schools offer an excellent opportunity for early identification of children in need before deep-rooting of their socio-emotional issues. Additionally, there is considerable evidence that both universal and targeted school-based interventions lead to better social, emotional, and academic outcomes for children, offering the potential to prevent mental health problems in later life.[13,14] Increasing recognition of the linkage between health and educational outcomes and schools being the ideal setting for efforts to improve mental health led to multiple initiatives by the World Health Organization (WHO) and other organizations with the shared vision of a healthy school psychosocial environment. [15-18] For this purpose, WHO has designed a comprehensive tool to help teachers assess their schools' psychosocial environment profile, identify positive characteristics to strengthen them, and take corrective measures for aspects having negative implications.

Based on global evidence on the effectiveness of School Mental health Programs (SMHPs), the use of a life course approach to address child mental health issues, and the integration of services in existing social and educational systems, WHO

EMRO (Eastern Mediterranean Regional Office)has identified Child Mental Health as a priority andendeavoured for large scale implementation of EMRO SMHP in Eastern Mediterranean Region with pilot roll downin selective EMR countries.In Pakistan, the Ministry of Health is implementing this program in collaboration with the ministry of education and other stakeholders. [29]Theprogram includes capacity building of teachers as task sharing solution to deliver mental health services in their schools. This study was carried out before the small-scale pilot implementation of the program to understand the context of the schools that has implications for the socio-emotional well-being of children and identify theareas for improvement in the school environment before implementation.

METHODS

Study Setting. This descriptive cross-sectional study was conducted as part of the pilot implementation of a school mental health program in public schools of Gujjar Khan[29], a rural sub-districtin Rawalpindi, Pakistan having a union council as its smallest unit with approximately 30,000-50,000 population members. It is mainly a low-income area with agriculture and farming as the main source of income followed by earnings through public and private sector jobs or industries in Rawalpindi city. The area has approximately 500 schools (231 girlsand 266 boys; 323 primary, 89 middle, and 85 high schools). Every school had one school administrator taking care of administrative and academic responsibilities and an average of 8 x teachers (Range 7-15). This study was conducted in 10 x schools selected by the education department for pilot implementation of conventional school mental health programs comprising 5 girls and 5 boysschools with 132 teachers.

Study Participants and Sampling.   Psycho-Social Environment (PSE) assessment toolis primarily intended to help teachers to assess the psychosocial environment in their school but other school staff may also be involved. Hence, teachers and administrators of 10 x schoolsselected bythe education department for pilot implementationof the EMRO School Mental Health Programwere taken as study participants. Respondents with more than six months of service were eligible.As per tool instructions, the selection of 96 (64%) respondents from a population of 150 employeescan give 95%certainty that responses are representative of school personnel, hence, the sample size of 90 (10 x school administrators and 80 x teachers) was considered sufficientfrom study population comprising 10 x school administrators and 132 teachers. [30]This study was conducted as part of the implementation evaluation of a pilot study hence small sample selection is considered appropriate to estimate data and values with valid results.[31]

Data Collection Tool. The Psycho-Social Environment (PSE) Profile tool, designed by WHO was utilized for data collection. This tool helps teachers, schooladministrators, and school health teams to raise awareness,identify positive characteristics of the school, create a positive psychosocialenvironment, and improve the socio-emotional well-being of children. It is most effective when used as a part of broader school effort[30]. The instrument consisted of a consent statement, demographic information,and scales measuring seven "quality areas" and 100 items:

• Quality area 1: Providing a friendly, rewarding, and supportive atmosphere (18 items)

• Quality area 2: Supporting cooperation and active learning (8 items)

• Quality area 3: Forbidding physical punishment and violence (20 items)

• Quality area 4: Not tolerating bullying, harassment, and discrimination (18 items)

• Quality area 5: Valuing the development of creative activities (10 items)

- Quality area 6: Connecting school and home life through involving parents (13 items)
- Quality area 7: Promoting equal opportunities and participation in decision-making (13 items)

Translation Adaptation of the Tool. PSE Tool was translated to Urdu by the forward and backward translation method recommended by WHO. [32] The forward translation was carried out by a psychologist versant with the terms and had Urdu as a native language with good English proficiency. It was followed by a review of bilingual experts and backward translation by an independent translator. As the psychometric properties of the tool are context-dependent, hence, these were assessed using the Partial Least Square technique to establish the validity and reliability of the instrument and the authenticity of the data collected through it.

Data Collection and Analysis. Data was collected through the self-administration of the tool after receiving permission from the education department, institutional gatekeepers, and individual consent. Ethical approval of the study was obtained from the institutional review board of the Health Services Academy and the Ethical Review Committee of the Human Development Research Foundation, Pakistan. Data analysis comprised of two parts i.e. analysis of psychometric properties through partial least square technique (PLS) using Smart PLS software and assessment of the psychosocial school environment through the use of Statistical Package for Social Sciences version 22. To determine the **reliability and validity analysis**, Partial Least Square (PLS) technique was applied through Smart PLS software. This is a multivariate statistical technique that allows comparison between multiple response variables and multiple explanatory variables. It is designed to deal with multiple regression when data has a small sample, little availability of theory, and

predictive accuracy is paramount. [33] It performs the simultaneous estimation of the group of equations by measuring the concepts (measurement model) and their relationships (structural model). [34]

To determine the internal consistency reliability of the model, the most common measure of internal consistency used by researchers, the Cronbach alpha (α) was used in the present study along with composite reliability (CR). The usual and widely used threshold of reliability (Cronbach's Alpha) for the measure and acceptable value is above 0.7. [35]

Face Validity: Face validity is defined as respondents or users judging the items of an instrument as appropriate to the targeted construct and assessment objectives. [36] The data collection tool was given to 3 respondents and 5 research experts for their feedback, on what the tool is intended to measure. The aim was to assess that the Urdu version of the instrument after translation measured the construct similarly to what it was intended to measure before translation.

Construct Validity: Statistically, construct validity is established when there is convergent validity and discriminant validity. Convergent Validity is the extent to which different measures, measuring the same construct correlate with each other. To establish convergent validity, the average variance extracted (AVE) of each latent variable is considered

While Discriminant Validity ensures that each construct in a measure is empirically unique and captures a phenomenon not represented by other constructs in a statistical model. In technical terms discriminate validity refers that a test that does not correlate too high with measures from which a construct is supposed to differ. [37]

With regards to **Confirmatory Factor Analysis,** structural equation modeling was employed in the present study that deals specifically with the measurement models that assess the relationship between observed measures or indicators and latent variables or factors. Confirmatory factor analysis (CFA) is almost always used in the process of scale development to examine the latent structure of a test instrument. [38] CFA verifies the number of underlying dimensions of the instrument (factors) and the pattern of item-factor relationships (factor loadings). Kline (2015) suggested reporting a minimum of the model chi-square, the standardized / Root Mean Square Residual (SRMR), The Root Mean Square Error of Approximation (RMSEA), and (comparative fit index) CFI while reporting factor analysis.[39]

PSE Profile Analysis was done on seven quality areas where a score of 1-4 was given for each item in every quality area (1; Not at all, 2; A little, 3; Quite a lot, 4; Very much). A higher score was assigned for better responses. Finally, the average score for each respondent was calculated followed by the calculation of the group mean score. Descriptive statistics are presented as mean scores by quality areas, and schools and inferential statistics are utilized to determine the variation in responses by gender,the role of the respondent, and inter-school variability.

RESULTS
Socio-Demographic Characteristics: The sample consisted of 90 respondents in 10 single-gender schools (5 boys, 5 girls) with 45 (50%) males and 45 (50%) females. The average age of the respondents was 37±6 years while 10 respondents (11%) were school administrators and 80 (89%) were teachers.

Reliability Analysis: PSE was originally developed by WHO; however, the present study translated the tool due to local cultural and linguistic reasons. The present study revealed that Cronbach's alpha for all quality areas is found to be above 0.85 and the composite reliability of all constructs is above 0.89 which is higher than the recommended values representing good internal consistency reliability.

Validity Analysis: Facevalidity and construct validity were tested in the validity analysis.
Face Validity: The aim of assessing the face validity was to assess that the Urdu version of the instrument after translation measured the construct similarly to what it was intended to measure before translation. The response of 3 respondents and 5 research experts was satisfactory, however, minute changes in the use of words were made.

Construct Validity: In the study, construct validity was based on satisfying the criteria of convergent validityas well as Discriminant Validity. In Construct Validity, the value of AVE is considered which ranges from 0 to 1 which means that factors must explain more than half the variance of their respective indicators, hence,the acceptable value is 0.50. A value less than 0.50 shows that the error variance is greater than the explained variance.In this model, the value of indicators is greater than 0.5 in all domains ranging from 0.67 to 0.86 (**Table 1**).

Table 1 Construct Reliability and Validity - WHO PSE Tool			
Dimensions	Cronbach – α (≥ 0.7)	Composite Reliability(≥ 0.7)	Average Variance Extracted (≥ 0.5)

Friendly Rewarding Supportive Atmosphere (FRSA)	0.93	0.93	0.74
Supporting Cooperation Active Learning (SCAL)	0.91	0.90	0.81
Forbidding Physical Punishment and Violence (FPPV)	0.91	0.91	0.72
Not Tolerating Bullying Harassment Discrimination (BHD)	0.92	0.91	0.83
Valuing Development of Creative Activity (CA)	0.89	0.91	0.77
Connecting School and Home Life Involving Parents (CSH)	0.90	0.93	0.86
Promoting Equal Opportunities & Participation in Decision Making (PDM)	0.85	0.89	0.67

Discriminant Validity was calculated using the Fornell-Larcker criterion. The results show there is a weak correlation between constructs in a measure and the square root of AVE for the construct is greater than the inter-construct correlation; hence satisfying discriminate validity criteria in model fit. (**Table 2**)

Table 2 Discriminant Validity - WHO PSE Tool	FRSA	SCAL	FPPV	BHD	CA	CSH	PDM
Friendly Rewarding Supportive Atmosphere (FRSA)	1						
Supporting Cooperation Active Learning (SCAL)	-0.01	0.9					
Forbidding Physical Punishment and Violence (FPPV)	0.23	0.55	0.84				
Not Tolerating Bullying Harassment Discrimination (BHD)	0.06	0.64	0.54	0.91			
Valuing Development of Creative Activity (CA)	0.07	0.54	0.99	0.41	0.87		
Connecting School and Home Life Involving Parents (CSH)	0.07	0.67	0.66	0.46	0.30	0.92	
Promoting Equal Opportunities & Participation in Decision Making (PDM)	0.89	0.43	0.77	0.66	0.28	0.38	0.81

Confirmatory Factor Analysis: In the present study, CFA was applied to the items of scale measured Psycho-social Environment.Chi-squared assesses the overall fit of the model.The environment is representing hundred items scale and based on the results, CFA indicates that chi-square ($\chi2$) with statistics of 2282.162 depictsa lower value than the standard value with the degree of freedom = 1349 and p-value ≤ 0.000. As chi-square is affected by sample size so normed chi-squarei.e. ratio of chi-square to the degree of freedom ($\chi2/df$)is used. In the study, this had a statistical value of 1.692, which is less than 2, depicting excellent fit as there is consensus in lieu of an acceptable ratio and most of the studies recommend its range highest at 5 and lowest as 2.[40] The values ofRMR/SRMR (standardized Root Mean Square Residual) representing the square root of the difference between the residuals of the sample matrix and the hypothesized model and Root Mean Square Error of Approximation (RMSEA), a non-centrality-based indexbelow <0.08 and 0.06 areis considered a good fit.[41]The corresponding values are found to be 0.70 and 0.056 respectively while the value of the comparative fit index (CFI) is 0.843 against an acceptable value of 0.09. (**Table 3**)

Table 3 Confirmatory Factor Analysis		
Fit Indicators	Acceptable Values	Values
Chi-square/degree of freedom	Between 1-3	1.692 (Excellent)
GFI	>0.90/095	.742 (Not Conforming)
RMR/SRMR	<0.08	.070
RMSEA	<0.06	.056
CFI	>0.90	.843
IFI	>0.90	.846
TLI	>0.90/0.80	.834

Analysis of School Psychosocial Profile

Scoring Profile of the Schools: As per the originalpsychosocial environment (PSE) scoring system, the schools scored better in consolidated PSE scores and all quality areas except the quality area of "not tolerating bullying and harassment". Though scores were better than average, still, they depict a large margin for improvement. (**Table 4**). On school-wise analysis, the majority of schools were rated lowin quality areas 4 (1,2,3,6,8,9) and 6 (1,2,6, 9,10) while none of the schools were rated low in Quality Areas 1, 5, and 7. (**Table I: Supplementary file**).

Table I

Psychosocial Profile Scores of Individual Schools

Quality Area	WHO	1	2	3	4	5	6	7	8	9	10
Friendly rewarding	**45**	47.	53.	63.	61	58.	53	62.	59.	54	59

supportive atmosphere	3	1	0	.7	8	.8	8	6	.1	.8	
Supporting cooperation active learning	20	18.2	19.2	24.1	21.6	22.4	20.6	23.5	22.1	20.8	21.2
Forbidding physical punishment and violence	50	54.0	48.8	55.2	64.4	59.6	47.8	60.1	50.7	50.6	61.4
Not tolerating bullying harassment discrimination	45	38.4	37.3	40.4	50.1	50.7	37.2	49.5	40.3	36.3	51.6
Valuing development of creative activity	25	27.2	27.0	29.2	27.7	28.3	26.6	31.1	27.6	25.4	27.7
Connecting school and home life involving parents	32.5	28.6	28.5	36.8	36.4	37.3	31.5	34.4	32.8	30.7	32.1
Promoting equal opportunities & participation in decision making	27.5	33.3	42.1	44.5	39.6	41.6	32.1	33.7	38.7	34.7	37.0
Total	245	247.2	256.2	293.4	302	299.1	250	295.4	272.2	253	291.11

Table 4 Comparison of Study Scores with WHO Tool Scores						
Quality Area	WHO PSE Tool			Current Study		
	Min	Max	Mean	Min	Max	Mean
Friendly, rewarding, supportive atmosphere	18	72	45	44	71	57.5
Supporting cooperation, active learning	8	32	20	15	27	21.5
Forbidding physical punishment and violence	20	80	50	40	80	55.3
Not tolerating bullying, harassment and discrimination	18	72	45	24	65	43.2
Valuing the development of creative activity	10	40	25	23	38	27.8
Connecting school and home life involving parents	13	52	32.5	19	46	33.0
Promoting equal opportunities and participation in decision making	11	44	27.5	28	51	37.7
Total	114	392	253	210	355	276

Policy Aspects: The availability of written policies is the most important aspect to be evaluated while assessing the psychosocial environment. In our study, there was a gross deficit in this aspect. Except for aspects of physical punishment, violence, bullying, and harassment, almost 80% of the schools had little or no policy in all other quality areas (**Figure 1**). Even in quality areas with the availability of policies, there is no or little dissemination or enforcement as per 60-70% of respondents.
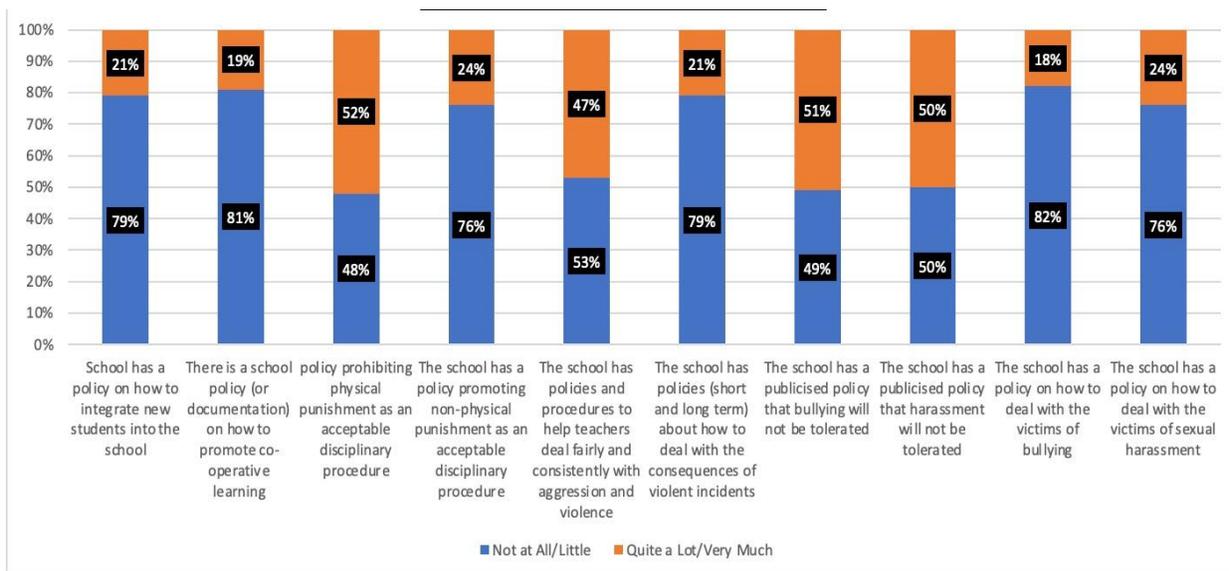

Figure 1 Availability of Policies by Quality Areas

Analysis of Individual Quality Aspects

School characteristics wereanalyzed concerningpositive characteristics and areas requiring improvement. In the analysis of positive characteristics, with regards to students, positive aspects involve assistance to new students (92%), support to children in distress (92%), encouraging students to care for each other, availability of trusted persons (86%), sense of belongingness (78%),group activities (76%),encouragement to ask questions(96%), opportunities to speak (98%) and express feelings (86%), and equality to students who are different (96%).

With regards to discipline, acknowledgment of good behaviours (100%), codes of conduct regarding expected behaviours (80%), well-maintained discipline (100%) with practical rules (98%), their firm, fairenforcement (94%), avoidance of physical punishment (92%) and support in non-physical punishment (80%) are the positive facets. In addition, teachers and students feel safe at school (100% each). In the case of bullying, there are publicized procedures regarding staff intervention (74%) with awareness of students regarding non-tolerance to bullying (92%) and places to seek help (96%).

For creative activities, availability of dedicated recreational time (88%), supervised by responsible adults (94%), opportunities for creating imaginative games (84%), stress-free creative experiences (84%), and rewarding both effort and achievement (86%) were strong areas. Efforts are in place to connect school and home life through informing parents regarding school policies and codes of conduct (80%), discussing the child's homework (92%) and worries (96%), and assisting parentswith learning at home

(86%). Other positive qualities are the availability of materials free of ethnic, religious, and gender stereotypes (98 % each).

Regarding the staff, positive characteristics were the perception of school asan attractive place to work (92%), confidence in receipt of support in need (92%), sense of belongingness (92%), and peers'cooperation (98%).

Aspects necessitating improvement are parental involvement in policy discussions (54%), school activities (18%), and things to be taught at school (6%) in addition to the sensitization regarding informing the school regarding changes in the home environment (52%).

With regards to students, aspects necessitating improvement werethe involvement of students in community projects (20%), display of work (50%), discouraging order (54%), creatingquiet places (64%), and opportunities for recreational physical activities (74%),outsideschool recreation (10%). Other aspects are to involve them in decisions about school organization (34%) promoting gender equality (58%) and provision of equal opportunities for both genders (56%).

More opportunities need to be provided to teachers to gain new knowledge and skills (67 %), and support to deal with students/staff who witnessed violence (58 %). Work is required to further strengthen measures to ensure that female students (78%) and teachers (76%) are not subjected to sexual harassment**(Table II: Supplementary   file)**.
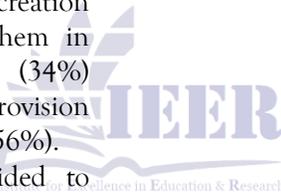
Table II
Analysis of Strong and Weak Quality Areas

Providing A Friendly, Rewarding and Supportive Atmosphere	Positive Aspects	School's friendliness to visitors (96%), encouragement of students to welcome and assist new students (92%), availability of support to children in distress (92%), student's confidence regarding receipt of help if needed (91%), availability of a trusted persons to approach (86%), strong sense of belongingness to school(78%), fair peer concern and care (70%), conduct of regular school events (84%), positive feedback to the students (88%). Staff perception of school being an attractive place to work (92 %), teacher's confidence on receipt of support in need (92%), maintenance of teacher's self-confidence by treating them well (90%), orderly behaviour of staff (92%) and strong sense of belongingness (92%).
	Need Improvement	Interest and support of parents in school and its governance (30%), policy to integrate new students (22%)
Supporting Cooperation and Active Learning	Positive Aspects	Students spending time on group activities (76%), encouraged to ask questions in class (96 %), teacher's cooperative to peers (98 %).
	Need Improvement	Students spending time on problem-solving (55 %), working on community projects (20%), appreciation of student's work through the display (49%), discouraging the order of students (52%), policy to promote cooperative learning (20%)
Forbidding physical punishment and violence,	Positive Aspects	Well maintained discipline (100%), acknowledgement of good students behaviours (100%), practical discipline rules (98%) with clarity to all (94%), firm, fair enforcement of discipline (94%), feeling of safety by teachers and students (100% each), teachers avoiding physical punishment (92%), support to teachers in non-aggressive style of discipline (80%) and stressful situations (76 %), opportunities for students (78 %) and parents (70 %) to voice concerns about inappropriate / abusive behaviours
	Need Improvement	Policies on forbidding physical punishment (54%), promoting non-physical punishment (26%), fair dealing (44%) and deal with the consequences of violence (20%),opportunities for teachers to gain new knowledge and skills (66 %), record keeping of disruptive incidence (21 %), dealing with students / staff who witnessed violence (60 %).
Not tolerating bullying, harassment and	Positive Aspects	Availability of publicized procedures regarding staff intervention (74%) and student help-seeking (96%) in case of bullying, codes of conduct regarding expected behaviours

discrimination,		(80%), regular updating of codes (98%), student's knowledge regarding non-tolerance to bullying (92%) and places to seek help, if bullied (96%)
	Need Improvement	Development of policies against bullying (52%), harassment (53%), staff intervention in bullying (74%), intervention in harassment (24%), enforcement of bullying policies (44%)and ensuring female students (78%) and teachers (76%) not subjected to sexual harassment.
Valuing the Development of Creative Activities	Positive Aspects	Availability of dedicated recreational time (88%), supervised by responsible adults (94%) in sufficient number (80%), opportunities for creating imaginative games (84%), stress/competitionfree creative experiences (84%), having constructive comparison (80%), reward for both effort and achievement (86%).
	Need Improvement	Creating opportunities for recreational physical activities (74%), quiet place for recreation (64%), recreation outside school hours (10%).
Connecting School and Home Life through Parents Involvement	Positive Aspects	Parents welcomed at school (82%), informing parents regarding school policies and codes of conduct (80%), discussing child's homework (92%) and worries (96%), assisting them for learning at home (86%).
	Need Improvement	Inform parents regarding school activities (70%), involving in discussion regarding policies (54%), things to be taught at school (6%) and how (15%), involving in outside activities (18%), parents knowledgeable to inform school regarding changes in home environment (52%).
Promoting Equal Opportunities and Participatory Decision-Making,	Positive Aspects	Availability of ethnic, religious and gender stereotypes freematerials (98 % each), opportunities for students to speak (98%), express feeling about home and school life (86%), equality and respect to students who are different (96%), non-exclusion of any student from possibility of being successful (98%).
	Need Improvement	Involve students in decisions about school organization (34%), deciding school rules (14%), gender equality (58%), provision of equal opportunities for both genders (56%).

Gender-based analysis depicted that female respondentsassigned better scores to their schools in total scores and all quality areas except promoting equal opportunities for participatory decision-making.(**Table 5**).

Table 5 Gender-Based Comparison of Perspective			
Quality areas	Male	Female	P-Value
	Mean (SD)	Mean (SD)	
Friendly, rewarding, supportive atmosphere	55.1 (6.4)	59.8 (5.7)	.001

Supporting cooperation, active learning	20.6 (2.6)	22.2 (2.4)	.005
Forbidding physical punishment and violence	55.3 (7.5)	55.3 (7.7)	.978
Not tolerating bullying, harassment, discrimination	43.1(10.1)	43.4 (8.0)	.087
Valuing development of creative activity	27.5 (3.2)	28.2(2.9)	.307
Connecting school and homelife involving parents	32.0 (5.5)	34.1(4.2)	.048
Promoting equal opportunities and participation in decision making	38.4 (4.8)	37.2(5.5)	.294
Total Score	272.0 (31.5)	280.0 (26.8)	.192

Moreover,concerning the **category of respondents**, teachers scored the school's psychosocial environment profile lower than school administrators in total scores and all quality areas. **(Table 6)** During the school-wide comparison, teachers rated the school lower in all schools except one school, where teachers rated their schoolhigher than school administrators **(Figure 2)**.

| Table 6 Comparison of Perspectives by Category of the Respondents			
Quality areas	School Administrators	Teachers	P-Value
	Mean (SD)	Mean (SD)	
Friendly rewarding supportive atmosphere	59.9(6.7)	57.15 (6.44)	**.020**
Supporting cooperation active learning	22.3(2.98)	21.3 (2.57)	.257
Forbidding physical punishment and violence	59 (9.28)	54.8 (7.3)	.103
Not tolerating bullying, harassment discrimination	48.2 (7.89)	42.6 (9.08)	.066
Valuing development of creative activity	30 (3.9)	27.5 (2.87)	**.017**
Connecting school and home life involving parents	37.1 (4.7)	32.4(4.9)	**.006**
Promoting equal opportunities & participation in decision making	40.2 (6.9)	37.4 (4.9)	.188
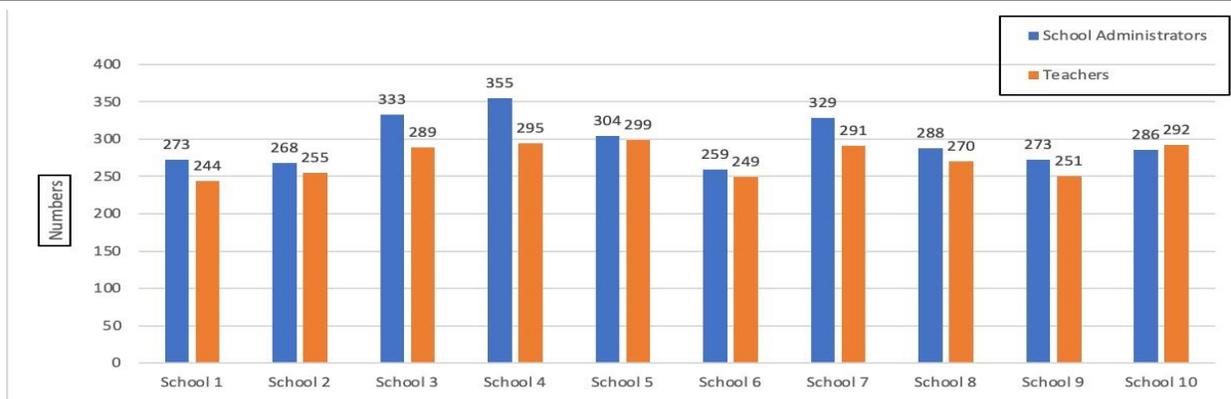
Figure 2 Comparison of Total PSE Scores by Category of Respondents

Interschool variation in responses was assessed through preliminary analysis byANOVA, followed by post hoc verification **(Table 4)**. Results highlighted a significant difference between the psychosocial profile scores of different schools (p <0.001).

Table 7 Interschool Variability of PSE Scores						
Schools	Total Score	df	Sum of Squares	Mean Square	F	P Value
	Between Groups	9	40983.12	4553.680	10.158	**.0001**
	Within Groups	80	35863.77	448.297		
	Total	89	76846.90			

DISCUSSION

Prior work has demonstrated the effectiveness of school-based interventions for improving socio-emotional well-being and academic outcomes for children.[13,14]Such interventions are implemented within complex school environments and are influenced by theschool's psychosocial environment and policy contexts.In this context, it is imperative to utilize standardized tools which allow for a comprehensive understanding of the complexity of the school's psychosocial environment. The WHO psychosocial environmental profile (PSE) tool is a standardized tool for assessing the school environment which has a linkage with the socioemotional well-being of the staff as well as children. This study was an attempt to adapt and validate the WHO PSE tool to evaluate the school environment in different contextual dimensions in the Pakistani context. Understanding the school context is of paramount importance before the implementation of school mental health programs and can pave the way for the success and failure of the programs. [42]

Although some work has been performed across the countries regarding the assessment of the school environment in an organizational context or before program implementation using some quality domains identified by the WHO PSE tool or complete tool,[43-45] however, could not locate its contextual adaptation and validation as a complete tool, especially in Pakistani context.The study provides evidence that the WHO psychosocial

environmental profile tool satisfied the criteria for assessment of the school environment in the Pakistani context. Face validity was assessed using an expert panel in addition to the assessment of construct validity and confirmatory factor analysis to validate that the findings of the tool can be relied upon in the Pakistani context. The psychometric properties obtained during the reliability and validity testing indicate reasonable indices to utilize the tool in the Pakistani context. Employment of the WHO PSE tool in the pilot study confirmed its reliabilityin the assessment of school organizational context.

The important aspect of this tool is that it assesses the school with regards to multiple dimensions like the policy, physical, social, and emotional domains and attributes concerning students, teachers/staff, and parents as they all comprise the complete environment of the child with crucial linkages to child socioemotional well being. It helps us to understand how respondents feel about their school environment and identify the strong areas as well as aspects requiring improvement. Understanding of psychosocial environment is more valuable when it is done as a part of large school-relatedimprovement efforts to inform the implementers regarding the school context. [30]Hence, this study attempted to inform regarding the organizational context of Pakistani schools before the implementation of EMRO school mental health programs in rural public schools of Pakistan.

Thefindings of this study revealed agross deficit inthe availability of written policiesin majority quality aspects. In aspectswhere some policies are available, these are not disseminated or enforced. The availability of written policies is important for establishing standard operating procedures, creating standards for quality, and ensuring accountability and consistency of decision-making in schools. This is one of the critical interventions to a sustainable and friendly psychosocial environment.[46]The current data set indicates that there are fewer written policies to guide teachers to deal with students fairly and handle violent cases in school. These can be student fights orteacher punishment. Non-availability of such policies raises the question as they guide teachers and staff to maintain non-aggressive behaviour and avoid physical punishment. These refer to teacher training, experiential learning, and awareness of the national legislation against physical punishment.[47] High school students are in a transitional age [48] with high energy most of the timewhich keeps them active. They need firm guidance and coaching to stay on the right track, which is mainly the teachers' responsibility. Studentcounseling and non-aggressive punishments can be positively applied to maintaining disciplinein the school.[49] Despite the lack of policies related to the students' punishment, teachers avoid punishing students physically and theydo not record unpleasant disruptive events as well. Similar findings were observed in a study conducted in schools in Gampaha District, Sri Lanka[50], and a study conducted in private schools of Lahore by Imran et al.[44]The results of our study are consistent with the study conducted in Lahore with regards to forbidden physical punishment, creative activities and opportunitiesfor participation in decision making whiles schools at Lahore were graded better in domains of providing a friendly environment, cooperation, availabilities of policies and parental involvement. These differences can be attributed to the category of schools i.e., Private schools in the Study by Nazish et al and rural public schools in our study.

There isa deficiency of publicized policies against bullying and harassment despite the availability of government policies. The policies and established mechanisms to avoid bullying andharassmentare essential for a better psychosocial environment in schools.[51] The teachers and staff shall understand the mechanism to intervene if there is any incident of bullying and harassment. In our schools, the policies are not available but there are procedures in place to guide teachers to control and take action on such incidents. These procedures are crucial for preventing and controlling such eventsin schools. [52] Another positive aspect was that female teachers and students are less likely to be subjected to sexual harassment as the school's code of conduct to maintain acceptable behaviour in the school is being followed. The code is regularly updated to address emerging needs and communicated to students to maintain acceptable behaviour with peers and teachers.

The respondents shared that the schools have procedures to deal with the staff, teachers, and students who witnessed violent incidents and have school discipline rules apparent to everyone and practically implemented.Similar results were reported by a study conducted in Rawalpindi. [43]Implementing discipline rules makes school a safe place.[53] Firm and consistent implementation of discipline rules by teachers and support from the school administration is positive aspects complemented by opportunities for students and parents for raising concerns about staff and teachers' behaviour. A school that encourages students and parents to share their concerns for improvement helps build a better psychosocial environment.[54]For teachers, the school offers opportunities for learning and updating their knowledge and skills. This improves classroom teaching and student management activity. All these aspects collectively improve the self-efficacy of teachers and the feeling of trust and a sense of safety among students and their parents.

The findings revealed that the school environment is friendly for students, parents, and visitors. Generally, the newcomers feel nervous in a new environment,[55] but they feel comfortable when current students welcome them, and schools have policies to integrate them with existing students.[56]Moreover, supportive teachers encourage students facing mental health issues to come out of distress.[57]Implementing such policies in schools makes schools a peaceful and appealing place for teachers and students. Our schools' aggregate performance indicates positive signs referring to a better psychosocial environment but still, there is a lot of room for improvement. Similar results were found by Gowrie, G in a study conducted in Trinidad and Tobago where small rural schools had better psychosocial environments. The underlying reason behind such positive findings can be greater informal interactions between students, teachers, and parents in small rural schools leading to positive relationships. [58,59]Despite the presence of these positive norms as a part of school culture, adeficiency was felt regarding the availability of formal policies.Development and enforcement of written policies and procedures can lead to the formalization and sustainability of these positive characteristics conducted as a norm.

A healthy environment that supports students to maintain quality mental health requires extracurricular activities.[60]The schools in our study are providing opportunities for organizing a variety of events regularly to involve students in activities other than academics. Such events are highly festive for the students and improve the overall environment and well-being.[61]

The school environment is composed of various factors and actors. Teachers are one of these actors and the actual points of delivering certain supportive activities and psychosocial programs.[62]In the study, teachers had a strong sense ofbelongingnessand confidence regarding administrative support.The teacher's belief in administrative support enables them to confidently implement the policies to create a friendly,positive psychosocial environment.[63] Parents are important stakeholdersinthe school environment with a critical role in students' mental health.[64]The data revealed that parents do not have an extended role in creating a positive psychosocial environment. Their role can be crucial because children spend more time at home than at school.[64]Their connectedness is important in strengthening the child's social support system and aligningthe priorities of teachers and parents for a positive impact on the child's personality. In our study, there is a fair amount of parents' connectedness with teachers'support regarding educational requirements but their knowledge regarding the impact of a child's home environment on socioemotional well-being merits attention.

Creating a supportive environment for students and making it appropriate for active learning is different from enabling a friendly environment.[65] Specifically targeting the learning activity, it was found that cooperative learningstill needs improvement as schools have no policies to promote cooperative learning. Evidence dictates that student attitudes toward joint projects remain low due to limited cooperative learning policies.[66]In our study, some students work together to solve educational problems, but the practice is still not famous. Student joint projects are helpful for learning, training students to work in teams, cooperating

with others to overcome challenges, andencouraging the weaker students to learn as much as the other students.[65,66]Community-related projects are given to the students to understand the social dynamics of a particular phenomenon.[67]The current study indicates students have few projects to interact with the community which is less than the required range of community-related projects. The schools do not often display student work due to unknown reasons. Assumingly,showcasing student work has not become a norm yet, and policies do not exist. Such activities result in moral boosting, confidence building, and improved creativity.

CONCLUSION AND RECOMMENDATIONS
The WHO PSE tools have several sections to identify the quality areas underscoring the strengths and weaknesses of the school's environments. Our study revealsan immense need for developing and enforcing policies in our schools. There is a need to capitalize on positive norms and strengthen them through developing and disseminatingwritten policies. These published policies will pave the way for establishing the systems and procedures for a better school environment and the well-being of students.Aspects necessitating improvement can be tackled by policymakers through evidence-informed strategies of school-based programs. The involvement of parentsand the appointment of student advisors is crucial to create a holistic supportive environment for children. It is also important to record disruptive events and incorporate themintoteachers' learning during mentoring sessions. Thus,the overall environment ofschools is positively enabled for student learning and growth but needs formalization by policies and procedures.

Implications for Policy and Research
Understanding strengths and weaknesses in the psychosocial environment of the schools are of utmost importance for the government and policymakers as well as schooladministrators. These strengths can be capitalized on by the stakeholders in the education and health department for improvement in children's socioemotional well-being. It can help school mental health program implementers and policymakersin understanding

the context before program implementation and highlight the aspects necessitating improvement. These aspects can be tackled through the implementation of evidence-basedintervention so that a better psychosocial environment can be provided to the school's children.

Limitations of the Study
This study was a descriptive study carried out as part of pilot implementation. Data presented in the study represents responses of selected teachers of pilot implementation sites. Hence, generalization to other schools in the country needs to be done with utmost care.

Credit Author Statement
Rukhsana Roshan: Conceptualization, Methodology, Manuscript writing – Original draft and editing, Data Curation, formal analysis**. Saima Hamid**: Supervision, formal analysis, Final Approval. **Shehzad Ali Khan:** Tech supervision,critical analysis of the manuscript, and Approval. **Usman Hamdani**: Conceptualization, Writing – Reviewing and editing, provision of study material, **Saman Naqvi**: literature search and sorting, Data analysis, manuscript draft writing, and editing. **Zille Huma**: Investigation, Methodology, Data Curation.

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