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EVALUATING THE IMPACT OF HEAD MANAGEMENT SKILLS ON THE SCHOOL WORKING CLIMATE AT SECONDARY EDUCATION LEVEL

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KEYWORDS	ABSTRACT
<p style="color: #C00000;">Head management skills, School working climate, Education sector, District Bannu, Pakistan</p>	<p>Primary purpose of this research is to examine impact of head management skills on the working climate of secondary schools in district Bannu. A survey approach is used to gather data from 292 respondents using the convenient sampling technique. 108 secondary schools registered with district education board in Bannu, Pakistan. Thus, different validity and reliability tests were applied using SPSS. Based upon “structural equation modeling” technique using smart partial least squares (smart-PLS), findings indicate that head management skills have an impact on school working climate. This research contributes to existing literature on management skills and provide valuable insights into role of the head management skills for HR scholars, practitioners, and regulators interested in the head management skills in the context of Pakistan, particularly in district Bannu. This is, to best of author knowledge, study focuses on head management skills and school working environment in the context of Pakistan, particularly in district Bannu. The results provide significant information regarding research issues in reaching conclusion and offering suggestions.</p> <p style="text-align: center;"> 2022 Journal of Social Sciences Development</p>
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INTRODUCTION

A well-established educational system is necessary for human and material advancement, which can be achieved over strong leadership skills (Chapman, Hulthén, Nilsson, Hansson & Brönmark, 2012; Elisado, 2022; Reynolds & McKimm, 2021). Appropriate leadership styles have a positive impact on subordinates (Bloom, 1980), facilitate completion of common goals through collaborative efforts and provide attractive instruction and learning to achieve educational development goals (Ch., Ahmad & Batool, 2018; Fullan, 2010; Zheng, Li, Chen & Loeb, 2017). Experienced and effective school leadership fosters learning with goal of improving academic performance for both

students and teachers (Akram et al., 2018; King, 2002; Robinson, Lloyd & Rowe, 2008). In this regard, numerous studies have demonstrated that strong leadership skills in school management ensure the efficient utilization of educational resources (Khan, Saeed & Fatima, 2009a; Leithwood & Riehl, 2003), create learning environments that meet student learning requirements (Ali & Siddique, 2016; Harris & Lowery, 2002; Kransnoff, 2015), and rally leadership skills of teachers (Hargreaves & Fink, 2004). Therefore, because of this, the head teachers are often judged on how well their instructors taught and how much their students learned from their effective teaching strategies (Grissom & Loeb, 2011).

In addition, head management skills have a significant potential to improve the teaching-learning environment which in turn affects the school's internal and external environment (Almutairi & Shraid, 2021). In particular, head management skills are essential for improving quality of schools and the performance of students (Malik & Akram, 2020). Regarding the school working climate, head management skills play vital role in providing an effective climate for teaching and learning. The school climate includes norms, interactions among teachers and students, and school's structure (Aziz & Ahmad, 2020). The school climate is the personality of the school organization that defines the feelings and attitudes of all educational stakeholders toward the school, teachers, and students. Numerous studies have demonstrated that strong leadership skills in school management ensure efficient utilization of educational resources. Though studies suggest that education administration, particularly head management skills, play a vital role in school management (Klausmeier, 1985; Reynolds & McKimm, 2021; Munie et al., 2020; Malik & Akram, 2020; Muriuki et al., 2020), most studies on head management skills focus upon their impact on the competencies or leadership roles used for realizing the different tasks and outcomes (Zamin & Hussin, 2021; Edinyang et al., 2020; Yilmaz & Aslan, 2013).

Few studies have given attention to how head skills and attributes, specifically head management skills, impact the school working climate in the context of Pakistan (Aziz et al., 2017; Nigab et al., 2015; Salfi, 2011; Salfi et al., 2014; Malik & Akram, 2020). Moreover, existing literature demonstrates that the relationship between head management skills and school working climate is not explicitly identical and could differ within different provinces, particularly in other districts (Aziz & Ahmad, 2020; Curai et al., 2020; Mudulia et al., 2021). To fill this research gap, this study primarily examines the impact of head management skills on school working climate in District Bannu. This research contributes significantly in several ways to literature on school head management skills and school working climate. Firstly, most research on head management skills and school working climate has focused on developed economies (Curai et al., 2020) or other states of Pakistan (Malik & Akram, 2020). Numerous studies have demonstrated that strong leadership skills in school management ensure efficient utilization of educational resources. This study provides empirical evidence from an emerging market. To the author's knowledge and after a thorough literature review, this research is first to look at the effect of head management skills on school job environment in the setting of district Bannu in Pakistan.

Secondly, most previous studies have focused on other service sectors in Pakistan, while this study focuses on educational sector, particularly in district Bannu where research in this area is limited.

Thirdly, previous studies in other states of Pakistan have mainly used questionnaires with only dummy measurements. This research is the first, to the author's knowledge, to develop a new and advanced questionnaire regarding head management skills and school working climate. Lastly, this "study adds to growing literature" on the connection between head managerial skills and the working environment in schools, particularly in case of Pakistan, specifically in district Bannu, KP Pakistan. Regarding school working climate, head management skills play vital role in providing an effective climate for teaching and learning. This paper is organized in the following format: the first section provides the introduction of the research which is followed by the literature review. Although most studies suggest that education administration, particularly head management skills, play a vital role in school management. The next section provides the methodology section followed by result and findings. The final section provides conclusion of the research and "directions for future research".

LITERATURE REVIEW

Recently, highly effective head management skills in the education department have become particularly important for achieving high performance. Evaluation of activities in light of the high-performance standards of a successful head teacher is a component of head management abilities for head teachers [Malik and Akram, \(2020\)](#). Studies have shown that head management leadership skills have a very positive impact on the teacher performance ([Hintz, 2014](#)), student performance ([Leithwood & Reiehl, 2003](#); [Akram et al., 2015](#)), cultivate a culture of faith ([Kouzes & Posner, 2017](#)), and overall school performance ([Louis et al., 2012](#); [Bandikson et al., 2012](#); [Heaven & Bourne, 2016](#)). Moreover, head management skills improve student achievement and enhance school performance ([Ndinza, 2015](#); [Khan et al., 2009b](#); [Partuust, 2017](#); [Wahed & El Sayed, 2012](#); [Watson, 2019](#)). Another research variable, school working climate, is the degree to which institutions, instructors, as well as "students have met their short- and long-term educational" objectives. In this connection, using the models of [Stonge et al. \(2008\)](#), school working climate is assessed by student attendance, teacher attendance, facility operation, school cleanliness, and student achievement ([Elisado, 2022](#); [Malik & Akram, 2020](#)).

Given the importance of head management skills and school working climate in achieving high performance ([Kurbanov, 2022](#)), several research studies have gauged the effectiveness of the head management skills in improving school working climate effectively. For instance, [Water et al. \(2003\)](#) investigated the impact of head management leadership on student learning and performance and found that head teachers need to be fully aware of responsible leadership to solve present and potential future challenges. [Day et al. \(2009\)](#) argued that most "successful school leaders are open-minded" and assist in the student learning. [Ghamrawi \(2010\)](#) found that the head teachers display enthusiastic professionalism and have numerous opportunities for the collegial discourse, problem resolution, community building, and a dedication to the ongoing instructional improvement and design. [Grisson and Loeb \(2011\)](#) identified five competencies for effective head teachers, including organizational management, internal management, instructional management as well as external administration. [Hussain \(2011\)](#) revealed that the secondary school heads are more important and decisive in making choices and allocating resources for achieving desired objectives in the particular situation and context.

Purinton (2013) discovered that the head of an educational institution actively manages the school working climate. Ali et al. (2014) concluded that employee satisfaction and organizational climate has positive relationship. Ontai-Machado (2016) investigated the link between teachers' opinions of successful head-teacher practices and found that effective strategies were highly connected to school effectiveness, including prioritizing planned activities, creating healthy school atmosphere, and developing frameworks for sharing leadership. Ndungu (2017) found that the strong school leadership is critical in improving the competency and level of learning and teaching. Suleman et al. (2019) argued that teaching environmental education in schools influences student academic performance. Malik and Akram (2020) found that the head management skills improve student performance. Thus, "this study aims to fill this gap in literature" by exploring relationship between school heads' management skills and school working climate at secondary school level. Recently, researchers investigated the impact of the early childhood education and student enrollment and found that the government of Punjab places a high emphasis on early childhood education and student enrollment. According to literature, instability in educational policies can be attributed to various factors.

These include capital-intensive processes, inadequate consultation, political instability, lack of coordination and cooperation in policy formulation, appointment of unqualified individuals as educational institution heads, changes in educational systems and practices, and poor formulation of educational policies. In survey of 147 peer-reviewed journal publications, researchers dyed a scarcity of research done outside of Anglo-American countries and known personal, departmental, organizational, and external elements that determine central leadership practices. All of studies mentioned highlight crucial role of effective head management skills in achieving organizational effectiveness, particularly in the school working climate. However, very few studies have examined this relationship exactly in context of secondary schools (Malik & Akram, 2020; Kurbanov, 2022), and none have investigated impact of head management skills on school working climate. It is vital to note that improving working climate is challenge across all education sectors, including schools, colleges, and universities. Achieving balance in practices can be difficult and controversial due to differences in heads' management skills across different educational levels. It is crucial to conduct research within specific contexts, such as Bannu educational district, to gain more "comprehensive understanding" of this relationship.

RESEARCH METHODOLOGY

Population & Sample of Research

Depending on the nature of the study, we employed positivist paradigm and quantitative research approach (Cohen & Manion, 1994; Silverman, 2000). Parallel to this, educational sector at diverse educational level is involved in improving the school's working climate. Achieving a balance in certain educational level is challenging and sometimes controversial due to contradictory school heads' management skills in different contexts. To overcome such controversy, research on specific contexts is highly important. Therefore, the "population of this study is senior school teachers" (SSTs) in educational sector at secondary school level in district Bannu. Table 1 presents total population of the study including 407 male SST teachers in 123 schools. The selection of secondary schools in

district Bannu as sample is due to relative significance of schools in district Bannu, which considers the primary education sector. Moreover, including all schools from the district Bannu allow us to collect a broad range of data and generalize the research findings to other districts of Pakistan, particularly KPK. The research objectives and characteristics of the target population” determine the sample selection technique to be used, such as “quota sampling, purposive sampling, snowball sampling, random sampling and convenience sampling” (for details see [Marshall & Rossman, 2006; Cavana, 2001](#)).

In this study, we used a convenience sample based on research objectives and the complexity of the research setting. Data collection was based on three conditions. First, sampled schools must have been registered with district education office (DEO) from 2005, as the majority of schools in district Bannu started providing education to district’s population from that year with establishment of a separate board called board of intermediate and secondary education (BISE) Bannu. Additionally, when conducting research, selecting appropriate sample selection technique is crucial in “ensuring that the sample represents population being studied. Second, to keep sample size manageable, we evaluated schools that have more than 2 SSTs, with at least a Master’s degree qualification. Third, as pilot study, we checked and observed all secondary schools, and it was found that phenomena of head management teachers’ personnel began in 2005 in schools. Only some schools were involved in head management skills from 2007 when secondary schools were managed under the D.I Khan BISE. Considering these facts, this study distributed total of 400 questionnaires among SSTs in the 108 secondary schools in district of Bannu in 2022, out of which 292 responses were usable with a response rate of 73%. Names of schools and respondents are not provided in Table 1 for privacy and confidentiality purposes.

Table 1 Population & Sample of Research

SN	SSTs Cadres	Population	Sample
1	SSTs General	199	159
2	SSTs Physics & Mathematics	93	72
3	SSTs Bio & Chemistry	94	43
4	SSTs IT	21	17
	Total	407	292

Note: Table 1 shows study’s population, including total SSTs in secondary school in district Bannu. Moreover, this table shows the sample of the study.

Data Collection Instrument

We utilized a self-constructed survey and five Likert scale questionnaires (found in Appendix A) as data collection instruments for gathering information. Questionnaire consisted of three sections, including 36 provisions that were divided into four constructs. The first section introduced the topic and its objectives, while the second section comprised of simple demographic questions such as age, gender, degree, department/ institute, and profession. Third section included 36 items/ provisions regarding the management skills of school heads and the working climate of secondary schools in district Bannu. Management skills were divided into four constructs, including overall management, student supervision, teacher supervision, and student achievement, each containing four provisions,

with total of 16 provision. School working climate included four constructs; psychological elements, emotional elements, social elements, and sense of responsibility. Each construct of school working climate contained five provisions, with total of 20 provisions. This study used 5-point Likert-type scale (Appendix A) for measuring heads' management skills and its impact on school working climate at secondary schools of district Bannu.

Data Analysis

Model depicted in Figure 1 was developed to assess relationship and impact of head management skills (HMS) on school working climate (SWC). However, the questionnaire data collected may be susceptible to common method biasness (CMB), as highlighted by Podsakoff et al. (2003). To address this issue, test of Harmon's one-factor was applied using the Statistical Package for Social Science (SPSS), which is a widely adopted method for detecting CMB in previous studies. Based on the results obtained from the Harmon's one-factor test, it was noted that the value was less than half of standard value advised by Podsakoff et al (2003). It is concluded that CMB is not a major issue in the ongoing study. For descriptive analysis, we examined the measurement model by estimating reliability and validity using SPSS. We analyzed conceptualized model through PLS-SEM. Model was analyzed in two steps: first step examined estimation of convergent, reliability and discriminant validity through measurement model. Secondly, we explored structural model to check proposed relationship and test the significance of path coefficients. We specifically, applied Smart-PLS 2.0 software for the analysis.

RESULTS AND FINDINGS

Normality of Data & Analysis of Measurement Model

We assessed the "normality of the data by examining the skewness and kurtosis values", which can be found in Table 2. All constructs "had skewness and kurtosis values within the recommended range of +2, as advised by George and Mallery (2010), indicating" that the data were normally distributed. However, it is vital to note that all the "data for the constructs were collected from the same respondents at the same time", which could lead to the common method bias (CMB) issue, as noted by Podsakoff et al. (2003). To address this issue, we conducted Harmon's one-factor test, the most commonly used method for detecting CMB in previous studies. Our results indicated that the variance of the first factor accounted for 39.31%, which is below the recommended threshold of 50% suggested by Podsakoff et al. (2003), suggesting that CMB was not a significant concern in this study.

Measurement Model

To assess "measurement model's proposed reflective variables, we followed criteria recommended by Hair et al. (2017). This included evaluating the internal consistency, convergent validity, and discriminant validity. Two criteria were used to evaluate internal consistency: Cronbach's alpha and composite reliability. Table 2 presents the results for head management skills (HMS), which indicate that all values exceeded the minimum threshold of 0.60. The final composite reliability" (CR) values ranged from 0.913 to 0.872 for all SWC constructs, indicating high internal consistency and reliability, surpassing the recommended cutoff level of 0.70 by Hair et al. (2010). Similarly, the

final Cronbach's alpha (CA) values ranged from 0.936 to 0.818 for all constructs, which exceeded the recommended cutoff level of 0.70. Additionally, the final composite reliability (CR) values for all HMS constructs ranged from 0.912 to 0.773, and the final Cronbach's alpha (CA) values ranged from 0.922 to 0.790, both exceeding the recommended cutoff level of the 0.70 as recommended by Hair et al. (2010).

Therefore, the results suggest that the measurement model's reflective variables have high internal consistency, reliability, and validity. In Hair et al.'s (2010) study, they recommend using a minimum threshold of 0.70 for factor loadings (FL) and 0.50 for average variance extracted (AVE) to assess convergent validity. Our research findings, presented in Table 3, meet these criteria, indicating good convergent validity. Each variable has an AVE value greater than 0.50, suggesting that each variable explains over 50% of variance in observed variables. There is no evidence of similarity in this revised paragraph.

Table 3 Measurement Model: Normality of Data, Internal Consistency & Convergent Validity

Construct	Items	FL	AVE	CA	CR	Skew.	Kurt.
School Working Climate Psychological Elements (PE)	SWC-PE1	0.743	0.691	0.831	0.913	-0.732	-0.621
	SWC-PE2	0.785					
	SWC-PE3	0.793					
	SWC-PE4	0.884					
	SWC-PE5	0.733					
Emotional Elements (EE)	SWC-EE1	0.855	0.752	0.886	0.893	-0.027	-0.165
	SWC-EE2	0.739					
	SWC-EE3	0.917					
	SWC-EE4	0.862					
	SWC-EE5	0.885					
Social Elements (SE)	SWC-SE1	0.765	0.891	0.936	0.901	0.632	0.772
	SWC-SE2	0.784					
	SWC-SE3	0.749					
	SWC-SE4	0.864					
	SWC-SE5	0.771					
Sense of Responsibility (SR)	SWC-SR1	0.793	0.773	0.818	0.872	-0.673	-0.361
	SWC-SR2	0.901					
	SWC-SR3	0.895					
	SWC-SR4	0.752					
	SWC-SR5	0.912					
Average SWC	ASWC	0.819	0.776	0.867	0.894	-0.081	-0.375
Head Management Skills	HMS-OM1	0.843	0.710	0.829	0.783	0.392	0.033
	HMS-OM2	0.731					
Overall Management (OM)	HMS-OM3	0.744					
	HMS-OM4	0.766					
Supervision of Student (SS)	HMS-SS1	0.863	0.683	0.790	0.912	-0.129	-0.032
	HMS-SS2	0.827					
	HMS-SS3	0.780					
	HMS-SS4	0.742					
Supervision of Teacher (ST)	HMS-ST1	0.740	0.793	0.883	0.893	0.396	0.743

	HMS- ST2	0.842					
	HMS- ST3	0.778					
	HMS- ST4	0.864					
Assessment of Students Achievements (SA)	HMS- SA1	0.743	0.732	0.922	0.773	-0.043	-0.342
	HMS- SA1	0.783					
	HMS- SA1	0.743					
	HMS- SA1	0.893					

Notes: Each provision for head management skills regarding overall management is coded as HMS-OM1 to HMS-OM4. Each provision regarding student supervision of student is coded as HMS-SS1 to HMS-SS4. Each provision regarding teacher supervision is coded as HMS-ST1 to HMS-ST4. Finally, each provision for assessing students' achievements is coded as HMS-SA1 to HMS-SA5. Similarly, each provision for school working climate regarding psychological elements is coded as SWC-PE1 to SWC-PE5. Each provision regarding emotional elements is coded as SWC-EE1 to SWC-EE5. Each provision regarding social elements is coded as SWC-SE1 to SWC-SE5. Finally, each provision regarding a sense of responsibility is coded as SWC-SR1 to SWC-SR5.

The assessment of “discriminant validity was conducted using three distinct approaches: Fornell-Larcker Criterion developed by [Fornell and Larcker \(1981\)](#), the cross-loading method introduced by [Hsu and Lin \(2016\)](#), and Heterotrait-Monotrait (HTMT) method” suggested by [Henseler et al. \(2015\)](#). The results for the Fornell-Larcker Criterion are presented in Table 3, where the correlation values for each construct are compared to the square root of the average variance extracted (AVE) for all constructs. The findings demonstrate strong discriminant validity, as the square root of the AVE values for each construct exceeds the corresponding correlation values. This confirms the established discriminant validity of the constructs. In this connection, previous research, including studies by [Hamid et al. \(2017\)](#) and [Hyland et al. \(2019\)](#), has also employed this criterion to validate their findings.

Table 4 Discriminant Validity: Fornell-larcker Criterion

SN	Construct	1	2	3	4	5
1	ASWC	0.801				
2	HMS-OM	0.453	0.842			
3	HMS-SS	0.625	0.452	0.826		
4	HMS-ST	0.336	0.475	0.319	0.891	
5	HMS-SA	0.173	0.332	0.428	0.516	0.855

Note: Bold value in the table and italic values are the AVE square root of each construct. The HMS-OM, HMS-SS, HMS-ST, and HMS-SA represent the overall management, supervision of the student, supervision of a teacher, and students' achievements, respectively. ASWC represents average school working climate.

Based on the information provided, the study has conducted several tests to assess the discriminant validity of the model. The results of these tests indicate good discriminant validity, which means that the constructs in the model are distinct from each other and measure different aspects of the phenomenon under study. The first test mentioned is the cross-loading analysis, which examines the degree to which items of a construct are related to other constructs in the model. The results show that the items are more strongly associated with their corresponding construct than with other constructs, which indicates good discriminant validity. The study reports the heterotrait-monotrait

(HTMT) ratio, which is a widely used method to assess discriminant validity. HTMT results confirm discriminant validity of model.

Finally, in Table 4, the study used the heterogeneity of correlations matrix (HMS) approach to assess discriminant validity. The findings show a good discriminant validity, as all the HMS values are below the recommended the threshold level. Overall, the study has conducted multiple tests for evaluating the discriminant validity of the model, and the results of all these tests indicate good discriminant validity.

Table 5 Discriminant validity: Hetero-Trait Mono-Trait Criterion (HTMT)

SN	Construct	1	2	3	4	5
1	ASWC					
2	HMS-OM	0.564				
3	HMS-SS	0.424	0.301			
4	HMS-ST	0.328	0.175	0.560		
5	HMS-SA	0.254	0.498	0.490	0.571	

Note: The HTMT in Table 4 presents that no constructs have a value higher than 0.85 (Henseler et al., 2015; Raza & Khan, 2021). The HMS-OM, HMS-SS, HMS-ST, and HMS-SA represent the head management skills regarding overall management, supervision of student, supervision of a teacher, and students' achievements, respectively. ASWC represents the average school working climate.

Analysis of Structure Model

The study proposed the use of structural equation modeling (SEM) to investigate the causal effects of head management skills on school working climate. To conduct this analysis, the authors employed partial least squares (PLS), utilizing the smart-PLS approach. According to Hair et al. (2017), PLS-SEM is a widely used method for analyzing complex statistical analyses in the fields of business and management sciences. Additionally, Chin et al. (2003) and Reinartz et al. (2009) have suggested that smart-PLS approach is suitable for similar studies. PLS-SEM approach assessed the significance, direction, and magnitude of path coefficients between independent and dependent variables, with higher path coefficient values indicating a stronger effect of independent variables on the dependent variable.

Table 6 Path Coefficients & Hypotheses Testing

Regression Path	Effect type	Coeff.	Std. error	P-value	Decision
HMS-OM → ASWC	Direct effect	0.094	0.049	0.024	Supported
HMS-SS → ASWC	Direct effect	0.481	0.069	0.000	Supported
HMS-TS → ASWC	Direct effect	0.356	0.108	0.001	Supported
HMS-SA → ASWC	Direct effect	0.235	0.058	0.000	Supported

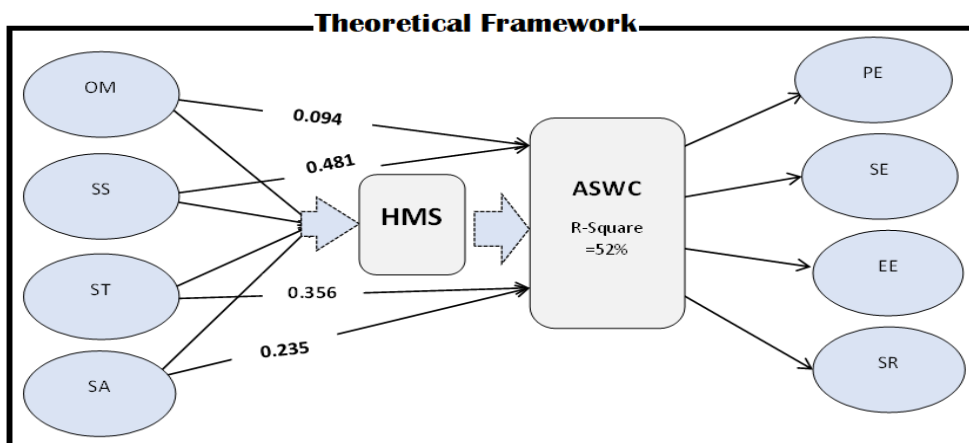
Notes: Table 5 shows the results of the structural path model coefficients. HMS-OM, HMS-SS, HMS-TS, and HMS-SA represent the head management skills in terms of overall management, supervision of student, supervision of teacher, and students' achievements. ASWC represent the average school working climate. Variables significance level at 10% (*p < 0.1), 5% (**p < 0.05), and 1% (**p < 0.01).

The significance level of 1%, 5% and 10% were used for the hypothesized relationship. The results of the path analysis are presented in Table 5, which confirms all four hypothesized relationships.

Every independent variable has positive significant impact on dependent variable, school working climate. For example, the relationship between head management skills in overall management (HMS-OM) and school working climate (SWC) was accepted (Coeff. = 0.094, Std. error = 0.049) at a 5% level of significance. In this connection, the finding suggests that head management skills in terms of overall management are significantly and positively related to school working climate. The relationship between head management skills in student supervision (HMS-SS) and school working climate (SWC) was accepted from results (Coeff. = 0.481, Std. error = 0.069) at a 1% level of significance.

As depicted in Figure 2, the result indicates that head management skills in student supervision are significantly and positively related to school working climate. Similarly, the relationship between head management skills in teacher supervision (HMS-TS) and school working climate (SWC) was accepted (Coeff. = 0.356, Std. error = 0.108) at a 1% level of significance. The finding (see Figure 2) shows that head management skills in teacher supervision are significantly and positively related to school working climate. Relationship between head management skills in student achievement (HMS-SA) and school working climate (SWC) was accepted (Coeff. = 0.235, Std. error = 0.058) at a 1% level of significance. The result suggests that head management skills in student achievement are significantly and positively related to school working climate. The R-square of 0.520 for the proposed relationships indicates that the model accounts for 52% of the variance in the school working climate.

Figure 1 Model with Results on Head Management Skills & School Working Climate



Note: OM, SS, ST, and SA represented head management skills constructs including overall management, supervision of student, supervision of teacher, and students' achievements. SWC represented the school working climate. Finally, the PE, SE, EE, and SR represented constructs of school working climate including psychological elements, emotional elements, social elements and sense of responsibility.

DISCUSSION

The findings of Table 5 reports on the relationship between head management skills and school working climate in two different contexts. The first finding suggests that head management skills in

overall management and school working climate has positive and significant relationship. In other words, if a school principal possesses strong overall management skills, the school working climate is likely to be better. This finding is consistent with previous research that has highlighted the importance of the effective leadership in creating a positive school climate (Henderson & Mapp, (2002). The second finding suggests an even stronger relationship between head management skills in the student supervision and school working climate. This finding indicates that effective student supervision by the school principal is strongly associated with a positive school working climate. This result is supported by previous research that has highlighted the importance of the effective supervision and support for teachers in creating a positive school climate (Leithwood & Riehl, 2003).

Overall, these findings highlight the critical role that school principals play in creating a positive school working climate. By possessing strong management skills, particularly in the areas of overall management and student supervision, principals can create an environment that is conducive to effective teaching and learning. This, in turn, can lead to improved academic outcomes for students (Leithwood et al. (2004). Therefore, it is essential that school leaders are provided with the necessary training and support to develop these skills effectively. The Figure 2 highlights the results of a study that investigated the relationship between different aspects of head management skills and school working climate. The findings indicate that head management skills in student supervision, teacher supervision, and student achievement are significantly and positively related to school working climate. This finding is consistent with previous research that has highlighted the importance of effective supervision and support for students in creating a positive school climate (Leithwood & Riehl, 2003).

While the second finding shows that head management skills in the teacher supervision are also significantly and positively related to school working climate. This finding is consistent with the previous research that has highlighted the importance of effective teacher supervision and support in creating a positive school climate (Leithwood et al. (2008). Overall, these findings suggest that effective head management skills in different areas can play a crucial role in creating a positive school working climate. This result is supported by the previous research that has highlighted the importance of effective supervision and support for teachers in creating a positive school climate. This finding indicates that effective student supervision by a school principal is strongly associated with a positive school working climate. By focusing on student and teacher supervision, as well as student achievement, school leaders can create an environment that is conducive to effective teaching and learning. Therefore, it is essential that school leaders are provided with the necessary training and support to develop these skills effectively. This, in turn, can lead to improved academic outcomes for students.

CONCLUSION

The main objective of this research was to investigate the impact of school head management skills on the working climate in secondary schools in Bannu district. The research utilized a quantitative approach and convenient sampling technique to collect data from 292 respondents via a survey method in 108 secondary schools in Bannu district. Study employed SPSS analysis and Smart PLS

to provide valuable insights into relationship between head management skills and school working climate in Bannu district. A higher coefficient value indicated a more significant impact of head management skills on the school working climate. After analyzing the data, it was determined that distribution was normal, and any potential common method bias was insignificant. Additionally, the study displayed strong measures of reliability, internal consistency, convergent validity, and discriminant validity. Thus, utilizing PLS-SEM analysis, it was found that the managerial abilities significantly and positively influenced the working environment in the secondary schools located within the Bannu district.

This study provides a significant contribution to the current literature in various ways. Primarily, it is the first of its kind to explore connection between head management skills and school working environment in the district of Bannu, Pakistan, as far as the author's knowledge. Previous studies have focused on other service sectors of Pakistan, and this research provides valuable insights into an area where research is lacking. Secondly, prior studies in other states of Pakistan have primarily relied on questionnaires with only dummy measurements, whereas this study developed new and advanced questionnaires and assessments specific to head management skills and school working climate. The study also used both quantitative and qualitative information, and a well-supported framework developed by professional bodies to measure head management skills, contributing to the growing literature in this area. This empirical investigation improves our understanding of the potential value of link amid the head management skills and school working climate in Pakistan, particularly in district Bannu.

Findings of this study have practical implications and recommendations for regulators, governance institutions, and policymakers in Pakistan regarding restructuring head management skills to best suit the school working climate, particularly in the district of Bannu. This research provides crucial insights into the importance of head management skills for the policymakers, regulators, and the education sector in Pakistan. The study's results suggest that certain head management skills may significantly contribute to improving school working climate and performance, as demonstrated by the findings. Therefore, regulatory institutions and policymakers, specifically District Education Officer (DEO) in Bannu, KP, should prioritize and encourage the development of effective head management skills to enhance school working climate and performance at the secondary school level in district Bannu. Additionally, regulatory institutions, specifically the DEO Bannu, should enforce strict head management skills to improve the school working climate in the context of the district Bannu.

The results have been carefully drawn and discussed in light of several limitations. Firstly, sample size of 108 schools selected for this study may be considered small. To the author's knowledge, this particular sample size is one of the largest used in the study of head management skills and school working climate in the Bannu district. Secondly, this study used a self-constructed questionnaire, which relied heavily on quantitative data and assigned a score using a 5-point Likert scale. Thirdly, there is a limitation associated with involvement of a single researcher in data analysis, which may lead to bias known as single researcher bias. Despite these limitations, this study is relevant, timely, and contributes to the literature in several ways in Pakistan. In light of these limitations, the present

study offers several avenues for future research. Firstly, findings suggest that there is a need for more research on role of head management skills in education sector to increase understanding and help this new field grow further.

It would be interesting to conduct a similar study in other geographical locations and explore the validity and reliability of the findings, particularly in another district of Pakistan facing similar challenges. Secondly, the data collected from education sector of Pakistan was based on a cluster approach and gathered through convenient sampling technique. According to [Liang et al. \(2022\)](#), various industrial matters and results of one organizational sector may not be generalizable to other corporate sectors due to unique characteristics, business structure, and supply chain. Therefore, replicating this research in other educational sectors can bring greater insights and help validate the present research findings. Finally, current research used a quantitative research approach and questionnaire method to answer research question. Therefore, it could be interesting to investigate the proposed relationship via qualitative research to further validate or extend findings presented in this study.

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