AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

ASSESSMENT OF SCIENCE TEACHERS' SELF-EFFICACY BELIEFS, CLASSROOM PRACTICES, SCHOOL CLIMATE AND JOB SATISFACTION IN TARABA STATE

Jack, Gladys Uzezi (PhD)

Department of Science Education, Taraba State University, P.M.B. 1167, Jalingo

ABSTRACT

This study aimed in assessing science teachers' self-efficacy beliefs, classroom practices, school climate and job satisfaction in secondary schools in Jalingo Education Zone, Taraba State, Nigeria. The study adopted a descriptive survey using questionnaire. Through purposive sampling, five secondary schools were selected with a sample size of 63 science teachers. Data collected were analyzed using descriptive statistical analysis of mean and standard deviation for the research questions, while hypotheses were tested using Pearson product moment correlation at 0.05 level of significance. The results revealed that science teachers' self-efficacy beliefs are at high level; while their classroom practices, school climate, and job satisfaction is at moderate level. There is a small positive relationship between self-efficacy beliefs and classroom practices among science teachers. However, there is no significant relationship between science teachers' job satisfactions and school climate. By implication, the analysis showed that self-efficacy beliefs of science teachers can promote their innovative classroom practices. It also showed that job satisfaction of science teachers may not be achieved without a good school climate. Therefore, strategies to enhance science teachers' self-efficacy beliefs for innovative classroom practices, and creating a conducive school climate to promote their job satisfaction should be developed for quality education.

Keywords: Science teachers, Self-efficacy beliefs, Classroom practices, School climate, Job satisfaction, Secondary schools**.**

Introduction

School climate, classroom practices, teacher personal or self-efficacy beliefs, and job or professional satisfaction are important concepts that affect both teachers' professional development and quality of education; and teachers are one of the major stakeholders that increase productivity in educational institutions. Hence this study was based on the premise that every science teacher's self-efficacy beliefs are strong indicators of his or her classroom practices. These beliefs are seen as true guiding principles teachers hold on to; which serve as lenses through which new experiences can be understood. When something is true, people perceive information supporting that belief. What teachers (science teachers inclusive) do in the classroom is said to be governed by what they believe. Science teachers' personal or self-efficacy belief is a part of the process of understanding how teachers conceptualize their work which in turn is important to the understanding of teachers' classroom practices.

Self-efficacy belief, based on Bandura's social learning theory, is related to personal

judgments about how well a person can perform necessary actions to deal with possible challenges. Self-efficacy belief affects individuals' behaviors as well as their thinking and emotional reactions. Individuals with a high self-efficacy belief can be more comfortable and productive in performing difficult duties. A low self-efficacy causes people to believe duties and responsibilities are even more difficult than they are. This way of thinking increases anxiety, and stress, and narrows the perspective of an individual to solve a problem in the best way. As noted by Tekin (2023) self-efficacy belief has a strong impact on the achievement levels of individuals, by managing environmental factors positively. From this perspective, self-efficacy is an important concept in understanding, expressing, and developing teachers' feelings, thoughts, and behaviors toward instruction that is affected by several environmental and psychological factors. A growing body of research argues that teachers' self-efficacy beliefs should be studied within a framework that is aware of the influence of culture. It may be that the relationship between science teachers' self-efficacy beliefs and classroom practices is complex and context dependent. Some researchers have found consistencies between teachers' beliefs and their practices whilst others have found inconsistencies (Tekin, 2023).

Also, science teachers' school climate, which influence their job performances, are very important. School climate is an important concept that also affects both teachers' professional development and quality of education. A positive and healthy school climate has positive effects on all stakeholders of the school, and education outcomes in general (Berkowitz et al. 2021; Saputra et al. 2020; Tekin, 2023). That is because, in schools that develop a positive school climate, all stakeholders feel valued, and cooperate with a sense of higher commitment (Thapa et al. 2013; Tekin, 2023). School climate may differ for every school because every school has a different perceived ambiance and atmosphere. Since the school climate perception is not a constant concept and may differ for any teacher and school conditions, it can be considered the expected situation to obtain different findings in the related literature.

Although goals and processes are similar, every educational institution has a distinctive, observable ambiance and atmosphere; and this distinctive atmosphere of educational institutions is referred as school climate (Tekin, 2023). The physical environment of the school consists of the school building, the number of teachers, students, and administrators, the number and cleanliness of classrooms, course materials, and technological infrastructure. The relationship and interaction between the partners of the school and participation in the decision-making process have been described as the social environment of the school. The emotions that the stakeholders experience in the school such as love, trust, respect, and tolerance, refer to the affective environment of the school. The academic environment covers all activities related to instruction, which is its main purpose. In light of this information, school climate can

be defined as the character and quality of the school reflecting the interpersonal relationships, instructional process, emotions and thoughts, administrative practices, and the physical and organizational structure obtained from the experiences of teachers, students, administrators, and parents (Tekin, 2023).

The environment in which the science teachers perform their job and their emotional reactions to the job, especially their working conditions, wages and feeling of accomplishment are of utmost importance because it has a direct impact on the quality and quantity of job they do. School climate enables staff and parents to discuss and interact with each other concerning the materials available in the school and the issues hindering the progress and achievement of the staff and the students (Selamat et al. 2013). The concept of school climate, which is both affected by and affects the feelings, behaviors, and perceptions of the stakeholders, has been studied in the previous literature. In previous studies, the relationship between school climate and many variables have been examined such as organizational productivity (Abdel- Basset et al. 2019), administrative leadership (Augustine et al. 2018), teacher behaviors (Dilbaz-Sayın, 2017; Malinen, & Savolainen, 2016; Wilson et al. 2020), and student achievement (Berkowitz, et al. 2017; Pong & Zeiser, 2012). These studies also revealed that school climate has positive effects on the mentioned variables. In addition, Aldridge and Fraser (2016) claimed that school climate may be related to teachers' personal or self-efficacy belief which is an important psychological concept related to teacher effectiveness and the quality of education.

Teachers' job satisfaction may be a significant concept in the quality of instruction. A job is an occupation undertaken for a particular period in someone's life and with opportunities for progress on the career. A job can also be referred to as a profession, occupation, vocation, calling or career. Science teachers play a key role in developing future leaders in science by evoking the curiosity of students and encouraging further exploration into areas of interest. Science teachers are the most important group of professionals in the nation's future, and without a teacher, the education system will suffer. In Nigeria and other parts of the world, the teacher finds it more difficult to cope with his or her financial obligations and societal expectations; hence, he or she becomes frustrated and therefore dissatisfied with his or her job. Satisfied teachers will be able to deliver quality education to students by motivating and inspiring them (Naz, 2017). Previous studies revealed that teachers with high-level professional satisfaction have higher motivation levels and self-efficacy (Berkowitz et al. 2021; Saputra et al. 2020; Tekin, 2023), better performances (Chamundeswari, 2013), and a sense of belonging to the profession (Skaalvik & Skaalvik, 2010 Tekin, 2023) compared to teachers with low levels of professional or job satisfaction. In addition, teachers with high job satisfaction are more successful in solving classroom problems, time management, and contributing to the

AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

personal development of students (Kıran & Sungur, 2018). Therefore, teachers' job satisfaction may be considered a significant concept concerning its direct effect on the quality of education.

Research Questions

1. What are science teachers' self-efficacy beliefs, in secondary schools in Jalingo Metropolis?
2. To what extent do science teachers' classroom practices influence teaching and learning, in secondary schools in Jalingo Metropolis?
3. To what extent do school climate influence teachers', students' and parents' relationships?
4. What are science teachers' job satisfactions, in secondary schools in Jalingo Metropolis?
5. What is the relationship between science teachers' self-efficacy beliefs and classroom practices, in secondary schools in Jalingo Metropolis?
6. What is the relationship between science teachers' job satisfactions and school climate, in secondary schools in Jalingo Metropolis?

Hypotheses

$H0_1$ There is no significant relationship between teachers' self-efficacy beliefs and classroom practices, in secondary schools in Jalingo Metropolis.

$H0_2$ There is no significant relationship between teachers' job satisfactions and school climate, in secondary schools in Jalingo Metropolis.

Methodology

The design of this study is a descriptive survey. The population of the study comprised all the science teachers in all the secondary schools in Jalingo Education Zone. Five secondary schools were purposively selected having adequate qualified science teachers and offers all-science-based courses with a sample size of 63 science teachers. The instrument used for collecting data was an adapted questionnaire titled "Science Teachers' Self-efficacy beliefs, Classroom Practices, Job Satisfaction and School Climate Questionnaire". The questionnaire was adapted from Organization for Economic Co-operation and Development (OECD) (2013). The questionnaire (containing 60 likert scale items) has four clusters; 'Cluster A' sought information about Science Teachers' Self-efficacy beliefs, cluster B sought information about Science Teachers' Classroom Practices, cluster C sought information about Science Teachers' Job Satisfactions, and cluster D sought information about Science Teachers' School Climate. The instrument was a 4-Likert scale with Strongly Disagree=1, Disagree=2, Agree=3, and Strongly Agree=4.

The responses to the items of instruments were analyzed through the use of SPSS 16.0 version; where mean and standard deviation were used in order to answer research questions 1 to 4; and Pearson product moment correlation coefficient was used to answer research question 5 to 6 and test the

AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

null hypotheses 1 to 2, at 0.05 level of significance. In interpretation of the results, the grand means >2.49= Low level, 2.5-3.25= Average or Moderate level, and 3.26-4.00=High level.

Results

Research Question One: What are science teachers' self-efficacy beliefs, in secondary schools in Jalingo Education Zone?

Table 1: Descriptive Statistics of Science Teachers' Personal or Self-efficacy beliefs

Statement of Item	N	Mean	SD	Decision
1. My role as a teacher is to facilitate students' own inquiry.	63	3.35	0.60	A
2. Students learn best by finding solutions to problems on their own.	63	3.21	0.54	A
3. Students should be allowed to think of solutions to practical problems themselves before the teacher shows them how they are solved.	63	3.22	0.68	A
4. Thinking and reasoning processes are more important than specific curriculum content	63	3.46	0.50	A
5. My role includes having a secure knowledge of my subject and curriculum areas and imparting this knowledge to students effectively.	63	3.30	0.73	A
6. My role includes keeping up to date with developments in my subject or specialism.	63	3.17	0.58	A
Grand Mean	**63**	**3.29**		**A**

Results of Table 1 show the mean and standard deviation scores of items 1 to 6 on the self-efficacy beliefs of science teachers, in secondary schools in Jalingo Education Zone. The results show that all items have mean value above 2.50 (test-value) from a likert scale. Also, the grand mean for the cluster is 3.29; which shows that the personal or self-efficacy belief of science teachers is at high level.

AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

Research Question Two: To what extent do science teachers' classroom practices influence teaching and learning, in secondary schools in Jalingo Education Zone?

Table 2: Descriptive Statistics of Science Teachers' Classroom Practices

Statement of Item	N	Mean	SD	Decision
7. Teach jointly as a team in the same class.	63	3.00	0.70	A
8. Observe other teachers' classes and provide feedback.	63	2.54	0.76	A
9. Engage in joint activities across different classes and age groups (e.g. projects).	63	2.51	0.69	A
10. Exchange teaching materials with colleagues.	63	2.41	0.82	D
11. Engage in discussions about the learning development of specific students.	63	2.63	0.73	A
12. Work with other teachers in my school to ensure common standards in evaluations assessing student progress.	63	2.71	0.89	A
13. Attend team conferences.	63	3.00	0.86	A
14. Take part in collaborative professional learning.	63	2.97	0.80	A
15. Get students to believe they can do well in school work.	63	3.33	0.57	A
16. Help my students' value learning.	63	3.03	0.80	A
17. Craft good questions for my students.	63	3.35	0.57	A
18. Control disruptive behaviour in the classroom.	63	3.56	0.53	SA
19. Motivate students who show low interest in school work.	63	3.48	0.50	A
20. Make my expectations about student behaviour clear.	63	3.29	0.67	A
21. Help students think critically.	63	3.25	0.59	A
22. Get students to follow classroom rules.	63	3.24	0.61	A
23. Calm a student who is disruptive or noisy.	63	3.19	0.72	A
24. Use a variety of assessment strategies.	63	3.19	0.62	A
25. Provide an alternative explanation, for example when students are confused.	63	3.03	0.69	A
26. Implement alternative instructional strategies in my classroom.	63	2.92	0.68	A
Grand Mean	**63**	**3.03**		**A**

Results of Table 2 show the mean and standard deviation scores of items 7 to 26 on the classroom practices of science teachers, in secondary schools in Jalingo Metropolis. The results show that the respondents agreed with the statements of all items (except item 10) having mean value above 2.50 (test-value) from a likert scale. Only item 10 (with mean value less than the 2.50 test value) implies that the respondents disagreed with the fact that ''science teachers exchange teaching materials with colleagues''. This implies that science teachers agree with many expected classroom practices. Also from item 18, the respondents strongly agreed that teachers control disruptive behaviour in the classroom. The grand mean response gives 3.03; which equally confirms that to a moderate extent, classroom practices influence science teachers' performance positively.

AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

Research Question Three: To what extent does school climate influence science teachers' relationships and performance?

Table 3: Descriptive Statistics of School Climate on Science Teachers' Relationships

Statement of Item	N	Mean	SD	Decision
27. This school provides staff with opportunities to participate actively in school decisions.	63	2.43	0.56	D
28. This school provides parents or guardians with opportunities to participate actively in school decisions.	63	2.83	0.61	A
29. This school provides students with opportunities to participate actively in school decisions.	63	3.24	0.59	A
30. This school has a culture of shared responsibility for school issues.	63	2.95	0.52	A
31. There is a collaborative school culture which is characterized by mutual support.	63	3.10	0.71	A
32. In this school, teachers and students usually get on well with each other.	63	3.33	0.72	A
33. Most teachers in this school believe that the students' well-being is important.	63	3.38	0.52	A
34. Most teachers in this school are interested in what have to say.	63	3.21	0.65	A
35. If a student from this school needs extra assistance, the school provides it.	63	3.17	0.68	A
Grand Mean	**63**	**3.07**		**A**

Results of Table 3 show the mean and standard deviation scores of items 27 to 35 on the influence of school climate on teachers', students' and parents' relationships, in secondary schools in Jalingo Education Zone. The results show that the respondents agreed with the statements of all items (except item 27) having mean value above 2.50 (test-value) from a likert scale. Only item 27 (with mean value less than the 2.50 test value) implies that the respondents disagreed that 'The school provides staff with opportunities to participate actively in school decisions'. This implies that science teachers agree with many expected school climate. The grand mean response gives 3.07; which equally confirms that to a moderate extent, school climate influence science teachers' relationships and performance.

AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

Research Question Four: What are science teachers' job satisfactions, in secondary schools in Jalingo Education Zone?

Table 4: Descriptive Statistics of Science Teachers' Job satisfaction

Statement of Item	N	Mean	SD	Decision
36. The advantages of being a teacher clearly outweigh the disadvantages.	63	3.29	0.58	A
37. If I could decide again, I would still choose to work as a teacher.	63	2.98	0.71	A
38. I would like to change to another school if that were possible	63	3.40	0.79	A
39. I regret that I decided to become a teacher	63	2.89	0.65	A
40. I enjoy working at this school.	63	3.19	0.72	A
41. I wonder whether it would have been better to choose another profession	63	3.10	0.76	A
42. I would recommend my school as a good place to work	63	3.06	0.59	A
43. I think that the teaching profession is valued in society.	63	2.65	0.74	A
44. I am satisfied with my performance in this school	63	3.41	0.69	A
45. All in all, I am satisfied with my job.	63	2.71	0.77	A
46. Teaching in this school is generally very good.	63	2.86	0.86	A
47. The students I teach are generally well behaved.	63	3.19	0.95	A
48. The school has an effective school management team.	63	3.05	0.81	A
49. The school management team gives clear vision and direction.	63	2.89	1.11	A
50. I do not have the autonomy I need to do a good job as a teacher.	63	3.16	0.79	A
51. Teachers are underpaid compared to other qualified professionals with similar levels of responsibility.	63	3.40	0.71	A
52. My own pay is fair given my performance.	63	3.13	0.73	A
53. My workload is unmanageable.	63	3.24	0.64	A
54. The accountability system (Ofsted, league tables, etc.) does not add significantly to the pressure of the job.	63	3.19	0.56	A
55. Parents are supportive of my role as their children's teacher.	63	2.83	0.52	A
56. The accountability system does not add significantly to my workload.	63	2.84	0.75	A
57. I have scope to progress as a classroom teacher.	63	3.00	0.57	A
58. I have scope to progress into a leadership team role.	63	2.97	0.84	A
59. I have scope to progress to a higher pay level.	63	3.22	0.66	A
60. I have the opportunity to help all my students realize their potential.	63	2.79	0.74	A
Grand Mean	**63**	**3.06**		**A**

Results of Table 4 show the mean and standard deviation scores of items 36 to 60 on the job satisfaction of science teachers, in secondary schools in Jalingo Education

AJEMATES
African Journal of Educational Management, Teaching and Entrepreneurship Studies
VOL.12 (2), May-August, 2024 https://ajemates.org

Zone. The results show that all items have mean value above 2.50 (test-value) from a likert scale. 10 out of the 25 items were at moderate level while 15 at high level; this suggests that science teachers have positive job satisfaction. However, the grand mean for the cluster is 3.06; which shows that the job satisfaction of science teachers is at moderate level.

Research Question Five: What is the relationship between science teachers' self-efficacy beliefs and classroom practices, in secondary schools in Jalingo Education Zone?

Table 5: Correlation Statistics of the Relationship between Science Teachers' Self-efficacy beliefs and Classroom Practices

		CLASSROOM PRACTICES	PERSONAL BELIEFS
PERSONAL BELIEFS	Pearson Correlation	1	.086
	Sig. (2-tailed)		.003
	N	63	63
CLASSROOM PRACTICES	Pearson Correlation	.086	1
	Sig. (2-tailed)	.003	
	N	63	63

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

From Table 5, the result shows that the correlation between self-efficacy beliefs and classroom practices of science teachers is .086; meaning there is a small positive relationship between self-efficacy beliefs and classroom practices among science teachers, in secondary schools in Jalingo Education Zone.

Research Question Six: What is the relationship between science teachers' job satisfaction and school climate, in secondary schools in Jalingo Education Zone?

Table 6: Correlation Statistics of the Relationship between Science Teachers' School Climate and Job Satisfaction.

		CLASSROOM PRACTICES	PERSONAL BELIEFS
PERSONAL BELIEFS	Pearson Correlation	1	-.074
	Sig. (2-tailed)		.564
	N	63	63
CLASSROOM PRACTICES	Pearson Correlation	-.074	1
	Sig. (2-tailed)	.564	
	N	63	63

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

From Table 6, the result shows that the correlation between job satisfactions and school climate of science teachers is -.074; meaning there is a small negative

relationship between job satisfactions and school climate among science teachers, in secondary schools in Jalingo Education Zone.

Hypothesis One: There is no significant relationship between science teachers' self-efficacy beliefs and classroom practices, in secondary schools in Jalingo Education Zone.

From the same Table 6, the analysis shows that the significance or p-value of r (.086) is .003, and therefore the $p < 0.05$ level of significance. Hence, the null hypothesis is not retained; which implies that there is a significant relationship between science teachers' self-efficacy beliefs and classroom practices, in secondary schools in Jalingo Education Zone.

Hypothesis Two: There is no significant relationship between science teachers' job satisfactions and school climate, in secondary schools in Jalingo Education Zone.

From the same Table 6 above, the analysis shows that the significance or p-value of r (-.074) is .564, and therefore the $p > 0.05$ level of significance. Hence, the null hypothesis is retained; which implies that there is no significant relationship between science teachers' job satisfactions and school climate, in secondary schools in Jalingo Education Zone.

Discussion of Findings

From the result obtained, it showed that the personal or self-efficacy belief of science teachers is at high level. Also, the result confirmed that science teachers' classroom practices, school climate and job satisfaction are at moderate level. The results indicated that majority of science teachers serve as facilitator to emphasize more student-centered activities that facilitate students' learning. From the result obtained, it showed that there is a small positive correlation between science teachers' self-efficacy beliefs and their classroom practices. This implies that the two variables depend on one another. This agrees with Farrow (2019) who found that teachers' beliefs affect their teaching abilities. It also agrees with Nwagbo and Ugwuanyi (2015), who reported that the relationship between teachers' beliefs and their practices is complex and context dependent. Although, Parmelee et al. in Fakhri (2012) showed that teachers' classroom practices were inconsistent with their self-efficacy beliefs, some researchers such as Tekin (2023) found that the teachers' beliefs played an important role in the classroom practices. As noted by Tekin (2023) self-efficacy belief has a strong impact on the achievement levels of individuals, by managing environmental factors positively.

The result by Tekin 2023 revealed that teachers' school climate perceptions were at a medium level. The findings of previous literatures (Collie et al. 2012; Meristo & Eisenschmidt, 2014; Mert & Ozdemir, 2019) also shows that teachers school climate perceptions were at a low or medium level. A positive and healthy school climate has positive effects on all stakeholders of the school, and education outcomes in general (Berkowitz et al. 2021; Saputra et al. 2020; Tekin, 2023). That is because, in schools

that develop a positive school climate, all stakeholders feel valued, and cooperate with a sense of higher commitment (Thapa et al. 2013; Tekin, 2023).

School climate may differ for every school because every school has a different perceived ambiance and atmosphere. Since the school climate perception is not a constant concept and may differ for any teacher and school conditions, it can be considered the expected situation to obtain different findings in the related literature. Many studies revealed that the physical opportunities of the school help to set a positive school culture and climate and affect teachers' perceptions of the school (Al-Dababneh et al. 2019; Goker & Gunguz, 2017; Rhee et al. 2017).

From the result obtained, it can also revealed that there is a negative significant correlation between science teachers' job satisfaction and their school climate. This implies that the two variables do not depend on one another. This finding agrees with Yinusa and Loyisa (2019) who revealed that science teachers' job satisfaction is the most effective significant contribution to their job performances. Since the result in Table 6 showed that the null hypothesis is retained, there may be other factors that can contribute to science teachers' job performance and not wholly the specific school climate. Aldridge and Fraser (2016) found a significant relationship between school climate and job satisfaction. Malinen and Savolainen (2016), in their studies designed with a structural equation model, revealed that school climate had a positive effect on job satisfaction. Treputtharat and Tayiam (2014) pointed out that school climate affect teachers' job satisfaction at a high level. Collie et al. (2012) stated that two school climate factors, i.e., "teachers' perceptions of students' motivation" and "behavior", had the most powerful impact to predict job satisfaction.

Conclusion

It was concluded from the findings of the study that there is a significant positive relationship between science teachers' personal belief and their classroom practices. Also, the findings of the study revealed that there is no significant relationship between science teachers' job satisfaction and their school climate.

Recommendations

Therefore, the following recommendations were given:

1. Strategies to enhance science teachers' self-efficacy beliefs for innovative classroom practices, and creating a conducive school climate to promote their job satisfaction should be developed for quality education by school managers and Ministry of Education.
2. Government should make compulsory the integration of good school climate in science classroom in every secondary school.
3. Science teachers may upgrade their self-efficacy beliefs and classroom practices to support the implementation of science curriculum.

4. Science researchers can further investigate or find out other strategies/factors contributing to teachers' job satisfaction and school climate.

References

Abdel- Basset, M., Manogaran, G., Mohamed, M., & Rushdy, E. (2019). Internet of things in smart education environment: Supportive framework in the decision- making process. *Concurrency and Computation: Practice and Experience*, *31*(10), Doi: https://doi.org/10.1002/cpe.4515.

Al-Dababneh, K. A., Al-Zboon, E. K., & Ahmad, J. (2019). The creative environment: teachers' perceptions, selfefficacy, and teaching experience for fostering children's creativity. *Early Child Development and Care*, *189*(10), 1620-1637.

Aldridge, J. M., & Fraser, B. J. (2016). Teachers' views of their school climate and its relationship with teacher self-efficacy and job satisfaction. *Learning Environments Research*, *19*(2), 291-307. doi: 10.1007/s10984-015-9198-x.

Augustine, C. H., Engberg, J., Grimm, G. E., Lee, E., Wang, E. L., Christianson, K., & Joseph, A. A. (2018). Can restorative practices improve school climate and curb suspensions. An evaluation of the impact of restorative practices in a mid-sized urban school district. https://www.rand.org/content/dam/rand/pubs/research_reports/RR2800/RR2840/RAND_RR2840.pdf

Berkowitz, R., Astor, R. A., Pineda, D., DePedro, K. T., Weiss, E. L., & Benbenishty, R. (2021). Parental involvement and perceptions of school climate in California. *Urban Education*, *56*(3), 393-423.

Berkowitz, R., Moore, H., Astor, R. A., & Benbenishty, R. (2017). A research synthesis of the associations between socioeconomic background, inequality, school climate, and academic achievement. *Review of Educational Research*, *87*(2), 425-469. doi: 10.3102/0034654316669821.

Chamundeswari, S. Z. (2013). Job satisfaction and performance of school teachers. *International Journal of Academic Research in Business and Social Sciences*, *3*(5), 420-428.

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, *104*(4), 1189–1204. Doi:10.1037/a0029356.

Dilbaz-Sayın, S. (2017). Okul iklimi ile öğretmen performansı arasındaki ilişkinin incelenmesi [The investigation of the relationship between the school climate and the teacher performance]. (Unpublished doctoral dissertation). *Onsekiz Mart Universitesi, Canakkale*.

Fakhri, R. (2012). Teachers' Pedagogical Beliefs and Actual Classroom Practices in Social Studies Instruction. *American International Journal of Contemporary Research*, 2(1), 1-20.

Farrow, K. (2019). "The relationship of science teachers' beliefs to their classroom strategies". *Unpublished Master Thesis, Queen's University at Kingston, Canada.*

Goker, S. & Gunduz, Y. (2017). Dunya olceğinde oğretmenlerin saygınlık statusu ve ozluk hakları [Teacher status and their employee personal rights across the world]. *Milli Eğitim Dergisi , 46* (213) , 177-196 .

Kıran, D., & Sungur, S. (2018). Fen bilimleri oğretmenlerinin motivasyon ve iş doyumlarının okul ortamı ileilişkisi [Science teachers' motivation and job satisfaction in relation to perceived school context]. *Eğitimve Bilim*, *43*(194), 61-80. doi: 10.15390/EB.2018.7409.

Mahmood, A., Nudrat, S., Asdaque, M. M., Nawaz. A., & Haider. N. (2011). Job satisfaction of secondary school teachers: A comparative analysis of gender, urban and rural schools. *Asian Social Science, 7* (8), 203-208. doi:10.5539/ass.v7n8p203.

Malinen, O. P., & Savolainen, H. (2016). The effect of perceived school climate and teacher efficacy in behavior management on job satisfaction and burnout: A longitudinal study. *Teaching and Teacher Education*, *60*, 144-152. doi: 10. 1016/j.tate.2016.08.012

Meristo, M., & Eisenschmidt, E. (2014). Novice teachers' perceptions of school climate and selfefficacy. *International Journal of Educational Research*, *67*, 1-10.doi:10.1016/j.ijer.2014.04.003.

Mert, A., & Ozdemir, G. (2019). Oğretmenlerin psikolojik okul iklimi algıları ile iş doyumu duzeyleri arasındakiilişkinin incelenmesi [The impact of psychological climate in educational institutions on teachers' job satisfaction]. *Journal of the Human & Social Science Researches*, *8*(1), 91-109.

Nasser M. (2019). Science Teachers' Beliefs and Practices: Issues, Implications and Research Agenda. *International Journal of Environmental & Science Education*, 4 (1) 25- 48.

Naz, S. (2017). Factors affecting teachers job satisfaction. *Market Forces, 11*(2), 44-59. Retrieved from: http://pafkiet.edu.pk/marketforces/index.php/marketforces/ article/view/343.

Nwagbo, C.R. & Ugwuanyi, C.S. (2015). Assessment of Science Teachers' Pedagogical Beliefs and ICT Classroom Practices in Secondary Schools in Enugu State, Nigeria. *Journal of the Science Teachers Association of Nigeria*, 50(1), 24-33.

Organization for Economic Co-operation and Development (OECD) (2013). Teaching and Learning International Survey (TALIS). The Institute of Education TALIS National Study Centre, London.

Pong, S. L., & Zeiser, K. L. (2012). Student engagement, school climate, and academic achievement of immigrants' children. *American Psychological Association*, 209-232. doi: 10.1037/13094-009.

Rhee, H., McQuillan, B., Chen, D. G., & Atis, S. (2017). Perceptions about

interpersonal relationships and school environment among middle school students with asthma. *Journal of Asthma*, *54*(9), 905-910.

Saputra, W. N. E., Supriyanto, A., Astuti, B., Ayriza, Y., & Adiputra, S. (2020). The effect of student perception of negative school climate on poor academic performance of students in Indonesia. *International Journal of Learning, Teaching and Educational Research*, *19*(2), 279-291.

Selamat, N., Samsu, N. Z., & Kamalu, N. S. M. (2013). The impact of organizational climate on teachers' job performance. *Educational Research Journal*, *2*(1), 71-82.

Tekin, O. 2023). School Climate, Teacher Self-Efficacy, and Professional Satisfaction: A Study of Relations. *Bartın University Journal of Faculty of Education* (BUEFAD), 12(2), 404-421.dergipark.org.tr/buefad DOI: 10.14686/buefad.1056718

Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, *83*(3), 357-385.

Treputtharat, S., & Tayiam, S. (2014). School climate affecting job satisfaction of teachers in primary education, Khon Kaen, Thailand. *Procedia-Social and Behavioral Sciences*, *116*, 996-1000. doi: 10.1016/j.sbspro.2014.01.334.

Yinusa A. F. & Loyiso C. J. (2019). Assessment of science teachers' career satisfaction and school organizational climate in enhancing job performance in rural learning ecologies. *Problems of Education in the 21st Century* 77(1), 254 – 269.