



A Study To Highlight How An Educational Instructor's Empathy Quotient Affects Their Student's Academic Achievements.

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ABSTRACT

Academic results across Indian schools, except for those in Rajasthan and Punjab, have shown a decline since 2017, indicating a widening learning gap due to pandemic disruptions. The National Achievement Survey, 2021, based on exams from 1.18 lakh schools in 720 districts, evaluated students' proficiency in environmental science, language, and math. Except for Punjab and Rajasthan, all states and Union Territories scored below the national average reported in the 2017 survey. Despite some improvements in math scores, the overall performance decreased. Kerala, Punjab, and Rajasthan ranked highest, while Telangana, Arunachal Pradesh, and Chhattisgarh ranked lowest in academic performance. Teachers with high emotional intelligence (EI) can focus on the emotional aspects of learning and teaching exchanges (Mortiboys, 2005), which can directly create a positive atmosphere in the classroom to make the course more interesting and enjoyable (Miri and Pishghadam, 2021). Previous research has found a close relationship between teachers' EI and student learning. This research aims to ascertain the degree to which Palakkad district, Kerala teachers' empathy quotient affects their students' academic achievement. The study looked at how parameters like age, gender, educational attainment, years of teaching experience, and COVID-19 influences affected the determination of teaching efficacy. A computerized survey was used to gather information from Palakkad district, Kerala, India's private and public schools. The study's participants included full-time instructors working in schools of Palakkad district, Kerala. 246 school instructors answered the poll. The data were examined using ANOVA, independent sample t-test, and descriptive statistics along with the multiple regression. Necessary suggestions are made.

Keywords: Emotional Quotient, Educational instructor, Academic Achievement.

INTRODUCTION

Emotions are complex psycho-physiological processes triggered by subjectively meaningful events in an individual's life, according to **Eisma and Stroebe (2021)**. For more than a century, psychologists have studied them (**Berridge, 2018**). Some academics contend that to be effective educators, inspire pupils, and create a positive learning environment, teachers must assess, manage, and control their emotions (**Schonert-Reichl, 2017**). Research on teacher emotions has increased significantly since the mid-1990s, prompting educators to concentrate more on using Emotional Quotient in their work (**Yin, 2012; Maamari & Majdalani, 2019**). Traditional education exclusively addressed logical intelligence, paying little attention to other types of intelligence, like Emotional Quotient. Therefore, the Emotional Quotient is essential for realizing the predetermined goals of humanity while fostering educational achievements. Psychologists Mayer and Salovey are credited with coining the term "Emotional Quotient," which they defined as an individual's capacity or ability to accurately perceive, process, know, and regulate emotional information in a way that involves intra- and inter-abilities to influence one's thinking to affect particular changes in others. The idea of emotional quotient has been described using a variety of models, such as the ability, mixed, and trait models (**Tyagi & Goutam, 2017**). The ability model defines the Emotional Quotient as the capacity to recognize emotion,

integrate feelings to validate ideas, comprehend the sentiment, and regulate emotion to promote personal development.

According to Daniel Goleman's mixed model, which he created, an Emotional Quotient is a collection of many talents and skills that influence how well people function. **Cherry (2018)** states, "Emotional Quotient refers to a person's ability to understand and manage emotions." It also contains the five key elements. These composite models of emotional quotient are based on self-awareness, self-regulation, social competence, empathy, and motivation.

A person's emotional quotient increases their general intelligence and has an impact on their achievement in school and the workplace (**Romanelli et al., 2006**). There have been mixed results in studies on the relationship between pupils' academic achievement and their emotional quotient. **Koifman (1998)** did not detect a relationship between Emotional Quotient and student accomplishment, despite the majority of studies (**Schutte et al., 1998; AbiSamra, 2000; Parker et al., 2004; Low & Nelson, 2004; Adeoye & Emeke, 2010**) finding a positive correlation. A strong educational system depends on its teachers' competence since they work closely with students and have a big impact on their learning and success (**Anderson, 2004; Birwatkar, 2014**).

Over the past few years, researchers have attempted to establish a connection between the Emotional Quotient of the principal and student achievement in this context (**Andrews & Soder, 1987; Bardach, 2008; Maulding et al., 2010**); however, this connection is indirect and primarily mediated by the support that school administrators provide to the teachers (**Hallinger, 2003; Leithwood & Mascall, 2008**). In this particular setting, it is imperative to examine the emotional responsibilities that teachers play because they have far more direct and impactful relationships with students than a principal would. The literature must include studies examining how instructors' Emotional Quotient affects students' academic progress (**Curci et al., 2014**).

Since they are aware of their strengths and shortcomings as well as those of their students, emotionally intelligent instructors are supposed to be able to adjust to the demands of the classroom. Teachers' consideration and friendliness enable students to perform better (**Skinner & Belmont, 1993; O'Donnell et al., 1995; Hamre & Pianta, 2001; Comer, 2001**). In order to fulfill the needs of a diverse student body, educators must be able to build and nurture connections with their students. Intense teacher-student interactions increase learning outcomes and productivity while giving children a sense of security in the classroom (**Pianta, 1999**). According to empirical research by **Penrose et al. (2007)**, teachers' self-efficacy is impacted by their emotional intelligence since higher emotional intelligence may increase efficacy, leading to higher student accomplishment.

Instructor Effectiveness

An essential part of any civilized culture is education. It helps someone enjoy a prosperous and comfortable life by enabling them to carry out their obligations to themselves, their family, society, and the country. It encourages the younger generation to adapt to a dynamic society that demands specific talents and knows how to instill those skills in the younger generation. to understand how it is accomplished through the instructors' performance. Consequently, teacher effectiveness is vital in today's world. The phrase "the impact of the classroom factors, such as teaching methods, teacher expectations, classroom organization, and use of classroom resources on students' performance" describes teacher effectiveness.

Statement of the problem:

The modern educational landscape places a significant emphasis on the quality of the student-teacher relationship, acknowledging that instructors who exhibit high levels of empathy can have a positive impact on student learning and well-being. Empathy, which is the capacity to comprehend and experience another person's feelings, is widely acknowledged as an essential quality for successful teaching. However, there is a need for a comprehensive study that explores the relationship between an educational instructor's empathy quotient and its influence on their students' academic performance. Understanding the dynamics between an educational instructor's empathy quotient and its implications for student academic performance is crucial in enhancing the educational experience. This research seeks to shed light on the role of empathy in the classroom, providing insights that can inform teacher training and curriculum development to create more supportive and effective learning environments.

Purpose of the study:

The following research questions are the focus of this investigation.:

1. Does the educational qualification of instructors affect the academic achievement of their students?
2. Do students' academic achievements significantly depend on the number of years professors have been teaching?
3. Do educators' views toward SAA vary according to their gender?
4. To investigate if TES- The teacher effectiveness survey has a significant impact on SAA-Student Academic Achievements.

LITERATURE SURVEY

- a. **(MacCann et al., 2020)** Some possible explanations for this significant relationship include the capacity to better manage emotions in educational settings, such as stress, frustration, or exam anxiety, as well as the capacity to forge stronger bonds with both teachers and students. It has also been suggested that certain critical noncognitive traits, such as emotional intelligence, may have an impact on academic performance as a result of contemporary educational changes (e.g., an increase in teamwork or group activities), which call for the development of social skills like decision-making, handling potential peer conflicts, and problem-solving in a group setting. To completely understand the connection between academic success and emotional intelligence, more research is necessary. Our research aims to investigate the potential mediating effects of thriving and the moderating effects of teacher-student interactions on the association between academic performance and emotional intelligence.
- b. **(Lopez-Zafra et al., 2019; Tejada-Gallardo et al., 2020)** Emotionally intelligent people, according to study, have better psychological adjustment, which includes reduced symptoms of depression, more happiness and optimism, improved self-esteem, and social support.
- c. **(Trigueros et al., 2019; Martínez-Martínez et al., 2020; Rey et al., 2019)** Previous studies suggest that developing emotional intelligence in the context of education could be a useful strategy to improve psychological adjustment, increase well-being, and improve interpersonal relationships in the teenage population.
- d. **(Upadhayaya, 2006)**. He conducted a study comparing the personality traits of highly and lowly emotionally intelligent prospective teachers. The results showed that emotionally intelligent teachers were more capable, self-assured, industrious, helpful, encouraging, and inspiring, as well as high-spirited, more eager, and flexible, than low emotionally intelligent prospective instructors.

HYPOTHESES IN THE RESEARCH

Ho: The academic achievement of the students does not significantly differ on the account of educational qualification of the instructors.

Ho: The academic achievement of the students does not significantly differ on account of the experience of the instructors.

H1: The academic achievement of the students does not significantly differ on account of the gender of the instructors.

H1: There is a significant impact of TES on SAA.

METHODS AND MATERIALS

The instructors in the Palakkad district participated in the study. The population, in this case, consists of government and independent instructors at schools. The study's participants consisted of instructors employed in ten schools in Palakkad. Included are both male and female educators employed by government, nonprofit, and independent schools.

Data collection and tools used:

Information was gathered from primary and secondary sources. Based on the goals, questionnaires were used to gather the primary data. Books, websites, and other online sources provided the secondary data. They were used in this study, reviewed, and acknowledged.

EI-related factors were gathered using a 5-point Likert scale. The study's hypotheses were tested by analyzing the acquired data using the data were examined using ANOVA, independent sample t-test, and descriptive statistics.

DATA ANALYSIS AND FINDINGS

DEMOGRAPHIC ANALYSIS

CATEGORY	PARTICULARS	FREQUENCY	PERCENT
AGE	Less than 30 years	106	43.1
	30-40 years	65	26.4
	40-50 years	75	30.5
	Total	246	100.0
GENDER	Male	67	27.2
	Female	179	72.8
	Total	246	100.0
EDUCATIONAL QUALIFICATION	SSLC	42	17.1
	UG	120	48.8
	PG	71	28.9
	DIPLOMA	13	5.3

	Total	246	100.0
MONTHLY INCOME	< 20000	57	23.2
	20000-30000	86	35.0
	30000-40000	90	36.6
	above 40000	13	5.3
	Total	246	100.0
INSTITUTION TYPE	Public	124	50.4
	Private	122	49.6
	Total	246	100.0
EXPERIENCE	Less than 5 years	87	35.4
	5 -10 years	133	54.1
	10-15 years	26	10.6
	Total	246	100.0

According to the table, most of the respondents come under the category i.e.; Age group of less than 30 years constituting around (106/246) of the respondents, followed by the age group 40-50 years and 30-40 years constituting around (75/246) & (65/246) of the respondents respectively, female respondents constitute the highest percentage than male respondents. The educational qualification of the respondents is higher in the case of the UG program followed by the PG, SSLC, and diploma courses. The highest percentage of the monthly income of the respondents is around 30000-40000 constituting around (90/246) of the respondents followed by the respondents having their monthly income around 20000-30000, <20000, above 40000 constituting around (86/246), (57/246), (13/246) of the respondents respectively. Most of the respondents are working in public schools according to the data collected, having around 5 to 10 years of experience as the highest.

Does the educational qualification of instructors affect the academic achievement of their students?

H0: The academic achievement of the students does not significantly differ on the account of educational qualification of the instructors.

H1: The academic achievement of the students does not significantly differ on the account of educational qualification of the instructors.

		N	Std. Deviation	Std. Error	Sum of Squares	df	Mean Square	Sig.	Decision
SAA1	SSLC	42	.563	.087	1.680 71.901 73.581	3 242 245	.560 .297	.133	Retain the null hypothesis
	UG	120	.470	.043					
	PG	71	.653	.077					
	DIPLOMA	13	.480	.133					
	Total	246	.548	.035					
SAA2	SSLC	42	.501	.077	8.086 57.934 66.020	3 242 245	2.69 5 .239	.000	Reject the null hypothesis
	UG	120	.304	.028					
	PG	71	.696	.083					
	DIPLOMA	13	.480	.133					
	Total	246	.519	.033					
SAA3	SSLC	42	.354	.055	3.680 43.804 47.484	3 242 245	1.227 .181	.000	Reject the null hypothesis
	UG	120	.423	.039					
	PG	71	.457	.054					
	DIPLOMA	13	.480	.133					
	Total	246	.440	.028					
SAA4	SSLC	42	.397	.061	.693 82.136 82.829	3 242 245	.231 .339	.565	Retain the null hypothesis
	UG	120	.518	.047					
	PG	71	.761	.090					
	DIPLOMA	13	.506	.140					
	Total	246	.581	.037					
SAA5	SSLC	42	.457	.071	4.152 54.222 58.374	3 242 245	1.384 .224	.000	Reject the null hypothesis
	UG	120	.465	.042					
	PG	71	.491	.058					
	DIPLOMA	13	.506	.140					
	Total	246	.488	.031					
SAA6	SSLC	42	.623	.096	6.923 59.260	3 242	2.30 8	.000	
	UG	120	.502	.046					

	PG	71	.390	.046	66.183	245	.245		Reject the null hypothesis
	DIPLOMA	13	.480	.133					
	Total	246	.520	.033					
SAA7	SSLC	42	.328	.051	.998 43.636 44.634	3 242 245	.333 .180	.140	Retain the null hypothesis
	UG	120	.485	.044					
	PG	71	.401	.048					
	DIPLOMA	13	.000	.000					
	Total	246	.427	.027					
SAA8	SSLC	42	.537	.083	.480 71.666 72.146	3 242 245	.160 .296	.655	Retain the null hypothesis
	UG	120	.510	.047					
	PG	71	.607	.072					
	DIPLOMA	13	.506	.140					
	Total	246	.543	.035					

Interpretation:

According to the table above, all the statements of students' academic achievement Apart from the statements that are coloured accept the null hypothesis since their p values are $<.05$.ie; SAA1, SAA4, SAA7 & SAA8 are the statements that retain the null hypothesis, and statements such as SAA2, SAA3, SAA5, and SAA6 reject the null hypothesis in case of the educational qualification of the instructors.

• **Do students' academic achievements significantly depend on the number of years professors have been teaching?**

H₀: The academic achievement of the students does not significantly differ on account of the experience of the instructors.

H₁: The academic achievement of the students does not significantly differ on account of the experience of the instructors.

		N	Std. Deviation	Std. Error	Sum of Squares	df	Mean Square	Sig.	Decision
SAA1	Less than 5 years	87	.702	.075	.404	2	.202	.512	Retain the null hypothesis
	5 -10 years	133	.468	.041	73.177	243	.301		
	10-15 years	26	.272	.053	73.581	245			
	Total	246	.548	.035					
SAA2	Less than 5 years	87	.575	.062	2.595	2	1.297	.008	Reject the null hypothesis
	5 -10 years	133	.501	.043	63.426	243	.261		
	10-15 years	26	.272	.053	66.020	245			
	Total	246	.519	.033					
SAA3	Less than 5 years	87	.454	.049	.372	2	.186	.385	Retain the null hypothesis
	5 -10 years	133	.457	.040	47.112	243	.194		
	10-15 years	26	.272	.053	47.484	245			
	Total	246	.440	.028					
SAA4	Less than 5 years	87	.655	.070	.899	2	.450	.265	Retain the null hypothesis
	5 -10 years	133	.572	.050	81.930	243	.337		
	10-15 years	26	.272	.053	82.829	245			
	Total	246	.581	.037					
SAA5	Less than 5 years	87	.594	.064	.454	2	.227	.388	Retain the null hypothesis
	5 -10 years	133	.441	.038	57.920	243	.238		
	10-15 years	26	.272	.053	58.374	245			
	Total	246	.488	.031					
SAA6	Less than 5 years	87	.465	.050	2.866	2	1.433	.005	Reject the null hypothesis
	5 -10 years	133	.545	.047	63.317	243	.261		
	10-15 years	26	.471	.092	66.183	245			
	Total	246	.520	.033					

SAA7	Less than 5 years	87	.359	.038	.775	2	.387	.119	Retain the null hypothesis
	5 -10 years	133	.452	.039	43.859	243	.180		
	10-15 years	26	.485	.095	44.634	245			
	Total	246	.427	.027					
SAA8	Less than 5 years	87	.538	.058	4.534	2	2.267	.000	Reject the null hypothesis
	5 -10 years	133	.546	.047	67.612	243	.278		
	10-15 years	26	.368	.072	72.146	245			
	Total	246	.543	.035					

Interpretation:

According to the table above, all the statements of students' academic achievement Apart from the statements that are coloured accept the null hypothesis since their p values are $<.05$.ie; SAA1, SAA3, SAA4, SAA5, and SAA7 are the statements that retain the null hypothesis, and statements such as SAA2, SAA6 & SAA8 reject the null hypothesis in the case of the experience of the instructors.

• Do the views of educators toward SAA vary according to their gender?

H₀: The academic achievement of the students does not significantly differ on account of the gender of the instructors.

H₁: The academic achievement of the students does not significantly differ on account of the gender of the instructors.

	Gender	N	Mean Rank	Sum of Ranks	Mann-Whitney U	z	sig	Decision
SAA1	Male	67	126.96	8506.00	5765.000	-.626	.531	Retain the null hypothesis
	Female	179	122.21	21875.00				
	Total	246						
SAA2	Male	67	129.49	8675.50	5595.500	-1.046	.295	Retain the null hypothesis
	Female	179	121.26	21705.50				
	Total	246						
SAA3	Male	67	119.91	8034.00	5756.000	-.669	.504	Retain the null hypothesis
	Female	179	124.84	22347.00				
	Total	246						
SAA4	Male	67	101.81	6821.00	4543.000	-3.544	.000	Reject the null hypothesis
	Female	179	131.62	23560.00				
	Total	246						
SAA5	Male	67	109.78	7355.50	5077.500	-2.465	.014	Reject the null hypothesis
	Female	179	128.63	23025.50				
	Total	246						
SAA6	Male	67	147.30	9869.00	4402.000	-3.745	.000	Reject the null hypothesis
	Female	179	114.59	20512.00				
	Total	246						
SAA7	Male	67	133.96	8975.00	5296.000	-1.963	.050	Reject the null hypothesis
	Female	179	119.59	21406.00				
	Total	246						
SAA8	Male	67	117.37	7863.50	5585.500	-.994	.320	Retain the null hypothesis
	Female	179	125.80	22517.50				
	Total	246						

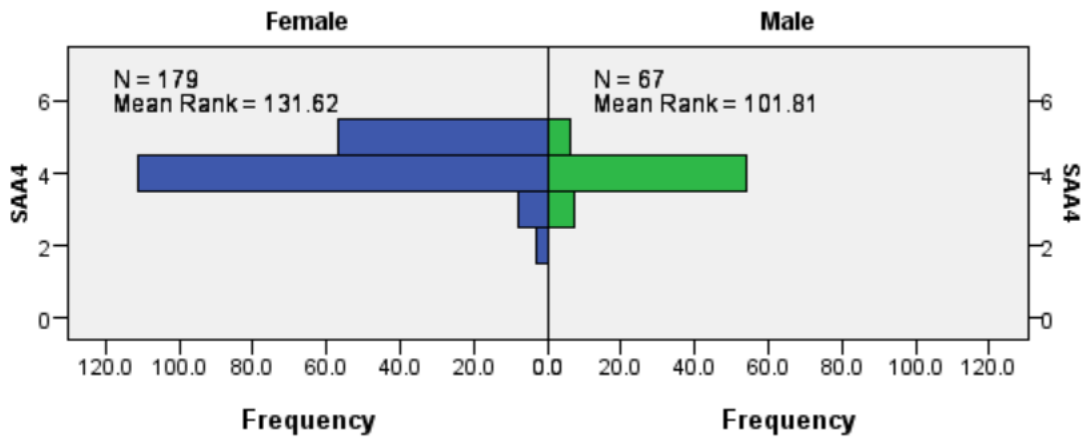


Figure 4.15 shows the result of the Mann- Whitney U Test regarding SAA4(Does instructor's emotional quotient affect your achievements) with their respective mean ranks. Since the mean rank of male school-level educators (101.81) is lesser than female school-level educators (Mean=131.62), it is concluded that female school-level educators engage in SAA4(Does instructor's emotional quotient affect your achievements), significantly more than male school-level educators.

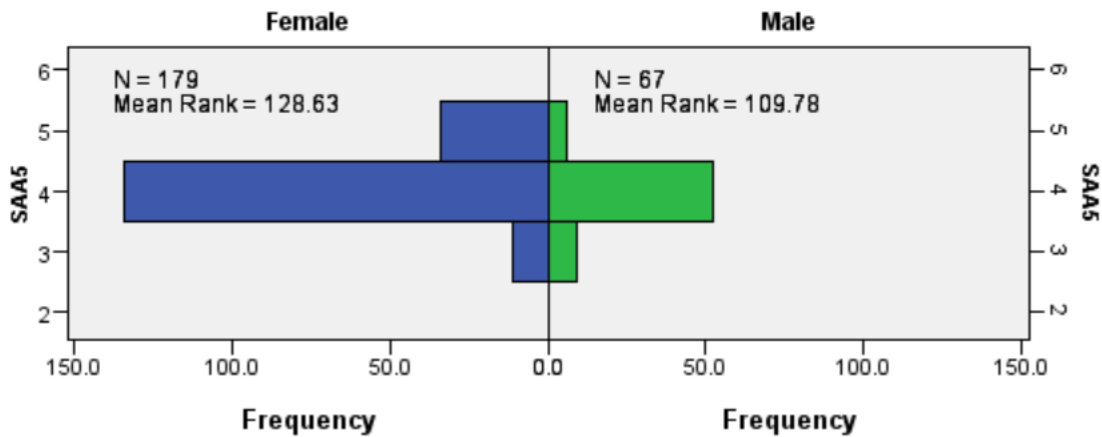


Figure 4.15 shows the result of the Mann- Whitney U Test regarding SAA5(Does assignments, sports, extracurricular activities have an impact on SAA) with their respective mean ranks. Since the mean rank of male school-level educators (109.78) is lesser than female school-level educators (Mean=128.63), it is concluded that female school-level educators engage in SAA5(Does assignments, sports, and extracurricular activities have an impact on SAA), significantly more than male school-level educators.

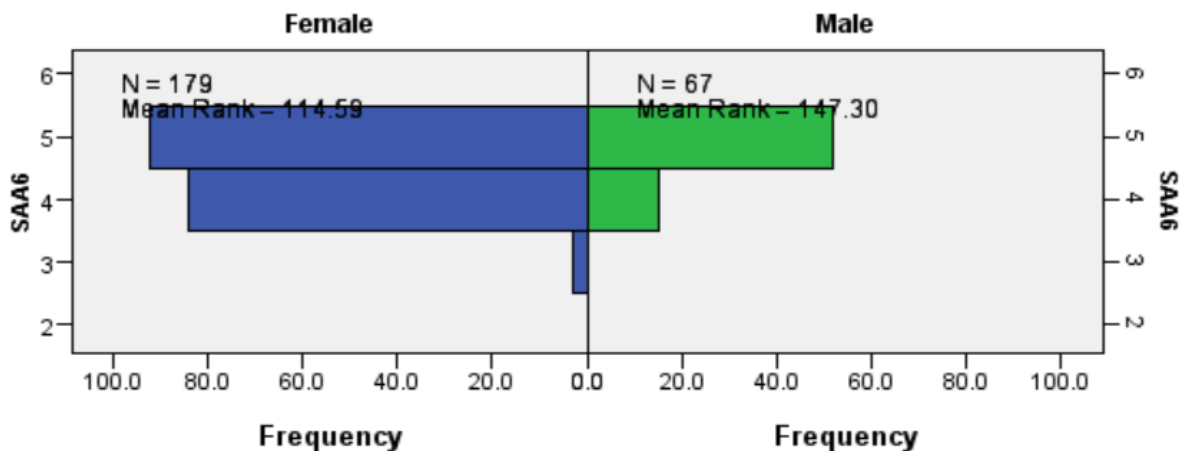


Figure 4.15 shows the result of the Mann- Whitney U Test regarding whether your instructors encourage you to perform better (SAA6) with their respective mean ranks. Since the mean rank of male school-level educators (147.30) is higher than female school-level educators (Mean=114.59), it is concluded that male school-level educators engage in whether your instructors encourage you to perform better (SAA6), significantly more than female school-level educators.

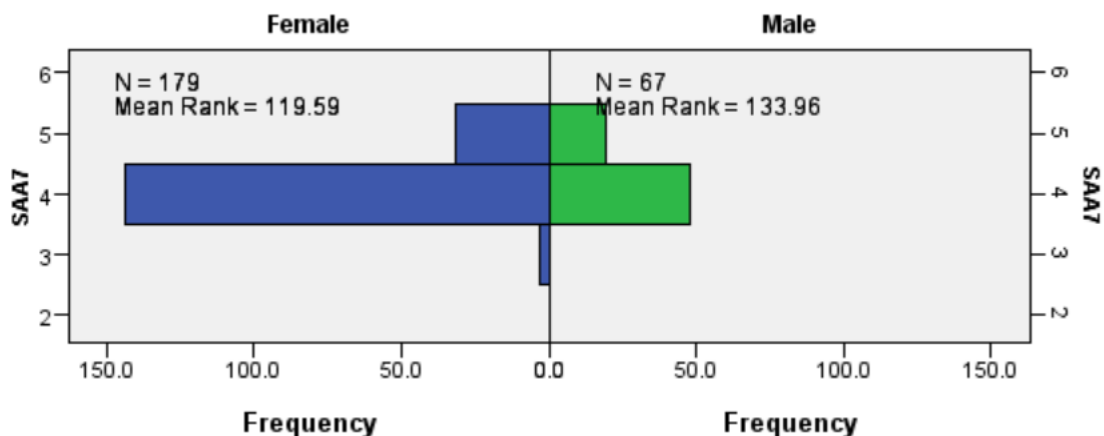


Figure 4.15 shows the result of the Mann-Whitney U Test regarding whether your instructors follow fair rules inside the classrooms (SAA7) with their respective mean ranks. Since the mean rank of male school-level educators (133.96) is higher than female school-level educators (Mean=119.59), it is concluded that male school-level educators engage in whether your instructors follow fair rules inside the classrooms (SAA7), significantly more than female school-level educators.

H1: There is a significant impact of TES on SAA.

Hypothesis	Regression Weights	R2	f	P value	Hypothesis supported
H1	TES→SAA	.223	8.517	.000	YES

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.098	.452		4.646	.000
	SAA1	-.018	.064	-.020	-.275	.783
	SAA2	.226	.067	.237	3.381	.001
	SAA3	-.004	.099	-.004	-.044	.965
	SAA4	.028	.075	.033	.372	.710
	SAA5	-.023	.092	-.023	-.250	.803
	SAA6	.373	.061	.393	6.075	.000
	SAA7	-.026	.076	-.022	-.339	.735
	SAA8	-.037	.069	-.041	-.542	.589

a. Dependent Variable: TES1

Interpretation:

The hypothesis tests whether the TES carries a significant impact on SAA. The dependent variable SAA was regressed on predicting variable TES to test hypothesis H1. TES significantly predicted SAA, $F(8,237) = 8,517$, $P < 0.001$, which indicates that TES can play a significant role in shaping SAA. These results direct the positive effect of TES. Moreover, the $R^2 = .223$ depicts that the model explains 22.3 % of the variance in SAA.

SUGGESTIONS

Here are some suggestions for integrating Emotional Intelligence into the classroom. The first step is to decide the particular SEL component you wish to concentrate on: Self-awareness, self-management, social awareness, interpersonal skills, and responsible decision-making are among the five primary competencies of social and emotional learning (SEL). For your thesis project, pick one or two of these areas to concentrate on. Putting an intervention into practice in a classroom and gathering data on its efficacy is another suggestion. This can include student comments, teacher observations, and surveys or assessments conducted before and after the intervention. Next, offer suggestions. In general, a thesis project on integrating Emotional Intelligence (EI) into the classroom can make a significant addition to the field of education and aid in fostering students' social and emotional well-being, particularly in the wake of the COVID-19 pandemic. Further investigation may be carried out to create awareness campaigns suitable for evaluating the impact of emotional intelligence on the effectiveness of instruction provided by state-employed teachers at different educational levels.

FINAL VERDICT

In sum, this study underscores the critical role of empathy in the realm of education. It illuminates the link between an educational instructor's empathy quotient and their student's academic performance, offering concrete evidence of the far-reaching and positive effects of empathy on learning outcomes. These findings provide a compelling case for the integration of empathy-related training and practices in education, ultimately contributing to the holistic development and success of students. In the classroom, teachers who understand emotional intelligence (EI), its components, and the reasons behind it can contribute to a higher level of academic performance for all students. It is common knowledge that instructors come into the classroom after COVID-19 with limited social and emotional literacy. The material in this professional development gives teachers a head start on implementing academic and emotional integration skills that can benefit the learner. The professional development in the appendix gives educators clear definitions of emotional intelligence (EI) as well as practical integration and implementation tactics for the very next day in academic contexts, which can be accessed by instructional coaches, administrators, and families in addition to educators.

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