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# Assessing Teachers' Engagement in Public Elementary Schools in the **Philippines**

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**Abstract:** Teachers are in authority to make decisions and to influence and engage learners. This descriptive study aimed to assess the 145 teachers' engagement in public elementary schools in the Philippines using the jury-validated and reliabilitytested researcher-made questionnaire on the Teachers' Engagement Scale. Appropriate statistical tools were used to interpret the data with a .05 significance level for all inferential data in a two-tailed test processed using the Statistical Packages for Social Sciences (SPSS) software, Version 26.0. Data revealed that teachers' engagement for school success was high in cognitive, emotional, and social engagement as an entire group and according to sex, educational qualification, length of teaching experience, and school size. Significant differences were noted in teachers' engagement across the three domains: sex, emotional and social engagement, educational qualification and social engagement, and the length of the teaching experience. The study concludes that teachers are generally well-engaged in their work, and their engagement as teachers depends on the leadership of their school heads. The study recommends that the Department of Education key officials are encouraged to develop school policies, design and create strategies and programs, and allot budgetary allotments to implement teacher-specific human resource development.

Keywords: Cognitive Engagement; Emotional Engagement; Social Engagement; Teachers' Engagement; Teaching and Learning; Educational Qualification; Length of Teaching Experience.

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# 1. Introduction

A high degree of performance from each individual professional is necessary for a school to be considered successful. Schools are complicated, collaborative entities. Day in and day out, it is the responsibility of school leaders to ensure that all students fulfil rigorous grade-level and college- and career-readiness criteria. This responsibility is a fundamental component of school success. The leadership abilities of school administrators are the most important factor in determining whether a school succeeds or fails as an organisation for learning. Neither birth nor complete forging in the classroom produces these exceptionally gifted school leaders. Graduates of conventional school administration programmes are also not adequately equipped to assume leadership roles [46]. School administrators have the power to make decisions that impact classroom instruction, particularly for new teachers. Teachers' career opportunities are influenced by the way school leaders treat them

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and their mentorship relationships. Teachers, like other employees, want to have a say in setting educational priorities and would like to work in an environment that encourages open communication and consensus building. Through active participation in school goal conversations, teaching can transform into a profession that encourages learners to engage in inquiry, reflective practise, and continual problem-solving. Concurrently, it has the potential to enhance leadership abilities [48].

Teachers' level of engagement can be defined as the degree to which they voluntarily devote time, effort, and resources to various tasks that are directly or indirectly relevant to their work as educators [27]. Interest in teacher involvement has been on the rise as of late. The desire to gain a deeper understanding of the problem of professional attrition, which has been linked to dissatisfaction with work and low levels of engagement, has prompted this [35]; [49]; [4]. The growing body of evidence showing that teacher engagement, a critical component of contextual antecedents, would impact student-level outcomes is another compelling rationale for the increased focus. Consider a scenario in which students are aware of the ways in which their professors' attitudes, beliefs, and participation in class are demonstrated. If that's the case, they're more likely to be engaged[24], motivated[28], and successful[1]; [36]. Nevertheless, few research have looked at teacher engagement in EFL classes, even though most studies in language teaching contexts have concentrated on foreign/s language teachers' job burnout [41]; [25]; [55]; [30].

The majority of the research that has focused on teacher engagement has used traditional classroom settings. With the increasing integration of internet technology and education, online teaching has emerged as a crucial method for college foreign language learning. Both online and traditional classroom instruction use different approaches to learning and pedagogy [9]. Teachers' involvement in their online classrooms may thus have a different effect on students' performance than it would in a traditional classroom setting. Research on the nature of instructor engagement and its correlation with student performance in online language classes is of the utmost importance.

There are both trait-like and state-like components to teachers' engagement, which is seen to be rather stable with occasional changes over time [43]. New research on teacher engagement suggests that there are three parts to this concept: mental, emotional, and social [26]. The work engagement conceptualization in Schaufeli et al. [43] is the ancestor of Klassen et al. [27] 's teacher engagement conceptualization. A "positive, gratifying, job-related state of mind characterised by vigour, devotion, and absorption" is what Schaufeli et al. [43] mean when they say that people are engaged in their work. According to Klassen et al. [27], the cognitive aspects are synonymous with vigour and immersion, whereas the emotional dimension is synonymous with dedication.

By including the social dimension of engagement, Klassen et al. [26]. 's conceptualization adds something new to the previous models of job engagement. According to Klassen et al. [26], this new concept is necessary because prior work engagement models failed to take into consideration the time and energy teachers put into building and maintaining relationships with their students and coworkers, even though this is an essential part of their job [23]. There are high relationships among the four components suggested by Klassen et al. [26] and other studies [35]; [54] that indicate this multidimensional framework is the most frequent perspective on teacher engagement.

A rise in teacher involvement and self-efficacy is necessary if students are to remain motivated and involved throughout the process of learning a foreign language [4]. However, there has been a dearth of research on teacher engagement in English as a foreign language (EFL) classes, in contrast to the abundance of literature on the topic in general education [26], [24]; [15]. Faskhodi and Siyyari (2018) investigated what factors, if any, are associated with teacher burnout and engagement, as well as with the number of years of experience in the field. There was a negative correlation between teacher involvement and burnout, according to the results. Educators with more years of experience also showed stronger dedication to their jobs.

The professional opportunities of such teachers are also influenced by the attitudes of the school administration toward mentoring and involving instructors. For instance, the Division of Antique under the Department of Education (DepEd) has emphasized the tasks and responsibilities of the Department's various levels. More specifically, the Division Office has the schools as its primary responsibility for directing, guiding, supervising, evaluating, and offering technical support to perform basic education services and eventually achieve DepEd thrust effectively. In order to improve the quality of teaching and learning in various schools within the Schools Division of Antique, this research focuses on teachers' level of engagement for school success in terms of cognitive, emotional engagement, and social engagement and whether or not there's a significant difference in teachers' engagement for school success considering the cognitive, emotional engagement, and social engagement with the identified secondary variables.

## 2. Literature Review

# 2.1. Teacher's Engagement

Giving all pupils the chance to learn from passionate educators has been a hot topic in public and academic discussions about education recently [38]. Because kids absorb their teachers' attitudes and levels of enthusiasm, it is critical to understand how teachers participate in their work. The Utrecht Work Engagement Scale (UWES), which is now the most utilised measure of work engagement [2], was originally developed for research involving employees in the business sector. However, in very diverse workplaces, there may be characteristics of engagement that are not currently measured. According to Shuck [45], "a context-specific, conceptual examination of the notion of employee engagement to another well-researched working attitude (s)" is a crucial initial step in advancing the field of work engagement research.

One idea that can motivate people is "work engagement," which is defined as "the willing commitment of one's own resources to meet the demands of one's job" [52]. There are three commonly proposed areas of engagement—physical, emotional, and cognitive—but two fundamental conceptual dimensions—energy and involvement—underpin engagement in the workplace [3]. In certain cases, a higher-order engagement construct is used to encompass all three domains, allowing for simultaneous or holistic experiences of the individual domains [39]; [47]. A lot of people have different opinions on how involvement relates to burnout.

Some people think that engagement is the polar opposite of burnout; it's the extreme opposite of being completely unengaged (high burnout) (high burnout). Although it is conceptually separate from both the motivating forces and the subsequent behaviours, engagement does reflect them [42]. I.e., intrinsic motivations for behaviour. How absorbed one is in one's work is what we mean when we talk about job engagement [45]. According to Christian et al. (2011) and others, work engagement has demonstrated discriminant validity when it comes to job attitudes, as well as job involvement and satisfaction [39]. Perceived ability to succeed in a given area and level of personal investment in that area are determinants of engagement. Optimism and organizational-based self-esteem, which comprise self-efficacy, were identified by Schaufeli et al. [42] as resources in the workplace that were predictive of engagement.

Teachers' belief in their own abilities to do their jobs well is a strong predictor of their dedication to the profession and, conversely, of their desire to leave the field altogether [27]. Resilience in the classroom is strongly associated with it [32]. A more complex picture of employee behaviour in the workplace can be obtained by investigating the homological web of relationships among important related variables; this is in addition to the fact that there is evidence for conceptual and empirical distinctiveness among engagement and other work-related motivation constructs.

## 2.2. Cognitive engagement

A strategic learning method that encourages self-regulated deep learning strategies [11]; [53] with higher-order thinking skills [5] and frequent and interactive engagement [31] is associated with cognitive engagement, which is also a psychological process [21]. A person is cognitively engaged when they are fully immersed in their work and focus all of their mental energy on tasks relating to their job [26].

Work engagement was described as an affective-cognitive state that is not focused on any one work event or task; this definition was operationalized by Schaufeli et al. [43] in the creation of the UWES. Its item content could not be applicable in all situations, and concerns persist over the reliability of its factor structure [27]; [44]; [47]. For instance, while the UWES has been administered to educators [19], the content of the scale disregards the unique circumstances linked to teachers' job.

Cognitive engagement was defined by Greene et al. [16] as "meaningful cognitive processes," which involve extensive processing of new information in order to make connections to previously learned content. Additionally, Patrick et al. [33] discovered that cognitive engagement might be constructed from a single dimension of self-regulation strategies. Individual and classroom-level cognitive involvement has also been assessed using observational approaches [12]. Some studies have shown that certain verbal and behavioural signs can accurately identify cognitive activation [20]; [17]; [29].

# 2.3. Emotional Engagement

The key to encouraging student involvement and good student outcomes may lie in the teacher-student connections, according to researchers [7]; [27]; [38]; [50]. Teachers who put in the time and effort to develop positive relationships with their pupils are less likely to suffer from emotional stress and burnout and more likely to be happy and healthy overall [23]. When educators are emotionally invested in their work, it shows in their classrooms [26].

It is essential to comprehend the emotions of teachers because teaching is fundamentally a personal endeavour. How teachers' feelings impact their students' final grades is a topic that has been studied. Important factors that shape the classroom climate and students' achievement include teachers' emotional intelligence, job engagement, and self-efficacy [14]. Engaging students on an emotional and social level in the classroom is more important for effective teaching. Additionally, it delves into the ways

in which teacher-student relationships can be impacted by teachers' participation and how it might evolve in response to this mismatch [26]. A teacher's pedagogical approach is often shaped by their own experiences or by the examples set by educators they looked up to. Furthermore, teachers' involvement can be enhanced more by external job resources, such a supportive organisational climate, than by personal resources, like self-efficacy and self-esteem. Also, the data reveals that teachers' emotional investment is crucial to their level of engagement.

#### 2.4. Social Engagement

Teachers' efforts to connect with and care about their pupils and colleagues are an example of social engagement [26]. The need to actively engage with others and spend energy to building relationships is unique among occupations, and teaching is no exception [38]; [40]. There are alternative conceptual definitions of engagement that omit that. Although employees in many fields are required to interact socially with coworkers, the teaching profession stands out for its emphasis on building lasting, meaningful relationships with the people who use its services. Although people in other occupations, such those in the medical or commercial sectors (e.g., sales representatives), may develop strong bonds with their clients or patients, teachers spend far more time with their pupils than those in these other professions. The chance to work closely with students is a strong incentive for many teachers entering the profession [51]. While teachers, like workers in other professions, form social relationships with colleagues during the workday, the emphasis on social relationships with students characterises the heart of teaching.

One of the most crucial components of teacher engagement is social engagement with students, which cannot be measured in isolation from work engagement. According to Shuck's recent study of work involvement [45], the concept is still evolving and different research communities need to work together to bridge disciplinary gaps. In order to meet the demands of educators, a study developed and piloted the Engaged Teacher Scale (ETS). Teachers' all-around involvement in this setting is a combination of classroom engagement—which includes physical, cognitive, and emotional aspects that are context-responsive [39]—and social engagement with both students and coworkers. According to Klassen et al. [26], the most important part of being a teacher is developing meaningful relationships with your pupils. Their research looks at the possibility of a connection between students' emotional and social engagement in the classroom and the mismatch that teachers experience.

According to Klassen et al. [27], the most important aspect of teaching is interacting socially with pupils. Additionally, there is no correlation between the students' level and the amount of social involvement. For example, compared to students whose English was better, those whose English was worse were more likely to interact socially with their instructors. This motivates educators to work with pupils whose English proficiency is the lowest and utilise social interaction as a tool to raise their levels. Teachers should be qualified to teach, and Petrides [37] agrees that their own drive is crucial in inspiring pupils to have a positive outlook on language learning. What this means is that students can pick up on teachers' enthusiasm for the subject and use it to their advantage when they study the language. The external elements that instructors are subjected to constantly change their engagement. Hakanen et al. [19] also confirm that teachers' social relationship with pupils may be impacted by the high expectations they endure.

According to Collie et al. [6], there is a correlation between students' emotional and social engagement and teachers' dedication. Students' levels of social engagement with their teachers were highest among those with the lowest English proficiency, according to the analysis. Their teachers' determination to teach them despite their students' limited English proficiency may be a contributing factor. Additionally, compared to more seasoned educators, teachers with less classroom experience demonstrate higher levels of social and emotional engagement. This is corroborated by Klassen et al. [26], who found that new teachers may be quite involved in their students' lives. However, they may not be as invested in the material as more seasoned educators.

There may be less likelihood of isolation, disconnection, and dropouts[22] if students and teachers form strong relationships via social engagement [34]. Classroom social engagement includes things like working together, paying attention in class, being on time, and keeping relationships with both teachers and classmates in check [34]. Joining a study group, a neighbourhood club, or a student organisation outside of the classroom is a great way to meet new people and form lasting friendships based on like interests, goals, or values [13]. It is important for students taking classes online to feel that they are part of a community rather just an individual [8]. One aspect that may be distinctively defining of teaching is the social interaction with students, although this dimension is not captured by the UWES or other work engagement measures [23].

#### 3. Methodology

This descriptive survey research involved 145 teachers randomly selected from the different school districts in the Division of Antique, Philippines. Respondent's categorization included sex, educational qualification, length of teaching experience, and class size. Table 1 presents the distribution of data on the personal information of teacher-respondents.

**Table 1:** Distribution of Teacher-Respondents

	f	%
Entire group	145	100
Sex		
Male	51	35
Female	94	65
<b>Educational Qualification</b>		
Bachelor's degree	82	57
Masters degree	41	28
Doctorate	22	15
Length of teaching experience		
Short (10 years and below)	55	38
Long (11 years and above)	90	62
Class size		
Small (200 and below)	60	41
Medium (201to 400)	43	30
Big (401 and above)	42	29

The researcher-made questionnaire checklist on the Teachers' Engagement Scale contains three parts: cognitive engagement (with 9 items), emotional engagement (with 13 items), and social engagement (with 20 items) was used. The indicators in each part sought the teacher's agreement or disagreement with the items in a four-Likert scale. Respondent's options to the items are as follows: 4 – Strongly agree, 3 – Agree, 2 – Disagree, and 1 – Strongly disagree.

The questionnaire checklist was subjected to a reliability test, and the results showed Cronbach's alpha results for the various areas of teachers' engagement: cognitive engagement = 0.92, emotional engagement = 0.90, and social engagement = 0.91. The jury members rejected three of 12 items in cognitive engagement, two of 15 items in emotional engagement, and three of 23 items in social engagement.

To determine the score of an individual respondent in a specific domain of the Teachers' Engagement Scale, the numerical equivalents of the options chosen by the respondents were added, and the mean for that particular domain was computed. The mean was translated into a numerical scale with a corresponding verbal description shown below (Table 2):

 Table 2: Numerical scale

Scale	Description
3.26 - 4.00	Very high
2.51 - 3.25	High
1.76 - 2.50	Low
1.00 - 1.75	Very low

Statistical tools used to interpret the data were frequency, percentage, mean, standard deviation, and rank for descriptive statistics and the t-test for Independent Samples, One-way ANOVA, and Least Significance Difference for inferential statistics. The significance level for all inferential data was set at alpha 0.05 in a two-tailed test. All statistical computations were processed using the Statistical Packages for Social Sciences (SPSS) software, Version 26.0.

#### 4. Results and Discussion

**Level of Teachers' Engagement for School Success:** The level of teachers' engagement for school success was determined by using the mean and standard deviation.

**Entire group:** Data revealed in Table 3 showed that the level of teachers' engagement for school success was high as an entire group (M=2.64, SD=.61) and in terms of cognitive (M=2.99; SD=.98), emotional (M=2.56; SD=.46), and social engagement (M=2.98; SD=.38).

**Table 3:** Level of Teachers' Engagement for School Success as an Entire Group

Teachers' engagement areas	Mean	SD	Description
Cognitive engagement	2.99	.98	High
Emotional engagement	2.56	.46	High
Social engagement	2.98	.38	High
Over-all Mean	2.84	.61	High

It could be implied from the data that teachers are highly engaged in their teaching profession, as indicated by their obtained scores. They would extend efforts to accomplish their tasks in school. Moreover, the data also revealed that teachers are participative in the school's undertakings. They build connections and communication among individuals inside and outside the school.

**Sex:** When sex was considered, it was found in Table 4 that the level of teachers' engagement for school success of male respondents was high in terms of cognitive (M=2.90; SD=.26) and social engagement (M=2.81; SD=.33), low in emotional engagement (M=2.40; SD=.33).

On the other hand, the level of teachers' engagement for school success of female respondents was high in all domains: cognitive (M=3.01; SD=.30), emotional (M=2.59; SD=.47), and social engagement (M=3.00; SD=.39).

Table 4: Level of Teachers' Engagement for School Success as to Sex

	Male			Female			
Teachers' engagement areas	Mean	SD	Desc.	Mean	SD	Desc.	
Cognitive engagement	2.90	.26	High	3.01	.30	High	
Emotional engagement	2.40	.33	Low	2.59	.47	High	
Social engagement	2.81	.33	High	3.00	.39	High	
Over-all Mean	2.70	.31	High	2.87	.39	High	

When sex was considered, it was found that male teachers had the lowest mean score in their emotional engagement. It could be implied that their emotional factors, such as interest, boredom, happiness, anxiety, and other affective states, affect their school involvement and enthusiasm. It could be possible that male respondents are experiencing a hard time juggling their work demands, especially when they are emotionally burdened.

**Educational qualification:** When educational qualification was considered, it was found in Table 5 that the level of teachers' engagement for school success of respondents who had bachelor's, master's, and doctorate degrees was high in all domains of engagement except for those doctorate holders with the low level of emotional engagement (M=2.40; SD=.25).

Table 5: Level of Teachers' Engagement for School Success as to Educational Qualification

	Bachelor	Bachelor's degree			Master's degree			Doctorate		
Teachers' engagement	Mean	SD	Desc.	Mean	SD	Desc.	Mean	SD	Desc.	
areas										
Cognitive engagement	2.98	.30	High	3.01	.28	High	2.99	.30	High	
Emotional engagement	2.58	.48	High	2.58	.46	High	2.40	.25	Low	
Social engagement	2.99	.39	High	2.97	.41	High	2.89	.17	High	
Over-all Mean	2.85	.39	High	2.85	.38	High	2.76	.24	High	

Regardless of educational qualification, it could be deduced from the data that teachers have a high level of engagement in the cognitive, emotional, and social aspects. They can engage in their job as teachers, attend to their emotions, and connect with their coworkers in school.

**Length of teaching experience:** When the length of teaching experience in Table 6 was considered, it was found that the level of teachers' engagement for school success of respondents who had short, medium, and long years of teaching experience was high in cognitive and social engagement, as shown in the mean scores that ranged from 2.66 to 3.05. Those with medium (M=2.50; SD=.47) and long (M=2.43; SD=.51) years of experience manifested low emotional engagement.

Table 6: Level of Teachers' Engagement for School Success as to Length of Teaching Experience

Teachers' engagement areas	Short				Medium			Long		
	Mean	SD	Desc.	Mean	SD	Desc.	Mean	SD	Desc.	
Cognitive engagement	2.94	.29	High	3.01	.25	High	3.05	.33	High	
Emotional engagement	2.66	.41	High	2.50	.47	Low	2.43	.51	Low	
Social engagement	3.05	.38	High	2.93	.33	High	2.89	.42	High	
Over-all Mean	2.88	.36	High	2.81	.35	High	2.79	.42	High	

It could be surmised from the data that teachers who have been in the teaching profession for a long time manifested the highest mean score in cognitive engagement. Through time, they have immersed themselves in the teaching job, which probably made them appreciate the job even more, and they persisted in doing what was expected of them despite the hindrances that came along the way.

On the other hand, teachers who have been in the service for a short time have shown the highest mean scores in emotional and social engagement. This could be attributed to the idea that the younger generation of teachers is considered to be more outgoing and have the energy to be more proactive in dealing with their emotional concerns and creating connections with the people inside and outside school.

**School size:** When school size in Table 7 was considered, it was found that the level of teachers' engagement for school success of respondents who were from small and big schools was high in all domains of engagement as shown in the mean scores that ranged from 2.56 (SD=.47) to 3.22 (SD=.40). However, those who were from medium-sized schools manifested high level of teachers' engagement for school success in the cognitive and social domains, and low (M=2.50; SD=.24) in the emotional domain.

**Table 7:** Level of Teachers' Engagement for School Success as to School Size

	Small		Medium			Big			
Teachers' engagement areas	Mean	SD	Desc.	Mean	SD	Desc.	Mean	SD	Desc
Cognitive engagement	2.92	.28	High	2.98	.31	High	2.99	.30	High
Emotional engagement	2.72	.49	High	2.50	.24	Low	2.56	.47	High
Social engagement	3.22	.40	High	2.99	.26	High	2.96	.39	High
Over-all Mean	2.95	.39	High	2.82	.27	High	2.84	.39	High

The data showed that the teachers' level of engagement in the cognitive, emotional, and social aspects is generally high despite the variation in school size. It is notable, however, that teachers from medium-sized schools had the lowest level of emotional engagement. As per the given data, it could be possible that teachers' involvement and enthusiasm for school are affected by their affective states, which could either be personal or work-related given that their schools are quite big, hence the number of students to deal with plus other school-related workloads may at time take a toll to their emotional engagement.

**Differences in the Level of Teachers' Engagement for School Success:** The differences in the level of teachers' engagement were ascertained in this study. T-tests for Independent Samples and One-way ANOVA were used to determine the difference in the level of teachers' engagement.

**Sex:** When sex was considered, results in Table 8 revealed that significant differences were noted in the level of teachers' engagement in terms of cognitive (t=2.190; p<0.05), emotional (t=3.104; p<0.05), and social engagement (t=2.749; p<0.05).

Table 8: t-test Results of the Difference in the Level of Teachers' Engagement as to Sex

Variable	Mean	Mean t		df	Sig level
	Male	Female			

Cognitive engagement	3.21	3.07	2.190*	143	.041
Emotional engagement	3.26	3.08	3.104*	143	.021
Social engagement	3.24	3.05	2.749*	143	.032

<sup>\*</sup>p<.05

It could be inferred that sex affects the level of engagement of teachers across the three dimensions. This means that sex influences how they invest effort in their work, manage their emotional concerns, and how they create connections among their colleagues and the community.

**Educational Qualification:** When educational qualification was considered, results in Table 9 revealed that significant differences were only noted in the level of teachers' engagement in terms of emotional (F=3.564; p<0.05) and social engagement (F=2.964; p<0.05).

Table 9: ANOVA Results of Teachers' Engagement as to Educational Qualification

		Sum of		Mean		
		Squares	df	Square	$\mathbf{F}$	Sig.
	Between Groups	6.747	2	.519	1.007	.462
Cognitive engagement	Within Groups	21.637	143			
	Total	28.384	145			
	Between Groups	4.136	2	.318	3.564*	.001
Emotional	Within Groups	3.750	143			
engagement	Total	7.886	145			
	Between Groups	4.263	2	.328	2.964*	.004
Social engagement	Within Groups	4.647	143			
	Total	8.911	145			

<sup>\*\*</sup>p<.01

Based on the given data, it could be mentioned that educational qualification affects teachers' emotional and social engagement. In other words, teachers' extent of continuing education and even the conferences and other related opportunities that they have undertaken for the furtherance of their qualifications have also influenced how they deal with their job as teachers, manage their emotions, and connect with the people around them, especially in school.

Further analysis of the data in Table 10 for the significant differences showed the following LSD results: between bachelor's degree and master's degree (mean difference = .35520) and bachelor's degree and doctorate (mean difference = .37324) for emotional engagement and between bachelor's degree and doctorate (mean difference = .29978) for social engagement.

Table 10: LSD Results of Teachers' Engagement as to Educational Qualification

Dependent Variable	<b>(I)</b>	( <b>J</b> )	Mean Difference (I-J)	Sig.
Emotional engagement	Bachelors	Masters	.35520**	.004
	Bachelors	Doctorate	.37324**	.006
Social engagement	Bachelors	Doctorate	.29978**	.012

<sup>\*\*</sup>p<.01

**Length of teaching experience:** When the length of teaching experience in Table 11 was considered, results revealed that a significant difference was only noted in the level of teachers' social engagement (F=3.213; p<0.05).

The data implied that the length of teaching experience affects the level of teachers' social engagement. In other words, the number of years teachers spend in school influences how they participate, connect, and communicate to form an emotional connection among individuals and the community.

Table 11: ANOVA Results of Teachers' Engagement as to Length of Teaching Experience

		Sum of Squares	df	Mean Square	F	Sig.
	Between Groups	5.215	2	.401	0.727	.727
Cognitive	Within Groups	23.169	143	.552		
engagement	Total	28.384	145			
	Between Groups	2.648	2	.204	1.633	.114
Emotional	Within Groups	5.239	143	.125		
engagement	Total	7.886	145			
	Between Groups	4.43	2	.342	3.213**	.002
Social engagement	Within Groups	4.468	143	.106		
	Total	8.911	145			

<sup>\*\*</sup>p<.01

LSD results in Table 12 showed that teachers' social engagement differences were found between those with short and medium (mean difference = .36580) teaching experience and between short and long (mean difference = .34574) years of experience.

Table 12: LSD Results of Teachers' Engagement as to Length of Teaching Experience

Dependent Variable	<b>(I)</b>	( <b>J</b> )	Mean Difference (I-J)	Sig.
Social engagement	Short	Medium	.36580*	.005
	Short	Long	.34574*	.003

<sup>\*\*</sup>p<.01

**Class size:** When class size was considered, Table 13 results revealed that no significant difference was noted in the level of teachers' engagement across the three domains of engagement. The null hypothesis, which states no significant difference in teachers' engagement regarding class size, was not rejected.

Table 13: ANOVA Results of Teachers' Engagement as to Length of Class Size

		Sum of		Mean		
		Squares	df	Square	F	Sig.
Cognitive engagement	Between Groups	0.13	2	.007	0.077	.926
	Within Groups	4.624	143	.087		
	Total	4.638	145			
Emotional engagement	Between Groups	.097	2	.049	0.228	.797
	Within Groups	11.300	143	.213		
	Total	11.397	145			
Social engagement	Between Groups	.185	2	.092	0.640	.531
	Within Groups	7.645	143	.144		
	Total	7.830	145			

The data revealed that class size does not affect teachers' engagement in the three aspects. Teachers can allocate their resources and energy across teaching-related activities from big, medium, or small classes.

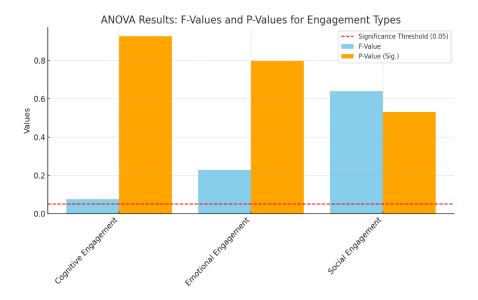


Figure 1: ANOVA Results: F-Values and P-Values for Engagement Types

Figure 1 visualizes the F-values and p-values (Sig.) for the three types of engagement: Cognitive, Emotional, and Social. The red dashed line at 0.05 represents the significance threshold, indicating that none of the p-values falls below this line, confirming the lack of significant differences in engagement types based on class size.

#### 5. Conclusions

Because of the preceding findings, the following conclusions were advanced by the researchers:

- Teachers' engagement is critical to understanding the teaching-learning process for effective and interactive teaching. Generally, in this study, teachers are equipped and well-engaged in their work, quirks, and even those who are immediately around them. These teachers reflect the particular features of harmoniously working individually and collectively in their classrooms and their assigned schools. They are actively engaged in social interactions with their superiors and other authorities in the Department of Education, their co-teachers, students, and other stakeholders. This shows an important step in understanding effective teaching and conceptualizing and measuring teacher engagement.
- The cognitive, emotional, and social domains of instructors' engagement are impacted by identified characteristics such as sex, educational degree, and length of administrative experience. Teachers' levels of personal and professional immersion are likely to be significantly impacted by these factors. Therefore, individuals involved in teacher education programmes should devote significant effort to recruiting future educators, as the level of cognitive, emotional, and social engagement of teachers has a positive impact on their classroom climate, students' learning, and the quality of instruction they provide. Not only should instructors be trained in specific pedagogical skills like managing teacher-student relations, student-oriented teaching methods, and effective feedback, but they should also be encouraged to actively engage with their students and the school community as a whole.

#### 5.1. Recommendations

In light of the findings and conclusions set forth, the following recommendations are at this moment presented:

- The Department of Education's key officials are encouraged to take initiatives to create strategies, programs, and budgetary allotments for the implementation of teacher-specific human resource development that are responsive to their needs. Also, they are advised to develop school policies and design strategies to support teachers' engagement, which will, in turn, help their effective performance.
- Division and school officials should invest in evidence-based and school-driven emerging practices, such as mental health programs that promote recovery-oriented outcomes, to ensure that teachers have meaningful involvement and are provided with appropriate support to better understand their emotional and health needs.

- The Human Resource Development Division could also use the study's findings in devising strategic HRD plans and programs, including delivering quality and sustainable HRD services. The unit can support schools by devising workable strategies to enhance teachers' engagement.
- School administrators can create more thorough development programs to strengthen their capacity and give them the tools to be more engaged and effective at work. They could tap various public/private entities specializing in mentorship to expose them to relevant mentoring tactics. They could also seek the help of these entities to better engage the teachers in the various undertakings of the school for personal and professional growth.
- Teachers could benefit from the study by better understanding their engagement level. Hence, they could voice their needs to school authorities, who could plan out and implement activities geared towards helping them further develop their extent of engagement in personal and professional development initiatives.

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#### References

- 1. A. K. Arens and A. J. S. Morin, "Relations between teachers' emotional exhaustion and students' educational outcomes," J. Educ. Psychol., vol. 108, no. 6, pp. 800–813, 2016.
- 2. A. B. Bakker, S. L. Albrecht, and M. P. Leiter, "Key questions regarding work engagement," Eur. J. Work Org. Psychol., vol. 20, no. 1, pp. 4–28, 2011.
- 3. A. B. Bakker and M. P. Bal, "Weekly work engagement and performance: A study among starting teachers," J. Occup. Organ. Psychol., vol. 83, no. 1, pp. 189–206, 2010.
- C. Bao, L. J. Zhang, and H. R. Dixon, "Emotional labor in teaching Chinese as an additional language in a family-based context in New Zealand: A Chinese teacher's case," Front. Psychol., vol. 13, no.6, p. 902700, 2022.
   S. L. Christenson, A. L. Reschly, and C. Wylie, Eds., "Handbook of research on student engagement" Boston,
- 5. S. L. Christenson, A. L. Reschly, and C. Wylie, Eds., "Handbook of research on student engagement" Boston Massachusetts, United States of America: Springer, US, 2012.
- 6. R. J. Collie, J. D. Shapka, and N. E. Perry, "Predicting teacher commitment: The impact of school climate and social—emotional learning: Predicting Teacher Commitment," Psychol. Sch., vol. 48, no. 10, pp. 1034–1048, 2011.
- 7. H. A. Davis, "Conceptualizing the role and influence of student-teacher relationships on children's social and cognitive development," Educ. Psychol., vol. 38, no. 4, pp. 207–234, 2003.
- 8. M. D. Dixson, "Measuring student engagement in the online course: The Online Student Engagement Scale (OSE)," Online Learn., vol. 19, no. 4, pp.1-15, 2015.
- 9. M. Farhan, M. Aslam, S. Jabbar, and S. Khalid, "Multimedia based qualitative assessment methodology in eLearning: student teacher engagement analysis," Multimed. Tools Appl., vol. 77, no. 4, pp. 4909–4923, 2018.
- 10. A. Faskhodi, M. Siyyari, "Dimensions of work engagement and teacher burnout: A study of relations among Iranian EFL teachers," Aust. J. Teach. Educ., vol. 43, no. 1, pp. 78–93, 2018.
- 11. J. A. Fredricks, P. C. Blumenfeld, and A. H. Paris, "School engagement: Potential of the concept, state of the evidence," Rev. Educ. Res., vol. 74, no. 1, pp. 59–109, 2004.
- 12. J. A. Fredricks and W. McColskey, "The measurement of student engagement: A comparative analysis of various methods and student self-report instruments," in Handbook of Research on Student Engagement. Boston, Massachusetts, United States of America: Springer, US, pp. 763–782, 2012.
- 13. J. B. Freedman, "What motivates voluntary engagement in cooperative information systems," in 2007 40th Annual Hawaii International Conference on System Sciences (HICSS'07), Hawaii, United States of America, 2007.
- 14. A. C. Frenzel, L. Daniels, and I. Burić, "Teacher emotions in the classroom and their implications for students," Educ. Psychol., vol. 56, no. 4, pp. 250–264, 2021.

- 15. H. Granziera and H. N. Perera, "Relations among teachers' self-efficacy beliefs, engagement, and work satisfaction: A social cognitive view," Contemp. Educ. Psychol., vol. 58, no.7, pp. 75–84, 2019.
- 16. B. A. Greene, R. B. Miller, H. M. Crowson, B. L. Duke, and K. L. Akey, "Predicting high school students' cognitive engagement and achievement: Contributions of classroom perceptions and motivation," Contemp. Educ. Psychol., vol. 29, no. 4, pp. 462–482, 2004.
- 17. B. A. Greene, "Measuring cognitive engagement with self-report scales: Reflections from over 20 years of research," Educ. Psychol., vol. 50, no. 1, pp. 14–30, 2015.
- 18. V. Greenier, A. Derakhshan, and J. Fathi, "Emotion regulation and psychological well-being in teacher work engagement: A case of British and Iranian English language teachers," System, vol. 97, no.4, p. 102446, 2021.
- 19. J. J. Hakanen, A. B. Bakker, and W. B. Schaufeli, "Burnout and work engagement among teachers," J. Sch. Psychol., vol. 43, no. 6, pp. 495–513, 2006.
- 20. S. Helme and D. Clarke, "Identifying cognitive engagement in the mathematics classroom," Math. Educ. Res. J., vol. 13, no. 2, pp. 133–153, 2001.
- 21. C. R. Henrie, L. R. Halverson, and C. R. Graham, "Measuring student engagement in technology-mediated learning: A review," Comput. Educ., vol. 90, no. 12, pp. 36–53, 2015.
- 22. V. N. Hoi and H. Le Hang, "The structure of student engagement in online learning: A bi-factor exploratory structural equation modelling approach," J. Comput. Assist. Learn., vol. 37, no. 4, pp. 1141–1153, 2021.
- 23. P. A. Jennings and M. T. Greenberg, "The prosocial classroom: Teacher social and emotional competence in relation to student and classroom outcomes," Rev. Educ. Res., vol. 79, no. 1, pp. 491–525, 2009.
- 24. M. M. Keller, A. W. Hoy, T. Goetz, and A. C. Frenzel, "Teacher enthusiasm: Reviewing and redefining a complex construct," Educ. Psychol. Rev., vol. 28, no. 4, pp. 743–769, 2016.
- 25. G. H. Khajavy, B. Ghonsooly, and A. Hosseini Fatemi, "Testing a burnout model based on affective-motivational factors among EFL teachers," Curr. Psychol., vol. 36, no. 2, pp. 339–349, 2017.
- 26. R. M. Klassen, S. Yerdelen, and T. L. Durksen, "Measuring teacher engagement: Development of the engaged teachers scale (ETS)," Frontline Learn. Res., vol. 1, no. 2, pp.33-52, 2013.
- 27. R. M. Klassen, N. E. Perry, and A. C. Frenzel, "Teachers' relatedness with students: An underemphasized component of teachers' basic psychological needs," J. Educ. Psychol., vol. 104, no. 1, pp. 150–165, 2012.
- 28. C. Lai, "Modeling teachers' influence on learners' self-directed use of technology for language learning outside the classroom," Comput. Educ., vol. 82, no. 3, pp. 74–83, 2015.
- 29. O. Lee and C. W. Anderson, "Task engagement and conceptual change in middle school science classrooms," Am. Educ. Res. J., vol. 30, no. 3, pp. 585–610, 1993.
- 30. C. Li, L. J. Zhang, and G. Jiang, "Conceptualization and measurement of foreign language learning burnout among Chinese EFL students," J. Multiling. Multicult. Dev., vol. 45, no. 4, pp. 906–920, 2024.
- 31. N. Lotz and D. Jones, "Social engagement in online design pedagogies," in Proceedings of the 3rd International Conference for Design Education Researchers, R. Vande Zande, E. Bohemia, and I. Digranes, Eds., Chicago, United States of America, Vol. 3, pp. 1645–1668, 2015.
- 32. M. Peacock, "Match or mismatch? Learning styles and teaching styles in EFL," Int. J. Appl. Linguist., vol. 11, no. 1, pp. 1–20, 2001.
- 33. H. Patrick, A. M. Ryan, and A. Kaplan, "Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement," J. Educ. Psychol., vol. 99, no. 1, pp. 83–98, 2007.
- 34. R. Pekrun and L. Linnenbrink-Garcia, "Academic emotions and student engagement," in Handbook of Research on Student Engagement, Boston, Massachusetts, United States of America: Springer US, pp. 259–282, 2012.
- 35. H. N. Perera, L. Vosicka, H. Granziera, and P. McIlveen, "Towards an integrative perspective on the structure of teacher work engagement," J. Vocat. Behav., vol. 108, no. 10, pp. 28–41, 2018.
- 36. H. N. Perera and J. E. John, "Teachers' self-efficacy beliefs for teaching math: Relations with teacher and student outcomes," Contemp. Educ. Psychol., vol. 61, no. 4, p. 101842, 2020.
- 37. J. R. Petrides, "Attitudes and motivation and their impact on the performance of young English as a foreign language learners," Journal of language and learning, vol. 5, no. 1, pp. 1–20, 2006.
- 38. R. C. Pianta, B. K. Hamre, and J. P. Allen, "Teacher-student relationships and engagement: Conceptualizing, measuring, and improving the capacity of classroom interactions," in Handbook of Research on student engagement, Dordrecht, Netherlands: Springer, pp. 365–386, 2012.
- 39. B. L. Rich, J. A. Lepine, and E. R. Crawford, "Job engagement: Antecedents and effects on job performance," Acad. Manage. J., vol. 53, no. 3, pp. 617–635, 2010.
- 40. D. L. Roorda, H. M. Y. Koomen, J. L. Spilt, and F. J. Oort, "The influence of affective teacher-student relationships on students' school engagement and achievement: A meta-analytic approach," Review of Educational Research, vol. 81, no. 4, pp. 493–529, 2011.
- 41. K. Sadeghi and S. Khezrlou, "The experience of burnout among English language teachers in Iran: self and other determinants," Teach. Dev., vol. 20, no. 5, pp. 631–647, 2016.

- 42. W. B. Schaufeli, A. B. Bakker, and M. Salanova, "The measurement of work engagement with a short questionnaire a cross-national study," Educational and psychological measurement, vol. 66, no. 4, pp. 701–716, 2006.
- 43. W. B. Schaufeli, M. Salanova, V. González-romá, and A. B. Bakker, J. Happiness Stud., vol. 3, no. 1, pp. 71–92, 2002.
- 44. A. Shimazu, W. B. Schaufeli, S. Kosugi, A. Suzuki, H. Nashiwa, and A. Kato, "Work engagement in Japan: Development and validation of the Japanese version of the Utrecht Work Engagement Scale," Applied Psychology: An International Review, vol. 57, no. 3, pp. 510–523, 2008.
- 45. B. Shuck, "Integrative literature review: Four emerging perspectives of employee engagement: An integrative literature review," Hum. Resour. Dev. Rev., vol. 10, no. 3, pp. 304–328, 2011.
- 46. D. S. Spence, Good Principals Aren't Born They're Mentored: Are We Investing Enough to Get the School Leaders We Need? Southern Regional Education Board 592 10th St. Atlanta, Georgia, United States of America, vol. 30318, 2015.
- 47. S. Sonnentag, "Recovery, work engagement, and proactive behavior: A new look at the interface between non-work and work," Journal of Applied Psychology, vol. 88, no.3, pp. 518–528, 2003.
- 48. M. Ulvik and E. Sunde, "The impact of mentor education: does mentor education matter?" Prof. Dev. Educ., vol. 39, no. 5, pp. 754–770, 2013.
- 49. D. Wang and L. J. Zhang, "Sustainability as a goal in teaching workforce retention: Exploring the role of teacher identity construction in preservice teachers' job motivation," Sustainability, vol. 13, no. 5, p. 2698, 2021.
- 50. M.-T. Wang, "School climate support for behavioral and psychological adjustment: Testing the mediating effect of social competence," School Psychology Quarterly, vol. 24, no.4, pp. 240–251, 2009.
- 51. H. M. G. Watt and P. W. Richardson, "Motivational factors influencing teaching as a career choice: Development and validation of the FIT-choice scale," J. Exp. Educ., vol. 75, no. 3, pp. 167–202, 2007.
- 52. K. Wentzel, "Part III commentary: Socio-cultural contexts, social competence, and engagement at school," in Handbook of Research on Student Engagement, Boston, Massachusetts, United States of America: Springer US, pp. 479–488, 2012.
- 53. C. Wu, B. Jing, X. Gong, Y. Mou, and J. Li, "Student's learning strategies and academic emotions: Their influence on learning satisfaction during the COVID-19 pandemic," Front. Psychol., vol. 12, no.9, p. 717683, 2021.
- 54. S. Yerdelen, T. Durksen, and R. M. Klassen, "An international validation of the engaged teacher scale," Teach. Teach., vol. 24, no. 6, pp. 673–689, 2018.
- 55. K. Zhaleh, B. Ghonsooly, and R. Pishghadam, "Effects of conceptions of intelligence and ambiguity tolerance on teacher burnout: A case of Iranian EFL teachers," J. Res. Applied Ling, vol. 9, no.1, pp. 118–140, 2018.

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