

Research Article



On the Brink of Attrition: An Analysis of the UAE PISA 2022 Teachers' Questionnaire

على شفا الاستنزاف: تحليل استبيان المعلمين في دولة الإمارات العربية المتحدة لبرنامج
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Abstract

Teacher attrition is a critical global challenge. As such, it is crucial to identify the key factors related to teacher attrition. In the context of the United Arab Emirates (UAE), this study examines the psychosocial, individual, and school factors associated with a teacher's intention to leave the profession. Using a sample of UAE-based teachers from the PISA 2022 teacher questionnaire (N = 10,092), logistic regression analysis indicated that psychosocial variables – such as satisfaction, ability to concentrate in the work setting, physical health symptoms, work stress, and work overload – are the strongest predictors of the likelihood of a teacher intending to leave classroom teaching and explain over a quarter of the variance, compared to other individual and school-related factors. These results discuss how schools and policymakers can address teacher attrition through tailored initiatives to enhance teacher satisfaction and reduce work stress.

الملخص

يُعد استنزاف المعلمين تحديًا عالميًا بالغ الأهمية. لذا، من الضروري تحديد العوامل الرئيسية المرتبطة باستنزاف المعلمين. في سياق دولة الإمارات العربية المتحدة، تدرس هذه الدراسة العوامل النفسية والاجتماعية والفردية والمدرسية المرتبطة بنية المعلم ترك المهنة. باستخدام عينة من المعلمين المقيمين في دولة الإمارات العربية المتحدة من استبيان المعلمين لبرنامج التقييم الدولي للطلاب (PISA) لعام ٢٠٢٢ (عدددهم ١٠٠٩٢)، أشار تحليل الانحدار اللوجستي إلى أن المتغيرات النفسية والاجتماعية - مثل الرضا والقدرة على التركيز في بيئة العمل والأعراض الصحية الجسدية وضغوط العمل وزيادة العبء - هي أقوى المؤشرات على احتمالية نية المعلم ترك التدريس في الفصول الدراسية وتفسر أكثر من ربع التباين، مقارنةً بالعوامل الفردية والمدرسية الأخرى. تناقش هذه النتائج كيف يمكن للمدارس وصانعي السياسات معالجة استنزاف المعلمين من خلال مبادرات مصممة خصيصًا لتعزيز رضا المعلمين وتقليل ضغوط العمل.

Keywords: Teacher attrition, Teacher well-being, Teacher stress, Teacher satisfaction, Teacher retention

الكلمات المفتاحية: استنزاف المعلمين، رفاة المعلمين، ضغوط المعلمين، رضا المعلمين، الاحتفاظ بالمعلمين

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1. Introduction

Teachers are a central component of any school and education system. However, the growing shortage of teachers is negatively impacting schools and the quality of instruction worldwide (OECD, 2024). According to UNESCO (2024), 44 million teachers are needed to achieve universal primary and secondary education by 2030. There is not only a significant decline in young professionals entering the teaching profession, but also a rising rate of teacher attrition. Among primary teachers, the attrition rate has nearly doubled from 4.6% in 2015 to 9% in 2022 worldwide (UNESCO, 2024). In some contexts, this is especially true for early career teachers (Simms & Jerrin, 2020). For instance, in North America, approximately 30% of teachers leave the profession within the first five years after graduating, with this rate rising to half in high-poverty areas (Cochran-Smith, 2004; Ingersoll, 2003; McCallum et al., 2017).

Teacher attrition has negative consequences at multiple levels (Doherty, 2020). Student achievement is negatively affected by higher teacher turnover and attrition (Carver-Thomas & Darling-Hammond, 2017; Schleicher, 2018; Sorensen & Ladd, 2020). Additionally, it incurs significant financial costs for schools and school systems (OECD, 2020), which invest in attracting, training, developing, and integrating teachers into the school's organizational ethos. To counter this alarming trend, it is vital to understand the factors that influence teachers' decisions to leave the profession.

While a growing body of literature exists on teacher attrition in various contexts (Madigan & Kim, 2021), there is a notable lack of evidence regarding teacher attrition in the Gulf region. The United Arab Emirates (UAE), due to its large expatriate community, has, in addition to its local public education system, a multitude of private schools with a diverse teacher population (Tandogan & Ridge, 2022). Schools serve linguistically and culturally diverse student bodies, and educators teach in schools that follow a variety of curricula, creating a unique landscape for investigating this phenomenon. Similar to international trends, initial evidence suggests that more than a quarter of teachers wish to leave the teaching profession within the next five years (OECD, 2020). However, it remains unclear whether this is indeed the case and what the most significant factors are that lead them to this decision.

In this study, I aim to examine the factors related to teacher attrition in the UAE context and how these factors predict the likelihood of a teacher leaving the profession. First, I will discuss the identified factors associated with teacher attrition. Then, I will explore why initial studies in the UAE context may obscure the examination of this phenomenon.

1.1. Teacher attrition as a multifaceted challenge

Teacher attrition, defined as teachers who leave teaching for reasons other than retirement (Kelchterman, 2017), is a critical and growing phenomenon currently facing many schools and education systems. Often operationalized as current teachers' intentions to leave (Billingsley & Cross, 1992; Madigan & Kim, 2021), and intentions may be considered the most proximal predictor of actual behavior (see the Theory of Planned Behavior, Ajzen, 2011), this proxy has been found to be strongly related to the attrition behavior

of teachers at all levels, both in the short term and over longer periods (Boe et al., 1999; Knudsen et al., 2008). The factors related to teacher attrition are multidimensional (Billingsley, 1993; Borman & Dowling, 2008; Madigan & Kim, 2021; Nguyen et al., 2019) and interconnected across individual, school, and system levels (Zavelevsky & Lishchinsky, 2020). While aspects related to individual teachers and the school environment are central components (e.g., Chambers Mack et al., 2019; Nguyen et al., 2019), psychosocial factors, such as well-being and stress, also play a key role in teachers' intention to quit (e.g., Viac & Fraser, 2020).

Psychosocial factors, especially well-being (Schleicher, 2018), stress (Billingsley & Bettini, 2019), and work overload (Chambers Mack et al., 2019), are pivotal determinants. Well-being, which can be defined as the "...intertwined individual, collective, and environmental elements which continually interact across lifespan ... something we can aim for, underpinned by positive notions, yet is unique to each of us and provides us with a sense of who we are which needs to be respected" (McCallum & Price, 2015, pp. 6–7), is often cited as a primary push factor for teacher attrition (UNESCO, 2024). Viac and Fraser (2020) propose teacher well-being as a construct with multiple facets. Several aspects of well-being, or the lack thereof, are linked to job stress (Madigan & Kim, 2021; Billingsley & Bettini, 2019), which is defined as the imbalance between work demands and available environmental and personal resources (World Health Organization, n.d.). Extended periods of stress can lead to burnout (Maslach & Jackson, 1981), which has been shown to have a strong correlation with teachers' intentions to leave the profession (Madigan & Kim, 2021; Madigan et al., 2023). Given the high job demands associated with teaching, including both instructional and various non-instructional responsibilities, teachers may feel overwhelmed, resulting in greater job dissatisfaction (Chambers Mack et al., 2019). Indeed, an excessive workload is often cited as a major factor contributing to teachers' heightened dissatisfaction and their decision to leave the profession (Carver-Thomas & Darling-Hammond, 2017). Furthermore, teachers in the Gulf report a high level of work overload (Gajderowicz et al., 2022). This situation reflects on teachers' well-being and influences their choice to remain in or leave the teaching profession (Bermejo-Toro et al., 2016).

A teacher's psychosocial states of well-being, stress, and work overload, as well as their subsequent decision to leave the teaching profession, may also be influenced by other ecological factors, such as teacher demographics and school environment factors (Viac & Fraser, 2020; Zavelevsky & Lishchinsky, 2020). Indeed, some teacher demographics, including gender, education, and experience, are significant predictors of attrition (Billingsley & Bettini, 2019; Borman & Dowling, 2008; Nguyen et al., 2019). While teaching is a female-dominated profession in most contexts (OECD, 2020), in certain situations, male teachers are more likely to leave the profession (de Neve & Devos, 2017). In the Gulf context, there is a lack of consensus regarding gender differences, teacher satisfaction (Buckner, 2017; Gajderowicz et al., 2022; Rahman, 2018), and related attrition. Whether male or female, teachers with higher levels of education may have greater professional opportunities in the broader labor market. Evidence suggests that teachers with higher levels of education are more likely to leave teaching (Borman & Dowling, 2008). Conversely, teachers with more experience may enjoy higher professional satisfaction and consequently be more likely to remain in the teaching profession. In fact, some evidence indicates that years of experience

are positively related to satisfaction (OECD, 2020) and negatively related to attrition (Borman & Dowling, 2008), with inexperienced teachers being particularly susceptible to leaving the profession (Nguyen et al., 2019; UNESCO, 2024). However, results may be unique to the context of the school environment, as the association between factors may be culturally specific (Buckner, 2017).

The school environment, particularly organizational characteristics such as teaching demands associated with the curriculum type and whether the school is privately or publicly run, can affect teacher attrition. Not only do private and public schools serve different student demographics, but they also differ in their structure and overall environment. For example, initial investigations have indicated that administrative tasks, outside of classroom teaching time, are particularly high for international school teachers in the Gulf, which has an adverse effect on their work stress and is related to their decision to leave (Dickson, 2024). These structural factors may impose varying demands on teachers, potentially impacting their well-being, stress levels, and work overload, which in turn may influence their intention to leave (Chambers Mack et al., 2019). In some contexts, teacher satisfaction varies significantly between public and private school teachers (OECD, 2020). In the Gulf context, there is substantial variation among schools, particularly regarding the type of school and whether it is public or private, and these factors may serve as important predictors of teacher attrition.

In summary, several factors may predict a teacher's intention to leave the profession. While psychosocial factors are central variables in teacher attrition, other factors may also influence teachers' decisions, including demographics and characteristics related to the school. These factors may depend on the context of the schools and school systems, and failing to take this into account may lead to biased conclusions and mask the potential underpinnings of this critical issue.

1.2. Examining teacher attrition in the UAE: An evidence-based approach

As mentioned above, a variety of factors can influence a teacher's decision to leave the profession, including psychosocial factors, individual teacher characteristics, and school-related factors. The diversity of the teaching population in the UAE and the range of school characteristics make it a unique sample for investigating this phenomenon. Across the UAE, there are approximately 670 public schools, along with a few privately operated charter schools (opendata.ae, n.d.), and over 700 private schools (Ministry of Education, n.d.) that offer a range of curricula, including British, Indian, American, and International Baccalaureate. Together, these schools serve over 46,000 students (Ministry of Education, n.d.). Most private schools are located in the major cities of Abu Dhabi and Dubai, with a few concentrations of private schools in the Northern Emirates. Teaching at these schools are over 50,000 educators and administrators, three-quarters of whom are non-nationals, and more than 70% are women. This diverse educational ecosystem fosters a rich environment for exploring trends in education across various groups and school types. However, to date, there is a dearth of studies that consider only a sub-section of the teaching population and analyze the factors separately.

One study investigating the factors associated with attrition rates in the UAE focused on public school teachers who are UAE nationals ($N = 445$; Al Kaabi, 2005). Analyzing the descriptive statistics of a variety of personal, economic, employment, and socio-cultural factors, the results of this study suggest that current teachers' stress and work overload are factors associated with teachers' perceived reasons for attrition. Moreover, teachers' perspectives differed significantly based on individual characteristics such as gender, qualifications, and years of experience. While this descriptive study provides a strong first step, the factors were analyzed individually without an independent variable for teacher attrition, which could be a confounding factor. Mohammad and Borkoski (2024) investigated the working conditions of 34 private school teachers. They found that, among the sample, there was a relatively negative school climate, a perception of a high workload, and an overall lack of work-life balance. Interestingly, however, more than half of the respondents reported that, if they had to make the choice again, they would choose to become teachers. Similar to Al Kaabi (2005), this study suggests that a variety of factors contribute to teacher attrition in the UAE.

While these studies represent a preliminary step in understanding this multifaceted challenge, it is essential to examine the factors alongside a diverse sample of teachers from various types of schools. Additionally, more advanced analyses using a large-scale dataset could reveal trends within the broader population of teachers. This will enhance our understanding of teacher attrition and support the development of policies and initiatives aimed at addressing this issue.

1.3. Research questions

To address these gaps in the literature, I examine the potential factors influencing teachers and their relationship to teacher attrition. Specifically, the study addresses the following research question:

What factors predict the likelihood that a teacher will seriously consider leaving classroom teaching?

2. Methods

2.1. Participants

The following analyses are secondary analyses of the teacher questionnaire data from the 2022 Programme for International Student Assessment (PISA), which tracks international trends in the skills and knowledge of 15-year-olds in reading, mathematics, and science (OECD, 2023). One of the 81 participating countries and economies was the UAE, which has a diverse student population attending a variety of schools. The UAE was the only Gulf Cooperation Council state that administered the teacher questionnaire, which included 10,092 teachers. The total sample of teachers (57% female; $M_{age} = 40.1$ years) comprised a diverse group who taught in various types of schools (see Table 1). The vast majority of teachers held either a bachelor's degree ($M_{bachelors} = 0.55$) or higher ($M_{postgraduate} = 0.43$), with an average of 14.73 years of teaching experience ($SD = 8.2$, $R = 0-50$ years), and 12.6% of the sample had five years of experience or less.

Table 1

Sample means/percentages and standard deviations of teacher demographics and school characteristics.

	Mean/Percentages	SD
Female (%)	0.56	0.5
Age (yrs)	40.1	8.82
Born in the UAE (%)	0.16	0.37
Education	1.41	0.53
Years of teaching experience	14.73	8.22
School type: private (%)	0.68	0.47
School type: public (%)	0.32	
Ministry of Education curriculum (%)	0.40	0.49
US curriculum (%)	0.17	0.38
UK curriculum (%)	0.20	0.40
Indian curriculum (%)	0.12	0.33
Other curriculum (%)	0.11	0.31

While over half (68%) of the teachers taught at private schools (compared to 32% who were employed at public schools), 40% of the sample taught at a school that implemented the Ministry of Education (MOE) curriculum. Other curricula include the US curriculum (17%), the UK curriculum (20%), the Indian curriculum (12%), and other curricula (11%).

2.2. Measures

2.2.1. Dependent variable

Intention to quit

The outcome variable of this analysis is teachers' intention to quit. Presented as a dichotomous variable, the questionnaire asked teachers, "This school year, have you seriously considered leaving classroom teaching?" This question serves as a proxy variable for attrition and is used to assess teachers' intention to leave the teaching profession. The dichotomous variable intention was coded as follows: 0 = "no, the teacher did not seriously consider leaving the classroom teaching" (Non-leavers); 1 = "yes, the teacher seriously considered leaving the classroom teaching" (Leavers).

2.2.2. Teachers' psychosocial factors

Teachers' satisfaction

As part of the subjective dimensions of teachers' occupational well-being, their satisfaction was measured using 10 statements that explored how teachers generally feel about their job (i.e., "All in all, I am satisfied

with my job”). A principal components analysis (PCA) was conducted on the 10 items to account for the potential variability among individual items (Stevens, 2002). The analysis revealed a strong single component for which the eigenvalues exceeded one. The single component explained 49% of the total standardized variance and was confirmed as a scale of satisfaction ($M = 0$, $SD = 1$, $R = -4.37$ to 1.40).

Teachers’ capacity to concentrate at work

As part of the cognitive dimension of teachers’ occupational well-being, their ability to concentrate at work was measured using six statements that examined whether teachers could focus on their tasks over the past two weeks (i.e., “It was easy for me to concentrate”). The PCA analysis of the six items revealed a single component, which accounted for 55% of the total standardized variance and was identified as a scale of concentration ($M = 0$, $SD = 1$, $R = -3.74$ to 1.28).

Teachers’ physical well-being

To measure the physical dimensions of teachers’ well-being, the questionnaire inquired about how often, during the current school year, teachers experienced physical health symptoms (e.g., headaches, fatigue, feeling anxious). The PCA of the 10 symptoms revealed a single strong component for which the eigenvalues exceeded one. The single component explained 61% of the total standardized variance and was identified as a scale of health symptoms ($M = 0$, $SD = 1$, $R = -1.33$ to 2.91).

Work overload

To measure teachers’ job demands, an indicator of work overload was measured utilizing six statements (i.e., “My non-teaching tasks [e.g., counselling students, communicating with parents, administrative work] negatively affect my ability to teach”). The PCA indicated a single strong component explaining 44% of the total standardized variance and was identified as a scale of overload ($M = 0$, $SD = 1$, $R = -2.54$ to 3.06).

Work stress

To measure teachers’ stress and burnout, an indicator of stress was measured using four items (i.e., “I experience stress in my work”). The PCA analysis revealed a single component that explained 59% of the total standardized variance and was identified as a scale of stress ($M = 0$, $SD = 1$, $R = -1.48$ to 2.55).

2.2.3. Teachers’ demographic and professional factors

For the analysis, the individual factors considered include gender, birthplace in the UAE, level of education, years of teaching experience, and employment status. Gender and birthplace in the UAE were treated as

dichotomous variables, with gender coded as female = 1 (male = 0) and birthplace in the UAE coded as yes = 1 (no = 0). Level of education was a categorical variable in which teachers were assigned a code of “0” for possessing a vocational certificate, “1” for having a bachelor’s degree, and “2” for holding a degree above a bachelor’s level. Similarly, employment status was a categorical variable, where a short-term contract of less than one year was coded as “0,” a term contract of more than one year as “1,” and a permanent contract as “2.”

2.2.4. School characteristics

Several aspects of schools in the UAE were assessed, including whether the school was private or public and which curriculum it used. The dichotomous variable “private” was coded as “1” and public as “0.” Five school curricula were reported: the MOE curriculum, the curriculum from the United States, the United Kingdom curriculum, the Indian National Curriculum, and other curricula (such as the International Baccalaureate, German, or French curriculum). A series of ‘dummy’ variables was generated, with each curriculum coded as “1.”

2.3. Statistical analyses

The data were analyzed using Stata/SE 16.0 (StataCorp 2019). To obtain an initial view of the data and explore potential differences between teachers who are seriously considering leaving and those who are not, descriptive statistics were analyzed. Due to the dichotomous nature of the outcome variable, intention, I conducted multiple logistic regression modeling (LOGIT) using the maximum likelihood (ML) function. Four logistic models were fitted. The first three models examine the impact of three dimensions of factors: teachers’ psychosocial factors, demographic and professional factors, and school characteristics. Given the significance of these factors in the literature and the lack of thorough analysis in the UAE context, the first three models analyze these factors in distinct groups. The final model assesses the factors collectively to identify which ones have the strongest effect on the outcome variable, intention.

3. Results

3.1. Descriptive statistics

To investigate the factors influencing teachers who seriously consider leaving the profession (Research Question 1), descriptive analyses were initially conducted on the psychosocial, individual, and school-related factors of teachers who reported seriously considering leaving teaching (Leavers) and those who did not (Non-leavers; see Table 2). Regarding the dimensions of teachers’ well-being, Leavers reported significantly lower satisfaction ($t = 45.59, P < 0.001, 95\% \text{ CI } [1.05, 1.15] d = 1.24$) and a reduced capacity to concentrate ($t = 26.71, P < 0.001, 95\% \text{ CI } [0.63, 0.73] d = 0.71$). Conversely, Leavers reported higher levels of physical health symptoms ($t = -34.53, P < 0.001, 95\% \text{ CI } [-0.93, -0.83] d = -0.95$) and stress (t

= -40.56 , $P < 0.001$, 95% CI $[-1.04, -0.94]$ $d = -1.09$). Teachers who were seriously considering leaving the teaching profession reported a significantly higher level of overload in their working environment ($t = -34.75$, $P < 0.001$, 95% CI $[-0.86, -0.77]$, $d = -0.87$).

Table 2

Sample means/percentages (and standard deviations) of teacher psychosocial, individual, and school-related factors for Leavers and Non-leavers.

		Non-leavers (n = 7381)	Leavers (n = 2175)
Teacher psychosocial factors	Job satisfaction	0.25 (0.86)	-0.85 (1.00)
	Work concentration	0.16 (0.93)	-0.53 (1.06)
	Health symptoms	-0.20 (0.89)	0.68 (1.05)
	Work stress	-0.23 (0.87)	0.77 (1.03)
	Work overload	-0.18 (0.94)	0.63 (0.95)
Teacher demographic and professional factors	Female (%)	0.55 (0.50)	0.62 (0.48)
	Born in the UAE (%)	0.14 (0.35)	0.22 (0.42)
	Education level	1.41 (0.53)	1.39 (0.53)
	Years of teaching experience	14.90 (8.33)	14.20 (7.80)
	Employment status	1.32 (0.69)	1.36 (0.68)
School characteristics	Private school (%)	0.68 (0.47)	0.67 (0.47)
	MOE curriculum (%)	0.40 (0.49)	0.41 (0.49)
	US curriculum (%)	0.16 (0.37)	0.19 (0.40)
	UK curriculum (%)	0.19 (0.39)	0.21 (0.41)
	Indian curriculum (%)	0.14 (0.35)	0.08 (0.27)
	Other curriculum (%)	0.10 (0.30)	0.11 (0.31)

Regarding the demographic and professional factors of teachers, a higher percentage of female teachers reported seriously considering leaving the profession ($t = -6.15$, $P < 0.001$, 95% CI $[-0.10, -0.05]$, $d = -0.15$). Additionally, teachers born in the UAE were more likely to consider leaving the teaching profession ($t = -8.17$, $P < 0.001$, 95% CI $[-0.10, -0.06]$, $d = -0.22$). The analysis indicated that, while there was not a significant difference in average education levels between Leavers and Non-leavers, teachers whose highest education was vocational were less likely to leave ($t = 2.51$, $P < 0.01$, 95% CI $[0.01, 0.08]$ $d = 0.09$), with no significant difference for teachers with higher levels of education.

Next, I examined the professional factors that led teachers to consider leaving seriously. Teachers who seriously considered leaving had fewer years of teaching experience ($t = 3.61$, $P = 0.0003$, 95% CI $[0.32, 1.08]$ $d = 0.09$). While teachers with a permanent contract were more likely to seriously consider leaving teaching ($t = -2.09$, $P = 0.04$, 95% CI $[-0.05, -0.012]$ $d = -0.05$), there was no significant difference between Leavers and Non-leavers with multiple-year or single-contract holders.

Finally, the structural characteristics of schools were examined in relation to teachers seriously considering leaving the teaching profession. No significant differences were found in the structural variables, except that teachers working in US curriculum schools were more likely to consider leaving (t

= -3.53, $P = 0.0004$, 95% CI [-0.05, -0.01] $d = -0.09$), while teachers in Indian curriculum schools were significantly less likely to contemplate leaving ($t = 8.74$, $P < 0.001$, 95% CI [0.05, 0.08] $d = 0.19$).

3.2. Predicting teacher attrition

Given the substantive interest in factors that predict a teacher seriously considering leaving classroom teaching, I fitted a series of logistic regression models with the dichotomous outcome variable, intention (see Table 3). First, I specified a model to understand the extent to which psychosocial factors influence a teacher's intention to leave (Model A). As the descriptive statistics showed, psychosocial factors play a strong role in a teacher's intention to leave the profession. The strongest predictors are job satisfaction (or lack thereof) and work-related stress. Additionally, the inability to concentrate at work, physical health symptoms, and work overload all predict teacher attrition, with each explaining its own significant variance in the model. Together, psychosocial factors explain over half of the variation in a teacher's intention to leave classroom teaching.

Table 3

Logistic regression models predicting the likelihood of a teacher seriously considering leaving classroom teaching.

		Model A	Model B	Model C	Model D
Teacher psychosocial factors	Intercept	-1.70***	-1.29***	-1.79***	-2.78***
	Job satisfaction	-0.92***			-0.91***
	Work concentration	-0.23***			-0.24***
	Health symptoms	0.23**			0.22***
	Work stress	0.37***			0.38***
	Work overload	0.15***			0.14***
Teacher individual factors	Gender (Female = 1)		0.24***		0.18**
	Born in the UAE (=1)		0.51***		0.12
	Education level		-0.05		0.1
	Years of teaching experience		-0.01**		0.009*
	Employment status		0.02		0.12**
School factors	Private school			-0.01	-0.03
	US curriculum			0.19*	0.14
	UK curriculum			0.07	0.006
	Ind curriculum			-0.58***	-0.60***
	Other curriculum			0.66***	0.04
Goodness of fit	-2LL	6684	96,448	10,180	6,336
	Pseudo R2	0.26	0.01	0.007	0.27

In Model B, teachers' individual factors, including gender, whether they were born in the UAE, education level, years of experience, and employment status, were examined. Similar to the descriptive statistics, female teachers and those born in the UAE were more likely to seriously consider leaving the teaching

profession, even when other factors were taken into account. The level of education and employment status do not have a significant effect, while years of experience have a negative effect, demonstrating that when considering other individual factors, teachers with fewer years of experience are more likely to seriously contemplate leaving the profession.

Next, I investigated the school-related factors as predictors of teachers' intention to quit the teaching profession. The analysis revealed no significant difference between public and private school teachers. However, using the MOE curriculum as a reference, the analysis revealed that teachers in the US curriculum and other curriculum schools were more likely to seriously consider leaving the teaching profession compared to their colleagues in the MOE curriculum. Conversely, teachers at Indian curriculum schools were less likely to do so, and there was no significant difference between teachers from the MOE and those from the UK curriculum.

As a final model, psychosocial, individual, and school-related factors were included. Teachers' psychosocial factors remain strong predictors of teacher attrition. Once other factors are accounted for, women are still more likely to seriously consider leaving classroom teaching. However, whether a teacher is born in the UAE is no longer an important predictor of teacher attrition. Interestingly, once psychosocial and school-related factors are added to the model, employment status becomes a significant predictor of teacher attrition. Additionally, years of experience can change a negative relationship into a positive one. This indicates that when psychosocial and school-related factors are considered, teachers with more years of experience are more likely to seriously contemplate leaving the profession. School-related factors contribute little predictive value to the final model, except that teachers in Indian curriculum schools are less likely to consider leaving the teaching profession.

4. Discussion

In the present study, I examined the psychosocial, demographic, and professional factors of teachers, along with school characteristics tied to teacher attrition. Additionally, the analysis aimed to identify factors that predict whether a teacher seriously considers leaving the profession within the school year. To this end, the factors related to teacher attrition were evaluated for teachers who were seriously considering leaving the teaching profession and those who were not. Given the substantive interest in predicting teacher attrition, the factors were analyzed together to account for confounding effects.

Regarding the research question, the results provide evidence that psychosocial, individual, and school-related factors are associated with teachers who seriously consider leaving the profession. All psychosocial factors were significant predictors of teacher attrition. These results support the theoretical assumption that teacher well-being, stress, and other psychosocial factors are central to addressing teacher attrition (Viac & Fraser, 2020). However, it should be noted that while psychosocial factors had the most explanatory power (pseudo- $R^2 = 0.26$), other important factors also contributed to explaining teacher attrition. Female teachers were more likely to report seriously considering leaving, as well as

those with permanent contracts. This finding aligns with earlier research indicating that female teachers in the Gulf are less satisfied than their male colleagues (Buckner, 2017; Mohammad & Borkoski, 2024).

Notably, years of teaching experience, when in a model that only took teacher individual factors into account, had a significant effect on teacher attrition (Model B: $\beta = -0.01^{**}$). In other words, teachers with less experience were more likely to leave the teaching profession. This finding complements earlier research in other contexts, which suggests that teachers are more likely to leave earlier in their careers (Nguyen et al., 2019; UNESCO, 2024). However, once psychosocial and school-related factors were taken into account, this relationship reversed, and teachers with more years of experience were more likely to consider leaving the teaching profession ($\beta = 0.009^*$). This may be because teachers with a few years of experience have lower well-being, higher stress, and greater feelings of work overload. Once these factors are taken into account, there is a small but significant drop-off rate associated with more years in the teaching profession.

Although psychosocial and individual teaching factors predicted the likelihood of teacher attrition, few school-related factors had a significant impact on teachers who seriously considered leaving the profession. The one caveat of this was teachers from Indian curriculum schools. Indian curriculum teachers were 60% less likely than all their other colleagues in other curriculum schools to seriously consider leaving the profession. Further investigation is needed to better understand the possible underlying reasons for this finding.

Taken together, these results have several implications for schools and policymakers. Firstly, actions must be taken in the UAE context to enhance teacher satisfaction and promote a healthy working environment, as well as to alleviate stress and reduce work overload. School leaders can prioritize this through in-school initiatives (Carver-Thomas & Darling-Hammond, 2017) and restructuring non-teaching tasks. This can enhance not only teachers' well-being and reduce stress but also provide focus and direction to the school community. Secondly, assuming other factors are equal, experienced teachers face the risk of leaving the profession, taking their knowledge and expertise with them. School leaders should recognize the danger of burnout among experienced teachers and actively offer new incentives to retain their most skilled staff.

4.1. Limitations and implications for future research

Despite the robust findings, the study does have several limitations. One limitation is the use of the proxy variable for teacher attrition. The independent variable, the answer to the question "This school year, have you seriously considered leaving classroom teaching?" while used widely in the literature, is a single-point affective response rather than a confirmed decision. Although supported by the Theory of Planned Behaviour (Ajzen, 2011), providing more robust evidence would be achieved if a sample of teachers who had already left the profession were used. However, given the transitory context of the UAE, collecting this would be highly unrealistic. The data also captures a small cross-section of teachers who teach 15-year-old students, as specified through the PISA assessment. The findings may vary for

teachers of students of different ages, particularly in primary school. Another limitation is the lack of more detailed variables related to teachers and teacher attrition. The current findings provide an initial overview of the factors that predict teacher attrition. However, the final model accounted for just over a quarter of the variance—additional unidentified variables likely influence teachers' decisions. Further investigation should consider additional factors that may affect teacher attrition, potentially related to student performance and perceived behavior in the classroom and school setting. Insights may also be gained by exploring students' perceptions of their teachers and how these perceptions relate to teachers' well-being.

Another avenue for further research should focus on the interactions among the factors, particularly through structural equation modeling and potential longitudinal investigations. The multinational nature of PISA provides an opportunity to unpack this phenomenon across multiple countries, specifically the Gulf states, to see if similar factors exist in various educational systems. This large-scale study provides evidence of some of the major factors that are affecting teacher attrition in the UAE. Through further research into the specifics and factors over time, school leaders and policymakers can better identify the root causes of teacher attrition. As this crisis becomes more acute over time, education systems worldwide must find ways to attract and retain their talented teaching staff, ensuring the educational needs of our young people are addressed in the years to come.

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Author Biography

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Appendix

PISA 2022 Teacher Questionnaire

Selected Items

This school year, have you seriously considered leaving classroom teaching? (Yes/No)

Teachers' satisfaction

We would like to know how you generally feel about your job. How strongly do you agree or disagree with the following statements?

The advantages of being a teacher clearly outweigh the disadvantages.

If I could decide again, I would still choose to work as a teacher.

I regret that I decided to become a teacher.

I enjoy working at this school.

I wonder whether it would have been better to choose another profession.

I would recommend my school as a good place to work.

I think that the teaching profession is valued in society.

I am satisfied with my performance in this school.

All in all, I am satisfied with my job.

Teachers' capacity to concentrate at work

In the past two weeks, how often have you experienced the following during the school day?

I was not thinking as clearly as usual.

It was hard for me to think about complicated things.

I was thinking slower than usual.

I was distracted.

It was easy for me to concentrate.

I felt focused.

Teachers' physical well-being

This school year, how often have you had the following during the school day?

Headache

Stomach pain

Back pain

Feeling down

Irritability

Feeling nervous

Fatigue

Feeling dizzy

Feeling anxious

Sleep deprivation

Work overload

To what extent do you agree or disagree with the following statements in reference to your job at this school?

I am given enough time to do what is expected of me at work.

I have too much work for one person to do.

There are times when I cannot meet everyone's expectations.

I have time for breaks during the workday.

My job prevents me from giving the time I want to my personal life.

My non-teaching tasks (e.g. counselling students, communicating with parents, administrative work) negatively affect my ability to teach.

Work stress

In your experience as a teacher at this school, to what extent do the following occur?

I experience stress in my work.

My job leaves me time for my personal life.

My job negatively impacts my mental health.

My job negatively impacts my physical health.

Teacher's demographic and professional factors

Are you female or male?

Female

Male

Do you have any of the following degrees?

<ISCED level 3.3>

<ISCED level 3.4>

<ISCED level 4>

<ISCED level 5>

<ISCED level 6>

<ISCED level 7>

<ISCED level 8>

In what country were you born?

How many years of work experience do you have?

What is your employment status as a teacher at this school?

Permanent employment (an on-going contract with no fixed end-point before the age of retirement)

Fixed-term contract for a period of more than 1 school year

Fixed-term contract for a period of 1 school year or less

School characteristics

Recoded for public/private or curriculum for ARE stratum 0–60