

*Insights Into Contextual Factors Related to Social Emotional Learning (SEL) in
UAE Public Schools*

Samantha Monroe, Alef Education, United Arab Emirates
Ali Nadaf, Alef Education, United Arab Emirates
Xin Miao, Alef Education, United Arab Emirates

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Abstract

In the UAE, there is a recognized need to boost Social Emotional Learning (SEL) skills in students, yet there remains a gap between that desire and the knowledge held by decision-makers. Although the Ministry of Education is dedicated to uncovering current SEL competencies, there have been few studies conducted in SEL that relate to the UAE context. The goal of this research is enabling factors related to SEL skills in the UAE to gain an insight to understand contextual factors in relation to student learning behavior and academic performance. Adapted from the OECD Survey on Social and Emotional Skills Contextual Questionnaire, UAE public school students from grades 5 to 12 completed a survey to gather a preliminary understanding on student academic achievement, active citizenship and civic participation, social connectedness, health, quality of life, and behavior/conduct. The data was taken from the students' responses to the survey and analyzed along with their academic performance on an education technology platform. The findings from the study highlight an inverse correlation between general student wellbeing, school-related stressors, and academic performance, most notably test anxiety. These findings showcase how improved stress-resistance and other SEL skills in students can help mitigate the profound impact school-related stress has on students outside the classroom. Understanding key contextual factors for UAE students will be useful to design, develop, and implement school interventions in SEL competencies to boost UAE students' abilities in these skills.

Keywords: UAE K12 Public School, OECD Survey on Social Emotional Skills (SSSES), Contextual Factors for SEL, Social Emotional Learning (SEL)

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Introduction

Across the globe, the education field is turning to Social Emotional Learning (SEL) skills to help students become well-rounded and emotionally mature individuals across school, work, and their personal lives. SEL is a process that helps all people manage their emotions, achieve life goals, establish and maintain healthy relationships, and show empathy for those around them (CASEL, 2022), as well as “encompass behavioral dispositions, internal states, approaches to tasks, and management and control of behavior and feelings” (OECD, 2021). For disadvantaged students, gaining strong SEL skills is increasingly important to help mitigate potential impacts on academic performance, as “social and emotional skills play an important role in the development of children and adolescents and, combined with academic achievement and cognitive skills, represent a holistic set of skills essential for success at school and later life” (OECD, 2021). Contextual factors such as lower socioeconomic status, an unstable home life, asylum seekers and immigrants, and other vulnerabilities mean that students may experience a greater impact on their academic achievement and are more prone to falling behind their peers (Banerjee, 2016). Social Emotional Learning skills can help these students and mitigate these contextual factors by allowing them to better manage and regulate their emotions, further develop their perseverance and stress regulation skills, improve their ability to effectively collaborate with their peers, and successfully set and strive towards academic goals (Ragozzino et al., 2003). Even further, a UK study found that by introducing the Promoting Alternative Thinking Strategies (PATHS) curriculum, which promotes self-control, empathy, positive self-esteem, and interpersonal skills in preschool and elementary aged children, students were predicted to experience both positive developmental outcomes and improved academic performance through participation in the program (Panayiotou et al., 2019). The PATHS school-based SEL intervention program found that SEL skills and competencies “allow children...to sustain relationships, recover in the face of failure, regulate emotions and stress, seek out educational opportunities, make responsible decisions, and identify with prosocial peer groups,” which can then mitigate the potentially detrimental effects that come from poor emotion regulation and behaviors that may pose a risk to students’ academic achievement (Panayiotou et al., 2019). As fostering SEL skills in students is rising in importance in schools around the world, the United Arab Emirates (UAE) recognized the importance of this trend and is working towards introducing students to SEL skills to better help students keep pace with their global peers.

The UAE has been striving towards raising the standard of education in the country for several years, with SEL being just one of many competencies the government is hoping to instill in the country’s students (UAE Government Portal, 2021). The need to understand and enhance SEL competencies in the country comes from current educational issues recognized by the government and its partners (Dubai Cares, 2022), as well as seen in field observations completed by this research team: a notable gender performance gap (Ridge, 2009), pervasive behavioral issues in male students (Tantawy, 2021), and more. As of now, there has yet to be in-school SEL intervention programs introduced in UAE public schools, although the need for it is well-documented as it is believed that Arab schools in particular could benefit from the introduction of SEL programming (Rocha, 2019). However, in other countries around the world, SEL school interventions are thriving, and their students along with them. Finland in particular is noted for having found success in introducing SEL skills into the classroom, where education policies are ensuring the children’s SEL skills are being nurtured both in school and in society as a whole (Nakamura, 2019). Finland’s SEL curriculum is introduced in primary school and continues on throughout a student’s academic career, focusing on seven transversal competencies: thinking and learning to learn; cultural competence,

interaction, and expression; taking care of oneself and others, managing daily life activities, safety; multiliteracy; ICT competence; competence for the world of work, entrepreneurship; and participation and influence, building the sustainable future (Finnish National Board of Education, 2016; Wilkins & Corrigan, 2019). The Finnish curriculum appears to be showing positive results already, with findings from the OECD Survey on Social and Emotional Skills (SSES) indicating that 10- and 15-year-old students who have greater SEL competency in intellectual curiosity, persistence, assertiveness, and trust of others perform more strongly in reading, mathematics, and the arts (OECD, 2021). These findings highlight the positive impact SEL programming can have on students, especially when taking into account the contextual factors that set a backdrop for how students approach challenges in both the classroom and in their personal lives. Students in the UAE have the potential to experience similar benefits from improved Social Emotional Learning skills and a better understanding of the specific contextual factors that relate to these students, in particular, is an important first step.

Objectives and Research Questions

The purpose of this research is to better understand the contextual factors related to SEL skills in the UAE in order to gain an insight into their significance in relation to student learning behavior and academic performance.

This was formulated through the following research questions:

Research Question One: Is there a relationship between school-related stressors (i.e. test anxiety and education expectations) and student overall wellbeing (i.e. life satisfaction and personal wellbeing) and how do such relationships vary by grade level and gender?

Research Question Two: What is the relationship between school-related stressors (i.e. test anxiety and education expectations) and students' academic performance and how do such relationships vary by grade level and gender?

Methodology

In order to answer the above research questions, we used the OECD Contextual Factors Questionnaire, which is one section of the OECD Survey on Social Emotional Skills (2021) and was adapted to better reflect cultural sensitivities relevant to the region. The purpose of this survey was to gain a deeper understanding of the contextual factors that impact students' lives both in and out of the classroom.

Data Description

The survey was provided to public school students in grades 5 to 12 via Survey Monkey and was completed by 1,835 students from all UAE emirates. Questions were primarily closed-ended and consisted of 4-point or 5-point Likert scales. There was a 70.73% (1298/1835) overall response rate to the survey and approvals were obtained from school principals and local education governing agencies before implementation. The survey contained 28 multiple choice questions, was administered bilingually in both Arabic and English, and looked at 25 contextual factors across 6 main areas: student academic achievement, active citizenship and civic participation, social connectedness, health, quality of life, and behavior/conduct. The two main areas of focus for this analysis are school-related stressors and student overall

wellbeing. School-related stressors are factors that originate or are mainly related to a student's schooling and are potentially impactful towards their academic learning, such as their school environment, school-related anxiety, and educational self-efficacy. Student overall wellbeing relates to a student's happiness with their life, health, and safety. We categorize the contextual factors related to school-related stressors to be test anxiety and education expectations, while the contextual factors for student overall wellbeing are life satisfaction and personal wellbeing. An example of survey questions for school-related stressors include "Even if I am well prepared for a test I feel very anxious" and "It seems that students are competing with each other." Examples of survey questions for student overall wellbeing include "Overall, how satisfied are you with your life as a whole these days?" and "My daily life has been filled with things that interest me."

Student academic performance data is extracted from the Alef Platform¹. Specifically, student interim assessment data is utilized from students in grades 5 through 12 by averaging scores across the four core subjects: mathematics, science, English, and Arabic. On the Alef Platform, an interim assessment is a short test students take at regular intervals throughout a course or academic program. It is typically used to monitor a student's progress and identify areas where they may need additional support or instruction and are often shorter and less comprehensive than end-of-year exams.

In this analysis, Kendall's Tau-B coefficient was computed to measure the association between two ordinal variables. This non-parametric technique is used to quantify the strength, direction and significance of the relationship between two variables, and can be used to assess whether one variable is a good predictor of the other. As a result of a different scale being used in Kendall Tau-B correlation, the correlation strength tends to be similar to or slightly lower than that of Spearman's correlation (Field, 2013). In this study, the relationship was considered statistically significant if the p-value was less than 0.05.

Findings and Discussion

Research Question One Results

For the first research question, results in Table 1 show that there is a statistically significant negative correlation between test anxiety and personal wellbeing ($\tau = -0.1614$, p-value = $4.34e-12$) as well as a statistically significant negative relationship between test anxiety and life satisfaction ($\tau = -0.1280$, p-value = $3.32e-07$). Additionally, education expectations do not have a statistically significant correlation with personal wellbeing ($\tau = -0.0169$, p-value = 0.5286) or with life satisfaction ($\tau = -0.0169$, p-value = 0.5289). This indicates that students who experience high levels of test anxiety have lower scores on personal wellbeing and life satisfaction, in general. This coefficient of test anxiety with personal wellbeing for female students ($\tau = -0.188$) is slightly higher than for male students ($\tau = -0.11$) and statistically significant with p-values less than 0.05. Similar results are observed for life satisfaction as well.

According to Table 2, test anxiety is statistically significantly negatively associated with student wellbeing in Grades 7, 8, 9, and 10. However, no relationship is found for students in Grades 5, 6, 11, and 12. In Grades 11 and 12, the sample size is incredibly small at 60 and 31

¹ The Alef Platform is a student-centered adaptive learning system which allows learners to self-regulate learning through adaptive tests, bite-sized multimedia content and analytics that provides feedback on cognitive and behavioral performance.

students respectively, which may have an impact on the p-value for those grades. For Grades 5 and 6, our assumption for this relationship not being statistically significant is that these students are still in primary school, so their test anxiety levels are most likely much smaller as compared to students in middle school and above, which starts in Grade 7 in the UAE. Overall, school-related stressors and student wellbeing demonstrate a negative correlation that is found to be more prevalent among female students and middle grade students.

Table 1: *The Association Between School-Related Stressors and Student Overall Wellbeing*

		Student Overall Wellbeing	
		Personal Wellbeing	Life Satisfaction
School-Related Stressors	Education Expectations	$\tau = 0.0157$ N = 1298 p-value = 0.5286	$\tau = -0.0169$ N = 913 p-value = 0.5289
	Test Anxiety	$\tau = -0.1614$ N = 1298 p-value = 4.34e-12	$\tau = -0.1280$ N = 913 p-value = 3.32e-07

Table 2: *The Correlation Between Test Anxiety and Student Overall Wellbeing by Grade Level*

	G5	G6	G7	G8	G9	G10	G11	G12
Test Anxiety	$\tau = -0.08^*$ N = 152 p-value = 0.15	$\tau = -0.11^*$ N = 114 p-value = 0.10	$\tau = -0.19$ N = 146 p-value = 0.00	$\tau = -0.16$ N = 149 p-value = 0.00	$\tau = -0.12$ N = 178 p-value = 0.02	$\tau = -0.18$ N = 115 p-value = 0.00	$\tau = -0.06^*$ N = 60 p-value = 0.51	$\tau = -0.11^*$ N = 31 p-value = 0.38

*The relationship is not statistically significant (p-value > 0.05)

Research Question Two Results

As shown in Table 3, test anxiety has a statistically significant negative correlation with student interim assessment scores ($\tau = -0.053$, p-value = 0.046), while education expectation is positively correlated ($\tau = 0.19$, p-value = 1.05e-14). The correlation is positive for education expectations, meaning that as a student's education expectations increase (i.e. how much education they believe they will be able to achieve, such as secondary school, undergraduate degree, master degree, etc.), their academic performance increases. On the other hand, test anxiety exhibits a negative correlation, in which as students report experiencing higher levels of anxiety, their academic performance decreases. The results also suggest that there is no significant relationship between student overall wellbeing (life satisfaction, personal wellbeing) and interim assessment scores.

When looking at school-related stressors and their relationship with student academic performance in regards to grade level in Table 4, we find that education expectations and academic performance have a statistically significant positive correlation in all grades except for Grade 12. This means that education expectations continue to have a positive relationship with academic performance for students from Grade 5 to 11, in which a student's high

expectations in their future educational attainment correlates with higher interim assessment scores. However, there is a very small number of Grade 12 respondents at only 20 students, which we believe may lead to this lack of statistically significant relationship in Grade 12. Interestingly, for test anxiety, although it was found to have a statistically significant negative relationship with student academic performance for the entire sample in Table 3, no relationship was found for students in any of the individual grade levels in Table 4. We are unsure if this is because of the low sample size or some other factor, but it is interesting when compared to the results from the sample as a whole. When looking at school-related stressors' impact on academic performance in relation to gender, no relationship was found for this contextual factor and is therefore not included in the below tables. This does not mean that gender does not correlate with the impact of school-related stressors on student academic performance, but none was found within this study for these particular students in the UAE K12 public school context.

Table 3: *The Correlation Between School-Related Stressors and Student Overall Wellbeing With Student Interim Assessment Scores*

		Correlation coefficient (τ)	p-value	N
School-Related Stressors	Education Expectations	0.1903	1.05e-14	1298
	Test Anxiety	-0.053	0.046	925
Student Overall Wellbeing	Personal Wellbeing	-0.016	0.4690	1298
	Life Satisfaction	-0.0104	0.7105	671

Table 4: *The Correlation Between School-Related Stressors and Student Interim Assessment Scores by Grade Level*

	G5	G6	G7	G8	G9	G10	G11	G12
Education Expectations	$\tau = 0.13$ N = 166 p-value = 0.02	$\tau = 0.15$ N = 127 p-value = 0.02	$\tau = 0.24$ N = 134 p-value = 0.00	$\tau = 0.14$ N = 150 p-value = 0.02	$\tau = 0.19$ N = 177 p-value = 0.00	$\tau = 0.22$ N = 96 p-value = 0.00	$\tau = 0.24$ N = 55 p-value = 0.02	$\tau = 0.05^*$ N = 20 p-value = 0.77
Test Anxiety	$\tau = -0.05^*$ N = 113 p-value = 0.37	$\tau = -0.04^*$ N = 85 p-value = 0.60	$\tau = 0.02^*$ N = 111 p-value = 0.68	$\tau = -0.01^*$ N = 114 p-value = 0.83	$\tau = -0.10^*$ N = 133 p-value = 0.10	$\tau = -0.02^*$ N = 76 p-value = 0.73	$\tau = -0.11^*$ N = 38 p-value = 0.32	$\tau = -0.20^*$ N = 16 p-value = 0.30

*The relationship is not statistically significant (p-value > 0.05)

Conclusion and Implications

This study set out to evaluate the contextual factors for Social Emotional Learning skills in the UAE K12 public school context. We sought to understand the relationship between school-related stressors and student overall wellbeing, between school-related stressors and

academic performance, and how both student gender and grade level play into these relationships. We found that test anxiety has a negative relationship with both personal wellbeing and life satisfaction, meaning that as a student's test anxiety increases, their personal wellbeing and life satisfaction decrease. However, we did not find a relationship between education expectations and personal wellbeing or education expectations and life satisfaction. Additionally, we found that female students have stronger negative relationships than male students between test anxiety and personal wellbeing as well as test anxiety and life satisfaction, meaning female students experienced this negative relationship to a greater extent than their male peers, in general. We also found that test anxiety has a negative relationship with student overall wellbeing in Grades 7, 8, 9, and 10. Additionally, we found that test anxiety has a negative relationship with student academic performance, meaning that as a student's test anxiety increases, their academic performance decreases. We also found that education expectations had a positive relationship with student academic performance, meaning that the greater a student's education expectations are for themselves, the better they perform academically. Even further, the relationship between education expectations and student academic performance was still found in all grades except for Grade 12 students, while test anxiety was not found to have a relationship with student academic performance when broken down by grade level.

The findings from this study highlight how student contextual factors can have marked impacts on their academic performance and health and personal wellbeing, and it demonstrates the need to help mitigate these impacts. Incorporating SEL skills and programming into schools has been found to help improve students' school attitudes, behavior, and performance (Zins et al., 2007), while making sure to take into account student contextual factors as this provides key "information about the conditions and practices that foster or hinder the development of these critical skills" (Chernyshenko et al., 2018). In order to begin bringing evidence-based SEL interventions into UAE K12 public schools, the next step is to evaluate the current status of student Social Emotional Learning skills based on existing SEL frameworks and measurements to identify gaps, such as contextualizing the Big Five framework utilized by OECD to the UAE context, as it contains several key SEL competencies and skills, such as curiosity, stress resistance, self-efficacy, and others (OECD, 2022). This research itself looked at the contextual factors for student Social Emotional Learning skills, which helps explain how student SEL skills were developed within the context of the study, as well as the interaction with academic performance. This will allow researchers, educators, school leadership, and other stakeholders to get a better understanding of where students currently stand in their own social emotional awareness and capabilities, as well as identify the gap in SEL skills for UAE students. Additionally, we will also be better able to understand the relationship between student contextual factors, their current SEL capacity, and student academic performance to gain a well-rounded picture of the UAE student population. Alef Education is currently incorporating SEL-focused videos into its online learning platform to help bolster students' SEL competencies (i.e. growth mindset). Future interventions will take this approach further and include more explicit SEL instructions in everyday teaching and learning. This will be accompanied by professional development for teachers, as they need to understand the importance of SEL and how to work with explicitly-designed SEL content in their daily classrooms and lessons. These interventions will work to help UAE K12 public school students thrive academically, personally, and professionally and live socially and emotionally competent and healthy lives.

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Contact email: samantha.monroe@alefeducation.com