

An Eye on the Future: Student Plans for Higher Education in Qatar

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Abstract

Education is identified as very critical to the achievement of the goals that were specified as strategic to Qatar’s socio-economic progress and development. At the core of the country’s policy plans is the need to develop human capacity as is highlighted in the *Qatar National Vision (QNV) 2030*. Not surprisingly, education has been identified as a strategic key to achieving the goals outlined in the QNV 2030. The present exploratory study employed a quantitative research design in order to investigate the factors that are likely to influence the educational aspirations of Qatari students. Drawing on Social Cognitive Theory (SCT) and Attribution Theory (AT), this study sought to examine students’ aspirations for post-secondary education in Qatar. Data for this study were collected using the Qatar Education Study (QES) survey, which is a nationally representative survey involving K-12 students in the State of Qatar. The analysis of this study’s data revealed that personal and household characteristics play an important role in shaping post-secondary educational aspirations of student participants, including age, nationality, education and employment status, as well as parental influence. Based on the study’s results, statistically significant associations were observed between personal and household variables and students’ aspirations for higher education. This study concludes with relevant recommendations and proposes future studies to explore the potential impact of individual aptitude and contextual factors on student future academic plans.

Keywords: Educational aspirations; High school students; Qatar

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عين على المستقبل: خطط الطلبة للتعليم العالي في قطر

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ملخص

يعدّ التعليم أمراً في غاية الأهمية لتحقيق الأهداف التي حُددت على أنها استراتيجية للتقدم والتنمية الاجتماعية والاقتصادية في دولة قطر. ويكمن جوهر خطط السياسات الوطنية في الحاجة إلى تطوير القدرات البشرية على النحو الذي سلّط الضوء عليه في رؤية قطر الوطنية 2030. وليس من المستغرب أن يُحدّد التعليم كمفتاح استراتيجي لتحقيق الأهداف المحددة في رؤية قطر الوطنية 2030. استخدمت الدراسة الإستطلاعية الحالية منهج البحث الكمي من أجل الكشف عن العوامل التي من المحتمل أن تؤثر على التطلعات التعليمية للطلبة القطريين. وقد اعتمدت الدراسة على النظرية المعرفية الاجتماعية ونظرية الإسناد، كما سعت هذه الدراسة إلى التعرف على تطلعات الطلبة للتعليم ما بعد الثانوي في قطر. جمعت بيانات هذه الدراسة باستخدام استطلاع مسحي تمثيلي شمل طلبة المدارس (K-12) في دولة قطر، وذلك كجزء من دراسة التعليم في قطر؛ حيث كشفت نتائج تحليل بيانات هذه الدراسة بأن الخصائص الشخصية والأسرية للطلبة الذين شاركوا في المسح تلعب دوراً مهماً في تشكيل تطلعاتهم التعليمية بعد المرحلة الثانوية، بما في ذلك عوامل الخاصة بعمر وجنسية الطلبة والمستوى التعليمي والوضعية الوظيفية لأولياء أمورهم، فضلاً عن تأثير الوالدين. واستناداً إلى نتائج الدراسة، لوحظت علاقات ذات دلالة إحصائية بين المتغيرات الشخصية والأسرية وتطلعات الطلبة لمتابعة دراساتهم بمرحلة التعليم العالي. وتحتتم هذه الدراسة بتوصيات ذات الصلة وتقترح دراسة مستقبلية لاستكشاف التأثير المحتمل للقدرات الفردية والعوامل السياقية.

الكلمات المفتاحية: التطلعات التعليمية، طلبة المدارس الثانوية، قطر

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Introduction

The *Qatar National Vision 2030 (QNV 2030)*, which outlines the country's long-term development policy plans, identifies human capacity development as a fundamental goal for the future growth and prosperity of Qatar's economy and society. The *QNV 2030* Vision rests on the key principle of moving from reliance on carbon-based resources to a knowledge-based economy (QGSDP, 2008, 2011). Education is identified as critical to attaining the goals specified as strategic to Qatar's social and economic progress. Unsurprisingly, the need for the provision of a system of education that meets international standards has driven successive governments in Qatar to launch several reform initiatives.

To achieve the goals outlined in *QNV 2030*, Qatar has invested significant funds in education in order to improve the quality of educational services and ensure the provision of "high-quality educational and training opportunities appropriate to each individual's aspirations and abilities" (GSDP, 2008, 16). Towards the beginning of the new millennium, the country adopted reform initiatives in an attempt to revamp its education system at both pre-college and post-secondary levels. Prominent among these reform plans is the *Education for a New Era (EFNE)* (Stasz et al., 2007), an initiative intended to enable Qatar's youth to play an active role in the knowledge society.

At the heart of the EFNE is the emphasis placed on the importance of developing the critical skill sets and knowledge citizens require to join a job market that has become fiercely competitive and is increasingly seeking to recruit and retain talent. However, despite Qatar's ambitious plans and lofty investments in the education sector, the country is still facing the crucial challenge of attracting citizens to pursue a post-secondary degree, particularly in STEM-related fields of study. This problem is alarming because of the imbalance characterizing Qatar's demographic profile, which displays a plain under-representation of citizens in the labor market (Mitchell & Gengler, 2015; Ridge, 2014).

As Qatar aspires to turn into a knowledge-based society, the shortage of Qatari citizens who are actively participating in the job market remains a serious challenge to the country's leadership. Demonstrably, the demand for professionals possessing critical knowledge economy skill sets is on the rise in Qatar. Exacerbating the situation is the reluctance of citizens willing to accept private sector jobs, a trend that has had and will continue to have detrimental effects on employment in Qatar and consequential developmental implications for the country's progress and development, as was pointed out by Stasz et al. (2007) and Al-Misnad (2010).

The bulk of research on students' aspirations for continuing education has been conducted in Western settings, especially in Europe and the United States (Barhate & Dirani, 2021; DeWitt, Archer, & Osborne, 2014; Vryonides & Gouvias, 2012). The present study aimed to offer an alternative, non-Western perspective, focusing on the context of an Arabian Gulf country. Research in this socio-cultural context differs significantly from Western settings, given its diverse student population, a demography where expatriates outnumber locals, and an economy that places high value and expectations from education, yet struggles to increase local students' interest in higher education and diverse career paths (Madeeha et al., 2022). As such, it helps to understand the extent to which factors that determine students' future educational aspirations in other societies apply in the Qatari context and the Arab region more broadly. In doing so, the study contributes to our understanding of students' educational aspirations and their background attributes, i.e., personal and contextual characteristics.

Drawing on past research in extant literature, this study aimed to unpack the individual and contextual factors that are likely to predict the educational paths high school students in Qatar aspire for once they complete their degree. Personal and contextual attributes were expected to shape the researchers' expectations concerning these aspirations. Based on data from the Qatar Education Study 2018, the current study presents an analysis of the determinants of student aspirations, with data gathered from schools that represent a broad spectrum of public and private high schools in Qatar.

This paper is structured as follows. The next section presents the theoretical considerations which guided the data collection and analysis in this study. Section Three documents the research questions, hypotheses and methodology adopted in this study. Section Four presents the results based on the outcomes of several statistical analyses. Section Five discusses these results in light of the theoretical considerations, offers recommendations and proposes future research directions.

Theoretical considerations

The concept of educational "aspirations"

While there is no clear or consensual definition of educational aspirations in the existing scholarship, they are depicted as the goals and plans a person has in an academic context (Trebbels, 2015; Widlund, Tuominen, & Korhonen, 2018). Terms such as 'aspirations', 'expectations', 'goals' and/or 'plans' are frequently employed interchangeably (Madeeha et al., 2022; Trebbels 2014). Recent and past educational research has drawn a distinction between educational aspirations and expectations (Beal & Crockett, 2010; Boxer et al., 2011; Khattab et al., 2021); whereas educational expectations denote what people expect to achieve, educational aspirations refer to what they desire and hope to accomplish (Khattab, 2015; Madeeha et al., 2022).

The constructs of "aspirations" and "expectations" are used in educational literature to tap into the goals and ambitions of an individual (Schmitt-Wilson & Faas, 2016). Although the concepts are sometimes treated as indivisible, previous studies have shown strong links between the two (Beal & Crockett, 2010; Boxer et al., 2011; Madeeha et al., 2022). Within the field of education, scholars have identified two broad types of aspirations. According to Gölz and Wohlkinger, (2019), for example, while realistic aspirations are the "perceived likelihood of successfully attaining a desired outcome," idealistic aspirations "are usually understood as expressions of a person's motivation towards educational attainment, independent from the individual's chances to realize this goal" (p. 1399).

Theoretical Framework

Two theories informed the theoretical framework for this study: the Social Cognitive Theory (Bandura, 1977, 1986, 1997) and the Attribution Theory (Weiner, 1972, 1985). The Social Cognitive Theory (SCT) provided a lens through which individual and environmental (contextual or school-related) factors were investigated. This lens helped in exploring individual characteristics, including self-efficacy, which is a core concept of SCT (Bandura, 1997). For instance, past work on students' self-efficacy beliefs has emphasized the importance of self-confidence in students' learning of certain

subjects in a classroom setting (Albion & Spence, 2013; Bursal, 2012; McDonnough & Matkins, 2010). Attribution Theory (AT), a prominent model used in social psychology, aids in understanding the reasons certain behaviors or events occur. As such, AT helps to make sense of the world and elucidates how individuals perceive the causes of their experiences in daily life. For the purpose of our study, AT was used to delve into the predictors of students' future educational aspirations.

The purpose of this study was to explore the predictors of the educational aspirations of Qatar's students. The extant literature has identified myriad factors that shape students' aspirations to pursue a post-secondary degree, ultimately impacting their future career paths (Barhate & Dirani, 2021). Prominent among the key influences predicting students' future educational trajectories are students' individual (nationality and gender) and contextual (family and school) factors (Agger, Meece, & Byun, 2018; Barhate & Dirani, 2021; Poynton & Lapan, 2017).

Several researchers have gained interest in understanding these associations in order to better guide students towards achieving their potential through education (Agger, Meece, & Byun, 2018; Barhate & Dirani, 2021; Gutman & Schoon, 2018). Another reason for exploring education aspirations and their influential factors lies in the association found between academic aspirations and academic achievement (Khattab, 2015). Studies have found that students who are uncertain about continuing their education have a lower academic achievement (Gutman & Schoon, 2018). These aspirations are shaped by multiple factors including students' individual characteristics (gender and nationality), as well as characteristics of the household (parent education, parent employment status) (Barhate & Dirani, 2021). Specifically, these factors have been shown to wield a crucial impact on how children form their future educational aspirations (Fang, 2016; Maltais, Duchesne, Ratelle, & Feng, 2015).

While students' educational aspirations are not static and are subject to a changing and evolving process (Gutman & Schoon, 2018), the study of educational aspirations remains worthy for their predictive power in supporting students to set goals, persevere and increase their academic achievement.

Research questions and hypotheses

Since its independence, education has always topped the list of Qatar's national priorities agenda. Although significant investments have been allocated to the education of Qatari nationals by successive governments, a real challenge that continues to worry decision makers in the country is the shortage of Qatari students, especially males, who are interested in pursuing further education (Al-Misnad, 2015). To gain an informed insight into the educational credentials that students in Qatar aspire to in the future, we focus in this study on personal and contextual factors expected to predict students' educational aspirations. Significant relationships were also expected to hold among students' personal characteristics and household demographics, and their educational aspirations. Drawing on previous research in the extant literature, the researchers aimed to unpack salient predictors of students' aspirations, both individual and contextual, bearing in mind that students' aspirations are not viewed as an "either/or" choice. In particular, answers were sought to address two main research questions guiding this study:

1. What are the factors likely to influence students' post-secondary educational aspirations in Qatar?
2. Are there any significant relationships between students' personal and household characteristics, and their educational aspirations in Qatar?

These questions formed the basis of this study's objectives and research hypotheses, which are formulated as follows:

- H0 (Null hypothesis): there is no association between students' personal and household characteristics, and their educational aspirations (i.e., the two are independent).
- H1 (Alternate hypothesis): there is a correlation between students' personal and household characteristics, and their educational aspirations (i.e., the two are associated).

Methodology

Research Design

For the purpose of this present study, data originating from the Qatar Education Study 2018 (QES 2018) – a nationally representative survey of K-12 students in Qatar – was used to explore students' future educational aspirations. The QES 2018 is a large-scale survey implemented in November 2018 by the Social and Economic Survey Research Institute (SESRI) at Qatar University. The validity of the questionnaire instrument was established through the use of the same questionnaire administered twice previously in the 2012 (QES 2012) and 2015 (QES 2015) survey rounds. In addition, a pre-test was then conducted in four randomly-selected schools, following which the final revision of the questionnaire was carried out.

Participants

The survey used in the QES 2018 involved students in 8th and 9th grades (preparatory schools) and 11th and 12th grades (secondary schools). The Ministry of Education and Higher Education in Qatar prepared a sampling frame, which comprised a list including public and private schools in the country. The list classified Qatar's schools into four types of schools (government-funded public schools, Arabic private schools, private international schools, and community schools) and contained information about school gender (e.g., male, female, or co-ed) and the grade level (preparatory or secondary).

Proportionate sampling was adopted in this research in order to ascertain a proportionate similarity between the frame and the sample. Within each of the strata, schools were selected randomly following a two-stage sampling procedure. Stage one involved a random selection of schools, with a probability that is proportionate to the size of each school (PPS). The second stage involved a random selection of one class representing grades 8, 9, 11 and 12. To avert biased estimates, weights were developed to explain the probability of selection. Weight trimming was employed to avert undesirable variability in the estimates. In total, 39 schools participated in this study, and 1,639 students completed the survey.

Procedure

Necessary approvals were secured from both the Ministry of Education in Qatar and Qatar University's Internal Review Board, following which letters were dispatched to the relevant schools, asking for permission to conduct the survey in their premises. Students were informed about the purpose of the study and were told that their participation was voluntary. They were also informed that their identity would not be disclosed and that the responses they provide would be kept strictly confidential.

Measures

Students' educational aspirations: This is the main dependent variable for this study. In the questionnaire, students were asked: "How far in education do you think you will go?" and they were also instructed to choose an answer from a list of 6 options as follows: 1) Will not finish secondary/high school; 2) Will graduate from secondary or high school, but will not go any further; 3) Will join the community college/or similar; 4) Will join a BA program at a university but will not graduate; 5) Will graduate from a university (with a BA); and 6) Will finish postgraduate studies with an advanced degree (MA, PhD, etc.). The list also included an "Other" option, with an open-ended, "Please specify" space as well as an "I do not know" option.

Individual-level factors: Gender, nationality, the father's and the mother's level of education and employment status at the time the survey was conducted were examined as individual-level predictors of the educational aspirations of students.

Gender: This was used in the analysis as a dichotomous variable, where female=1 and male=0.

Nationality: The questionnaire required students to indicate their nationality as either Qatari or non-Qatari, as variations may exist depending on whether the students were Qatari or expatriates, whose parents may be on temporary work visas. An open-ended "Please specify" response option was also included.

Contextual (Household) factors: Parents' education and employment were the two household attributes that were used in the analysis of the data.

Parents' education: Students were asked to select one of the following options: 1) Primary (1-6); 2) Preparatory; 3) Secondary; 4) Post-secondary (Diploma); 5) University Graduate or Bachelor's degree; 6) Master's degree; 7) PhD; 8) Never attended any school. The list also comprised an "Other" option, with an open-ended, "Please specify" space) and an "I do not know" option.

Parent Employment: In the questionnaire, students were asked two separate questions, one for the father and the other for the mother: "What is your father's [or: mother's] main occupation?" and were instructed to choose one out of 6 options: 1) Full-time employee; 2) Part-time employee; 3) Unemployed, seeking a job; 4) Retired; 5) Unable to work; 6). Additionally, the list also contained an "Other" option, with an open-ended, "Please specify" space and an "I do not know" option. In the analysis, the employment options were collapsed into two categories for fathers (Employed/Other) and three for mothers (Employed /Housewife/Other). The sample characteristics are presented in Table 1.

Table 1: Sample Characteristics

Variable	Variables Values	%	Observations
Students' characteristics			
Nationality	Qatari	23.7	389
	Non-Qatari	76.3	1250
Gender	Male	41.4	678
	Female	58.6	961
Household characteristics			
Father's highest education level	Pre-college	26.5	434
	University graduate/B.A.	54.0	885
	Post-graduate	19.5	320
Father's current employment status	Employed	86.8	1422
	Other	13.2	217
Mother's highest education level	Pre-college	33.9	555
	Undergraduate	53.6	879
	Post-graduate	12.5	205
Mother's current employment status	Employed	36.4	596
	Housewife	44.4	727
	Other	19.3	316
Student educational aspirations			
How far in education students will go	High school	5.2	85
	University diploma/Bachelor's	31.7	519
	Post-graduate degree	63.1	1035
Likelihood to go to university/college	Very unlikely	0.5	9
	Somewhat unlikely	1.7	28
	Somewhat likely	15.8	259
	Very likely	75.5	1237
	Don't know	6.5	106
Type of work expected in the future	Military/Police	5.1	84
	Academic/Research	6.3	103
	Health sector	24.2	398
	Business person	7.0	114
	Engineer	14.3	234
	Other	43.1	706
N		100	1,639

Mode of analysis

In analyzing the data, the Statistical Package for the Social Sciences (SPSS) was used. Besides descriptive statistics, different analytical tools were used in analyzing the data. For the purpose of this study, Pearson's chi-square and the Gamma statistics test were employed to assess potential associations between students' personal characteristics and household demographics and educational aspirations. As a

first step, Pearson’s Chi-Square Test was used to see if there is an association between the present study’s nominal/categorical variables. Second, the Gamma statistics test was used to see if an association exists between two ordinal variables. The two tests provide information on the significance of any observed differences and the specific groups or categories responsible for the differences observed. Where an association was observed, Cramer’s V was employed to determine the strength of the association between those variables, interpreted as follows:

> 0.25 = Very strong

> 0.15 = Strong

> 0.10 = Moderate

> 0.05 = Weak

> 0 = Not or very weak

The second step involved using Goodman and Kruskal’s Gamma to examine possible associations between points and determine the strength of these associations. Accordingly, Gamma tests were calculated for ordinal (ordered) variables (for example, “High School” “Bachelor’s Degree” and “Post-graduate”). Gamma tests were also utilized as measures of the strength of association, with the gamma coefficient ranging from -1 and 1 as follows:

1 = there is a positive correlation (if one value goes up, so does the other).

-1 = there is an inverse correlation (as one value goes up, the other goes down).

0 = there is no association between the variables

Results

The results derived based on Gamma test calculations were interpreted as is indicated in Table 2.

Table 2: Gamma test results

Strength of Association	Value of Lambda, Gamma, Pearson’s r
None	0.00
Weak association	$\pm 0.01 - 0.09$
Moderate Association	$\pm 0.10 - 0.29$
Evidence of strong association	$\pm 0.30 - 0.99$
Perfect association, strongest possible	± 1.00

Nationality and students’ educational aspirations

As Table 3 demonstrates, results support the rejection of the null hypothesis, suggesting that there is an association between students’ nationality and their educational aspirations ($p < .001$).

Table 3: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	14.538 ^a	2	0.001
Likelihood Ratio	14.189	2	0.001
Linear-by-Linear Association	14.353	1	0.000
N of Valid Cases	1639		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 20.17.

As is shown in Table 4, results from Cramer’s V indicated a weak association between students’ nationality and their educational aspirations (Cramer’s V = 0.094).

Table 4: Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.094	0.001
	Cramer’s V	0.094	0.001
N of Valid Cases		1639	

The results displayed in Table 5 reveal that slightly more than half (55.3%) of Qatari students aspire to pursue postgraduate or advanced studies, as compared to 65.6% non-Qataris who plan on completing a postgraduate or advanced degree. Of the students aspiring to finishing a Bachelor’s degree, 37.5% were Qataris and 29.8% non-Qataris. A mere 7.2% of Qatari students pointed out they aspire to get a high school degree only.

Table 5: Cross-tabulation

		How far in education do you think you will go?			Total	
		Secondary/ High school	Higher Diploma/ Bachelor	Post-graduate		
What is your nationality?	Qatari	Count	28	146	215	389
		% within What is your nationality?	7.2%	37.5%	55.3%	100.0%
	Non-Qatari	Count	57	373	820	1250
		% within What is your nationality?	4.6%	29.8%	65.6%	100.0%
Total		Count	85	519	1035	1639
		% within What is your nationality?	5.2%	31.7%	63.1%	100.0%

Gender and students’ educational aspirations

Table 6 demonstrates results that provide evidence rejecting the null hypothesis. This suggests that there is an association between students’ gender and their educational aspirations ($p < .001$). As is

shown in Table 6, results from Cramer’s V revealed a strong association between student gender and the aspirations they hold for future education (Cramer’s V = 0.151).

Table 6: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	37.575 ^a	2	0.000
Likelihood Ratio	37.368	2	0.000
Linear-by-Linear Association	26.039	1	0.000
N of Valid Cases	1639		

0 cells (.0%) have expected count less than 5. The minimum expected count is 35.16.

As is shown in Table 7, results from Cramer’s V indicated a strong association between students’ gender and their educational aspirations (Cramer’s V = 0.151).

Table 7: Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.151	0.000
	Cramer’s V	0.151	0.000
N of Valid Cases		1639	

The results illustrated in Table 8 reveal that the percentage of female students (66.7%) aspiring to pursue a postgraduate or advanced degree is higher than that of their male counterparts (58.1%). Interestingly, a low 9.0% of male students aim to complete high school, compared to only 2.5% of their female counterparts.

Table 8: Cross-tabulation

		How far in education do you think you will go?				
		Secondary/High school	Higher Diploma/ Bachelor	Postgraduate		
What is your gender?	Male	Count	61	223	394	678
		% within What is your gender?	9.0%	32.9%	58.1%	100.0%
	Female	Count	24	296	641	961
		% within What is your gender?	2.5%	30.8%	66.7%	100.0%
Total	Count	85	519	1035	1639	
	% within What is your gender?	5.2%	31.7%	63.1%	100.0%	

Father’s level of education and students’ educational aspirations

Table 9 demonstrates Gamma test results revealed a strong positive relationship (0.310) between the father’s education level and the child’s educational aspirations: the higher the father’s education level, the higher the child’s aspirations to pursue a higher education degree. Furthermore, the “Approx. Sig.” column shows a high statistical significance value of .000 (i.e., $p < .0005$). Therefore, the association between the father’s education and the child’s aspirations is statistically significant.

Table 9: Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Ordinal by Ordinal	Gamma	0.310	0.040	7.426	0.000
N of Valid Cases		1639			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Father’s employment status and students’ educational aspirations

The results presented in Table 10 offer evidence to reject the study’s null hypothesis. Accordingly, it can be concluded that there is an association between the father’s employment status and the child’s educational aspirations ($p < .001$).

Table 10: Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	12.052 ^a	2	0.002
Likelihood Ratio	11.194	2	0.004
Linear-by-Linear Association	11.791	1	0.001
N of Valid Cases		1639	

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 11.25.

As is displayed in Table 11, results concluded from Cramer’s V revealed a weak positive association between the father’s employment status and the child’s educational aspirations (Cramer’s V = 0.086).

Table 11: Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	.086	.002
	Cramer’s V	.086	.002
N of Valid Cases		1639	

The results from this study further showed that 64.6% of the students whose father is employed aspire to complete a postgraduate or advanced degree, in comparison to those with unemployed parents (53.9%) (see Table 12).

Table 12: Cross-tabulation

		How far in education do you think you will go?				
		Secondary/ High school	Higher Diploma/ Bachelor	Postgraduate	Total	
What is your father/male guardian's current employment status?	Employed	Count	66	438	918	1422
		% within What is your father/male guardian's current employment status?	4.6%	30.8%	64.6%	100.0%
	Other	Count	19	81	117	217
		% within What is your father/male guardian's current employment status?	8.8%	37.3%	53.9%	100.0%
Total	Count	85	519	1035	1639	
	% within What is your father/male guardian's current employment status?	5.2%	31.7%	63.1%	100.0%	

Mother's highest education degree and students' educational aspirations

Results from Gamma tests presented in Table 13 indicate a moderate relationship (0.269) between the mother's level of education and the child's educational aspirations (Table 12). Thus, the higher the mother's education level, the higher the educational aspirations of her child. The analyses for the study also yielded a statistically significant association between the mother's education level and the child's educational aspirations. Moreover, the "Approx. Sig." column shows a strong association between the mother's employment and her child's educational aspirations, with a statistically significance value (p-value) of .000, (i.e., $p < .0005$).

Table 13: Symmetric Measures

		Value	Asymptotic Standard Error ^a	Approximate T ^b	Approximate Significance
Ordinal by Ordinal	Gamma	0.269	0.041	6.300	0.000
N of Valid Cases		1639			

a. Not assuming the null hypothesis.

b. Using the asymptotic standard error assuming the null hypothesis.

Mother's current employment and students' educational aspirations

The results presented in Table 14 lend clear support for rejecting the null hypothesis, suggesting that

there is an association between the mother’s employment status and the child’s educational aspirations ($p < .001$).

Table 14: Cross-tabulation

Chi-Square Tests			
	Value	df	Asymptotic Significance (2-sided)
Pearson Chi-Square	16.413 ^a	4	0.003
Likelihood Ratio	15.189	4	0.004
Linear-by-Linear Association	7.262	1	0.007
N of Valid Cases	16.39		

a. 0 cells (.0%) have expected count less than 5. The minimum expected count is 16.39.

Cramer’s V results presented in Table 15 indicated a weak positive association (0.071) between the mother’s employment and the educational aspirations of the student (Cramer’s V = 0.094). As can be seen from the table below, it is clear that there is a weak association between the mother’s employment status and the child’s educational aspirations.

Table 15: Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	0.100	0.003
	Cramer’s V	0.071	0.003
N of Valid Cases		1639	

The results presented in Table 16 further showed that 64.1% of the students whose mother is employed aspire to complete a postgraduate or advanced degree, in comparison to those with unemployed parents (57.6%).

Table 16: Cross-tabulation

How far in education do you think you will go?						
		Secondary/ High school	Higher Diploma/ Bachelor	Postgraduate		
What is your mother’s current employment status?	Employed	Count	20	194	382	596
		% within your mother’s current employment status?	3.4%	32.6%	64.1%	100.0%
Housewife		Count	36	220	471	727
		% within your mother’s current employment status?	5.0%	30.3%	64.8%	100.0%
Other		Count	29	105	182	316
		% within your mother’s current employment status?	9.2%	33.2%	57.6%	100.0%

How far in education do you think you will go?				
	Secondary/ High school	Higher Diploma/ Bachelor	Postgraduate	
	Count	85	519	1035
Total	% within What is your mother's current employment status?	5.2%	31.7%	63.1%
				100.0%

Discussion

The main aim of this study was to identify the most salient predictors of Qatari students' educational aspirations. Using a representative sample of students from grades 8, 9, 11 and 12; the study used Social Cognitive Theory and Attribution Theory as a framework to assess the influence of personal and contextual factors on students' educational aspirations. Hypotheses relevant to this study included assessing the direct relationship between students' nationality and gender as personal factors, and their parents' educational and employment status as contextual factors. Relationships between these personal factors and educational aspirations were supported across all grade levels.

First, educational aspirations were associated with students' nationality in such a way that non-Qatari students were more significantly likely to pursue postgraduate or advanced studies than their Qatar counterparts, whereas they were less significantly likely to finish a Bachelor's degree. Second, there is an association between students' gender and their educational aspirations, with females reporting a significantly higher aspiration to pursue a postgraduate or advanced degree than their male counterparts. Additionally, significantly less females aspire to complete high school, compared to their male counterparts.

In regards to contextual factors, this study found a strong positive relationship between the father's education level and his child's educational aspirations. That is, the higher the father's education level, the higher the child's aspirations to pursue a post-secondary education degree. Therefore, the association between the father's education and the child's aspirations is statistically significant, while this same association did not hold as strongly between the mother's education level and her child's educational aspirations. Furthermore, there is a weak positive association between the father's employment status and his child's educational aspirations. Similarly, a weak positive association was found between the mother's employment status and her child's educational aspirations.

The importance of exploring education aspirations stems from the fact that they encompass the educational goals students set for themselves and their perseverance to pursue these goals. These goals are further associated with students' self-efficacy beliefs, or their self-appraisal of ability (Ansong et al., 2019; Bandura, 1997). Previous studies have also found a strong association between students' academic aspirations and academic achievement (Gutman & Schoon, 2018; Khattab, 2015). Drawing on the role that self-efficacy plays in organizing incoming information and translating it into behavior (Bandura, 1997), it may be postulated that self-efficacy beliefs are associated with educational aspirations, which

are further linked to academic achievement (Ansong et al., 2019). Future studies in the Qatari context are needed to confirm this association between educational aspirations and academic achievement, which will support a more comprehensive understanding of the factors influencing academic aspirations.

Similar to previous research, several factors influencing students' academic aspirations, are compounded by personal and contextual dimensions. The difference between Qatari and non-Qatari students corroborates with previous studies that propose a contextual approach is needed to account for the many possible influences of the environment upon students, including their educational aspirations (Agger, Meece, & Byun, 2018; Madeeha et al., 2022; Poynton & Lapan, 2017). Cultural influences were found in the form of family background and nationality. As Qatari families enjoy higher socio-economic status in comparison to non-Qatari families, the aspirations of Qatari students to pursue a postgraduate or advanced degree seem to diminish, comparatively speaking (Khattab et al., 2021).

Non-Qatari students may be cognizant of the need to obtain a postgraduate or advanced degree in order to secure future employment in Qatar or back home. The fact that they cannot remain in Qatar unless they have some form of employment may exacerbate this need, and further motivate them to have higher academic aspirations. It must be noted that this association between nationality and academic aspirations was relatively weak, which points to a positive outlook for Qatari students who also indicated their aspirations to pursue a postgraduate or advanced degree. According to *QNV 2030*, the large investments in education aimed to improve the quality of educational services, as well as the reform initiatives aimed to revamp its education system may be changing the outlook of many Qatari students towards education. There may be a shift in the way future Qatari generation perceives the importance of education, which emphasizes the need for continued efforts in this direction. Sustainable investments in education may lead to further shifts in perspectives among Qatari students, and perhaps translate into actions, whereby they take advantage of these privileges in choosing from a variety of possible careers, and even consider non-traditional, exploratory career paths (Khattab et al., 2021). Policymakers are, therefore, encouraged to take these results into consideration in planning for future investments in education.

Another personal factor found to influence students' educational aspirations is gender. Similar to other studies (Ansong et al., 2019), female students had significantly higher educational aspirations than their male counterparts. As self-efficacy influences boys' and girls' educational aspirations differently, then each could benefit from different intervention programs that address their psychosocial needs. It remains consistent that both genders would benefit from a school environment that offers them opportunities for career guidance activities and a place where they may begin to consider their future educational aspirations (Ansong et al., 2019). Accordingly, schools can play an active role in fostering greater interest and involvement of students in career-related activities and increasing their awareness of university degrees and diverse career pathways (Madeeha et al., 2022).

Additionally, our hypothesis that parents' social background affects the child's academic aspirations was accepted. When parents have a higher education level, they will be more familiar with schooling, which may allow them to offer their children more school-related support, thus influencing their academic aspirations. Accordingly, these parents would not only place a higher value on education but

would also exert more demand on their children to follow in a similar path. Further, highly educated parents tend to place greater emphasis on education and instill in their children the belief that education is necessary and important. Noteworthy in this study is the greater influence of the father's education level, in comparison to the mother's education level.

Therefore, school leaders and career counselors can benefit from taking this result into consideration when preparing career-related activities and events, specifically catering to the needs of students whose parents may not be highly educated or may be uncertain on ways to support their children into successful career pathways. They are also encouraged to strengthen their career programs by proactively coordinating their efforts with parents in order to assist students who require guidance on their educational and career plans (Ansong et al., 2019).

Given their crucial role in the teaching process and the role they play as "important significant others" (Van den Broeck et al., 2020) and the influence they exert on student's academic achievement (Hanson, Paulsen, & Pascarella, 2016), teachers stand to benefit from the findings derived from this study. They can use these results and draw on their expectations to enhance their teaching practices and accommodate the needs of students from different social, economic and cultural backgrounds. In doing so, they can develop a better understanding of students' demographic composition and can therefore be well informed to encourage them pursue their educational aspirations to attend higher education (Hanson, Paulsen, & Pascarella, 2016).

Limitations and future directions

This study sought to identify the factors that shape students' educational aspirations using data from the 2018 QES student survey. The QES survey was developed through a careful process involving focus groups and interviews with key educational stakeholders in Qatar (Sellami et al., 2017; Sellami, 2019). However, the factors explored in this study were limited and further analyses could be used to enhance our understanding of students' educational experiences. Given the quantitative nature of this study, the interpretation of the results could benefit from a qualitative follow-up with a sample of students who had high and low academic aspirations.

With regard to the analyses, it may have been possible to examine the contribution of other factors related to school type and academic achievement. This is a limitation because the predominant school type in this study is the publicly funded government school, which comprises the majority of the Qatari students in this sample. Finally, it may be difficult to compare the results of this study to those carried out in non-Arab countries, for a nation's social and cultural norms and values influence its education system (Barbour, Barbour, & Scully, 2008).

Nonetheless, the results of this study have provided important insights into the factors influencing Qatar students' academic aspirations. These results are important as they help to unveil and understand the individual and contextual factors that influence students' educational aspirations in Qatar. As such, they can be used to enhance student plans for higher education in this and similar other contexts. This study also raises several important questions that should be addressed by future research. For one, the cross-cultural factor needs to be re-examined. Although only a weak association was found between

Qatari and non-Qatari students' academic aspirations, future mixed methods studies may further explain these differences and provide a nuanced understanding of the cultural differences existing in Qatar. Other studies using case study methodology may further add to our understanding of the career aspirations of Qatari and non-Qatari students who attend the same schools.

In addition, other research methodologies, including qualitative designs and Q methodology, may also help explain the differences between male and female students. There has been some indication in the literature of the presence of a “boy problem” when it comes to academic success. However, whether there is a boy problem in educational aspirations requires further investigation. Lastly, there is a need for further studies which explore the difference between fathers' and mothers' education levels and employment status. While this study has found an association between these factors and students' academic aspirations, future studies could delve into the reasons behind the stronger influence of the fathers' education level and employment status in comparison to those of mothers.

References

- Agger, C., Meece, J., & Byun, S. (2018). The influences of family and place on rural adolescents' educational aspirations and post-secondary enrollment. *Journal of Youth and Adolescence*, 47(12), 2554–2568. <https://doi.org/10.1007/s10964-018-0893-7>
- Albion, P. R., & Spence, K. G. (2013). Primary Connections in a provincial Queensland school system: Relationships to science teaching self-efficacy and practices. *International Journal of Environmental and Science Education*, 8(3), 501-520. DOI: 10.12973/ijese.2013.215a
- Al-Misnad, S. A. (2015). *The dearth of Qatari men in higher education: Reasons and implications*. Washington, DC: Middle Easter Institute. <http://www.mei.edu/content/dearth-qatari-men-higher-education-reasons-and-implications>
- Ansong, D., Eisensmith, S. R., Okumu, m., & Chowa, G. A. (2019). The importance of self-efficacy and educational aspirations for T academic achievement in resource-limited countries: Evidence from Ghana. *Journal of Adolescence*, 70, 13-23. <https://doi.org/10.1016/j.adolescence.2018.11.003>
- Barhate, B., & Dirani, K. M. (2021). Career aspirations of generation Z : A systematic literature review. *European Journal of Training and Development*. <https://doi.org/10.1108/EJTD-07-2020-0124>
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84(2), 191-215.
- . (1986). The explanatory and predictive scope of self-efficacy theory. *Journal of Social and Clinical Psychology*, 4(3), 359.
- . (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman & Co.
- Beal, S. J. & Crockett, L. J. (2010). Adolescents' occupational and educational aspirations and expectations: Links to high school activities and adult educational attainment. *Developmental Psychology*, 46(1), 258-265. <https://dx.doi.org/10.1037/a0017416>
- Boxer, P., Goldstein, S. E., DeLorenzo, T., Savoy, S. & Mercado, I. (2011). Educational aspiration–expectation discrepancies: Relation to socioeconomic and academic risk-related factors. *Journal of Adolescence*, 34(4), 609-617. <https://doi.org/10.1016/j.adolescence.2010.10.002>

- Bursal, M. (2012). Changes in American preservice elementary teachers' efficacy beliefs and anxieties during a science methods course. *Science Education International*, 23(1), 40-55.
- DeWitt, J., Archer, L., & Osborne, J. (2014). Science-related aspirations across the primary-secondary divide: Evidence from two surveys in England. *International Journal of Science Education*, 36(10), 1609-1629. <https://dx.doi.org/10.1080/09500693.2013.871659>
- Fang, L. (2016). Educational aspirations of Chinese migrant children: The role of self-esteem contextual and individual influences. *Learning and Individual Differences*, 50, 195-202. <https://doi.org/10.1016/j.lindif.2016.08.009>
- General Secretariat for Development Planning (GSDP). (2008). *Qatar national vision 2030*. Doha, Qatar: General Secretariat for Development Planning. Retrieved from QNV2030_English_v2.pdf (psa.gov.qa).
- Gölz, N., & Wohlkinger, F. (2019). Determinants of students' idealistic and realistic educational aspirations in elementary school. *Zeitschrift für Erziehungswissenschaft*, 22(6), 1397-1431. <https://doi.org/10.1007/s11618-019-00916-x>
- Gutman, L. M., & Schoon, I. (2018). Emotional engagement, educational aspirations, and their association during secondary school. *Journal of Adolescence*, 67, 109-119. <https://doi.org/10.1016/j.adolescence.2018.05.014>
- Guo, J., Marsh, H. W., Morin, A. J., Parker, P. D., & Kaur, G. (2015). Directionality of the associations of high school expectancy-value, aspirations, and attainment: A longitudinal study. *American Educational Research Journal*, 52(2), 371-402. DOI: 10.3102/0002831214565786
- Hanson, J.M., Paulsen, M.B. & Pascarella, E.T. (2016). Understanding graduate school aspirations: The effect of good teaching practices. *Higher Education*, 71, 735–752. <https://doi.org/10.1007/s10734-015-9934-2>
- Khattab, N. (2015). Students' aspirations, expectations and school achievement: What really matters? *British Educational Research Journal*, 41(5), 731-748. <http://dx.doi.org/10.1002/berj.3171>
- Khattab, N., Madeeha, M., Samara, M., Modood, T., & Barham, A. (2021). Do educational aspirations and expectations matter in improving school achievement? *Social Psychology of Education*, 1-21. <https://doi.org/10.1007/s11218-021-09670-7>
- Madeeha, M., Khattab, N., Samara, M., Modood, T., & Barham, A. (2022): Explaining the educational aspirations-expectations mismatch among middle school students: the role of parental expectations, attitudinal and demographic factors. *Educational Studies*. <https://doi.org/10.1080/03055698.2022.2088228>
- Maltais, C., Duchesne, S., Ratelle, C. F., & Feng, B. (2015). Attachment to the mother and achievement goal orientations at the beginning of middle school: The mediating role of academic competence and anxiety. *Learning and Individual Differences*, 39, 39–48. <https://doi.org/10.1016/j.lindif.2015.03.006>
- McDonnough, J. T., & Matkins, J. J. (2010). The role of field experience in elementary preservice teachers' self-efficacy and ability to connect research to practice. *School Science and Mathematics*, 110(1), 13-23.
- Mitchell, J. S., & Gengler, J. J. (2019). What money can't buy: Wealth, inequality, and economic satisfaction in the rentier state. *Political Research Quarterly*, 72(1), 75-89. <https://doi.org/10.1177/1065912918776128>
- Poynton, T. A., & Lapan, R. T. (2017). Aspirations, achievement, and school counselors' impact on the college transition. *Journal of Counseling & Development*, 95(4), 369-377. <https://doi.org/10.1002/jcad.12152>
- Ridge, N. (2014). *Education and the reverse gender divide in the Gulf States: Embracing the global, ignoring the local*. New York, NY: Teachers College Press, Columbia University.
- Rojewski, J. W. (2005). Occupational aspirations: constructs, meanings, and application. In S. D. Brown and R. W. Lent (Eds.), *Career development and counseling: Putting theory and research to work* (pp. 131–154). Hoboken, NJ: John Wiley & Sons Inc.

- Sellami, A. (2019). Parental influence on student educational expectations: Results from the 2012 Qatar Education Study. *International Journal of Higher Education*, 8(4), 189-201. DOI: 10.5430/ijhe.v8n4p189
- Sellami, A. Kimmel, L., Wittrock, J., Hunscher, B., Cotter, A., Al-Emadi, A., & Al-Emadi, D. (2017). Factors shaping Qatari students' career expectations in STEM, business, or public sectors fields. *Eurasia Journal of Mathematics, Science and Technology Education (EJMSTE)*, 13(10), 6491–6505. ISSN: 1305-8215 (print), 1305-8223 (online). DOI: 10.12973/ejmste/77043
- Schmitt-Wilson, S. & Faas, C. (2016). Alignment of educational and occupational expectations influences on young adult educational attainment, income, and underemployment. *Social Science Quarterly*, 97(5), 1174-1188. <http://dx.doi.org/10.1111/ssqu.12244>
- Stasz, C., Eide, E. R. & Martorell, P. (2007). *Post-secondary education in Qatar: Employer demand, student choice, and options for policy*. Santa Monica, CA: RAND Education.
- Trebbels, M. (2014). *The transition at the end of compulsory full-time education. Educational and future career aspirations of native and migrant students*. Wiesbaden: Springer VS.
- . (2015). *The transition at the end of compulsory full-time education: Educational and future career aspirations for native and migrant students*. Wiesbaden: Springer. DOI: 10.1007/978-3-658-06241-5
- Van den Broeck, L., Demanet, J., & Van Houtte, M. (2020). The forgotten role of teachers in students' educational aspirations. School composition effects and the buffering capacity of teachers' expectations culture. *Teaching and Teacher Education*, 90, 103015. <https://doi.org/10.1016/j.tate.2020.103015>
- Vryonides, M. & Gouviyas, D. (2012). Parents' aspirations for their children's educational and occupational prospects in Greece: The role of social class. *International Journal of Educational Research*, 53, 319-329. <http://dx.doi.org/10.1016/j.ijer.2012.04.005>
- Weiner, B. (1972). Attribution theory, achievement motivation, and the educational process. *Review of Educational Research*, 42(2), 203-215.
- . (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573. DOI: 10.1037/0033-295X.92.4.548
- Widlund, A., Tuominen, H., & Korhonen, J. (2018). Academic well-being, mathematics performance, and educational aspirations in lower secondary education: Changes within a school year. *Frontiers in Psychology*, 9, 297. DOI: 10.3389/fpsyg.2018.00297

تصريحات ختامية:

- يصرح المؤلف/ المؤلفون بالحصول على موافقة الأشخاص المتطوعين للمشاركة في الدراسة وعلى الموافقات المؤسسية اللازمة.
- تتوفر البيانات الناتجة و/ أو المحللة المتصلة بهذه الدراسة من المؤلف المراسل عند الطلب.

Final declarations:

- The authors declare that they got the required voluntary human participants consent to participate in the study as well as the necessary institutional approvals.
- The datasets generated and/or analyzed during the current study are available from the corresponding author upon reasonable request.