Routledge
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Assessing the impact of socio-economic inequities on college enrolment: emerging differences in the United Arab Emirates

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As the United Arab Emirates diversifies its economy towards knowledge-based industries, maximising the participation of the national workforce, particularly women, in the science, engineering and technology fields is of utmost importance. To accomplish this, identifying the factors that lead students to select their degree programme, as well as forming a deeper understanding of societal dynamics in the United Arab Emirates is needed. This paper studies how socio-economic status affects female students' enrolment in science, engineering and technology fields. Using surveys and semi-structured interviews, we find that motivations for entering science, engineering and technology fields differ such that women of higher socio-economic background have greater interest in studying non-science, engineering and technology fields. This is attributed to a confluence of factors related to status attainment, employment expectations, family connections and perceptions of science, engineering and technology fields. It is important that variations in socio-economic status be accounted for when devising policy recommendations to successfully integrate different segments of the society into science, engineering and technology fields.

Keywords: science, engineering and technology (SET); socio-economic status (SES)

Introduction

The United Arab Emirates (UAE) has achieved impressive development in the last three decades, mostly driven by the abundance of its natural resource endowments of oil and gas, allowing it to reach a level of income per capita comparable to that of most industrialised nations. The country's non-oil sector is also slowly expanding, predominantly due to the development of Dubai as a global centre of tourism and trade (Gallup, 2010). However, for the UAE to reach its recently stated goal of becoming a knowledge-driven economy and to sustain this rapid growth, the availability of a highly qualified national workforce is essential. In particular, the development of strong local capacity in the science, engineering and technology (SET) fields is required.

Without doubt, the UAE has accomplished worthy goals with regards to education, considering that just 50 years ago, there were almost no formal schools in the country (Al Fahim, 1995). The high literacy rate, almost 90 per cent, is a major national achievement, especially given the high share of youth in the UAE population (Government of Abu Dhabi [GAD], 2008). Also, the share of women entering higher education is among the

highest in the world (Fergany, 2005) and women's further integration into the workforce has consistently increased over the past two decades.

However, several challenges remain. Emirati nationals are a minority in their own country, only 20 per cent of the population (UAE Ministry of Economy, 2008). There has been a heavy reliance on the use of expatriates as knowledge workers to support the growing economy (Al Rostamani, 2004), as nationals have commonly been viewed as lacking necessary skills to drive the ambitious development plans being undertaken by the Government (Al Waqfi & Forstenlechner, 2010). This has been attributed to an educational system that does not sufficiently focus on developing the skills needed for new industries (Al Dosary & Rahman, 2005). Moreover, the UAE labour market is segmented, with the vast majority of the Emiratis working in the public sector (Hafez, 2009). The private sector has been reluctant to employ Emiratis as a result of negative perceptions of their productiveness, greater salary expectations as compared to immigrant workers (Nelson, 2004), lack of skills, and insufficient motivation towards hard work ('Labour market problems threaten relations', 2007). Davidson (2009, p. 149) goes so far as to describe the national workforce as being 'wholly accustomed to material benefits and no forms of extraction'. Knowledge production in the UAE is also insubstantial despite the high level of education attainment (United Nations Educational, Scientific and Cultural Organization [UNESCO], 2009). Additionally, despite women being the majority of those educated at the tertiary level (UNESCO, 2009), this has not translated into careers when they graduate, as their participation in the workforce remains low, around 28 per cent (UAE Ministry of Economy, 2008).

Given the aforementioned challenges, the current drive to engage into a sustainable transformation process requires further development of the UAE's intellectual capital in the SET fields. A low supply of national high-calibre SET graduates is a barrier in the economic transition process, hampering the ability of Emiratis to take ownership of their own innovative processes (Hays & Farhar, 2000). As such, macro-level strategic discussions about the UAE's industrial diversification would be misguided without a deeper analysis of the underlying cultural and social factors which influence the development of human capital in the country.

To this end, we conducted research on how best to expand women's participation in the UAE higher education and labour market, emphasising their contributions in SET fields (Ghazal Aswad, Vidican, & Samulewicz, 2011; Samulewicz, Vidican, & Ghazal, 2011; Vidican, Ghazal Aswad, & Samulewicz, 2011). Further analysis revealed the varying influences of family background on students' educational preferences, leading us to hypothesize that students of higher socio-economic status (SES) would be more likely to prefer non-SET fields than those from lower SES. This pattern is quite unlike what is found in the literature originating from Western societies, where women from higher SES groups are said to be more likely to make non-traditional educational choices such as the sciences, architecture and engineering (Gruca, Ethington, & Pascarella, 1988; Wernersson, 1991; Windolf, 1995).

Therefore, in this paper we address the following research question: How does SES influence Emirati women's decision to enrol in SET disciplines? We also seek to examine how education-related policies and programmes should be tailored to attract Emirati women of different socio-economic backgrounds to the SET fields. Understanding the context shaping women's choices regarding education and career, and subsequently adapting mainstream policies to the specifics of the local environment, is pivotal to successfully expanding the participation of all segments of society, especially women, into the economy.

Our findings point to a complex set of factors relating to employment expectations, family connections, perceptions of SET fields, as well as the recent focus of Emiratisation initiatives (UAE Government's policy to provide employment opportunities for young Emiratis and replace the expatriate workforce with UAE nationals), in determining how female students from varying socio-economic backgrounds come to choose their educational paths.

Literature review

The underrepresentation of women in SET fields is not a new topic in science policy research. However, the influence of SES on preventing or encouraging young talented students to enter SET fields remains relatively unexplored. Moreover, existing studies oftentimes show contradictory evidence on this relationship (Erebus International, 2005). SES is used to measure a person's relative economic and social ranking, through variables related to parents' highest education level, family income, parental occupation and the status associated with their occupation (Brown, Fukunaga, Umemoto, & Wicker, 1996). The participation of women, in particular at the university level, is expected to be strongly related to their SES, even more so than at the high school level (Stromquist, 1989).

Previous studies predominantly revolve around the conclusion that lower SES disadvantages students in terms of achievements in mathematics, science and language fields (Hogrebe, Kyei-Blankson, & Zou, 2006; Marks, 2007). For instance, analysis of international tests like TIMSS (Trends in International Mathematics and Science Study) indicates that family background in terms of income is a powerful determinant for student performance (The Royal Society, 2008), with lower family income correlating to a lower academic accomplishment. These differences are found to emerge from inequalities in the quality of resources of schools servicing lower SES students (Biddle & Berliner, 2003) or as a consequence of the contextual effects of social segregation in society (Bankston & Caldas, 1998).

SES also plays a role in students' preferences towards certain fields of education over others. Women from higher SES groups are said to be more likely to make 'atypical' educational choices (Gruca et al., 1988; Wernersson, 1991), such as careers in the sciences and engineering, which are usually identified as masculine occupations (Kulik, 1997; White, Kruczek, Brown, & White, 1989). For example, a study in England found that science undergraduates at university come prevalently from high SES backgrounds (The Royal Society, 2008). This could be due to greater parental support, varying academic standards of schools attended, as well as the factor of social selection (Shuttleworth & Daly, 1997). The educational status of parents in particular is an influential factor in the relationship between SES and programme choice (Sadker & Sadker, 1994). For example, American working mothers of higher educational background are more likely to encourage their children to enter technical and science fields than unemployed mothers. This has been attributed to their children performing better in education because of the provision of cultural capital from their parents, as well as the higher expectations their parents have of them (Kalmijn, 1994; Khazzoom, 1997). However, literature is at times contradictory, with other studies finding that children of lower SES actually have more positive attitudes towards science (Breakwell & Beardsell, 1992). Moreover, a study done in Israel shows that students of lower SES are more likely to choose computer science and engineering professions that those of higher SES (Dar & Getz, 2007). Moreover, Butler (2004) finds that ethnic and racial background, as a component of SET, also affect college entry. For instance, Asians have been found to prefer medical degrees, engineering or mathematics

compared to their white colleagues (Modood, 1993; Taylor, 1993). However, most studies on the effect of SES on students' educational preferences have focused on Western countries, while research on other ethnic groups, such as those within the Middle East and North Africa region, has been limited. Existing research on MENA (Middle East and North Africa) relies mostly on secondary data conducted at the pan-Arab level, and has not examined in greater detail Arab women's participation in SET. In effect, little has been published on a country-level basis on the factors that affect Arab women's decisions regarding their educational choices. Therefore, it is our belief that a more informed perspective is needed to better understand how the SES of women in the Arab world shapes their views on SET programmes. Similarly to other countries, secondary statistics in the UAE show that the majority of female students are enrolled in social sciences, arts or business administration fields, while engineering and science-related fields are still dominated by men (Nelson, 2004; UAE Ministry of Economy, 2006). Our study explores the reasons behind this trend in greater depth, in particular the influence of SES on female students' enrolment in these fields. Based on the literature and our preliminary analysis, we hypothesize that an inverse relationship exists between SES and SET preference.

Methodology

We used both qualitative and quantitative research methods to explore the dynamics behind women's participation in SET fields. The primary method of data collection was a 66-item questionnaire, designed to include multiple choice, 5-point Likert-scale and open-ended questions on the issues of interest, based on a dynamic skip-pattern approach for the responses. The surveys were distributed online, during the months of March to May 2010. In selecting our sampling frame, we included the main federal universities in the country, as well as the flagship private universities of each Emirate. A total of 17 university campuses participated in the study.

Our study is based on a non-probability sample, due to restrictions in public access of student identifications. Hence we generalise our results only to the sample. However, we believe our sample closely resembles the population of female students in tertiary education in the UAE, as a result of its diversity in participating universities, geographic location and the variety of departmental specialisations included. Approximately 2600 female students took part in our study, with 46 per cent of them from SET fields. The majority were Emirati, single, between the ages of 20–25 and from middle income backgrounds. In this paper we will focus on findings specific to Emirati female participants, a sample of 984 students.

To further elaborate on our findings, data was also gathered by semi-structured interviews with an 'expert sample' in the months of May and June 2010. A total of 17 in-depth interviews were conducted in person with Emirati female engineers working in industry, university administrators, NGO (non-governmental organization) representatives, educational policy makers, researchers on the UAE labour market, as well as academics working on Emiratisation and other contemporary issues of concern in UAE society. The discussions were guided by an interview protocol, tailored according to the educational background and experience of the interviewee. Interviews were recorded, transcribed, coded, and analysed using NVivo software (QSR International). This allowed us to engage with collected data in a structured way to find patterns and relevant themes. We then read the data and re-positioned the themes within the context of discourses covered (Davies, 1994), later testing our hypotheses in a consistent manner across the different population groups.

Results

Considering the importance of family culture as a critical part of the societal structure in UAE (Gallant & Pounder, 2008; Shono & Smith, 2006), we examined the relationship between the socio-economic background of female students and their choice of educational programme. This is done in order to shed light on structural advantages or obstacles faced when entering tertiary education, in particular as reflected in SET choice. We measured SES using two indicators of observable family background: educational attainment of each parent and family income. Students were asked to identify their family as low, middle or high income. They were also asked to identify the highest educational level of each of their parents separately, as either illiterate, preparatory, elementary, secondary, diploma, higher diploma, Bachelor's, Master's or PhD. We looked into the programmes that students are currently enrolled in (revealed preference), as well as other items which indicate students' interest in and attitudes towards SET fields (stated preference).

Our results showed some intriguing patterns. For Emirati respondents, we found a statistically significant relationship between the declared family income and the students' likelihood of entering SET fields ($\chi^2=6.255$, df=2, N=984, p=0.044). Students who considered themselves from low or middle income families were equally likely to enter either an SET or non-SET field. However, students from wealthier families were more likely to study in a non-SET field (see Figure 1). In fact, among the Emirati population in our sample, only 35 per cent of high income respondents were currently enrolled in an SET field, as compared to 50 per cent of middle income students. Stated preferences also corroborated this, with students from high income backgrounds being twice as likely to disagree that they had an interest in becoming a scientist, technologist or engineer as compared to students from less advantageous backgrounds ($\chi^2=7.237$, df=2, N=984, p=0.027).

Furthermore, Emirati students whose mothers were more highly educated were actually significantly less likely to be interested in becoming an SET professional ($\chi^2=28.525$, df=8, N=984, p=0.000) (see Figure 2).

In considering the reasons behind these findings, a greater comprehension of the diversity of UAE society is required, in particular its non-homogenous nature. Though we cannot determine all sources of this heterogeneity, gross domestic product per capita by emirate certainly points to significant income disparities between the seven Emirates, as shown in Table 1. Additionally, family background is an influential factor in the differing motivations informing students' study selection. In the case of the UAE, prosperous families built
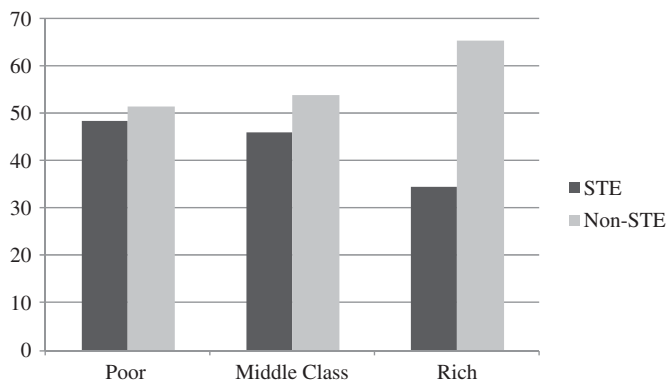

Figure 1.   Emirati students enrolled in SET fields according to family income (N=984).
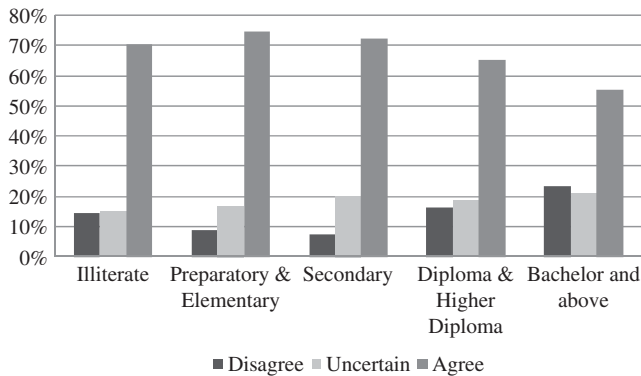
Figure 2.   Emirati students' interest in becoming an SET professional, by mother's educational level (N=984).

Table 1.   Gross domestic product per capita by emirate (2001–2006) in UAE Dirham

Emirate	2000	2001	2002	2003	2004	2005	2006
Abu Dhabi	143,161	128,407	131,496	152,067	172,386	204,821	251,397
Dubai	70,997	69,576	68,660	74,026	83,691	106,132	123,017
Sharjah	39,374	41,401	39,874	43,170	49,501	44,985	52,177
Ajman	26,013	25,951	27,079	28,952	33,844	28,831	35,382
Umm al Qaiwan	34,268	34,262	36,803	39,411	45,815	41,490	49,960
Ras al Khaimah	34,941	35,898	37,090	40,992	48,179	44,057	51,981
Fujairah	34,989	37,280	37,015	40,476	47,250	46,008	53,808

Source: International Monetary Fund (IMF) (2007).

their wealth and access to oil revenues through maintaining relations with political elites and members of ruling families (Al Mezaini, n.d.). The UAE Government offered material largesse (income, land and privileges) to loyal supporters of the rulers of each emirate, whereas less well-connected families did not receive such advantages (Al Mezaini, n.d.; Peterson, 2001). The power of these family connections, especially at the upper echelons of society, cannot be under-estimated, considering that 'the degree of influence of your "wasta" (connection) determines your political, economic and social status in the state . . . In other words, the closer you are to the ruling families, the better off you are' (Al Mezaini, n.d., p. 16). As Peterson (2001) states, one of the main advantages of coming from such families is the substantial family support afforded to young family members, in terms of authority, power and wealth to affect their children's employment prospects in both direct and indirect ways. Gaining higher positions in the workforce is expected to be easier for those with further reaching connections, in a world where 'nepotism is often evident in selecting upper-level managers, but qualifications are emphasized in the selection of middle and lower-level personnel' (Abbas, 1990, p. 16). This argument is also supported by commentary collected in our qualitative interviews:

> Wasta is a big thing to get the right public sector job. Where this really hits people is outside of Dubai and Abu Dhabi when you are from the wrong Emirate. They are never going to rise above a certain level in that structure because they are not from the right Emirate or family. That is not only a case of wasta, but also . . . are you the right kind of Emirati?

Therefore, based on evidence to be detailed further, it is our expectation that wealthier students, although certainly in need of degrees to ensure employment, can rely on their family connections to find high-placed positions, regardless of their major, while lower income students are in greater need of a 'strong' scientific degree to secure job positions available in the market, as indicated by our qualitative interviews:

> Rich girls are not in need of engineering [to get a job], unless she really has a passion for engineering or she is after the title.

> They [lower SES female students] have more motivation to succeed because they come from lower income families. They need this education to get better jobs.

Moreover, as a result of Emiratisation, Emirati graduates are being promoted rapidly into managerial and leadership positions left empty as non-nationals are phased out (Gallant, 2006). Such positions are expected to be easier to achieve should you be from the 'right' Emirate or family, further directing the attention of wealthier students to such fields. On a more general level, evidence from our qualitative interviews suggests that Emiratisation initiatives are inadvertently pulling students towards non-SET fields. The low enrolment in SET fields is therefore being fuelled by the fact that Emiratisation quota targets are directed at service sector industries and administrative positions, rather than professional and technical jobs. Shah (2006) also made general remarks about how the success of Emiratisation in some sectors may be counterbalanced by 'a disproportional influx in some other sectors'. As an interviewee explained:

> They want an industry that will attract Emiratis. There are general quotas for every industry, but they really focus on financing, banking and human resources. There are not enough graduates with engineering skills to enforce quotas there . . . students [don't enter engineering because they] have too many other alternatives right now.

Our expectation is that one of the main reasons behind the greater preference of privileged Emirati students for non-SET fields is that these are viewed as more likely to lead to positions of leadership, such as managerial or administrative positions, or other entrepreneurial and self-employment prospects. This was also evident from our survey data; when asking students to look into their future and outline how they envisaged their ideal career to be, high income students were far more likely to cite their wish to be a business woman (10 per cent as compared to 1 per cent), to work in banking (38 per cent as compared to 15 per cent) and to generally work in a non-SET field (68 per cent as compared to 51 per cent) than middle income students.

Data from our survey also indicated that one of the reasons behind the greater incentive to enrol in SET among students of lower socio-economic background was due to this group of students having a greater motive to work and establish a career for themselves. The greater need to earn a degree which would guarantee a stable livelihood was evident among students of lower SES. When asking Emirati students whether they believed it to be worthwhile to pursue college or graduate studies even if they did not plan to enter the workforce, low income students were significantly more likely to disagree to this compared to high income students (84 per cent as compared to 62 per cent), indicating that for them education has more of an instrumental value in guaranteeing work, as opposed to the more intrinsic view of education held by wealthier students (χ^2=11.613, df=4, N=984, p=0.020). Moreover, when asking students who planned to work the reasons their parents supported/did not support their plans for employment, middle income students were more

likely to state the need to support themselves and their family as compared to high income students (χ^2=39.511, df=18, N=293, p=0.020).

Additionally, low income students were more likely to have selected their educational programme based on the perception that these fields were in demand in the job market than their wealthier counterparts and this also was especially true among SET students, although these differences were not statistically significant in our sample. Our qualitative analysis also indicated that students from less privileged families had a greater expectation of their need to rely on 'strenuous' work and study to succeed in their careers, with SET more likely to be perceived as a way of achieving this end, as shown by excerpts from our interviews below. The awareness of their greater necessity for qualifications in order to gain respectable job positions was more palpable among these students:

> Engineering is connected to hard work and longer years of study. Why would a rich girl want to put herself through that? Give herself a headache? Rich girls are not in need of engineering [to get a job], unless she really has a passion for engineering or she is after the title.

> Sadly, SET fields have become linked to 'kadeh' [Arabic word for exhausting labour or toiling hard]. We do not have knowledge for the sake of knowledge. We have the principle of: If you want a job, go to university.

> Gaining those skills [those needed in the SET fields] is a big investment, in time if not money. That is why a lot [of wealthier Emiratis] will take the easier way through your four year degree and be done. You don't get a lot of engineers, as an engineer you constantly have to keep your skills up throughout your career. You are always being tested. They think 'why should I invest in that kind of career where I am constantly going to be pushed, when I can spend four years and get a degree in something soft, English literature, Arabic literature and get a place in the government?'

The association of SET fields with difficult or demanding work, indicated in the quotes above, was also clearly apparent throughout our survey analysis. In order to better comprehend students' views of SET fields, several items in our survey related to unearthing students' perceptions of SET careers. Our results predominantly underlined the connection between SET fields and 'hard work', with the discernment of SET fields as 'stressful/challenging/a struggle' being the premier discouraging aspect of SET fields (37 per cent). On the other hand, literature on the topic indicates that Emiratis tend to view administrative posts as 'easier' than technical careers (Al Faris, 1991; Elhussein, 1994; Elhussein & Elshahin, 2008). We also found that high income students were more likely to complain of the difficulties they would face working in the field (15 per cent as compared to 6 per cent) and the stressful work load and the time away from leisure (40 per cent as compared to 31 per cent) than low income students. Over all, we found that students from low income backgrounds were reputed to be more willing to face the perceived difficulties of the SET fields than their wealthier counterparts, as well as owning a higher work ethic, as indicated by the following remarks:

> The girls coming from Ras Al Khaimah and Fujairah [poorer regions], they work really hard. They are probably the majority of students in . . . the IT College, Medical School and Engineering. They work really hard.

> Women from the North: Poorer regions. More necessity. More motivation. We see this even in the classes. My National research assistants, they are all from the North.

> The poorer students are so motivated to work that you will probably see from them innovation and creativity in the SET fields.

Emirati girls from very wealthy families are typically lazy, even though their fathers or mothers would be pushing them to study. They like enjoying their time.

One of the principal motivating factors towards enrolment in SET fields for students of lower socio-economic background was the quest for status. Generally, factors such as the desire for control, prestige and power are said to enter more predominantly into women's choice of quantitative fields of study than for men (Ethington, 1988; Graham, 1997). Our results indicate that this is especially applicable to the lower socio-economic strata of participants. In fact, they were the only ones in our sample to cite having been attracted to enter into SET fields because of the prestige, 'high' culture and position associated with SET, as well as the only ones to cite those same reasons as the most rewarding aspects of being in the field (11 per cent). These views also extended to the family; when asking students the rationale behind their parents support of their higher education, those whose mothers were less educated were significantly more likely to cite the motive of status attainment than their counterparts with more educated mothers (χ^2=42.984, df=20, N=984, p=0.020). The social development potential brought about by being in the SET fields was observed to be a strong pull towards enrolment. Although traditionally status in the Arab world has been ascription oriented, determined largely by family background (Trompenaars & Hampden-Turner, 2004), this seems to be in a state of transition as the customary definitions of social class in the society move from an intrinsic position to one which can be attained. For students of less well-off families, the potential of a degree in the SET fields as a venue to increase their social status and position in society was evident:

For the poor students, engineering guarantees a job with a high salary, as well as the title of being an engineer. So she would be improving her situation.

[I was attracted to] the social prestige of engineering.

By being an engineer, you become part of the high class community.

A person who specialises in this area is well positioned in society.

These fields have a lot of importance nowadays and hence give you the opportunity to pursue highly respectable careers.

Moreover, a look into the forms of address used in the region opens a window into the socio-cultural context of the society, allowing us to identify through verbal behaviour the views and practices of the society (Afful, 2006). In the Arab world, occupation-bound terms are quite common, such as the etiquette of calling an engineer ('Mohandes') or doctor by their job title, rather than the first or second name. Students of lower SES demonstrated a keen awareness of this factor in their responses:

[I want] the title of 'engineer'.

The glory of being called an engineer after graduating.

The title, honestly.

When you graduate and they start calling you an engineer.

Nice to call me Engineer!

Being called an engineer and having the upper most respect from everyone.

The current analysis shows that a wide range of indicators of SES support the view that students of higher socio-economic strata have less inclination to enrol in SET fields. This is attributed to a confluence of factors related to status attainment, employment expectations, family connections, perceptions of SET fields, as well as the recent focus of Emiratisation initiatives. It is important that these variations in SES be taken into account when devising policy recommendations to successfully recruit and integrate different segments of the society into the SET fields. Such differences in students' preferences with regards to SET education may hold considerable practical and theoretical significance for those concerned with social equity in educational fields, as well as in the labour market, which we discuss in the next section.

Concluding discussion

To capitalise fully on the development process towards a knowledge-based economy, a broader involvement of the UAE population in the locally emerging SET fields is critical. The current study illustrated how SES impacts students' aspirations and intentions regarding higher education, allowing for appreciable social stratification in SET enrolment in the UAE. The observed lower participation of women in SET fields is expected to be even more pronounced among students of higher income families. Cultural, social and geographic dimensions in the UAE play a large role in understanding student's educational placements. For instance, the ability of students with high SES to rely on their family's economic and social capital when looking for job placements, may allow for less instrumental value to be placed on educational degrees. Furthermore, the elite image of 'high' culture and prestige associated with the professional attainment in the engineering field may encourage students of lower SES to enter into more scientific or professional directions in their field selection.

Moreover, the stratification of educational preferences of students according to SES may have undesirable implications on social class diversity in the SET labour market. Drawing income-privileged women to the SET profession is not only a policy concern, but would do much to ensure social equality in these fields. Literature also suggests that greater diversity allows for enhanced innovation (Lising, Chang, Hakuta, Levin, & Milem, 2004; Page, 2007; Paul, McElroy, & Leatherberry, 2011), and that the importance of diversity is heightened in the fields of science and engineering (*Grutter v. Bollinger et al.*, 2003).

Certainly, achieving greater enrolment of students from higher socio-economic backgrounds in SET fields would present a major challenge for education policy. A re-assessment of selection procedures at universities, although certainly a bold stride, could help address this sensitive issue. Initial steps in this direction would be the monitoring of participation rates of higher education students from all socio-economic backgrounds. Calling out for universities to raise the enrolment of students from socially-advantaged backgrounds in SET fields, clearly articulating the educational case for diversity, would be of benefit.

Furthermore, the UAE Government would be advised to put greater effort in devising policies to prevent lower SES students from facing social disadvantages as a result of the preferences of elite groupings in the society. This would allow students to make educational choices based on the expectation that their skills will be recognised, regardless of family connections and position. Additionally, stereotypical views of SET fields, such as those of it being particularly difficult and stressful, need to be addressed. Greater awareness of the myriad of career opportunities in SET fields, and ways in which they help in propagating

the country's interests, would need to be cultivated. Such initiatives may aid in ameliorating the imbalances in educational participation in the SET fields.

Until now, few research studies have focused on the impact of SES on educational aspirations of students in the Arab world, particularly in such transitional societies. This study certainly contributes further to understanding the vastly differing motivators and situational circumstances of female students in UAE. Further areas for more detailed study include the influence of pre-tertiary schooling, as well as parental occupation, on students' educational enrolment. Comparative studies in other regions of the Gulf examining this topic would help to find whether patterns found in our study are replicated elsewhere.

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