SHEIKH SAUD BIN SAQR AL QASIMI
FOUNDATION FOR POLICY RESEARCH

Patterns and Perceptions in Male Secondary School Dropouts in the United Arab Emirates

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Working Paper 03

Feburary 2013

Abstract

The impact of socioeconomic status, family, and school experiences on the school continuation decision has been well-documented in Western literature. To date, however, no empirical studies have been conducted on the Gulf region. Using a sample of 149 dropouts and 347 non-dropouts, this study is the first to apply a mixed-methods comparative design to explore the patterns and trends in male dropout rates across government schools in the United Arab Emirates (UAE). Importantly, the study finds that the effect of teachers on a student's decision to stay in school can be as strong as family influences. Consistent with previous literature on other parts of the world, dropping out in the UAE is associated with low socio-economic background, poorly educated and/or uninvolved parents, and de-motivating school experiences marked by unsupportive teachers and disruptive peers

Keywords: *dropouts, education, teacher quality, parental involvement, socioeconomic status*

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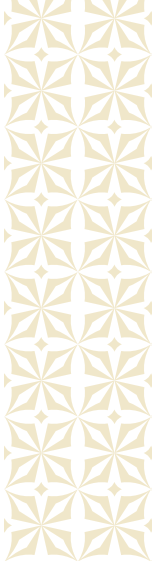
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Introduction

The United Arab Emirates (UAE) is a rapidly developing hydrocarbon-based economy, which has only existed as a national entity since 1971. Great strides in development have been made in the last 40 years, in particular in achieving universal enrollment in education and the rapid growth of a large higher education sector (Baghat, 1999; Sulaiman, 2000). As the per capita income has increased in the UAE and educational access expanded, however, issues with retention have become pronounced. Across the UAE boys are dropping out of secondary school at rates of up to 20% in a single year, which has prompted concern and interest in understanding why males are leaving school at 18% higher rates than females (KHDA, 2010).

This paper is based on a research study sponsored by the Emirates Foundation called "Patterns and Perceptions in Male Secondary School Dropouts in the United Arab Emirates." The study included both dropouts and non-dropouts from across the UAE. To date, there has been no systematic study looking at dropouts, and the poor retention rates of males have been explained by policy makers and academics alike as resulting from the high public sector salaries, which are characteristic in rentier states. However, this study finds that far from being pulled out of school by the lure of employment in the public sector, dropouts in the UAE are similar to dropouts in countries across the world. They come from low socio-economic backgrounds, have poorly educated parents who in turn are unable to be involved in their education, and have been attending schools marked by teachers of poor quality. The findings of this study will allow policy makers in the UAE to better address the problem of male dropouts through focusing on the actual underlying issues rather than relying on anecdotes and stereotypes.

Theory & Background

The phenomenon of dropping out of secondary school is a global issue that has been found to have negative effects on students, their families, and society overall. In a literature review conducted by USAID (2011) of 40 studies of dropouts across the United States (US), Organisation for Economic Co-operation and Development (OECD) countries, and developing countries, four primary domains were identified that impact a student's decision to drop out of school – the individual, the family, the school, and the community. *Table 1* in Appendix A illustrates the findings for all domains, except for the community, which had no significant impact on students' decisions to dropout.

Interestingly, there were observed differences in the types of factors that affect US and OECD countries, as opposed to developing countries. Consistent with other studies, the most significant factor in the developing world is the socioeconomic status of the family, followed by the level of education of the parents, and the health of the student. In the West, however, the most critical factors in determining whether a student drops out or not are within the individual domain: academic achievement (81%), low attendance rate (69%), retention (50%), (mis)behavior (50%), and interest in or commitment to school (56%). Other relevant factors are family-related such as low socioeconomic status of the family (50%), living in a single parent household (38%),

and social mobility (38%). These differences, therefore, indicate that although the reasons for dropping may not necessarily be the same across countries, the decision to leave school is based on a cumulative process influenced by a number of interrelated factors (USAID, 2011). This section will review the literature on the three primary areas - an individual's academic and social characteristics, family background, and the school – that determine a student's decision to drop out of school.

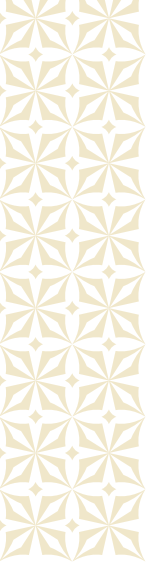## Individual Academic & Social Characteristics

Literature from Western countries finds that one of the main factors contributing to whether a student will drop out of school relates to the individual characteristics and experiences of the student in and outside of school. This includes their academic performance, retention, absenteeism, participation and engagement, motivation, as well as their social interactions with peers.

Students who drop out from school have been found to have markedly different characteristics from those who stay in school. As represented in Croninger and Lee's study (2001), they would have repeated at least a year at school, have been kicked out of class and had parents called for misbehavior, had an average of less than a C in middle school, and had no expectation to graduate from secondary school.

Of all the factors that impact a student's decision to opt out of secondary school, an overwhelming number of studies from Western countries find that poor academic achievement is the strongest determining factor (Lee and Burkam, 2003; Hunt, 2008). According to Finn (1989), poor academic performance is correlated with a number of other factors such as absenteeism and disruptive behavior. Over time, the lack of academic engagement of students can also lead to low self-esteem and low educational expectations (Hammond et al., 2007). According to a review of literature (Rumberger and Lim, 2008) on why students in California drop out from school, 33 out of 41 studies state that students with higher educational expectations or ambitions had lower dropout rates than other students who did not have such goals for their future.

In the long term, however, low attendance (Christle et al., 2007) and retention (Hammond et al., 2007; Lyche, 2010; Rumberger and Lim, 2008) are also strongly linked to dropout rates. In a meta-analysis of the literature, Hammond et al. (2007) find that the effects of repetition on dropping out increase exponentially with every additional year that a student repeats. The relationship between retention and dropping out has also been attributed to the age of the student (Rumberger and Lim, 2008), whereby students that are over-age are more likely to drop out from school than their younger counterparts.

Social behavior is also a factor that has been linked to why students choose to drop out of school. In a review of 75 dropout studies, the National Dropout Prevention Center in the US found that at the secondary level, having friends who are at risk of dropping out and engaging in negative social behavior, among other factors, increases the likelihood of dropping out (USAID, 2012). Similarly, according to Rumberger (1987) students at risk of dropping out are likely to be encouraged to drop out if they engage with students who have already left school.

Family Background

Literature from both developing and developed countries finds that the family also plays a significant role in determining whether or not a child stays in school (Rumberger, 1995; Hunt, 2008; USAID, 2012). Studies have identified a number of factors within the context of the family that shape the social and academic lives of young adolescents at school. They include family income, socioeconomic status, level of parents' education, number of siblings and whether any had dropped out from school, and family structure (whether children live in single-parent homes or not) (Rumberger, 1995; Hunt, 2008; USAID, 2012).

Socioeconomic status is one important universal trait determining a student's decision to drop out from school, with findings in *Table 1* (Appendix A) illustrating its impact both in developed and developing countries (USAID, 2012). This is corroborated by Croninger and Lee's results (2001), which found that students from low-income or single-parent households are more likely to opt out of school than any other students. Other studies further suggest that children from families with single parents or stepmothers (which is also linked to lower socioeconomic status), are less likely to find the family encouragement and support they need to keep them in school (Christle et al., 2005; Rumberger, 1987).

Further studies have linked parents' education with their children's academic achievement, retention, and likelihood to drop out from school (USAID, 2012; Maurin and McNally, 2008; Carneiro, Meghir, and Matthias, 2007; Lyche, 2010). Tansel (1998) found that the higher the level of education of the parents, the higher the likelihood that the academic achievements of the children will be even greater. Oreopoulos, Page, and Stevens (2003) also found that the children of more educated parents are less likely to repeat a year. Finally, Traag and van der Velden (2008) in Lyche (2010) found that for every additional year of parental education, a child was 7% more likely to remain in school.

When looking at parents in terms of gender, studies have reported that maternal education has strong positive effects on child behavioral problems, math, reading, grade repetition, and educational achievement (Carneiro, Meghir, and Matthias, 2007; Black, Devereux, and Salvanes, 2003; Kemptner and Marcus, 2011). Similarly, in a study conducted in France, Maurin and McNally (2008) found that a father's level of educational attainment and occupational status have been positively causally linked to the academic achievement of their children.

School

Studies that explore the effect of student-teacher relations on their decisions to drop out from school are limited but revealing. According to Farmer (2001), a supportive teacher at school who has high expectations of his/her students has been found to come immediately after parents and peers in terms of influencing student career choices and plans. Similarly, Croninger and Lee (2001) found that teachers can have a significant impact on students' decisions stay in or leave school. Their study finds that students who have dropped out typically have weaker relationships with their teachers[1] than other students in the same class. However, receiving the

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[1] Student-teacher relations were measured using a composite variable of students' perceptions of the support they receive from teachers and teachers' assessment of the extent of their ties with each of the students.

necessary support both inside and outside of class has been found to have a greater impact on dropouts than on students who are not at risk of dropping out (Croninger and Lee, 2001). Moreover, a study by Hanushek (2005) indicates that teachers can not only have a positive effect on students' emotional wellbeing and decisions to stay in school, but also on their academic achievement. He finds that the difference between a good and a bad teacher can amount to up to a year's worth of learning.

In contrast, Nestvogel (1995), examines the potential negative effects of a bad teacher. Based on her research in Pakistani schools, she argues that teachers' lack of training results in poor teaching methods, insufficient learning materials, and lack of interest and motivation to teach. This, combined with a low salary and consequent involvement in additional jobs as well as lack of commitment to children's learning and progress, has strong repercussions on students' interest in school and can contribute to students leaving school prior to completion. Christle et al. (2005) found similar results in their comparative study of two sets of schools in Kentucky in the US - those with high dropout rates and low dropout rates, respectively. As expected, the percentage of dropouts was higher in schools where teachers and administrators were less educated and less trained.

Gender

As educational achievement of females is catching up, and in some countries surpassing, that of males, there has been a growing body of literature particularly within the US and Commonwealth countries attempting to understand the role of gender differences in education. The focus has not only been on attainment but also dropping out. According to USAID (2012), in the US and other OECD countries boys are 19% more likely to drop out of school than girls. In developing countries the findings are reversed, with females being 35% more likely to drop out from school. In Quebec, although the overall dropout rate has been falling over the past two decades, the ratio of male to female dropouts has grown to approximately 5 to 3 (Richard, 2011).

There have been a growing number of studies in Canada, Australia, and New Zealand specifically on schooling experiences to understand the impact schools have had on male underachievement. Some scholars argue that the decline in male achievement, and the resulting negative impact on participation, is a result of the 'feminization' of schools which cater better to the needs and preferences of female students (Gibb, Ferguson and Horwood, 2008). Other school-based factors that have been found to significantly affect males' education include disruptive classroom behavior, an alienating school environment, irrelevant school curricula, and poor student-teacher relations (Trent and Slade, 2001; Brooks et al, 1997).

One of the focal areas for researchers studying male underachievement has been the presence, or lack thereof, of male role models. In Guyana Hunte's (2002) study in Jha and Kelleher (2006), the author argued that the absence of positive male relationships, both in and outside of the school, results in boys seeking out male role models that have a negative influence on their achievement in school. Studies by Walker (1997) in Jamaica and the US Department of Health and Human Services (HHS, 2008) found that a young man's relationship with his father is especially important

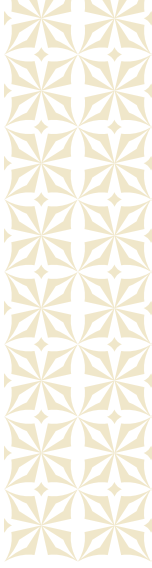in determining his aspirations and decisions stay in school or drop out.

On the school level, teachers have also been found to have an important impact on boys. West (2002) is referenced in Jha and Kelleher (2006) describing how, in Australia, boys felt that good male teachers provided a great deal of academic support to them in the classroom. However, studies also show that some teachers resort to gender stereotyping, which can result in lower male achievement (Jha and Kelleher, 2006). In other words, some teachers have been found to assume that boys are innately more likely to misbehave than girls and therefore have lower expectations of them. This in turn, contributes to their lower achievement levels (Jha and Kelleher, 2006).

Middle East & The Gulf

Studies on dropouts and school retention in the Middle East (and the Gulf in particular) are few, but what little data has been reported reveals that retention and dropping out are pronounced across the region. The challenge, as Smits (2007) rightly points out, is no longer enrolling students in school but keeping them there. With close to universal primary enrollment in the Middle East and secondary enrollment figures hovering at 80% and above in most countries, there is no longer a widespread concern about getting children into school. Set against good enrollment ratios, however, are disturbing trends in non-completion of both secondary and tertiary studies.

Consistent with a USAID report (2011) findings, dropping out of school in the Middle East is highly gendered in terms of socioeconomic status, with lower socioeconomic status countries struggling to keep girls in school while in higher socioeconomic status countries, it is the boys who are more at risk. In Yemen 30% of girls and 10% of boys do not go to school at all. In Morocco and Syria, half of girls and over 40% of boys are out of school by age 15 (Smits, 2007). However in the Gulf, dropout trends are far more pronounced for boys with up to 25% disappearing from school in a single year in Dubai alone (Al Marri & Helal, 2011) while dropout statistics for girls are no higher than 14%. Typically, however, the literature focuses on the situation of girls in poorer Middle Eastern countries, with major reports containing statements such as, "by far the most important personal characteristic influencing a child's educational chances in the Arab world is gender. The major reason for this is the weak position of women in the region" (Smits and Huisman, 2012, p. 4). Statements like this are drawn from research that excludes Gulf Cooperation Council (GCC) countries, with the exception of Yemen as it fits the pre-determined paradigm, typically because the large-scale data sets often used for such studies are not available in the Gulf. While not dismissing the reality of the situation for women and girls in the poorer countries of the Middle East, it is, however, inaccurate to present the region as homogenous and without significant differences, in particular between the North African countries and those in the Gulf. With regards to dropouts, these differences are particularly acute.

Studies examining the reasons for dropping out of school in the wider Middle East are few, however Smits and Huisman (2012) who examined data from Algeria, Egypt, Morocco, Tunisia, Syria and Yemen had a number of interesting findings that have a bearing and connection to the findings of this study. They found strong urban/rural differences with girls living in rural areas having non-participation rates up to seven times higher than those in urban areas. They also found that while there was a strong gender difference in participation rates within rural areas, the
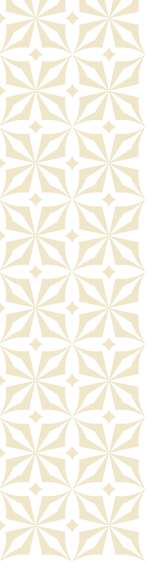
difference almost disappeared in urban areas; in some instances these differences were even to the advantage of girls (Smits and Huisman, 2012). Further to that, they found that socioeconomic characteristics, in particular the education of the mother and father, were important. Interestingly though, they found that while some Western studies attribute up to 80-90% of the variation in school outcomes to household-level factors, in the Middle East this only accounts for 29% of the variation for young girls and for young boys only 52%. Smits and Huisman (2012, p. 18) state that, "in the Arab world, the environment where children are born determines their educational chances to a much larger extent than in Western countries." In addition, the age of the child was also an important determinant of dropping out with children aged 11 and over much more likely to be out of school than younger ones. The presence of the mother was also important for the education of girls. However they found that for boys, a missing mother does not have a significant effect but a missing father had a significant negative effect "indicating that they have to take over the father's tasks" (Smits and Huisman, 2012, p. 14).

Focusing on the Gulf countries, the literature reveals that countries at the bottom of the economic ladder such as Yemen, in which less than 6% of students make it to college overall (Kahtan, 2008), have the highest dropout rates. They also have higher rates of girls dropping out of schools than boys, but it is important to note that in fact only 18% of Yemeni students make it to secondary school (Kahtan, 2008). A key contributing factor in the high dropout rates in Yemen are the even higher unemployment rates (34%) across the country, which compel families that have on average eight children, to encourage these children to find jobs as soon as possible. For girls the situation is compounded as they are often married off at very young ages and there are fewer schools for girls to attend in general. There is also a large rural-urban divide with 44% of girls out of school in rural areas as compared to 17% of boys (Smits and Huisman, 2012).

Studies on dropping out in Saudi Arabia have typically focused on girls. However, like other GCC countries, girls in Saudi Arabia are continuing their schooling in ever increasing numbers (Hussain, 2007). Males, on the other hand, are far more likely to be seeking out work to support their families in a patriarchal society that is highly segregated (Hussain, 2007). Statistics on enrollment for Saudi Arabia from 2000 found that 94.5% of girls and 97.5% of boys were enrolled in primary education. At the secondary level, only 88.3% of girls and 92.8% of boys were enrolled in school (Hussain, 2007). However, Prokop (2003) found that over 40% of Saudis dropped out before reaching secondary school and that 28% of the new entrants in the labor market were dropouts from elementary school and adult vocational education. In light of Western studies linking poor student achievement with dropping out of school, it is useful to note that in the 2003 Trends in Mathematics and Science Study (TIMSS) test Saudi Arabian boys scored higher in the math than the girls, with an average scale score of 319 compared to an average score of 309 points, respectively. Moreover, Hussain (2007) looked at teacher factors relating to student achievement in the TIMSS and found that both a mother and father's education levels were positively and significantly related to student achievement and that teacher expectations of students were also linked to student achievement.

For Qatar, literature dealing specifically with retention and/or dropping out is also scarce. However, a RAND report on young Qatari secondary school graduates revealed that on the secondary school exit examination in 1998, women accounted for 56% of all test takers (Martorell, Nadareishvili, &

Salem, 2008). This indicates that fewer young men took the exam and had therefore probably dropped out of secondary school before taking the examination. Also, in terms of achievement only 59% of men passed the exit examination in comparison to 81% of women. Similarly, the 2004 census of Qatar found that only 46% of men had more than a secondary school qualification while 61% of women held more than a secondary school qualification, again indicating issues with retention of men at all levels of education (Martorell et al., 2008). Qatar's Third Human Development Report entitled "Expanding the Capacities of Qatari Youth" (2012) also highlights issues of male retention and persistence in education. In 2009/2010, gross tertiary enrollment ratios revealed that only 27% of Qatari men were enrolled in tertiary education as compared to 50% of Qatari women. In terms of achievement, Qatari women outperform Qatari men on both international and national examinations. Female scores in national examinations were 20 points higher than male scores, and females outperformed males in all three international assessments: Program for International Student Assessment (PISA), Progress in International Reading Literacy Study (PIRLS) and TIMSS (GSDP, 2012). Qatar also has the second highest gender difference (after Kuwait), favoring women, in reading achievement (PIRLS, 2007). Qatari men who continue with their education tend to predominantly go on to technical colleges rather than university (56%), while 81% of Qatari women enrolled in Qatar University (GSDP, 2012). Overall, 34% of all Qataris aged 20 to 24 lack a secondary school qualification (Al Kandari, 2012). So while there are no explicit studies on dropping out of school in Qatar, it is clear that males perform more poorly than females and have less years of education than females in Qatar.

Similarly, in Oman, reports show large differences between men and women in education achievement and retention. However, to date there is nothing explicitly looking at dropping out either for males or females. A newspaper report stated that the dropout rates in 2008/2009 for Grade 10 (which was said to have the highest rates) were 5% for girls and 7% for boys (Education in Oman, 2012). In 2000, 55% of Omani women had completed some form of tertiary qualification while only 17% of Omani men had a tertiary degree (Education in Oman, 2012). Statistics from the Oman Statistical Year Book compiled by the Ministry of Economy (2010) show that in 2010, 60% of all tertiary students studying in Sultan Qaboos University, Oman's primary tertiary institution, were female.

In Bahrain, school dropout rates are reported to be as high as 26%; however, no other definitive statistics could be located (Al Marri & Helal, 2011). As for Kuwait, Al Kandari (2008) found that male students in Kuwait are more likely than females to drop out of university and that students who have good friends and solid relationships with the faculty are also less likely to drop out of university. In addition, the study finds that over 25% of Kuwaitis aged 20 to 24 lack a secondary school qualification, which suggests that many of them may have dropped out of school (Al Kandari, 2008).

In the UAE, there is only one study to date that has closely examined dropout patterns and this was conducted by Zureik in 2005. Zureik's research examined 416 students from seven boys' and seven girls' schools in the emirate of Sharjah. Zuriek (2005) found that close to 35% of males dropped out between grades 10 and 12 as compared to 25% of females. He found that boys sometimes drop out of school due to family circumstances related to the father being ill or absent, which forces the boys to become providers for the family. For girls, marriage was found to be the

main reason for leaving school early. School factors included lack of interest in the lessons, the curriculum, and 'obsolete' teaching methods. Teachers tended to blame the student or family for their failure or dropping out. The Dubai Schools Inspection Bureau under the Knowledge and Human Development Authority (based in Dubai), also released an analysis of dropout rates in Dubai and found that up to 22% of males and 14% of females between the ages of 20 and 24 had left school before completing their secondary education (DSIB, 2010). Ridge (2009) also found that in 2006/2007 in the emirate of Ras Al Khaimah (RAK), 14% of boys had dropped out of school as compared to only 2.5% of females in the same year.

The Study

After examining the literature on dropouts from a global and regional perspective, the authors define the following research question to guide the study: What are the patterns and perceptions of male dropouts in the United Arab Emirates? The study takes a two-stage approach to answer this question using both quantitative and qualitative methods.

It utilizes a mixed methods comparative design in order to capture not just the "what" but also the "why" and the "how" (Chatterji, 2004). Creswell (2003) notes that there has been an increase in the use of mixed methods of data collection in recent years and that it is seen as a way to "neutralize or cancel the biases of other methods" (p. 15). A mixed methods approach can include both open- and closed-ended questions in surveys or interviews, the use of both predetermined and emerging design, and the use of statistical as well as textual analysis (Creswell, 2003). The use of both qualitative and quantitative data within a mixed methods design adds to the depth and precision of the study, and many authors are now advocating for mixed methods research to become a separate design in its own right (Creswell, 2003; Creswell & Plano Clark, 2007; Tashakkori & Teddlie, 2003). Through using a mixed methods design, it is hoped that this study gives a fuller and clearer picture of the issues relating to male dropouts in the UAE.

Data Collection

The data collection process consisted of three phases. The first phase involved surveying males that were attending higher education at the Higher Colleges of Technology (HCT), a public higher education institute with seven campuses across the UAE. This group of males would serve as the control group in the study. The second phase involved surveying the secondary school dropouts (treatment group), and the final phase of the study consisted of conducting in-depth interviews with a smaller number of the men who dropped out of school. The process took place over 17 months, between May 2011 and October 2012.

Phase 1

Appointments were arranged with the Heads of the Foundations Departments[2] at all seven of the HCT campuses. The research team administered the survey in Arabic to a number of classes

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[2] The Foundation Department is responsible for managing the Foundations Program, a one-year introductory program aimed at improving the English, Arabic, Mathematics, and ICT skills of students before they enroll into their undergraduate programs.

assigned by the Heads at each of the colleges, with the exception of Ruwais and Madinat Zayed as these campuses were located in more remote areas and difficult for the team to physically access. There, faculty in both colleges administered the surveys. Overall, the authors collected 364 surveys. The majority of surveys were collected from the Abu Dhabi, Dubai, and Sharjah campuses, which have the largest populations of students. *Table 1* provides the complete breakdown of surveys collected in each of the HCT colleges.

Table 1. Number of surveys collected from each of the HCT campuses

HCT College	Number [N]
Dubai	68
Abu Dhabi	80
Ruwais and Madinat Zayed	47
Sharjah	68
Fujairah	59
RAK	42
Total	**364**

Phase 2

The second phase consisted of surveying males who had dropped out of secondary school. Identifying males who had not completed their schooling was very difficult. A variety of techniques were used to locate dropouts. These included contacting friends and family and visiting adult education centers and prisons. All participants were informed of their rights and that if they consented to participate in the study, they were free to stop at any time or not answer questions they felt uncomfortable with. Confidentiality was also assured and surveys were collected using numerical identifiers only, except in the case where the participants wished to be contacted for follow up interviews. The authors began by conducting telephone surveys with 18 dropouts, who were identified through participants in the control group as well as research assistants. Then, the authors surveyed 25 Emirati men who had dropped out of school and who are now inmates at the RAK Prison. They surveyed the first 14 men, and due to logistical difficulties the remaining 11 completed their surveys with the support of the prison staff.

Next, the research team surveyed males enrolled in adult education centers in Dubai and RAK. These centers are typically based in public schools and classes are offered in the evenings five days a week, as some of the students are also working full-time. Of the 123 participants surveyed at the centers, 41 of the men were based in RAK and 82 were based in two centers in Dubai. The authors visited a number of classes, chosen by the principals on the basis of availability, and administered the surveys to all the students in these classes.

While the aim was to collect an equal number of surveys from the dropout group as from the control group, access to dropouts proved difficult. Therefore, the total number of male dropouts who participated in the second phase of the study and completed surveys was 166. *Table 2* shows the distribution of the dropout samples.

Table 2. Sample populations of dropouts by emirate and number of surveys collected

Sample Population	Number [N]
Connection through other respondents and assistants	18
Inmates	25
Students attending adult education	123

Total number of participants (N)=166

Phase 3

The third phase of the study was the qualitative phase in which the research team interviewed five prisoners and five students attending adult education. Out of the five students attending adult education, four were based in RAK and 1 was based in Dubai and had completed his adult education. All interviews were recorded with the permission of the participants. Demographic information about participants is reported in *Table 3*. Dropouts 1-5 were men interviewed from the prison system, and Dropouts 6-10 were interviewed from the adult education centers.

Table 3. Demographic information about dropout interviewees

	Age	Dropout Grade	Marital Status	Illiterate Mother	Illiterate Father	Stepmother	Emirate
Dropout 1	27	8	Single	Yes	Yes	Yes	RAK
Dropout 2	28	8	Single	Yes	Yes	No	RAK
Dropout 3	33	9	Divorced	Yes	No	No	Al Ain*
Dropout 4	23	11	Divorced	Yes	No	No	Abu Dhabi
Dropout 5	35	5	Single	Yes	No	No	Sharjah
Dropout 6	27	6	Married	Yes	Yes	No	Dubai
Dropout 7	37	10	Married	Yes	Yes	No	RAK
Dropout 8	24	10	Single	Yes	Yes	No	RAK
Dropout 9	18	7	Single	Yes	No	No	RAK
Dropout 10	24	10	Married	Yes	No	No	RAK

Al Ain is a city in the emirate of Abu Dhabi

Instruments

The survey used in the first and second phases of the study was adapted from an instrument used by Rumberger (1995) in a study of students who had dropped out of school across the US between grades 8 and 10. It was designed to effectively measure respondents' attitudes about family, socioeconomic, and school influences in their decision to continue education versus drop out from secondary school. Respondents were asked about their parents' academic and professional qualifications, family size, mother's nationality, and existence or lack thereof of a stepmother living in the same house. Respondents were also asked about their families' attitudes toward education and the level of involvement in their child's education.

To measure socioeconomic influences, respondents were asked a variety of questions about saving patterns, perceptions about school, relationships with friends and the community, and drugs and alcohol usage. They were also asked very specific questions about their families' level of wealth and socioeconomic status. Responses regarding the number of personal and family assets including mobile phones, TV's and computers were then combined in the statistical analysis phase to generate a proxy for wealth.

Finally, in measuring school influences, survey respondents were asked about type of schooling, school safety, number of repeated years, absenteeism patterns, teacher-student relationships, class environment (including teacher practices and student behavior), good experiences, bad experiences, and attitudes about grades versus attitudes about school. Questions from this comprehensive survey were then slightly adapted and used to conduct interviews in phase three of the data collection process.

Phase three involved conducting face-to-face, in depth interviews with a select number of males from the dropout sample who had volunteered to do so. The aim of this phase was to gain a deeper understanding of the factors that lead to males dropping out of school. The research team prepared an interview protocol based on the literature review, survey questions, and personal observations. The protocol consisted of a number of closed-ended, but primarily open-ended questions inquiring about the three main themes in the research – family, school, and personal experiences. The purpose of these interviews was to gain a more comprehensive understanding of the participants' experiences and fill in any gaps that were not addressed in the surveys.

Limitations

There were a number of limitations that emerged from the study, primarily related to sampling. First, because of the difficulty in accessing the dropout population, the size of the dropout sample was relatively small compared to the control group. While the research team aimed to have more comparable samples, identifying and meeting with the dropouts also proved to be a major challenge. Second, as the sampling process was not systematic, the sample of dropouts consisted of males based only in Dubai and RAK and is therefore not representative of the larger Emirati population. Third, as a result of the difficulty in accessing male Emirati dropouts, the age range of those males who participated in the study varied to some extent. Accordingly, the

existence of generational differences that were unaccounted for may have skewed the results. Fourth, the study presents the perceptions of a cross-section of males at one specific moment in time after they dropped out of school. Conducting a longitudinal study, where a sample of young men can be traced over a number of years leading up to some of them dropping out of school may offer more precise findings regarding the dropout experience. Finally, the research team would have hoped to conduct interviews with a larger number and a more diverse group of men to gain a deeper understanding of their perceptions and experiences dropping out of school.

Data Analysis

Quantitative

Following the data collection process, the research team reviewed the surveys and entered the respondents' answers in a database. A two-stage quantitative analysis of the data collected from all surveys was conducted to better understand the underlying dynamics that contribute to a student's decision to drop out of secondary school. The two primary stages of the analysis are as follows: (1) analysis of descriptive statistics and frequencies, and (2) correlational and regression analysis. Both stages employed the SPSS statistical software package.

The first stage presents key descriptive findings based on dropout data from the Ministry of Education (MOE) in the UAE for the academic years 2007/2008 and 2011/2012. It also presents the descriptive findings from the surveys that were distributed throughout the emirates. Overall and inter-emirate dropout rates are examined to determine patterns across government schools. The second stage of the quantitative analysis employs a binary logistic regression to predict the effects of family, socioeconomic, and school influences on the dropout decision using survey data. The Forward Wald method is also used as a comparative tool to test whether certain variables have a stronger impact on the overall predictive power of the regression than others. Overall, the model was 92% accurate in the prediction and produced 17 statistically significant results.

The dropout probability *Equation (1)* shown below is an adapted version of the standard equation used in previous literature (Lee & Burkam, 2003), but also includes culturally relevant factors like polygamy that do not exist in previous literature on other regions. The dependent variable is a dichotomous measure of whether or not the student dropped out of secondary school (between grades 10 and 12). Dropouts are defined as students who have left school for disciplinary reasons, poor academic performance, exceeding number of absences, exceeding acceptable levels of retention, disengagement and lack of motivation, and other individual reasons. Students who have transferred to another school are not included in the sample. The left-hand side of the equation is a dummy variable equal to 1 if respondent *i* is a dropout and 0 otherwise. The right-hand side of the equation consists of the intercept and three primary explanatory vectors (FAMILY, SOCIOECON, SCHOOL) representing family influences, individual and socioeconomic influences, and school experiences and influences. The coefficients $\beta_0, \beta_1, \beta_2,$ and β_3 represent the likelihood of dropping out of secondary school, the expected change in the probability of dropping out for individual *i* due to family influences, the expected change in the probability of dropping out

for individual i due to socioeconomic influences, and the expected change in the probability of dropping out for individual i due to school influences respectively. ε_i is the expected error term for the model.

Equation (1)

$$\text{Log } [p_i/1\text{-}p_i] = \beta_0 + \beta_1 \text{FAMILY}_i + \beta_2 \text{ SOCIOECON}_i + \beta_3 \text{SCHOOL}_i + \varepsilon_i$$
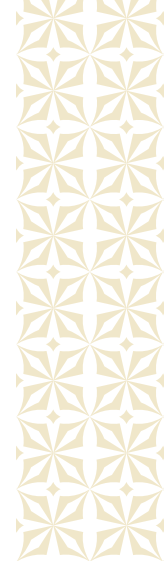
Qualitative

Following the quantitative data analysis, a qualitative analysis was conducted based on the in-depth interviews. These were first transcribed and then coded on the basis of themes that emerged throughout the interviews (family, school, and personal factors). Based on these codes, comparisons were made between and within the groups (prisoners and adult education students) to better understand the defining factors in their respective decisions to drop out of school.

Results

Quantitative

1. Descriptive Statistics

Data collected from the UAE's MOE reveals differences in secondary school dropout rates across emirates and grades. *Table 4* on the next page and *Tables 2* and *3* in Appendix A summarize the findings for the academic year 2007/2008 where the total number of secondary school dropouts for all emirates was 2,226 or 7.7% of the student population. *Table 4* below also indicates that the emirate of Um Al Quwain (UAQ) experienced the highest rate of dropouts among Grade 10 students given the total student population of UAQ that year (18.3%). Fujairah had the highest rate among Grade 11 students (7.8%), and RAK the highest rate among Grade 12 students (11.3%). The lowest dropout rates were experienced in Abu Dhabi for Grade 10 students (9.2%), UAQ for Grade 11 students (2.6%), and again Abu Dhabi for Grade 12 students (2.8%). Across all emirates, the highest dropout rate was experienced in Grade 10 students (11.6%) and the lowest in grade 11 students (4%). RAK and UAQ experienced the highest total dropout rate across all grades that year, both at 11.2%, and Abu Dhabi the lowest at 5.5%. In assessing these outcomes, however, it is important to understand how dropouts are defined. Those who drop out due to poor disciplinary or academic performance, exceeding the number of permissible leave days, marriage, or long-term sickness are treated as dropouts in the MOE dataset and are represented in *Table 4*. Excluded from this definition are students who have transferred to another school, possibly in the private sector, transferred to adult education, moved out of the country, or passed away during the academic year. This group of students is represented in *Table 2* Appendix A. Finally, *Table 3* in Appendix A reports the total number of students who left school in 2007/2008, the summation of values reported in *Tables 4* here and *Table 2* in Appendix A.

In addition to 2007/2008 data, the authors were able to access limited data from the MOE for the last academic year, 2011/2012, but not any of the years in between. Although the authors cannot draw any accurate conclusions about trends based solely on these two years, the authors were able to compare the statistics to examine any improvements or lack thereof since 2008. As reported in *Table 5*, Dubai experienced the highest dropout rate (7%), compared to all emirates that year, with the exception of Abu Dhabi for which the authors were unable to access any data. Sharjah, Fujairah, and Ajman experienced the lowest dropout rates, each standing at 4%. Overall, the dropout rates experienced in 2011/2012 were 2.7% lower than in 2008, indicating that there have been modest improvements over the years.

Table 4. Male secondary school dropouts across emirates and grades for 2007/2008

Emirate	Number of Dropouts*				Percentage of Dropouts*			
	Grade 10	Grade 11	Grade 12	All Grades	Grade 10	Grade 11	Grade 12	All Grades
RAK	230	48	111	389	15.1	5.0	11.3	11.2
Sharjah	318	48	72	438	14.1	4.2	5.4	9.2
Fujairah	137	50	53	240	15.8	7.8	8.6	11.3
UAQ	51	5	21	77	18.3	2.6	9.5	11.2
Ajman	75	28	47	150	10.8	5.1	9.4	8.6
Abu Dhabi	508	118	104	730	9.2	3.0	2.8	5.5
Dubai	133	31	38	202	9.4	3.8	4.4	6.5
All Emirates	1,452	328	446	2,226	11.6	4	5.4	7.7

* Percentage and number of dropouts where dropping out was due to long-term sickness, marriage, exceeding number of leave days, and disciplinary dispelling

Table 5. Total number of dropouts across emirates and grades for 2011/2012 (males and females)

Emirate	Student Count	Number of Dropouts*	Percentage of Dropouts*
RAK	36,685	2,289	6%
Sharjah	16,323	659	4%
Fujairah	21,385	883	4%
UAQ	6,334	360	6%
Ajman	31,968	1,262	4%
Abu Dhabi	N/A	N/A	N/A
Dubai	42,544	3,027	7%
All Emirates	155,239	8,480	5%

Total number and percentage of dropouts (all reasons accounted for)

Data collected from the surveys complements the MOE data to produce a more accurate and complete picture on the patterns of dropping out of secondary school in the UAE. From the total number of 496 survey respondents, 149 or 30% were dropouts and 347 or 70% were non-dropouts from across the UAE. Survey results indicate that socioeconomic factors contribute most to students' decision to drop out of secondary school in the UAE. As evidenced by the authors' findings, 55.7% of dropouts reported that one of the primary reasons for their dropping out was choosing to support their family. 48.3% preferred to work and make their own money and 11.3% indicated that they simply could no longer afford to stay in school. Other common self-reported reasons for dropping out reported in *Table 4* in Appendix A include poor academic performance, lack of interest in school, and lack of motivation to work in the future. Based on these findings, three main factors influencing students' decision to drop out can be derived, namely family, socioeconomic conditions, and school experiences. Further quantitative analysis in the next section will highlight the significance of these factors in contributing to the drop out decision for the sample as a whole as well as for the dropouts and non-dropout groups separately.
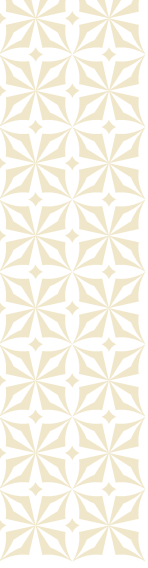
a) Family influences

Differences in family characteristics between dropouts and non-dropouts help identify factors that could potentially be affecting male students' decision to drop out. One notable difference highlighted in *Table 6* is that both mothers and fathers of dropouts have attained lower levels of education overall than the non-dropouts. While dropouts' mothers on average have attained a little over 5 years of primary schooling (2.29 on the scale of 1 to 8), non-dropouts' mothers attained 10-11 years of education in total (3.63 on the scale of 1 to 8), more than double the educational attainment achieved by

Table 6. Family factors

		Dropouts	HCT	Total
Mother's nationality	*Emirati*	89.3%	96.3%	94%
	Indian/Pakistani	4.7%	1.2%	2.2%
	Other (including expat Arab)	6%	2.5%	3.6%
Mother's education	*No formal education*	35.6%	14.4%	20.8%
	Primary and Preparatory	28.1%	24.5%	25.6%
	Secondary	16.8%	39.8%	32.9%
Father's education	*No formal education*	22.8%	11%	14.5%
	Primary and Preparatory	27.6%	25.6%	26.2%
	Secondary	35.7%	28.9%	33.7%
Mother's occupation	*Housewife/unemployed*	67.8%	73.8%	72%
	Government (ministries, army, police)	12.1%	10.7%	11.7%
	Unemployed	9.4%	2.9%	4.8%
Father's occupation	*Retired*	38.9%	31.7%	33.9%
	Government (ministries, army, police)	12.1%	10.7%	11.7%
	Unemployed	9.4%	2.9%	4.8%
Parents' attitudes towards child's education	*Parents never check child's homework*	32.9%	14.7%	20.2%
	Parents never reward good grades	33.6%	9.5%	26.2%
	Parents often discuss child's grades with them	20.8%	36.3%	31.7%
	Parents often discuss child's further studies with them	24.8%	41.2%	36.3%
Siblings and other relationships	*Stepmother lives in the same house*	26%	13.8%	14.3%
	Number of siblings who dropped out	1.25*	0.472*	0.71*
	Number of siblings in family	7.2*	6.26*	6.42*

* Means

dropouts' mothers. Similarly, dropout students' fathers completed 6 years of schooling on average compared to non-dropouts' fathers who have completed almost 12 years of schooling. Consistent to both groups, however, is that fathers have generally attained more years of education than the mothers. Similarly, intriguing differences between the parents' attitudes towards their child's education may also have an impact on the child's decision to continue or discontinue their education. As reported in *Table 6*, one large area of difference in terms of family was that parents of dropouts checked their child's homework 18.2% less often than the parents of non-dropouts. In addition, 20.8% of dropouts reported that their parents often discussed their grades with them in contrast to 36.3% of non-dropouts.

Another factor, which may contribute to the dropout decision, is having other siblings who dropped out in the family. *Table 6* shows that dropouts have had, on average, 0.78 more siblings dropout from school when compared to non-dropouts. The parents' acceptance of another sibling dropping out may have further encouraged respondents to discontinue school.

A more interesting family dynamic, common in Muslim societies, is living in a multiple-mother household. The existence of a stepmother who lives in the same house as the rest of the family is an offshoot of the acceptance and wide pervasiveness of polygamy in the UAE (Al-Shamsi and Fulcher, 2005). While previous research (Rumberger and Thomas, 2000) predicts the effects of having a step-family, none has studied the issue of having a stepmother who lives in the family house and how it can directly impact dropout rates as this is uncommon in the US and much of the West. This study seeks to delve deeper to understand the relationship between living in a polygamous household and dropping out. The authors found that while 26% of dropouts reported that their stepmother lives in the same house, only 13.8% of students who had continued their education reported the same. This can be compared with the idea of living in a broken single-parent family where children are less likely to find the supportive family environment that they need to keep them in school (Christle et al., 2005; Rumberger, 1987). The finding also supports literature on polygamy, which finds that polygamous relationships are conflict-prone and thus, affect the educational performance of children in the family (Brooks, 2008).

b) Socioeconomic influences

Differences in socioeconomic characteristics between dropouts and non-dropouts can also impact the decision to drop out from school. Particularly interesting are differences in family income/wealth illustrated in *Table 7*. Around 11% more non-dropouts have reported that they have their own bedroom and 21% more reported that they have internet access at home than dropouts. Similarly, while families of dropouts own on average 2.93 mobile phones, a family of non-dropouts typically owns 19% more, or around 3.5 mobile phones on average. The same goes for other wealth indicators including number of cars owned, where 75% more cars and 33% more computers are owned in a non-dropout family than in a dropout family.
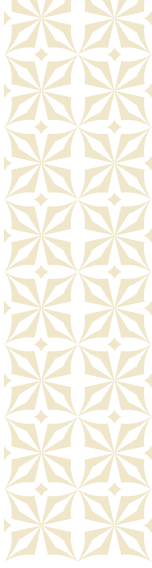
Table 7. Socioeconomic factors

		Dropouts	HCT	Total	Diff
Family wealth indicators	Own room	71.8%	82.7%	79.4%	10.9%
	Internet at home	72.5%	93.1%	86.9%	20.60%
	Own desk	58%	72.3%	68%	14.3%
	Own a dictionary	31.5%	76.4%	62.9%	44.90%
	Own over 50 books at home	20.1%	47.8%	39.5%	27.70%
	Own 4 or more mobile phones	57%	76.4%	70.6%	19.40%
	Own 4 or more cars	40.9%	64.8%	57.7%	23.90%
	Own 4 or more computers	22.2%	56.2%	46.2%	34.00%
	Number of mobile phones owned	2.93*	3.48*	3.32*	19%
	Number of cars owned	2.50*	3.32*	3.08*	75%
	Number of computers owned	1.78*	3.12*	2.71*	33%
Values	Very important to make lots of money	59.1%	55.9%	56.9%	–3.20%
	Very important to get a good education	79.2%	83.9%	81.3%	4.70%
	Save towards education	19.6%	28.2%	25.6%	8.60%

* Means

In addition, non-dropouts had access to better learning resources like a desk to study on (14% more prevalent for non-dropouts), a dictionary (45% more prevalent for non-dropouts), and over 50 books at home (28% more prevalent for non-dropouts). This implies that male non-dropouts generally come from wealthier families than dropouts. Their self-reported saving patterns also indicate more saving towards education in comparison to dropouts, only 19.6% of whom reported that they would save for education in contrast to 28.2%.

c) School influences

Finally, *Table 8* also illustrates important descriptive differences in school experiences between dropouts and those who continued their education. Non-dropouts generally had better experiences with their school teachers and peers than dropouts; 65% of them reported that they got along very well with their teachers in contrast to 27.5% of dropouts. Non-dropouts also reported feeling put down less often by other students than dropouts, 27% compared to 40%. As evidenced by the survey responses, perceptions about school safety also differed greatly between the dropouts and the non-dropouts. More dropouts perceived school to be an unsafe environment for them than non-dropouts, 72.9% compared to 42.3%.

Table 8. School factors*

		Dropouts	HCT	Total
	Private	1.3%	11.2%	8.3%
	Distance from school <30 minutes	67.3%	84.1%	80.2%
Teachers	*Students got along very well with teachers*	27.5%	65.7%	54.2%
	Teachers taught well	28.9%	50.7%	44.2%
	Teachers were interested in students	27.5%	57.1%	48.2%
	Teachers praised students' efforts	23.5%	50.4%	42.3%
Peers	*I often felt 'put down' by my teacher*	43%	25.4%	30.6%
	I often felt 'put down' by my peers	39.6%	26.8%	30.6%
	Disruptions by my peers interfered with my learning	38.3%	40.1%	39.5%
	Misbehaving students got away with it	30.2%	46.3%	41.5%
School safety	*I didn't feel safe at school*	42.3%	17.9%	25.2%
	Someone threatened to hurt me at school (more than twice)	10.1%	5.8%	7.1%
	I got into a physical fight at school (more than twice)	24.8%	19%	20.8%
Student attitudes toward school	*I never review work from the previous day*	18.8%	12.7%	14.5%
	I never participate in student-led discussions	30.9%	18.4%	22.2%
	Grades are very important to me	28.2%	67.1%	55.4%
	I like school a great deal	31.5%	76.1%	78%
	*Number of times I repeated a year***	1.17	0.282	0.55

*Percentage of respondents who agree with these statements, **Means*

In addition to external teacher, student, and school safety factors, however, the students' individual attitudes toward school-reflected by their self-reported commitments to reviewing schoolwork, being attentive in class, and participating in class discussions-differ across the two groups. *Table 8* shows that 14.5% more non-dropouts have put in the effort to revise their work from the previous day than their dropout counterparts. While 30.9% of dropouts reported that they never participated in student-led discussions, 18.4% of non-dropouts reported the same.

2. Inferential Statistics

Turning now to the correlation and regression stage of the quantitative analysis, a number of interesting relationships were found which support predictions from the descriptives stage. Appendix B displays the results of the logistic regression model predicting the effects of 43 selected variables on the probability of dropping out from secondary school. The model was significant χ2 (43, N = 496) =42 with a p-value of 0. Of the total predictors, 17 were found to be significant.
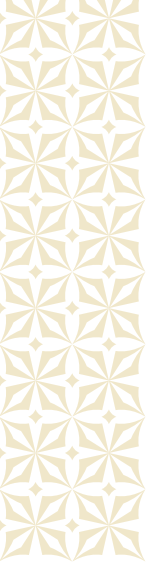
a) Family influences

The correlation and regression findings largely confirm previous literature, which emphasizes the impact of parents' education on the child's educational attainment and decision to drop out from school (USAID, 2012; Maurin and McNally, 2008; Carneiro, Meghir, and Matthias, 2007; Lyche, 2010; Oreopoloius Page & Stevens, 2003; Heineck and Ripahn, 2007). They find that a one-level increase in the mother's educational attainment lowers the odds that the student will drop out of school by 22%[3]. This result is moderately strong and statistically significant at the 5% level[4]. It implies that there are significant inter-generational effects from maternal education, which will be discussed in more detail in the conclusion. Similarly, the father's occupation was found to be statistically correlated in the expected direction to the respondents' decision to either drop out or continue with school. Respondents whose fathers were retired, unemployed, or dead are 19.1% more likely to have dropped out than those whose fathers are employed either in the government sector (ministries, army, or police) or private sector.

Family size is another factor that was statistically correlated to dropping out. In line with the existing literature (USAID, 2011), this study finds that the likelihood of dropping out increases as the number of siblings in the family (or family size) increases. For every additional sibling that is in the family, a child is 13.3% more likely to drop out. This correlation is significant at the 5% level. In addition to family size, respondents whose siblings dropped out of school also experienced a higher chance of dropping out. Every additional sibling who drops out from school increases the likelihood of the respondent dropping out by 27.2%. This finding is statistically significant at the 5% level and also confirms findings in previous literature, which highlight the role that siblings play in promoting the dropout decision (USAID, 2011).

Another expected result was that of the parents' attitude toward (and involvement in) their child's education. Previous literature suggests that parental supervision and academic support can have a positive impact on students' academic success and continuance of education (Rumberger & Thomas, 2000). This study's findings are consistent with the literature and suggest a similar positive relationship. They predict that, other things equal, parents checking on their child's homework and helping them with it, requiring

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[3] After adjusting for other explanatory variables in the regression.

[4] The levels that are identified in the regression are: 1. no formal education, 2. primary and preparatory (grades 1-9), 3. secondary (grade 10-12), 4. post-secondary (diploma and bachelors degree), and finally 5. graduate (masters and doctorate).

them to do chores around the house (indicative of responsibility-building), discussing grades with them, and discussing things that are troubling them reduces the chances of their child dropping out from school by 51%[5]. This strong negative correlation was again statistically significant at the 5% level.
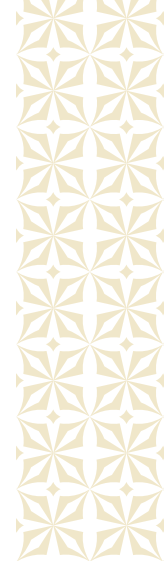
Two interesting and new findings to add to the existing body of literature, particularly applicable to the Gulf region, are the impact of inter-racial families and stepmothers living in the family house on the likelihood of dropping out from secondary school. The regression finds that living in a household with a non-Emirati mother, often Pakistani, Indian, or an Arab expatriate, and an Emirati father is likely to increase the chances of dropping out by nearly double compared to a household where both parents are Emirati. This finding is strongly positive and significant at the 5% level. It is important to note, however, that out of a sample of 347 non-dropouts, only 13 or 3.8% have non-Emirati mothers and out of a group of 149 dropouts, only 16 or 10.7% have non-Emirati mothers. Therefore, it is difficult to make conclusive judgments built on the small sample size. Another interesting regression finding is that having a stepmother living in the same house with the rest of the family is also expected to double the probability of dropping. This may suggest the effects of household conflict arising from the presence of a stepmother and is consistent with findings from Astone and MacLanahan (1991) and Rumberger (1983). The result is statistically significant at the 10% level.

b) Socioeconomic influences

The regression and correlations also indicate the existence of strong socioeconomic influences on the decision to drop out. One of these factors is the region of residence, or emirate. As the authors found earlier through data collected from the MOE, the emirate of Abu Dhabi achieved the lowest overall dropout rate in the academic year 2007/2008 across secondary schools in the UAE. Consistent with these findings, the regression results obtained from a sample of 126 respondents from Abu Dhabi, 158 from Dubai, and 212 from the Northern Emirates (Sharjah, Ajman, UAQ, Fujairah, and RAK) show that those who reside in Abu Dhabi are almost three times less likely to drop out when compared to respondents residing in the reference region, *Emirate 3,* or the Northern Emirates. In contrast, the regression finds that those who reside in Dubai are nearly twice as likely to drop out when compared to respondents residing in the Northern Emirates. Both of these results are statistically significant at the 1% level.

In addition to regional differences in schooling, the values and attitudes of individual respondents also affect the dropout decision. For instance, a one-level increase in respondents' reported interest in building and maintaining strong friendships is predicted to decrease the probability of dropping out by 71%. This finding is statistically

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[5] To study the effects of parental involvement and regulation on respondents' decision to remain in or leave school, a parental factor was generated through SPSS. The factor, called "Good Parenting," combined the following 8 survey items together based on their high statistical correlation to act as one variable in this regression: parents checking homework regularly, parents rewarding children for academic achievements, parents requiring that their children perform regular chores around the house, and parents discussing lessons, grades, further studies, and concerns with the child.

significant at the 10% level. Similarly, a one-level increase in respondents' reported interest in getting a good education is predicted to decrease the probability of dropping out by 80%. This result is statistically significant at the 5% level. Levels are distinguished in a Likert Scale in the survey where education is reported to be either 'not important at all,' 'not very important,' 'somewhat important,' or 'very important.'

Another value that was tested and that proved to be statistically related to dropping out was the value of living close to family. Respondents who reported that they value living close to family very much were 66% more likely to drop out than those who reported that they valued it somewhat, not very much, or not at all[6]. There is no obvious explanation for this result, but it may highlight the importance of proximity to the family in Emirati culture.
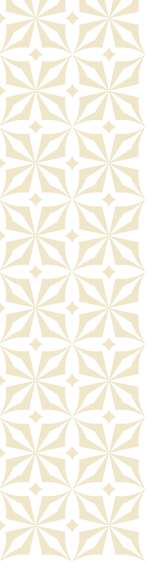
The regression findings also confirm existing literature on the relationship between family wealth and dropping out. Previous literature emphasizes socioeconomic status as one of the most strongly correlated factors to student dropout rates, whereby students from low-income families are 2.4 times more likely to drop out than their middle income counterparts (Christle et al., 2007; Rumberger, 1987). Literature on the UAE indicates that children who come from poor backgrounds experience strong pressure to join the labor market, and thus drop out of school (Zureikj, 2005). In this study, the authors find that other things equal, a 1% decrease in family wealth is associated with a 21% increase the probability of dropping out. The finding is strongly and statistically significant with a p-value of 0. Family wealth was measured as a composite of the following variables: having internet access at home, having a dictionary at home, owning over 50 books at home, number of mobile phones in the household, number of TV's in the household, number of DVDs in the household, number of computers in the household, number of cars in the household, and number of videogames in the household. These variables were then factored together using SPSS to serve as a proxy for wealth.

A final socioeconomic indicator of wealth, which was not factored in with the above-mentioned variables, is the type of schooling: private versus public. Consistent with Lee and Burkam's (2003) hypothesis that private schools experience higher rates of continued education, one key finding from this study is that those enrolled in private schools are 11% less likely to drop out when compared to those enrolled in public schools. This result is strongly significant at the 1% level.

c) School influences

The final set of factors that were found to help shape students' decisions about remaining in or leaving are school influences. While gaining insight into some of the family, socioeconomic, and individual characteristics is important in understanding the decision to drop out, the literature finds that it is equally important to consider students' experiences at school.

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[6] This variable is also based on a four-level Likert Scale

In previous literature, two primary groups of individuals found to be influencing the dropout decision in school are peers and teachers (Farmer, 2001; Trent and Slade, 2001; Brooks et al., 1997). This study confirms these findings and demonstrates that both produce statistically significant effects on the probability of dropping out. To measure peer effects in the sample, a variable called "disruptive students" was generated through SPSS as a composite of four variables representing students' perceptions about their classmates' behavior in school. The factor quantifies beliefs about the existence of disruptive and unsupportive student behavior and is derived from the following variables: beliefs that other students often disrupted the class, that they often felt 'put down' by their classmates, that disruptions by other students often got in the way of their learning, and that misbehaving students often got away with things. Regression results show that at the 1% level of statistical significance, respondents who perceived other classmates as disruptive were 1.34 times less likely to drop out than those who had not indicated these concerns.

In addition to peers, experiences with teachers have also played a significant role in determining the school continuation decision of young male students in the UAE. As Hanushek (2005) and Lee and Burkam (2003) found in their studies, good teachers can have a positive impact on students' academic achievement as well as their overall attitudes toward school, thereby reducing their chances of dropping out. In order to measure teacher effects in this study, a composite variable called "good teacher" was formed to quantify supportive teaching practices in the school environment. The factor measures the extent to which each of the following attitudes and perceptions about teaching were true for respondents: students got along well with teachers, teachers taught well, teachers seemed interested in the students, teacher praised students' work and effort when the students worked hard, teachers critiqued the work of students, and students felt safe in school and around their teachers. The regression finds that adopting these teaching practices and building a learner-centric classroom environment reduces students' chances of dropping out of school by 1.61 times. This result is statistically significant at the 1% level and carries a p-value of 0.

The final factor considered to play a key role in either promoting or reducing dropout behavior is individual characteristics and experiences at school. Existing literature shows that academic achievement, participation and engagement, discipline, and retention are all strongly linked to dropout behavior (Lee and Burkam, 2003; Hunt, 2008; USAID, 2011). This study confirms this and finds that respondents who reported positive academic engagement characteristics about themselves like reviewing work from the previous day, being attentive in class, using outside materials to study for a class, using computers in class, explaining work to the rest of their classmates, participating in student-led discussions, and getting involved in community service projects were found to be 54% less likely to drop out from school than those who did not report this level of engagement. This finding is statistically significant at the 5% level. In addition, the regression finds that for every year that a student repeats, there is a 1.1 times higher chance that the student will drop out of school. This is consistent with most literature on retention as a signaling mechanism for at-risk youth and is statistically

significant at the 1% level (USAID, 2011). Finally, transferring from another school for disciplinary reasons was found to have a strong positive correlation to dropping out. Every additional transfer is correlated with a 15.5% higher chance of dropping out at a statistical significance of 1%.

Qualitative

Proceeding to the qualitative stage, 10 of the surveyed men who had dropped out of school volunteered to have in-depth interviews. Five of them were enrolled in or had completed adult education at the time, whereas the other five were in prison. The participants were asked questions regarding their family, school, and personal experiences throughout their education, as well as their perceptions of the forces that led them to drop out from school. All interviews were conducted in Arabic and excerpts from transcripts were translated into English. The primary themes that emerged in these interviews, discussed below, were parental education and involvement, teacher-student relations, self-esteem and confidence, and peer influences. Overall, the interviewees perceived that a combination of some or all of these factors contributed to their decisions to drop out from school.

Parental education and support

The first topic that was discussed with the respondents was the influence of the family on their decisions to dropout. The main theme that emerged was that all of the interviewed men had uneducated mothers, almost all of whom were illiterate. The fathers had relatively higher levels of education, but few had studied beyond secondary school. According to most of the respondents, the low level of their parents' education combined with their low expectations for their children were important determinants in the level of their academic achievement and engagement at school. This is evidenced in the comments of two participants regarding their parents' interest, or lack thereof, in their schooling and dropout experiences:

> "My parents are illiterate and they would never ask about school. Even at the end of the year when I'd give them my report card, they wouldn't be able to tell if I passed or failed. So this would encourage us to skip class and misbehave at school because no one paid attention."

> "[My parents] weren't upset when I dropped out because they were illiterate themselves."

On the contrary, another respondent, Ahmed, argued that because his mother was illiterate and did not have the opportunity to enroll in schooling, she felt strongly about her son earning an education. He said, "My mom was the only one who would run after me to go to school, but my dad always said 'leave him alone'." With the father as the decision-maker in the family, Ahmad (as well as most of the other interviewed men) was given the freedom to do whatever he wanted, which he claimed ultimately had a negative influence on his academic achievement and engagement at school.

In a few cases, particularly among the older interviewees who came from more traditional and strict families, the fathers were in some cases found to be physically and/or psychologically abusive towards them. One of the men did not recall having any 'pleasant memories from home.'

"Imagine you are having breakfast, lunch, and dinner, and your family is telling you 'you fool, you failure, when are you going to be like your brother? When?' How would you feel?"

Another interviewee also described being ridiculed by his father in the middle of his class at school and being regularly beaten at home. Such situations, although undoubtedly critical in determining the experiences of these men, were not the norm but highlight, particularly in the case of inmates, how some individuals are subjected to numerous abusive situations of which dropping out of school is but one result.

Student–teacher relations

When asked about their experiences at school, the interviewees all agreed that student-teacher relations were one of the most critical factors, within the school domain, that determined young men's decision to drop out of school. With the exception of a few respondents who dropped out of school under unique circumstances, such as financial reasons, almost all of the men described having extremely bad experiences with their teachers, and in some cases principals and social workers as well. Bad teachers were most commonly characterized as being 'strict' and 'unsupportive'. The interviewees also mentioned that the teachers offered no support to students who were visibly struggling with their school work, they favored those who were faring well academically, and often resorted to humiliating weak students publicly. This behavior, the participants stated, only spurred resentment and frustration toward the teachers. One of the men specifically recalls a teacher saying to him, "Understand on your own. Understand from God." Others faced similar difficulties dealing with their teachers:

"The teachers gave all their attention to the good students. They completely ignored the others."

"They [teachers] would make you feel like you're a mistake…if you don't understand why what you've done is wrong, then you'll just spiral down and focus on just annoying your teacher by getting into more trouble."

In addition, most of the participants admitted that their dislike of certain teachers resulted in their dislike of the subjects taught by these teachers. One of the respondents described moving from being at the top of his class to disliking math after starting secondary school and having a bad teacher in the subject. Another young man experienced a similar situation:

"I actually liked all subjects, but it was the teachers who would make me hate certain subjects and push me to skip classes, especially when the teacher would continuously pick on you and blame you for anything that went wrong in class you'd just give up on trying to behave."

A number of older participants also added that in the past some teachers resorted to hitting their students. Choosing such forms of punishment, although no longer popular, was an additional practice used by teachers, and sometimes principals, to control student behavior both in and outside the classroom. According to the men, physical abuse was a common practice beginning in the early stages of school and the teachers used anything from rulers, pipes, and wires.

"I still remember the hitting. In grade 5, I had a teacher who for some reason hated me and made me hate studying. As a result I became stubborn and refused to study. I still remember the teacher once brought an electrical cable and had two boys hold me, and he hit my legs with the wire to the point where I couldn't walk."

"During those [school] days, the teachers did nothing but hit us; we were used to it from grade 1."

The MOE now officially forbids corporal punishment and as a result this practice has become less prevalent over the years. Younger interviewees did not mention it as a practice in their respective schools. However, Ridge (2009) found that over 70% of students in her study reported being hit by a teacher, and at schools visited recently, boys still reported being hit by teachers. So while the practice is forbidden, it does persist, probably in schools with weaker leadership and/or in remote areas where rules are difficult to enforce.

Finally, despite the respondents overall having negative experiences with most of their teachers, all of the interviewees recalled at least one favorite teacher that they typically looked up to. Usually, this teacher also taught their favorite subject. The interviewees used terms such as 'kind', 'patient', and 'supportive' to describe how they remembered these teachers. One of the respondents added that the students had positive relations with these teachers primarily because, "…they would treat us like their sons and would advise us."
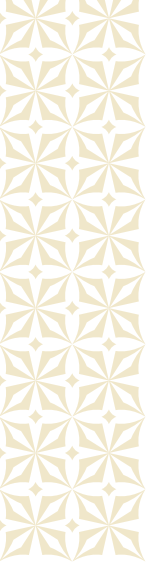
Self-esteem and (dis)engagement

In addition to all of the visible negative school factors such as low achievement rates, retention, misbehavior, skipping classes, and bad relations with teachers that, over time, pushed the men out of school, there are a number of other individual factors that they argued also played an important role in their decision to leave school early. These included the students' self-esteem and confidence, and resulting disengagement from school. A few of the participants reflected on these influences:

"If I could go back in time, I would advise the teachers who ridiculed students in front of the class when they would ask a question…[I would] tell these teachers that this is wrong and that they were lowering the students' self esteem."

"The teacher put me down even when I answered questions correctly…all they did was upset me and dig me deeper and deeper into depression."

"I felt I was an idiot…I honestly believed I wasn't good enough. How was I not supposed to feel that way if everyone told me from the social worker to the teacher to my parents…and I was young so I couldn't convince myself otherwise."

Therefore, teachers, and schools overall, have an important role to play not only on the academic achievement of students, but also on their psychological well-being and self-esteem. In the case of the interviewed men, it is evident that rather than serving as a support system and safe environment for the students, the school (and teachers specifically), were perceived as being important in pushing them away from school and society.

Peer influences and social behavior

When asked about the influence of other students on their decisions to drop out, the participants described experiencing one of two forms of negative peer influences. The first involved being bullied or disturbed by other students in the classroom. This hindered their ability to benefit from the classes and over time left them feeling disengaged from school due to the lack of school support to address these issues. One of the interviewees, Faisal, also attributed his problem with his peers to the low quality of teachers who were unable and/or disinterested in controlling the misbehaving students in class. This experience, he states, left him resentful of his close friend, who had an opportunity to move to a better school and was able to complete secondary school.

The second, and seemingly larger, influence that pushed the men to drop out from school was their involvement in a bad circle of friends, who were prone to misbehave, were regularly absent, and had a destructive social life outside of school. A number of the participants recalled frequently getting into fights with other young men over petty issues:

> "Fights were always caused by small things like a lost football game. They were always meaningless reasons. As youngsters the men didn't know how to deal with their frustrations except through fighting."

> "I used to get into fights with my friends, outside the sports clubs, etc. but they were never serious…about someone swearing at another, meaningless reasons that didn't deserve fighting over."

Another participant described how his involvement with drugs and alcohol resulted not only in his entanglement with a bad group of friends, but also in his decision to drop out of school.

> "We were more interested in going to discos, doing drugs, and drinking, how were we supposed to show up to school? My whole group of friends left school around the same time."

In the worst of cases a few of the young men had access to and carried weapons, which ultimately were the leading cause behind their jail-time.

The dropout experience

When asked about their reasons for dropping out of school, most of the interviewees did not state just one reason, but rather a combination of family, school, and personal factors that over a period of time pushed them out of school, which is consistent with the literature on the topic. Of the men that were interviewed, most attributed their decisions to the lack of family support and awareness, low quality teachers, and being part of a disruptive group of friends (or being bullied by peers). The reflections of the respondents on this question illustrate the complexity of the dropout process and the difficulty in identifying one primary cause behind why students choose to leave school early:

> "I was pressured from numerous sides. My parents were not as supportive of my education as they should have been. I chose the wrong friends."
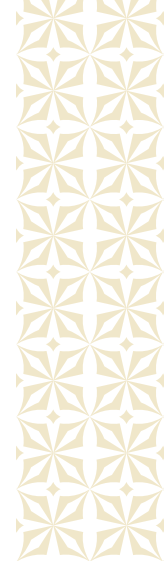
> *"If it hadn't been for my problems with the teachers, I would have wanted to complete school…at the time, I [also] didn't feel like there was any benefit to school, there was no awareness about education."*

> *"If I could go back in time, I would change my relationship with my family and friends. I would make sure to pass my courses."*

After dropping out of school, some of the men chose to join the public sector, primarily working in the army. Ultimately, many of them enrolled in adult education in order to earn their secondary school diploma. Interestingly, the experiences of the men varied significantly, with only some choosing to remain enrolled in the courses. Two interviewees described having particularly negative experiences, while one describes what he has gained from adult education:

> *"After first dropping out I went to an adult education center for a whole year, but I failed the year…I felt the teachers there wouldn't care at all about the students. No one asked about attendance…I once was one hour late for my exam and no one paid attention to me."*

> *"[Adult education] is horrible, they don't care at all about the students…the teachers refused to help me. No one cared if we attended classes or exams."*

> *"Being [in adult education] is starting to bring back my love for mathematics. I still hope to pursue my dream of becoming an electric engineer."*

The Future

In a discussion of future steps for both groups of men who dropped out of school, their plans were clearly different. Of the men who are currently in prison, a few have since received their secondary school diplomas, but unfortunately in most prisons in the UAE, there are no provisions for prisoners to enroll in any higher education programs. The remaining interviewees have prioritized looking for employment over returning to education as they feel that is the only option that will allow them to live independently upon their release. For those who had a history of drug use, their futures remain unclear as they claim that employers are unlikely to hire individuals with a drug record, despite them having served their sentences.

In the case of the men currently enrolled in adult education, they all discussed their aspirations to pursue higher education. Most of them stated that they have chosen to pursue this path due to their recognition of the value of education. However, the more likely reason behind their decision to continue their education is government regulations that increasingly require public sector employees to meet minimal educational requirements in order to gain employment and develop a meaningful career.

Conclusions

This study of Emirati males and school retention is remarkable in its findings being so consistent with similar studies conducted in the rest of the world. There is often a belief that dropping out of school is a cultural phenomenon and somehow unique in each setting. However, this study finds that in the UAE, the reasons young people choose to leave school before completing their education are largely the same as young people the world over.

Firstly, students from low socioeconomic backgrounds are more likely to drop out of school than those from wealthier families. Low socioeconomic indicators are also associated with single parent families, and in the case of families in the UAE, there is either divorce or polygamy. Students whose fathers were not working were also at greater risk of dropping out than students whose fathers had a job. It did not matter whether the father was working in the public or private sector, as long as he was working. This has wide policy ramifications for the UAE as retirement ages are based on years of service rather than the age of the person. Of course, having a job may also be signaling a particular work ethic, or a value for education that fathers who are retired or unemployed do not have.

Having a large family size was also found to be significantly and positively related to dropping out. One possible explanation for this would be that larger families tend to be less financially stable, and thus, could force young men into dropping out to seek a job. Another explanation could be that with larger families, each sibling is given less personal attention, support, and academic supervision.

Secondly, at the school level, again consistent with the literature, students who have repeated a grade or who were not engaged in school were more likely to have dropped out. The impact of peers who have dropped out or who were disruptive is also linked to dropping out. Students who were interested, engaged, and involved in school were also less likely to drop out than those who weren't. There were equally strong effects for teachers from both the quantitative and qualitative results. Good teachers were significantly linked to students staying in school, while poor and, often abusive, teachers had not been forgotten by those that dropped out of school. Having a good relationship with the teacher was also found to reduce the likelihood of dropping out. The impact of teachers on student achievement has been documented in a number of studies but less so in terms of their impact on student retention, the default position being that socioeconomic or family factors are more important. However, this research finds that efforts to reform teacher quality, through minor changes such as checking homework, respecting their students, and encouraging them, could have real benefits in terms of keeping students in school.

Finally, the study finds that parents play an important role in their child staying in school. The education of the parents is significantly related to the likelihood of dropping out of school, in particular the mother's education shows a strong positive impact on keeping a child in school. The findings suggest the possible existence of an intergenerational transmission of educational attainment effect (Heineck and Ripahn, 2007). That is, the lower levels of educational degrees attained by the parents of dropouts are likely to have been transmitted to the dropouts in the form of attitudes towards schooling or simply modeling of the parents.

Parental involvement in their child's education was also important. The interviews indicated that many of the young men who had dropped out had very little parent involvement in their education. This may be the result of the parents themselves having little education, feeling unable to assist, or being too busy with other commitments. Regardless of the reasons, the findings suggest that parental supervision and support can act as a motivating factor for young men in the UAE.

If parents feel accepted at their child's school, then they will be aware of their child's academic and behavioral standing and be able to support him or her. In rural areas, there are anecdotal accounts of parents not even knowing the name of the school their child is enrolled in. This, coupled with the strong relationship between living close to family and having strong friendships, means that what schools and communities need to invest in is relationships between family and the school. This will yield significant improvements in a child's attendance at school and likely in their achievement as well.
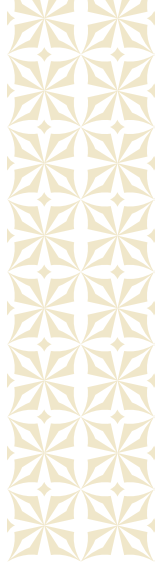
Recommendations

Recommendations are provided in two parts, the first relating to family and socioeconomic factors and the second relating to school factors.

Family and Socioeconomic

1. Encourage greater parent involvement in the child's education - this could take the form of programs that provide parents with information about what is happening in the school, more frequent parent-teacher contact through regular messages or phone calls, literacy courses for mothers or fathers, a dedicated parents lounge in the school, courses for parents on how to help children succeed at school even if they are not well-educated.

2. Help fathers to maintain employment of some sort until at least the age of 60 to set a positive example for their children. Incentives could include running courses in setting up a business and building entrepreneurial skills.

3. Provide financial literacy courses for parents to help build a stable savings base for their family, and thus mitigate some of the low socioeconomic factors through better financial management.

4. Offer support for children from single parent or multiple mother households in the form of social worker follow-up from the schools, financial supplements for good grades, or assistance for attending special courses/counseling related to resolving family conflict.

School

1. Improve teacher quality through:

   a. More rigorous entry requirements for teacher education programs for national teachers.

   b. More stringent recruiting requirements for expatriate teachers, including mandatory introductory courses in pedagogy and classroom management before starting work in government schools.

   c. Minimum competency standards for subject specialist teachers that have to be maintained, i.e. a minimum of 550 TOEFL for English language teachers.

   d. Regular, high standard professional development for all teachers, with a minimum amount required for each year.

   e. A mandatory probation period of two years for all new teachers during which they are observed and assessed by independent inspectors to determine whether or not they should be granted permanent status.

   f. Five year reviews of all teachers based on a combination of observations and feedback from students, colleagues, principals and parents.

2. Provide support for weaker students in the form of extra classes at school, homework help, or bringing in specialized teachers.

3. Track students' grades and attendance records and follow up on students as soon as they have four or more absences in a semester or if they have poor examination results. Related to that would be using student records to target young, at-risk males for early intervention programs.

Appendix A

Table 1. Number (percent) of studies finding each risk significantly contributing to school dropout by region

Factor	U.S. & OECD Countries (N=16)	Developing Countries (N=26)
Individual Domain		
Individual Background Characteristics		
• Higher age at enrollment (over-age for grade)	--	5 (19%)
• Gender	3 (19%)-male	**9 (35%)–female**
• Presence of disability/frequent illness	5 (31%)	**12 (46%)**
Early Adult Responsibilities		
• Economic/opportunity cost/employment	5 (31%)	19 (73%)
• Marriage/parenthood	5 (31%)	7 (27%)
Social Attitudes, Values & Behavior		
• High-risk peer group/social behavior	4 (25%)	--
• Admiration of those who left	--	3 (12%)
School Performance		
• Low achievement	**13 (81%)**	**9 (35%)**
• Retention/over-age for grade	**8 (50%)**	**10 (38%)**
School Engagement		
• Poor attendance	**11 (69%)**	8 (31%)
• Low educational expectations	3 (19%)	--
• Low commitment to school/lack of interest	**9 (56%)**	**10 (38%)**
School Behavior		
• Misbehavior/delinquency	**8 (50%)**	19 (73%)
Family Domain		
Family Background Characteristics		
• Poor/low socioeconomic status	**8 (50%)**	**19 (73%)**

Factor	U.S. & OECD Countries (N=16)	Developing Countries (N=26)
• Ethnic/caste/language minority	4 (25%)	7 (27%)
• Low education level of parents	4 (25%)	**12 (46%)**
• Not living with both natural parents	**6 (38%)**	7 (27%)
• Parent unemployed	2 (13%)	4 (15%)
• Large number of siblings, esp. under age 5	3 (19%)	5 (19%)
• Family disruption (e.g., divorce, death)	4 (25%)	5 (19%)
• High family mobility	**6 (38%)**	7 (27%)
Family Engagement/Commitment to Education		
• Sibling has dropped out	3 (19%)	--
• Low contact with school	**6 (38%)**	2 (8%)
• Little importance placed on schooling	4 (25%)	5 (19%)
School Domain		
Structure		
• Large enrollment	3 (19%)	--
• Higher concentration of low-income & minority	3 (19%)	--
• Distance too far/too few schools	1 (6%)	11 (42%)
• Lack of facilities (e.g., latrines) & materials	--	4 (15%)
• Lack of post-primary schools	--	2 (8%)
Functioning		
• Lower school quality	1 (6%)	**11 (42%)**
• Unsafe (e.g., gangs, corporal punishment)	3 (19%)	6 (23%)
• Low quality of teaching/high teacher absence	--	5 (19%)
• Lack of relationship with adult in school	4 (25%)	--
• Language of instruction not child's mother tongue	1 (6%)	3 (12%)
• Lack of relevance of curriculum	4 (25%)	3 (12%)
• Lack of rigor in teaching	**6 (38%)**	--

* USAID, 2012

Table 2. Secondary school students who discontinued schooling for reasons other than those represented by Table 4

Emirate	Number of Dropouts*				Percentage of Dropouts*			
	Grade 10	Grade 11	Grade 12	All Grades	Grade 10	Grade 11	Grade 12	All Grades
RAK	212	14	19	245	13.9	1.5	1.9	7.1
Sharjah	264	32	98	395	11.7	2.8	7.4	8.3
Fujairah	76	14	47	137	8.8	2.2	7.6	6.5
UAQ	0	1	2	3	0.0	0.5	0.9	0.4
Ajman	45	8	4	57	6.5	1.5	0.8	3.3
Abu Dhabi	552	243	332	1,127	10.0	6.1	8.9	8.5
Dubai	196	34	71	300	13.8	4.1	8.2	9.7
All Emirates	1,345	346	573	2,264	4.1	0.6	0.8	5.5

Percentage of dropouts where dropping out was due to the above reasons as well as death, transferring to another school, transferring to adult education, moving out of the country

Table 3. Number and percentage of secondary school students who dropped out from school by emirate in 2007/2008

Emirate	All Grades [N]	All Grades (%)
RAK	634	18.3
Sharjah	833	17.6
Fujairah	377	17.8
UAQ	80	11.6
Ajman	207	11.9
Abu Dhabi	1,857	14.0
Dubai	502	16.2
All Emirates (2007/2008)	4,490	15.4

Table 4. Self-reported reasons for dropping out

Reason for dropping out	Yes (%)
Didn't like school	31.5%
Grades weren't high enough	48.3%
Didn't need education for the job I wanted	24.2%
Couldn't afford it	11.4%
Preferred to work and make my own money	48.3%
Didn't feel school was important	30.9%
Needed to support my family	55.7%
Other	6.7%

Appendix B

Logistic Regression Prediction Model predicting the effects of selected variables on the probability of dropping out from secondary school (N = 496)

Variable	B	S.E.	Wald	df	p	OR	95% C.I. LL	95% C.I. UL
Region								
Abu Dhabi	-2.92	0.703	17.278	1	.000	0.054	0.014	0.214
Dubai	1.821	0.546	11.133	1	.001	6.177	2.12	18.002
Northern Emirates	0.501	0.473	1.124	1	0.289	1.651	0.654	4.17
Family Background								
Mother's occupation								
Government	0.096	0.709	0.018	1	0.893	1.101	0.274	4.42
Private	-0.11	1.643	0.005	1	0.946	0.895	0.036	22.403
Other (retired/dead)	0.421	0.535	0.622	1	0.43	1.524	0.535	4.345
Father's occupation								
Ministries	0.437	0.578	0.571	1	0.45	1.548	0.499	4.804
Private	-1.15	0.893	1.665	1	0.197	0.316	0.055	1.819
Army/police	-0.54	0.586	0.864	1	0.352	0.58	0.184	1.828
Unemployed	0.262	0.954	0.075	1	0.784	1.299	0.2	8.424
Other (retired/dead)	0.001	0.672	0	1	.060	2.001	0.268	3.737
Stepmother at home	1.072	0.57	3.535	1	.060	2.922	0.956	8.938
Mother's nationality	1.801	0.832	4.685	1	.030	6.058	1.186	30.959
No. of siblings	0.075	0.065	1.322	1	0.25	1.078	0.949	1.225
Mother's highest level of education	-0.22	0.168	1.706	1	0.192	0.803	0.578	1.116
Father's highest level of education	0.424	0.174	5.959	1	.015	1.529	1.087	2.149
Good Parenting Factor	-0.51	0.232	4.826	1	.028	0.601	0.381	0.947

Wealth Factor	-0.21	0.043	23.026	1	.000	0.815	0.749	0.886

School Characteristics and Experiences

Private school	-4.24	1.534	7.619	1	.006	0.014	0.001	0.293
Violence Factor	0.269	0.188	2.048	1	0.152	1.309	0.905	1.893
Disruptive Students Factor	-1.34	0.242	30.605	1	.000	0.262	0.163	0.421
Good Teacher Factor	-1.61	0.256	39.295	1	.000	0.2	1.121	0.331

Individual Characteristics

Positive attitude towards school	0.795	0.326	5.951	1	.015	2.215	1.169	4.195
No. of repeated years	1.1	0.256	18.505	1	.000	3.005	1.82	4.961
Took drugs/alcohol	1.075	0.901	1.421	1	0.233	2.929	0.501	17.134
Saving for education	0.307	0.494	0.385	1	0.535	1.359	0.516	3.581
Good Student Factor	-0.54	0.231	5.373	1	.020	0.585	0.372	0.921
Bad Student Factor	-0.36	0.23	2.443	1	0.118	0.698	0.445	1.095

Values and Attitudes About Life

Being successful at work	-0.47	0.515	0.825	1	0.364	0.626	0.228	1.718
Getting married and starting a family	0.326	0.38	0.739	1	0.39	1.386	0.659	2.916
Being rich	0.439	0.264	2.771	1	0.096	1.551	0.925	2.6
Having strong friendships	-0.71	0.409	2.966	1	0.85	0.494	0.222	1.102
Having steady work/ job	0.422	0.434	0.947	1	0.33	1.525	0.652	3.569

	B	SE	Wald	df	p	OR	LL	UL
Helping others in the community	-0.16	0.348	0.222	1	0.638	0.849	0.429	1.678
Giving kids better opportunities	1.02	0.476	4.587	1	.032	2.774	1.09	7.057
Living close to family	0.664	0.339	3.837	1	.050	1.942	1	3.773
Leaving current area of residence	0.161	0.181	0.786	1	0.375	1.174	0.823	1.674
Addressing socioeconomic inequalities	0.279	0.243	1.316	1	0.251	1.322	0.821	2.129
Having children	0.241	0.345	0.488	1	0.485	1.273	0.647	2.504
Enjoying interests and skills	-0.24	0.252	0.901	1	0.342	0.787	0.481	1.29
Becoming an expert in my field	0.389	0.345	1.276	1	0.259	1.476	0.751	2.902
Getting a good education	-0.80	0.363	4.805	1	.028	0.451	0.221	0.919
Constant	-5.72	3.01	3.614	1	.057	0.003		

Note. *CI* = confidence interval; *B* = intercept; *SE* = standard error; Wald = Wald χ^2 significance; *df* = degree of freedom; *p* = probability; *OR* = odds ratio; UL = upper limit; LL = lower limit
χ^2 (43, *N* =496) = 42, *p* = .000

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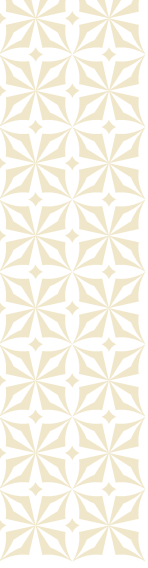
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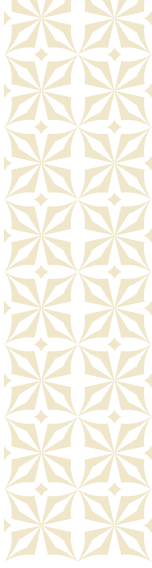
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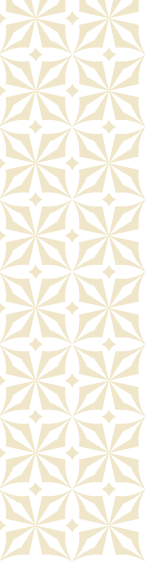
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