

**Family Socioeconomic Status and Students'
Attainments in Secondary Education in Saudi Arabia**



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LIVERPOOL

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By

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Dedication

To my beloved parents

To my dear husband

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Abstract

One of the greatest commitments of modern society is a child's entitlement to education. Although there is a vast body of literature on the relationship between family socioeconomic status and the academic performance of children, the factors that may influence educational outcomes within particular socioeconomic status bands have not been exhaustively examined. This study investigates the relationship between socioeconomic status and academic performance of secondary school children in the Kingdom of Saudi Arabia. The study starts with the fact that socioeconomic background, even if measured in terms of simple indicators of income and parental education, is a major predictor of cognitive achievement.

There is a case, however, for a more detailed analysis of the effects of the individual elements of socioeconomic status, to determine whether the social and the economic components of socioeconomic status may have distinct and separate influences on educational outcomes. In developed countries this relationship has been thoroughly investigated in sociological research. The same cannot yet be said of developing countries.

It was found necessary to assess the extent to which academic achievement (and access to higher education and further careers) is dependent on the individual elements of socioeconomic status. The resulting knowledge may play an important role in guiding and informing policy makers in addressing the problem (if demonstrated) and creating equal opportunities in education regardless of socioeconomic status.

The specific research questions posed in this research are as follows:

Does children's school performance depend on the socioeconomic status of their family? What socioeconomic, contextual, individual and family factors contribute to this relationship, if established?

The study is of particular relevance to people in low socioeconomic groups, normally unable to afford private education. In order to compete fairly with other groups, it is essential that policy-makers are informed as to the exact nature and extent of the relationship between family socioeconomic status and academic performance.

The study involved extensive field-work in the Kingdom of Saudi Arabia where surveys were carried out at public and private schools to acquire data relating to the children's families, living conditions and educational levels. This data was then analysed using the one-way ANOVA and Chi-square. Conclusions are drawn, quantifying to some extent the relationship between these factors and various measures of student performance. From these conclusions a number of practical guidelines are presented to aid in setting and evaluating government policy with a view to ensuring comprehensive and equal opportunities in accessing further and higher education.

Preface

In the final year of my first degree (in mathematics and education, graduating in 2003) I went to a secondary school to begin training as a teacher, something I'd always wanted to do. I was full of hope and motivated to improve the children's understanding of the subject and to encourage them in their learning. Being involved with students and teaching them by myself I saw many different learning styles in the students, and the effects of student attitude, for example. Such observation would be expected of educators, but extensive conversations with experienced teachers led to my recognising that student progress was governed by more than school facilities or the quality of teaching. I then observed some of my relatives in schools and discussed the students' achievements with their parents. I also began to read more about factors that are related to student achievement so as to gain a wider perspective on this issue. I discovered that although there had been extensive research into the issue worldwide, there had been very little in Saudi Arabia. Yet the issues seemed highly relevant to Saudi society and culture. Most of the available data in Saudi did not address the socio-economic position of the family and its relation to student performance. I realised that to improve planning for education, sound policies and strategies needed to be implemented. This would require a clear picture about the factors associated with students' achievements and ought to take into account their backgrounds. It seemed crucial that the information gathered and employed should be current and related to the country to which it would be applied. Hence my application for a post-graduate scholarship that brought me to Liverpool in 2005.

A couple of preliminary points may aid understanding of this thesis. First, all schools in Saudi Arabia are religious (Islamic). This applies to both public and private schools. There are no Christian, Hindu or Jewish, or secular schools.

Second, all education is single-sex. This applies from elementary school through to university. In the schools boys are always taught by male teachers and girls by females. Thus teaching in Saudi Arabia is not a mainly female occupation. There are as many male as female school-teachers. However, in 2003 the only occupations open to female graduates were in education and medicine. Opportunities for women are now wider than this, but until recently women graduates' opportunities to pursue careers were extremely limited. Teaching was one of many occupations open to men, and it was, and still is, rarely their first choice. In contrast, female recruits to teaching have included some the academically most able, which will be why most educational research has been conducted by women, who normally have been allowed to study only girls schools. An outcome is that much more has been published on girls' than on boys' schooling. There are several senses in which the research reported in this thesis is a first, and one of these is that data was collected from both girls and boys schools.

1

Introduction

The progress of any modern society depends on the correct functioning of an appropriate education system. This is particularly true in developing countries such as the Kingdom of Saudi Arabia which is currently going through a phase of social and economic change. While knowledge of the relationship between socio-economic status (SES) and education is well established in the developed world, the picture is still unclear in countries such as Saudi Arabia where only limited data is available. Little relevant research into this topic has ever been carried out in Saudi Arabia and a large number of unproven assumptions and preconceptions have the potential to inform (or misinform) the policy-making process.

The field of study is particularly important for people in low SES groups who cannot normally afford private education. For them to be able to compete fairly with other groups it is essential that policy-makers be informed as to the exact nature and extent of the relationship between SES and academic performance. Failure to address this matter urgently may lead to a social crisis in the near future as a "social exclusion" process develops, with the potential (albeit inadvertent) to create an under-privileged and under-educated underclass within Saudi society.

The population in Saudi Arabia has increased significantly in the last decade. The growth rate, of 3.6% annually, is one of the highest in the world. Official data published in November 2004 shows that the total population was then approximately 23 million (it was estimated at 27 million in 2007), and some official reports expect the population to double by 2020. This has coincided with (or perhaps resulted in) a

significant change in the socio-economic landscape. The education system has also changed and this is invariably attributed to alterations in the underlying socio-economic context, although the effects of the dramatic rise in the number of students in education (to more than 4 million) cannot be overlooked. It is in this socio-economic and political context that the issue of socio-economic status and its impact on academic performance has been investigated.

One of the greatest commitments of modern society is the child's entitlement to education. Despite the existence of a vast literature on the relationship between family SES and the academic performance of children, the factors that may influence educational outcomes within particular SES bands have not been exhaustively examined, even in western societies. Investigators from different disciplines such as psychology, education, sociology, and economics have examined the barriers to equal opportunity in educational attainment, and have disagreed on both the character of the main barriers and how these could be removed. In Saudi Arabia, however, such debates have thus far been virtually evidence-free.

Aims and objectives

This is a pioneering study into the relationship between socio-economic status and education in the Kingdom of Saudi Arabia. The general aims of this study are to determine whether or not students' performances depend on the socio-economic status of their families and to what extent various social, economic and cultural factors contribute to this. As a result of this study it is hoped that educational and social policies will be improved.

The specific operational objectives set for this project were as follows:

- 1) Determine the socio-economic, contextual, individual and family factors that may be directly relevant to academic performance.
- 2) Select a sample of secondary schools representative of Saudi Arabian society.
- 3) Design a simple anonymous questionnaire for parents.
- 4) Conduct field surveys in Saudi Arabia.
- 5) Statistically analyse the collated data and search for patterns and relationships between variables.
- 6) Derive conclusions from the above analysis relating to Saudi society.
- 7) Develop a set of practical guidelines that may lead to education policy development for the benefit of all SES groups in Saudi society.

Research questions

The research questions posed in this study are as follows:

1. Do students' performances depend on the SES of their families?
2. What socio-economic, contextual, individual and family factors contribute to this relationship, if established?
3. Is there a significant relationship between the type of educational institution (whether private or public) and student academic performance?
4. If these relationships exist, what is the extent of variation between genders?

5. What is the difference between Saudi and non-Saudi students in their attainments?

The thesis proceeds by introducing the Saudi context. It then reviews the relevant literature – exhaustively for the limited Saudi literature, and more selectively for western studies – on the relationship between children’s social class backgrounds and their attainments in education. The research methods adopted for the study are then described and justified. The subsequently chapters present the findings, leading to a chapter on conclusions, policy recommendations, and suggestions for further research in Saudi Arabia.

The Organisation of the Study

Based on the aims and objectives of this research, this thesis is divided into seven chapters. The chapters are organised as follows:

Chapter 1: Introduction

In this chapter an overview of the thesis is presented. The scope, aims and objectives of the study are outlined. Finally, the plan of the thesis is described.

Chapter 2: The education system in Saudi Arabia

Contextual information about Saudi Arabia is essential in order to facilitate comprehension of the study’s findings. Thus, geographic, socio-demographic characteristics, political and economic considerations and the education system in the Kingdom of Saudi Arabia are all explained in this chapter. Data regarding population

age structure and life expectancy are also given to provide a background to the needs of the nation.

The chapter then focuses on the education system in Saudi by addressing its history, the instigation of female access to education and the Islamic perspective on the education of women. Additionally, this chapter illustrates the structure of education in Saudi; the main administrations and more recent developments in the system such as provision of higher education. As it is important to understand the situation of women in Saudi this section goes on to highlight the main issues related to them and the difficulties they face in gaining an education. Finally the chapter describes education and economic growth in the country.

Chapter 3: Literature review

The third chapter provides a review of the literature and identifies gaps within it. This starts by presenting the existing Saudi literature and its limitations then progresses to a review of the Western literature. In this way the theoretical background of the topic is outlined.

Chapter 4: Study methodology

In chapter four the methods in the research for this thesis are discussed. The chapter begins by identifying the target population, the study site, and describes the sampling. Survey design and stages of research are explained together with associated issues, and the pilot and field study procedures are described together with their outputs. The study site selected is also detailed from the perspective of the study's aims.

Chapter 5: Results (socio-economic status, parental attitudes and student cultural activities).

This chapter deals with the data collected and contains two sections. The first section provides an outline of the data that profiles the sample of students and families. In the second section the chapter develops an analysis of this data with regard to socio-economic status, parental attitudes and cultural activities.

Chapter 6: Results (gender, nationality and school type)

This chapter analyses differences in student attainment according to gender, nationality and type of school.

Chapter 7: Conclusions

Based on the results of data analysis, the discussion is presented in a manner that links the findings to each study objective. The study had a number of distinct objectives; hence certain conclusions are set out in relation to each objective.

In this final chapter a summary is presented of the data so that comparisons can be drawn between the Saudi and global contexts. Furthermore, the findings are discussed in the light of Bourdieu's theory of cultural capital. The thesis concludes with policy recommendations and suggestions for further research in this area.

Saudi Arabia and Its Education System

Profile of Saudi Arabia

The Kingdom of Saudi Arabia came into existence in 1932 and has Riyadh as its capital and Jeddah as the principal port. Saudi Arabia was an absolute monarchy until 1992 at which time the Saudi royal family introduced the country's first constitution, and the legal system is based on Shariah (Islamic law). In February 2005, Saudi Arabia held its first ever elections - municipal council elections to choose half of the new council members in Riyadh. The remaining half of council members continued to be appointed, in keeping with the previous Saudi system. Women were not eligible to vote, and less than a third of eligible voters registered.

It is necessary to describe some of the geographical, political, economic, and social characteristics of Saudi Arabia in order to understand its education.

Geographical considerations

Saudi Arabia is located in the south-west of Asia, occupies approximately four-fifths of the Arabian peninsula and covers an area of about 2,250,000 square kilometres. It has 1,760 kilometres of western coast along the Red Sea and 560 kilometres of eastern coast along the Arabian Gulf.

Saudi Arabia is bounded in the north by Jordan, Iraq, and Kuwait; in the south by North and South Yemen; in the west by the Red Sea and the Gulf of Aqaba; and in the east by Oman, Qatar, the United Arab Emirates and the Arabian Gulf.

The geographical position of Saudi Arabia is very important. It is located strategically between Africa and mainland Asia, lies close to the Suez Canal, and has frontiers on both the Red Sea and the Arabian Gulf.

Saudi Arabia is predominantly arid desert, receiving an average annual rainfall of about 100 millimetres. Temperatures are high and, in comparative terms, the environment is harsh.

Figure 2.1 The administrative map of Saudi Arabia showing Madinah region (Saudi-US Relation Information Services, 2005)



Political considerations

The highest political and administrative authority in the country is the King, who is The Custodian of the Two Holy Mosques. The constitution and legal system of Saudi are based on the Islamic law called Shariah, which obtains its legality from the Quran, the Prophet Mohammad (Peace and Blessing be Upon Him), and authentic prophetic traditions (Sunnah).

Islam is the institution on which all legal and political decisions are based. This system of government is said to be based on the interests of the country, where such interest does not conflict with the principles of religion. In other words, Islam is the

foundation of all government activities. King Fahad (1982) said: "The system of government defines responsibilities, rights and duties and regulates the system of the government and its role in the light of the Book of Allah, which is our constitution, and the traditions of his prophet, which constitute a model of life to be copied by us".

In 1924 a Council was founded under the name of The Consultative National Council, comprising 12 members. The Consultative Council's job is to study any subject referred to it in order to help the government take decisions. Ash-Shura (consultation) is defined as thinking over and exchanging views on certain issues, which are examined by scholars and experts seeking the best solutions so as to achieve the best outcomes. Hence, in Shura, rights and freedoms are transformed into social and religious duties (The Consultative National Council, 2009).

Economic considerations

It is believed that in the 1930s, prior to the beginning of commercial oil production in 1938, the government's total income was never more than US\$55 million in any one year (Al-Baadi, 1995). However, according to recent statistics, the Gross Domestic Product (GDP) of Saudi Arabia in 2007 was 216.8 billion US\$, and the Saudi per capita income in 2007 stood at \$15.736 (United Nation Development Programme, 2009).

Saudi Arabia is an oil-based economy. Oil was discovered in 1936 (Al-Baadi, 1995), and commercial production took-off during World War II. The government received its first large royalty from oil in 1945, totalling US\$ 20 million, and thereafter its revenue grew to more than US\$ 120 billion in 1980 (Al-Baadi, 1995). It is estimated that Saudi Arabia has at least 25 per cent of the world's proven oil reserves, and the oil industry dominates the economy. Oil revenues constitute about three-quarters of

the national income, making the country highly vulnerable to world price fluctuations. Huge revenues from oil exports have been used to diversify the industrial base into metals, chemicals, plastics, cement, and fertilizer, which are all now produced.

A dramatic increase in the income of Saudi Arabia in the 1970s (due to high oil prices) led to extremely rapid economic and material evolution with the construction of the main public services such as hospitals, schools, universities, houses, roads and communication systems, which were completed throughout the 1980s. The government started five-year development plans in the 1970s, which resulted in an enormous expansion in the economy and affected all aspects of life. Thus social and economic change have continued dramatically, and the discovery of oil in Saudi Arabia is considered a turning point in its modern history (Al Rawaf and Simmons, 1991).

Nowadays, family income in Saudi society is related to social class. The lower classes usually earn no more than £500 per month. Middle class incomes (the middle class encompasses the majority of the Saudi population) range from £500-£3000 per month. The higher classes have unlimited incomes not lower than £3000 per month (Albrithen, 2006).

The people of Saudi Arabia

During the 1930s the population of Saudi Arabia was estimated at 1.5 - 2 million people (Al-Baadi, 1995). In 1991 the total population of the country was about 16 million, of whom 11.5 million (72%) were citizens and 4.6 million (28%) were expatriates (Al-Baadi, 1995). In July 2007, the population of Saudi Arabia was estimated to be almost 27 million (Table 2.1). The population growth rate for native

people is about 3.65%, mainly as a result of the high birth rate (Al-Baadi, 1995). The overwhelming majority of the population are Muslim Arabs (World Press, 2009). Arabic is the official language, although English is taught in intermediate schools. Rapid economic and urban growth have resulted in the settlement (from a nomadic life) of more than 95% of the population. Until the 1960s most of the population was either nomadic or semi-nomadic (Al-Ameel, 2002).

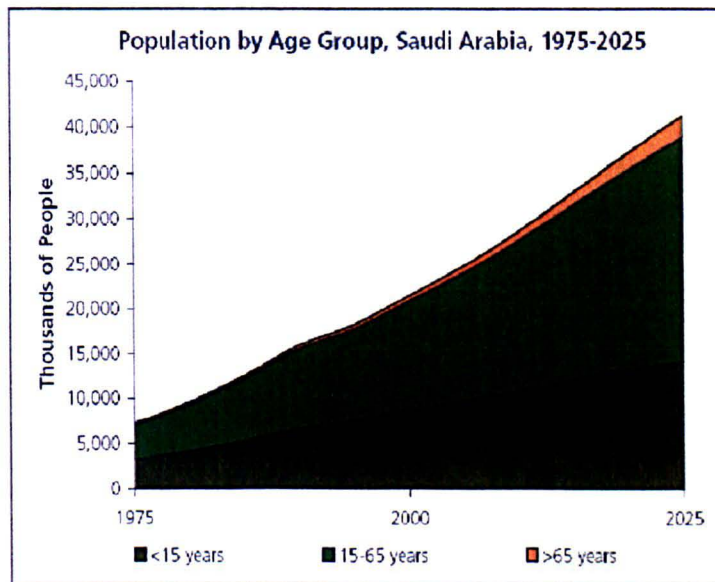
Age structure in Saudi Arabia

In developing countries, the population pyramids display population percentages of persons aged up to 14 of over 30%, and for age 75 and above of under 6%. These are considered "young populations". This is applicable to the current situation in Saudi Arabia as figures show (Table 2.1) that over 38% of the population is less than 15 years old. This leads to the realisation that the country has to face the challenge of providing schooling for this large child population.

Table 2.1 Age structure of Saudi Population (2007) (World Press, 2009)

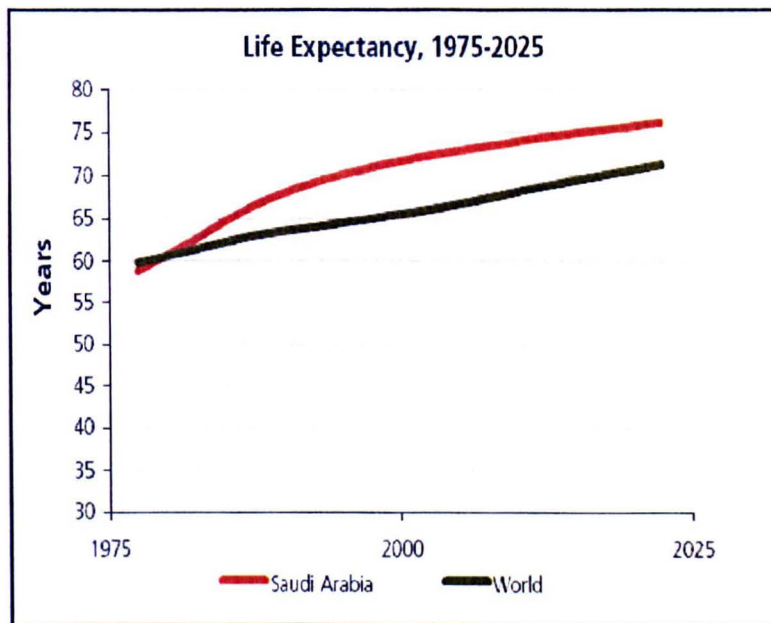
Age Group (Year)	Male	%	Female	%	Total
1-14	5369285	51.0	5162585	49.0	10531870
15-64	9316694	56.8	7089370	43.2	16406064
65-over	348827	52.6	314277	47.4	663104
Total	15034806	54.5	12566232	45.5	27601038

Figure 2.2 Population projection of Saudi Arabia by age group (World Resources Institute, 2003)



The size of particular age groups relative to the population as a whole has a significant impact on social stability and economic development. It raises key socio-economic issues. While young people are a tremendous asset for any society, countries with very young or youthful age structures have historically faced the greatest challenges in terms of development and stability. Countries with young populations (high percentages under age 15) need to invest heavily in schools. However, the population of Saudi Arabia is beginning to age (Figure 2.2), due mainly to increased life expectancy (Figure 2.3).

Figure 2.3 Life expectancy projection of Saudi Arabia (World Resources Institute, 2003)



Social considerations

Since the establishment of Saudi Arabia, the society has changed in two major stages (Al-Ameel, 2002). The first change occurred as a result of the dramatic increase in the income of Saudi Arabia in the 1970s and 1980s, which is considered a turning point in its modern history (AlMunajjed, 1997). However, the country has started another stage since the 1990s due to the global communications revolution that happened through media developments (Albrithen, 2006).

The social value system in Saudi Arabia is based on religion, the family and tradition. Religion and tradition are important factors in Saudi Arabia which is the birthplace of Islam, and its impact on the culture and society cannot be overstated. Of these three factors, family life is likely to have the most significant influence on variations in student academic performance and will therefore be considered in more detail. However, the other two factors will also be touched on briefly when describing family life.

Family life in Saudi Arabia

Relationships inside the Saudi family depend on an individual's status and personality. The father has the highest status in the family. In Saudi society and culture, a woman's primary role is that of nurturing mother and housewife (Sabbagh, 1996). Thus the mother should have unlimited support inside the house, and her image is usually friendly, sympathetic and hardworking. The relationships between the boys and girls in the family are usually dependent on their ages, family size, their personality characteristics and relationships with their parents (Albrithen, 2006).

In small cities and communities people are married at an early age, such as 22 for males and 16 for females. A traditional marriage is commonly arranged by the families. The mother or sister of the prospective groom usually consults the prospective bride first to obtain her unofficial acceptance. After receiving agreement, the groom visits the girl's father to request an engagement. At this stage, the couple are permitted see each other before making their final decision. If the engagement is confirmed, the couple enter an engagement period of a few months. During this time, the future groom calls his fiancée on the phone to get to know her more and to make plans for their future life (Albrithen, 2006).

Because of the costly requirements, marriage becomes more and more difficult for new generations. The general requirements for marriage are all indicators of solvency; a man's job and house or apartment, giving a dowry for the fiancée, usually £5,000-£15,000, and giving a gold gift, usually from the husband's mother to the fiancée (Albrithen, 2006).

Although Islam is the official religion in Saudi society, there are some matrimonial customs which are not based on Islamic principles. For instance, it is rare to find a man who is marrying for the first time a woman who has been divorced. Also, as an

example of inequality, it is rare to see a man marrying an older woman, but it is not unusual to find an older groom with a young bride. Thus, when women are past their 30th birthday, marriage becomes a less likely prospect. Furthermore, some families are unwilling to permit the possibility of marriage outside their tribe (Albrithen, 2006).

Unfortunately, divorce is a common social problem in Saudi society and has not been studied seriously. Divorce is the last resort in marriage breakdown and the decision is almost always taken by the husband. However, women can apply for a divorce in court when the husband does not want to end the marriage, but only under exceptional circumstances such as when the husband has failed to support the family. Family life inside Saudi Arabia differs from place to place within the country (Al-Ameel, 2002). For instance, families in big cities like Riyadh and Jeddah differ from those living in smaller settlements. Generally speaking, contemporary Saudi families tend to be large with not less than two children, and often have grandparents living with the main family unit (Al-Dossary, 1983). Some old social customs such as having many children, males in particular, appear to be dying out. In the past, people in villages and farms preferred sons, for men tended to be the family earners and supporters (Albrithen, 2006).

Most Saudi families rely heavily upon the housemaid to take care of cleaning, cooking and possibly raising children. Some rich families have many housemaids in addition to a family driver. Both housemaids and family drivers are usually from abroad, in particular from poor countries in eastern Asia (Khalifa, 2001). Housemaids exist in many houses but particularly in the homes of middle and upper income families. Poorer homes are significantly less likely to employ this live-in assistance. Practices began to change during the economic growth of the 1980s when

the normal family unit began to change from large and extended to small and nuclear. Nevertheless, the employment of housemaids remains a very common Saudi family custom (Khalifa, 2001). The housemaids are usually paid £80-£150 a month in addition to receiving housing, food, health care and an annual flight home. The disadvantages of employing foreign labour within the family include the loss of influence on the socialisation of children. The permanent presence of such labour and the increased reliance on it have changed family members' obligations towards each other. Children in contemporary Saudi Arabia are growing up used to being waited upon, and live in wealthy surroundings where they can mostly get everything they wish for. This compares with previous generations where children were brought up in impoverished, destitute environments, and were expected to play their part within their hard working families (Khalifa, 2001).

Education in Saudi Arabia

Saudi Arabia is generally considered an educated society. The total number of students in 2008 was 4.394.209 (Ministry of Education, 2008). Families usually support their children financially from kindergarten through to elementary and middle school with some families continuing assistance until university level (Al-Ajaji, 1999). Education has a high status in most Saudi homes where families teach their children basic knowledge such as the alphabet and Islamic principles before sending them to kindergarten at the age of five or six. Education in Saudi Arabia is provided by the government, free of charge, to all Saudi children and children of Arabic speaking residents in the country who want it, from kindergarten up to and including secondary level. However, education is not compulsory (Al Rawaf and Simmons, 1991). In 2008, the total number of schools in Saudi stood at 27,597

(Ministry of Education, 2008). The Saudi government encourages all Saudi citizens (boys and girls alike) to attend schools (Al-Hariri, 1987). Private kindergartens and schools charge a fee. There has been a great expansion of education at all levels in the past 30 years (Al Rawaf and Simmons, 1991).

History of education in Saudi Arabia

In the eighteenth century, the Islamic movement's influence on the government of Saudi Arabia led to the spread of Islamic education for all children. Classes for reading and memorizing the Quran and hadith (Prophetic traditions) were sponsored in towns and villages. Elementary education was mainly practised at the kuttab. This is a class of Quran recitation for children attached to a mosque, or conducted as a private tutorial under the direction of a Quran reader. In the late nineteenth century under Ottoman rule, non-religious subjects were also taught within kuttab schools which specialized in Quran memorisation, sometimes including arithmetic, a foreign language, and Arabic reading in the curriculum. As the purpose of basic religious learning was to know the contents of the Holy Scripture, the ability to read Arabic text was not a priority, and illiteracy remained widespread in the country. In 1970, the literacy rate for men was still only 15% and 2% for women, extremely low by any standards (Schryer, 2000). However, literacy in Saudi Arabia has improved dramatically since 1980 (Figure 2.4). In 2003, literacy (defined as persons aged 15 and over who can read and write) was reported at 78.8% of the total population (males: 84.7%, females: 70.8%) (World Press, 2007).

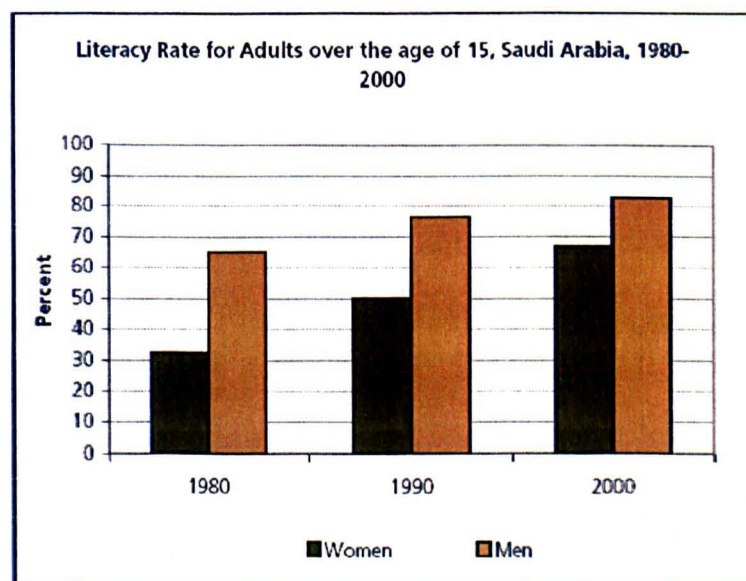
Traditionally students who wished to pursue their studies beyond the elementary level could attend an informal network of scholarly lectures (halaqat) offering instruction in Islamic jurisprudence, Arabic language, Quranic commentaries (tafsir),

hadith (Prophetic traditions), literature, rhetoric, and sometimes arithmetic and history (Al-Ameel, 2002).

Higher studies in religious scholarship were formalised in 1945 with the establishment of the At Taif School of Theology. In the early 1990s, there were two university-level institutions for religious studies - the Islamic University of Madinah and the Imam Muhammad ibn Saud Islamic University in Riyadh.

From the 1920s, a small number of private institutions began offering limited secular education for boys, but it was not until 1951 that an extensive programme of publicly funded secondary schools was initiated. The Ministry of Education, which administered public educational institutions for boys and men, was set up in 1954. The first university not dedicated to religious subjects, now known as King Saud University, was set up in Riyadh in 1957, but publicly funded education for girls did not begin until 1961 (Al-Hariri, 1987).

Figure 2.4 Literacy rates in Saudi Arabia (United Nation Development Programme, 2009)



Girls' education in Saudi Arabia

Until recently, Saudi social and economic conditions, together with primitive production methods, resulted in a feeble economy. Socially, women were of low status and priority. They played a marginal role in society and they were considered to be a burden. The situation was aggravated even more by the isolation imposed on the peninsula by the Ottoman state. This led to the accumulation of negative concepts and habits that limited women's position in society. In effect, several social forces led to a disregard of women's education for a very long time (Al-Baker, 1988).

Before 1960 there was no public formal education for women in Saudi Arabia. The daughters of rich families were sometimes educated at home by private tutors and the daughters of less well off families could attend informal kuttab schools where they would learn to read the Quran under a blind religious man (motawa) or a religious woman (who could also teach children in their own homes) (Al Rawaf and Simmons, 1991).

Education for girls started in privately run non-profit schools. The first girls' school was established in Makkah in 1942. Several other schools were established in Makkah, Madinah, Jeddah, and Riyadh. The founding of private girls' schools reflected a real expression of the social and religious desire of some citizens for the education of their daughters (Al Rawaf and Simmons, 1991).

In 1951, the General Presidency of Girls' Education (GPGE) was established. Formal state-funded education for girls started only in 1961, 30 years after the establishment of the Kingdom of Saudi Arabia (Al-Hariri, 1987).

Initially, opening schools for girls met with strong opposition in some parts of the Kingdom, where non-religious education was viewed as useless, if not actually dangerous, for girls (Al Rawaf and Simmons, 1991). This attitude was reflected in

the ratio of boys to girls in primary schools. This ratio changed from 22%:2% in 1960 to 81%:43% in 1981 as public perceptions of the value of education for girls changed. In 1989 there were approximately equal numbers of boys and girls in public schools, although school attendance was not compulsory for either boys or girls. By this time the education system had more than 14,000 education institutions, including seven universities and 11 teacher-training colleges, in addition to schools for vocational and technical training, special needs, and adult literacy. Almost 4,400,000 students were enrolled in Saudi schools for the academic year 2007-08, and 48% were female (Ministry of Education, 2008).

Female education is now widely accepted and at present there are more female schools (14,373: 52%) than male (13,224: 48%) (Ministry of Education, 2008). This development stems from mothers' encouragement of their daughters to get educated, something which was not evident in earlier days. Also, women have been working (or trained) in teaching since the beginning of girls' education in the early 1960s, and this has contributed to the acceptance of women's education and work (Al-Ajaji, 1999).

The Islamic perspective on the education of women

Since Saudi Arabia draws its habits and customs from Islam, it is important to examine the Islamic point of view regarding female education.

Islam is not just a religious ideology, but also a comprehensive way of life that claims to take into consideration all human needs (AlMunajjed, 1997). Since its beginning Islam encouraged education for both sexes and stressed the idea of equality of women and men in the pursuit of knowledge. This is inferred in both the Quran and the sayings of Prophet Mohammed (Peace and Blessings be Upon Him).

Prophet Mohammed (Peace and Blessing be Upon Him) said: 'Every Muslim, male and female, is requested to seek for knowledge' (Al-Hariri, 1987).

In fact, Islam has made no distinction between males and females in the need for acquiring education. As the Prophet Mohammed (Peace and Blessing Be Upon Him) said: "whoever follows a path in seeking knowledge, God will ease the way to heaven". Islam encourages females to learn and do what is suitable given their physical and mental abilities, as this will have a positive reflection on their society (Al-Marshed, 1998). During the days of the Prophet, women were taught Islamic religion and how to build a moral and dignified life for themselves, their children and society as a whole (AlMunajjed, 1997).

Nevertheless, this encouragement has come with some restrictions. For example, women and men are discouraged from mingling with each other and women are asked to reveal their beauty only to their husbands (Al-Hariri, 1987). An interpretation of this was taken as meaning complete division between the sexes in most aspects of life, and is apparent in Saudi society to this day. Gender division in Saudi education will be discussed later.

Structure of the education system

All state education at all levels is financed through the state budget. The total budget for education in Saudi Arabia for the academic year of 2007/2008 was 56 billion Saudi Riyals (nearly 15 billion US\$) (Ministry of Education, 2008). The elementary schools accept pupils aged seven without the requirement of having attended or completed kindergarten. Elementary or primary schools have six grades; middle or intermediate schools have three grades and are different from the high or secondary schools that also have three grades with three specialist fields; science, arts, plus a

specialisation in a religious subject. Students who successfully complete secondary education may continue their studies at universities or other post-secondary institutions. University education extends over four years or more depending on the university and the subjects studied. The bachelor degree is the lowest and most common degree offered to Saudi university students.

Overwhelmingly, youth who gain places at Saudi universities do so despite poor preparation and with little consideration given to the subjects to be studied. The reason for this is that studying at university is simply believed to be a requirement to complete one's education. All university students receive a monthly stipend of \$300. There are, however, other educational opportunities and levels involving vocational training and art education in institutions that have lower status than universities. Saudis tend to prefer jobs that do not require physical work, and most university educated people have a preference for the positions of teacher, manager or director (Albrithen, 2006).

Education in Saudi Arabia at all levels is not fully separated from its Islamic roots (Al Rawaf and Simmons, 1991, Al-Ajaji, 1999, Al-Ameel, 2002, Al-Hariri, 1987). At the elementary school level an average of nine periods a week are devoted to religious subjects and eight per week at the intermediate school level. This concentration on religious subjects is substantial when compared with the time devoted to other subjects: nine periods for Arabic language and twelve for geography, history, mathematics, science, art, and physical education combined at the elementary level; six for Arabic language and nineteen for all other subjects at the intermediate level. At the secondary level, the required periods of religious study are less, although an option remains for a concentration on religious studies.

Education in Saudi Arabia today is under the administration of three main authorities: Ministry of Education (MOE), Ministry of Higher Education (MOHE), and General Organization for Technical Education and Vocational Training (GOTEVOT).

MOE was established in 1954, headed by Prince Fahd bin Abdulaziz as the first Minister of Education. This ministry is responsible for general education, teacher training, special education programmes for the disabled, adult education and literacy, and junior colleges. However, these colleges were merged with the universities in 2009 to be controlled by Ministry of Higher Education.

MOHE was established in 1975 and oversees the colleges and universities of the KSA. By the 2004 academic year, there were around 200,000 students at Saudi universities and colleges, a dramatic improvement over the 7,000 students enrolled in 1970. In 2004, more than half were female students studying at the universities that accept both male and female students, and also at the numerous colleges set up exclusively for women. The number of Saudi universities has dramatically increased recently from eight universities in 2006 to more than 21 universities in 2008.

GOTEVOT oversees the recruitment and training of national manpower. Within this organization, programmes are divided into three tracks: technological education, industrial education, and vocational training (GOTEVOT, 2006).

Technological education encompasses courses in electricity, electronics, computing, mechanics, administration, communications, construction and agriculture. Training courses are offered by vocational training centres and cover various fields including car mechanics, AC electricity, welding, carpentry, tinsmithing, audio/visual electronics, sanitary installations, typing, aluminium work, office machines repair, computers, haircutting, sewing, photography and architecture. In 2004 there were

40,000 trainees and this number is expected to reach 75,000 trainees by the year 2010 (GOTEVOT, 2006).

Prior to its dissolution in 2003 when its functions were absorbed by the ministry, there was also a Presidency General for Girls' Education. This body administered the girls' schools, supervised kindergartens and nursery schools, as well as colleges of education and junior colleges for girls, and it sponsored literacy programmes for females. Girls' education is now co-ordinated and run by the Directorate General of Girls' Education, and staffed by religious scholars.

Gender division in Saudi Arabian schools

Saudi Arabia applies the Islamic law that prohibits women mixing with males who are unrelated to them (AlMunajjed, 1997). Furthermore, Saudi Arabia is the only Islamic country in the world that applies a strict and complete separate education system for females (El-Sanabary, 1994). This separation is applied at all levels from the elementary to university, and enforces the idea that each sex has a complementary role rather than an equal one. Saudi Arabia further reinforces gender division through the requirement that only boys take physical education, and only girls take home economics (El-Sanabary, 1994).

The Saudis also have a limited conception of the role of education in contributing to society's cultural development. The primary concern of Saudi education is the preservation of the traditional social order of strictly differentiated male and female roles (El-Sanabary, 1994).

Public and private education

Private education is officially encouraged and private institutions exist at all levels, receiving some government funding and administrative support. Although these institutions were authorised to grant official qualifications only in 2008, they have always been, in principle, supervised by the state in order to maintain an equivalent standard to the public schools. However there is a growing sense within Saudi society that these private schools, by operating as commercial enterprises, are compromising educational standards. This has in turn lead to a perception that students at such institutions are less capable and motivated than those at public schools, relying on their higher socio-economic status to effectively "pay their way" into higher education and a worthwhile career. Nevertheless, many families, especially the more affluent, prefer the recently introduced private fee-paying schools with both high educational standards and good facilities. This change has occurred since the county faced an educational crisis in the 1990s (Hamdan, 2005). The government's schools are mostly in very bad condition due to lack of maintenance. The Ministry of Education, along with the entire Saudi government, has faced recurrent financial difficulties as a result of mismanagement.

In the academic year of 2007/2008, 7% (303,173) of Saudi students were enrolled in the 1.893 private schools in the country. Slightly more males (186,523: 8%) than females (116,650: 6%) were enrolled in these schools (Ministry of Education, 2008).

This research is intended to question the validity of placing a higher value on private education by investigating the facts and attempting to address a number of fundamental research questions involving the factors that contribute to academic success and failure in the country.

Recent developments in the education system

A major objective for education has been to develop general education to deal with technological changes and rapid developments in social and economic fields, with the ultimate goal of replacing a portion of Saudi Arabia's huge foreign labour force with indigenous workers.

In the late-1980s, a high rate of student drop-outs and secondary school failures prevented the realisation of these goals. The drop-out rate was far more acute with boys than girls. One means of addressing the drop-out problem was a programme initiated in 1985 called "developed secondary education", designed to prepare students for university study as well as for practical participation in the workforce. In this programme, the student was allowed to select two-thirds of his/her study plan from courses that had practical applications or genuine appeal to the student's own interests and abilities. After completing a required general programme consisting of courses in Religion, Mathematics, Science, Social Studies, English, Arabic, and Computing, students elected a course of study in one from Islamic studies and literature, administrative science and humanities, and natural sciences.

Universities in Saudi Arabia

Between 1983 and 1989, the number of university students rose from approximately 58,000 to about 113,000, an increase of 95%. Even more dramatic was the increase in the number of women students studying at university level: from 20,300 to 47,000 during the same period, or a 132% increase. In 1989 the number of graduates from

all of the Kingdom's colleges and universities was almost the same for men and women, about 7,000 each (Ministry of Higher Education, 2008).

There has been a great expansion in Saudi education at all levels in the past few years. The total number of universities has increased from 8 to 21 since 2006 (Ministry of Higher Education, 2008). Thus the total number of students admitted to university in Saudi Arabia has increased from 68,000 in 2004 to 110,000 in 2007 (Ministry of Higher Education, 2008).

The establishment and growth of faculties of arts and sciences, medicine, and technology has been accompanied by a growth in religious institutes of higher learning. However, at least two of the universities founded for religious instruction have now integrated secular subjects and practical training into their curricula.

The expansion of the university system in Saudi Arabia has led the Kingdom to increase financial support for study abroad. In the year of 2006, the government introduced a programme known as 'The custodian of the two holy mosques' programme for overseas scholarship' (Ministry of Higher Education, 2009). This programme has been introduced to meet the huge demand for academic staff by the newly established universities. In 2009, the total number of students sponsored by this programme exceeded 50,000 Saudis with nearly 15,000 in the UK. In addition to the US and UK, new countries were included in this programme such as India, China, Japan, Malaysia, Belgium, the Netherlands and others (Ministry of Higher Education, 2009).

Initially, sending Saudi youth to study abroad met with strong opposition in Saudi Arabia in 1980s. Therefore, the government at the time decided to limit financial support for study abroad. Such restrictions had long been the desire of some

conservatives, who feared the negative influence on Saudi youth from studying abroad. After the mid- to late-1980s, the number of Saudi students going abroad to study dropped sharply. In the 1991/92 school year, only 5,000 students were reported to be studying abroad. This was slightly more than the 4,000 during the previous year, with half of these studying in the United States. These figures contrast significantly with approximately 10,000 students studying abroad in 1984.

Women going abroad to study was a particular concern for scholars in the Department of Religious Research, Missionary Activities, and Guidance. In 1982 government scholarships for women to study abroad were sharply curtailed. Enforcement of the mahram rule, whereby women were not allowed to travel without a close male relative as a chaperone, discouraged prospective students from studying outside the Kingdom. In 1990 there were almost three times as many men studying abroad on government scholarships as there were women. Currently, by the Custodian of the Two Holy Mosques' Programme for abroad scholarship, more than half of those leaving Saudi to study are female.

The expansion of formal religious education programmes in a technologically modernizing society has created some economic dislocations and some degree of social polarisation between those equipped primarily with a religious education and those prepared to work in the modern economic sector. Opportunities for government employment in religious affairs agencies and the judiciary have been shrinking as traditional areas of religious authority have given way to new demands of the modernizing and developing state. At the same time, unemployment has become a problem in society at large. In the private sector, for example, where most of the employment growth was expected in the period between 1990 and 1995,

employment was projected to increase by 213,500, but at the same time the Saudi indigenous labour force was expected to increase by 433,900.

Women's issues

For women, the goal of education, as stated in official policy, is ideologically tied to religion: "the purpose of educating a girl is to bring her up in a proper Islamic way so as to perform her duty in life, to be an ideal and successful housewife and a good mother, ready to do things which suit her nature such as teaching, nursing and medical treatment (Al Rawaf and Simmons, 1991, Al-Ajaji, 1999, Al-Hariri, 1987, Al-Marshed, 1998, Al-Zaid, 1994). The policy also recognises "women's right to obtain suitable education on an equal footing with men in the light of Islamic laws.

Although women now constitute 58% of all university graduates in Saudi Arabia (Baki, 2004), there are inequalities of opportunity in higher education that originate from the religious and social imperative of gender segregation (Cordesman, 2003). In addition to education, gender segregation is implemented in public areas and in businesses by conservative religious groups as well as by social convention (Cordesman, 2003). Due to the social expectation that men will put their knowledge and skills to productive use, fewer resources are dedicated to women's higher education than to men's. This constraint is a source of concern to economic planners and policy makers because training and hiring women will not only help solve the difficulties of indigenizing the workforce, but will also help satisfy the rising expectations of the thousands of women graduating from secondary schools, colleges, and universities. Despite this, women in Saudi Arabia are gradually getting more and more freedom. Recently, a few women have gained access to professions other than teaching and medicine which used to be the only areas of employment

accessible to women. Also, women's segregation has started to be part of a public dialogue, and as such is becoming an important issue (Baki, 2004, El-Sanabary, 1994).

Concern about these developments is compounded by the fact that females as a group have surpassed males academically in secondary schools, and the number of female graduates has outstripped the number of males (Cordesman, 2003), even though the number of girls entering school is lower than the number of boys. Calculated as a combination of the hours invested in those who drop-out or repeat classes and those who graduate, it takes an average of eighteen pupil years to produce a male graduate of general education, as opposed to fifteen pupil years to produce a female graduate.

The increase in women secondary school graduates has not been met by a commensurate increase in higher education opportunities. Despite the substantial expansion of college and university programmes for women, there remains insufficient provision for females seeking admission.

Unemployment among women is almost 20%, and women make up only about 15% of the citizen workforce. It has been estimated that Saudi women own approximately 20 percent of all businesses. However these women still cannot freely practise their businesses as they must deputise a male relative to represent them in financial transactions. Most employment opportunities for women are still in education and health care. However, despite limited educational opportunities in many professional fields, some female citizens are now able to study abroad and return to work in professions such as architecture, law and journalism (Keddie, 2006).

Difficulties of females in education in Saudi Arabia

There have been many difficulties Saudi women have faced since the beginning of women's education in Saudi Arabia. The social perspective of women's natural setting being at home, taking care of the house and children, together with the conservative ideology of Saudi culture, have added further problems to women's education in Saudi Arabia (Al Rawaf and Simmons, 1991).

It is not only in Saudi Arabia, of course, that women have had difficulties in securing their educational rights, since all over the world women are comparative newcomers to equality of opportunity in education. In Saudi Arabia, however, conservative attitudes towards the education of women arose not because of the influence of Islam but because of the traditions that grew up around it (Al Rawaf and Simmons, 1991). The Islamic clear message is that both sexes are equal in pursuing education and, even more, women and men complement each other (Al-Hariri, 1987).

There are still several limitations and restrictions facing women in education in Saudi Arabia that may be summarised as follows (Al Rawaf and Simmons, 1991, Al-Ajaji, 1999):

- 1) Curricular restrictions. Courses open to women are limited in number and many e.g. engineering, agriculture, are available only to men. In limiting women's educational options men are dictating to women and seeking to preserve their traditional role in the society.
- 2) Economic restrictions. The facilities that are provided for men greatly outnumber those provided for women. Furthermore women's education is not given the same financial support as it is for men.

3) Cultural restrictions. Women are not at liberty to travel independently; consequently they have to be driven to their places of learning by male relatives or by hired male drivers. Female teachers teach female students and when there are no female faculty in universities (as in some specialities), male teachers will teach female students through closed circuit television (CCTV).

4) Occupational restrictions. One of the major problems that face women in Saudi Arabia is the limited number of jobs that are open to them. This means that a large number of females are unemployed.

Despite these numerous restrictions on women's education in Saudi Arabia, some changes have occurred that may have had some impact on women's education (Al Rawaf and Simmons, 1991).

Education and economic growth

Due to the authority of males in Saudi families, men usually take on the official role of 'breadwinner'. Nevertheless, modern families increasingly tend to share this responsibility between men and women (Al Rawaf and Simmons, 1991, Al-Ajaji, 1999, Al-Ameel, 2002, Albrithen, 2006, AlMunajjed, 1997). This change has occurred because of women's demand to be allowed to make more significant contributions, and also as a result of modern Saudi women having been influenced by media images of western women. Many married men and women now share authority and responsibility in order to improve their economic condition. In the past, men preferred to marry women who did not work at all. Nowadays, however, some men seek women who work - especially in teaching as it has three attractive

characteristics. It is a traditional job for women, has a good salary, and there is a long summer holiday. Consequently, Saudi society is currently in conflict between being modern and being conservative, limiting opportunities for women to participate in all of society's sectors.

Despite the fact that few Saudi women work, the majority of families still experience significant economic prosperity, and yet they desire more. For example, Saudi families would be unlikely to relinquish some customs such as the housemaid, the family driver and the habit of travelling during summer holidays. Still, there is the exception of extremely poor families among the Saudi population who appear to face significant social exclusion. However, evidence of poverty is sparse, and is only now emerging as a research issue.

An article by Baki (2004) examines Saudi Arabia's gender-segregated higher education system and how it is used to transmit traditional societal expectations to the employment sector. The research concludes that, with the current need for economic change, the education system is retarding instead of accelerating reform. The case is made that the current education system fails to prepare its students for the global economy - by limiting women's access to the labour market, and also by not preparing men for the realities of the global market, thereby creating the need for migrant workers. She concludes that although conserving culture is important, for economic change to occur, the extent of cultural conservatism and its effect on the education system need to be re-evaluated.

A similar interpretation is made by Pletka (2003), who observes that despite high spending on education in the Arab world, findings from the United Nations show that

there is little evidence that education contributes to economic growth. In other words, people are going to school but they are not learning anything useful (Pletka, 2003).

3

Literature Review

Most of the research into social class and education has been conducted in western countries. Very few studies have been undertaken in Saudi Arabia. This research was designed to complement and build upon the latter studies. In respect of the western knowledge-base, the project did not set out to test hypotheses. The social, cultural and educational contexts in Saudi are so different that one could not assume that whatever applies in the west would also apply in Saudi, or conversely, that if a hypothesis was confirmed or refuted in Saudi this would prove or discredit its validity in the west. The western literature is used as a source of ideas about the features of SES that trigger processes, and the character of these processes, whereby family SES and children's attainments in education might be linked in Saudi Arabia.

The western literature is massive, and this chapter is not an exhaustive review. Rather, the intention is to search the literature sufficiently to identify processes in respect of which there is substantial evidence that the processes help to explain the link between family SES and children's attainments, and features of family SES that are responsible, whose significance could then be explored in a Saudi-based project.

Saudi literature

Comprehensive knowledge of the factors impacting on educational outcomes in Saudi Arabia is limited because there have been few previous studies in this area. Most of the studies have been unpublished Masters and PhD theses conducted in universities, written in Arabic, with a local or regional perspective. In addition, few

of the studies are recent enough to necessarily have a meaningful bearing on the current situation in Saudi Arabia. Saudi society has recently changed dramatically, both socially and economically (Albrithen, 2006), and the scale of this change makes it difficult to carry out meaningful comparisons or draw definitive conclusions at a national level from these studies. Moreover, as mentioned in the preface to this thesis, most studies have recruited female students only and thus the conclusions drawn from these studies are difficult to generalise. This was one reason for deciding to study both boys and girls in the research reported in this thesis. Furthermore, most of the previous studies investigated the issue from a purely educational rather than a sociological perspective. Finally, as far as one can be aware, none of the previous studies targeted either pupils at private schools or non-Saudi students.

Al-Ajaji (1999) found that there were several factors impacting on girls' achievements: the parents' level of education, home facilities, parent-student relationships, economic status, teacher qualifications and teacher-student relationships. Factors which did not appear to have a bearing on the achievement of female students included family size and birth order, and parents' attitudes toward their children's' education (Al-Ajaji, 1999). Social status as considered in Al-Ajaji's research was defined merely by features of the home environment such as parents' education, parents' relationships with their children, home facilities and the parents' attitude toward girls' education. However, Al-Ajaji admitted that financial status might well have been influencing the girls' education via parents' ability to purchase aids to learning. Resources thus accessed could then increase the girls' desire to learn, especially if a girl developed a hobby as a result of parental resource provision.

A recent study in Saudi Arabia by Sharaz (2006) investigated the elements of family background, size and up-bringing that might impact on academic performance at

secondary school level. The most significant factors reported in this study were the parents' employment status, the size of the family, up-bringing style and economic conditions (Sharaz, 2006).

This inevitably brief review shows the limitations of the available data regarding social influences on education in Saudi Arabia. It thereby emphasises the urgent need for up-to-date and comprehensive studies in this area. The remainder of the literature reviewed below is western.

SES and academic performance

Although there is no single theory that explicitly provides a theoretical under-pinning for SES measures, the conceptual definitions of social class and SES may help us to understand differences among these measures. Social class may be defined as "a group of people who share a similar relation to the means of production and whose interests are in conflict with other classes" (Marx, 1973 p.69). Socio-economic status (SES) refers to one's position in society as determined by a variety of factors including income, education, occupation, and accumulated wealth (Bollen et al., 2001). Conger and Elder (1994) describe low SES as involving "a high level of economic pressure indicating spousal agreement that the family (a) cannot meet its material needs, (b) often falls behind in paying its debts, and (c) has had to cut back on everyday expenses in an attempt to live within available means" (Conger and Elder, 1994).

Coleman reported that social differences, such as living in poverty, family life, and community involvement were more important to student achievement than school

expenditure (Coleman et al., 1966). Similarly, 16 years later, White found in 1982 in his meta-analytic study on SES and school performance that SES had become a convenient construct that referred to a variety of different combinations of variables (White, 1982). Additionally, he noted that this lack of consensus had created an ambiguity in interpreting research findings for social science in general and educational research in particular (White, 1982). Since the publication of White's study, a large number of new empirical studies have explored the relationship between SES and school achievement. Some of these such as (Pallas et al. (1990) and Wang et al. (1993) give a clear picture of how the relationship between SES and school achievement has changed as social and economic contexts have evolved over time.

However, many studies carried out over the last decade have demonstrated that SES is an essential contextual factor in which school achievement is embedded (Bronfenbrenner and Crouter, 1982, Duncan and Brooks-Gunn, 1997, Eccles et al., 1991, Haveman and Barbara, 1984, McLoyd, 1990). SES plays two major roles in the educational process. One's position within the socio-economic structure has a strong impact on students' life conditions by determining a) the quality of life to which they have access and b) through the socialisation process, membership of a certain social stratum creates its own social and cultural capital that influence school achievement (Considine and Zappala, 2002).

Several comprehensive reviews of the relationship between SES and educational outcomes exist (Ainley et al., 1995, Amato, 1987, Mukherjee, 1995, Williams, 1991). These reviews make it clear that children from low SES families are more likely to exhibit the following patterns in terms of educational outcomes compared to children from high SES families:

- Lower levels of literacy, numeracy and comprehension.
- Lower retention rates (i.e. children from low SES families are more likely to leave school early).
- Lower higher education participation rates (children from low SES families are less likely to attend university).
- Higher levels of problematic school behaviour (e.g. truancy).
- Less likely to study specialised maths and science subjects.
- More likely to have difficulties with their studies and display negative attitudes to school.
- Less successful school to labour market transitions.

Similarly, studies of children's educational achievements over time have demonstrated that 'social background remains one of the major sources of educational inequality' (Graetz, 1995). In other words, 'educational success depends very strongly on the socio-economic status of one's parents' (Edgar, 1976).

Another view has also been presented in which the relationship between SES and school achievement is said to be attributable to a number of other factors such as ethnicity, school type, and neighbourhood environment. Considine and Zappala (2001) carried out a study on 3000 students from financially disadvantaged backgrounds to estimate the influence of socio-economic, family, individual and contextual factors on school educational performance. Their results indicated that sex, unexplained absence, ethnicity, parental educational attainment, housing type, and student age were all statistically significant variables and predictors of academic performance. In contrast, family structure, the main source of family income and geographical location did not significantly predict variation in school performance once other factors were controlled for. They concluded their study with the

suggestion that while financial assistance to schools and families in need is important, policies and programmes that also assist families of low economic status in providing appropriate psychological and educational support for their children should be promoted (Considine and Zappalà, 2001).

In their later paper, the same authors (Considine and Zappala, 2002) went on to investigate the educational performance of children from financially disadvantaged backgrounds and examine its variation as affected by traditional measures of SES as well as by a range of other family, individual and contextual factors (Considine and Zappala, 2002). As before, they postulated that the effect of parental SES on children's educational outcomes may be neutralised, strengthened or mediated by a range of other contextual, family and individual characteristics. Parents might have a low income and a low-status occupation, for example, but nevertheless transmit high educational aspirations to their children. They single-out the following factors as being of particular significance in this respect: family structure, type of school, absences, gender, ethnicity, geographical location, and housing type (Considine and Zappala, 2002).

A number of authors have developed and adapted many parenting style typologies since the 1960s. Baumrind, for example, has been a pioneer in this field, modifying her typology from the original three types (1971) to four types (1989) (Baumrind, 1971, Baumrind, 1989). To determine different categories, typologies have commonly focused on levels of reasoning, control, demandingness, and support used by parents (Baumrind, 1971, Baumrind, 1989, Darling and Steinberg, 1993, Leung and Kwan, 1998).

The issue of whether the findings of research carried out in the west are necessarily transferable and applicable to developing countries has not been conclusively resolved in the academic debate. Indeed it is not clear whether developing countries, of which Saudi Arabia is one, are themselves sufficiently similar to be able to extend any meaningful conclusions from one country to another. There is a body of researchers (Heyneman, 1976, Niles, 1981) that maintains that pre-school influences such as SES are, at best, only marginally related to academic achievement in developing countries.

Nature or nurture? The I.Q. debate

Perhaps one of the most controversial questions relating to intelligence is that concerning the influence of genetic inheritance (i.e. nature) and environment (i.e. nurture). After the Second World War the prevailing intellectual climate favoured the "nurture" side of the argument: in other words, differences in intelligence between individuals and groups were due to environmental factors. The rise of the American civil rights movement and a general rejection of racism and elitism further favoured the environmentalist view.

Nevertheless, the "nature" argument was again endorsed in 1969 in an article by American Arthur Jensen. The article suggested that differences in I.Q. test scores between whites and blacks might have a genetic basis. Not long afterwards, further evidence that differences in test scores were genetically determined began to emerge. This led to debate, controversy and criticism. Most of the research done in this area concerns the differences in average scores between blacks and whites in the United States.

Jensen's model was criticised by Light and Smith, (1969), who demonstrated statistically that the mean IQ of 15 points difference (which is substantial) between persons of black origin and white could be explained in terms other than racial genetic differences. Instead, Light and Smith argued that such gaps were attributable to the environments blacks and whites inhabit (Light and Smith, 1969). These findings support Stinchcombe's (1969) thesis that stresses the effects of one's environment, pointing out that for most blacks the "consistently and sequentially operating social conditions" required to generate measured IQ skills are often absent (Stinchcombe, 1969). Stinchcombe (1969) widened his argument by adding that, "the cognitive consequences of growing up in urban slums, the disparities of achievement among ethnic, religious and social class groups begin to make sense if we define civilization in terms of the densities or frequencies of use of intellectual structures at different levels." The IQ studies have not controlled for the racial and social class composition of the schools attended by the subjects. However, Coleman et al (1966), conclude "that schools bring little influence to bear on a child's achievement that is independent of his background and general social context (Coleman et al., 1966). Jencks, et al. (1972) concur, stating that differences in schools have little effect on the long-term "success" of those who attend them (Jencks, 1972).

Hughes (2000) makes the point that SES is itself partly a result of intelligence, as people of high and low cognitive ability move to high and low places in the class structure (Hughes, 2000). The reason parents have high or low SES is in part a function of their intelligence, and their intelligence also affects the I.Q. of the children via both genes and environment.

Bowles and Gintis (1976) present their view that schools in the United States themselves lead to inequality, hence contribute to the capitalist economy and society

and thus make the case for educational reform (Bowles and Gintis, 1976). They also shed light on what they consider to be the reasons for the faltering of reform efforts. They argue that liberal strategies for achieving socio-economic equality have been based on a fundamental misconception of the historical evolution of the educational system, which they say has "never been a potent force for economic equality". They stress that despite the increase in the general level of education in the United States, economic mobility (i.e., the degree to which economic success - income or occupational status - is independent of the family background of individuals), has not changed measurably. Bowles and Gintis also observe that the total effect of family background on educational attainment (in term of years of schooling) has remained substantially constant. They therefore claim that the evidence indicates that, despite the vast increase in college enrolments, the probability of a high school graduate attending college is just as dependent on parental SES as it was a generation previously. Moreover, despite the important contribution of education to an individual's economic chances, the substantial equalisation of elementary and high school educational attainments over the years has not led measurably to an equalisation in income among individuals.

They make a further contribution to the I.Q. debate by claiming that the failure of reform efforts as well as the feeble contribution of education to promoting economic equality cannot be attributed to inequalities among individuals in I.Q. or other measured cognitive capacities, whether of genetic or environmental origin. Thus while one's race and the SES of one's family have substantial effects on the amount of schooling one receives, race and family background effects are practically unrelated to differences in measured I.Q.

Similarly, they maintain that while family background has an important effect on an individual's chances of economic success, this effect is not attributable to the genetic or environmental transmission of measured I.Q. Thus their view is that the debate of recent years over the "heritability of intelligence" is misplaced. Indeed, the salience of these issues in educational circles appears to be part of a widespread over-estimation of the importance of mental performance in understanding education in the United States and its relationship to economic life. The intensive effort to investigate the effect of educational resources on the cognitive attainments of different races and social classes loses much of its rationale given the wide variety of statistical sources which indicate that the association of income and occupational status with an individual's educational attainment is not due to measured mental skills.

Herrnstein and Murray (1994) stress that the social impact of variations in intelligence is significant regardless of whether the differences arise from genetic or environmental factors (Herrnstein and Murray, 1994). They do, however, venture into the nature versus nurture debate. In dealing with this question they look at variations in profiles of intellectual capacity. Modern IQ tests are made up of a number of subtests which can be classified as verbal or performance (non-verbal). While whites on average tend to score equally well on verbal and performance sections, Japanese and Koreans tend to score lower on the verbal but higher on the performance aspects. These results are similar whether the tests are done in Asia or America. It would seem that the racial variations are largely due to genes rather than environment.

In comparing black and white Americans, Herrnstein and Murray (1994) looked at people at one particular IQ level (say 105). A group of whites from a high SES band

and IQ of 105 was compared with a group of whites of low SES but the same IQ. It was found that, on the average, the educational profiles were basically the same for both groups. When whites were compared with blacks of a similar IQ level there was found to be a wide variation in the profiles of each group. They nevertheless go on to argue that genetic variations rather than the environment would seem to be the source of the race differences. The validity of tests has been scrutinised to see if any possible bias was evident. If a test is valid it should predict an individual's likely success in academic or vocational pursuits. Studies concentrating on the predictive validity of tests have shown no bias against blacks. In fact there is some evidence that tests are more likely to over-predict than under-predict the likely success of blacks.

Noble et al (2005) investigated racial and ethnic disparities in school readiness from a neuroscience perspective (Noble et al., 2005). Although researchers have traditionally measured gaps in school readiness using broad achievement tests, they can now access this in terms of more specific brain-based cognitive functions. Three neurocognitive systems - cognitive control, learning and memory, and reading - are essential for success in school. Thanks to recent advances in brain imaging it is now possible to examine these three systems, each located in a specific area of the brain, by observing them in action as children engage in particular tasks. Socio-economic status - already linked with children's performance on skills tests generally - is particularly closely linked with how well they perform on tasks involving these crucial neurocognitive systems. Moreover, children's life experiences can influence their neurocognitive development and lead to functional and anatomical changes in their brains. Noting that chronic stress or abuse in childhood can impair development of the brain region involved in learning and memory, the authors show how the

extreme stress of being placed in an orphanage leads to abnormal brain development and decreased cognitive functioning.

More optimistically, the authors explain that children's brains remain plastic and capable of growth and development. Targeted educational interventions thus have the promise of improving both brain function and behaviour. Several such interventions, for example, both raise children's scores in tests of reading and increase activity in the brain regions most closely linked with reading. The brain regions of permanent importance for school readiness may prove quite responsive to effective therapeutic interventions - even making it possible to tailor particular interventions for individual children. The authors look ahead to the day when effective educational interventions can begin to close racial and socio-economic gaps in readiness and achievement.

Although these studies are all highly relevant in the context of understanding the various relationships between SES and other factors and variables, caution must be exercised when drawing any parallels with Saudi Arabian society and the education system there. This is due to the significant and deep-rooted differences in Saudi attitudes towards education and employment. Societal expectations and norms are different than in the United States.

The effect of school type

While SES is undoubtedly a major contributor to academic performance, many studies have been conducted to investigate how this is also affected by schools. In the context of this study in Saudi Arabia where school type (private vs. public) is itself influenced by SES to a large extent, this perspective is particularly relevant. Sampson et al (2004) in USA consider the following school characteristics: funding

(public or private), school size (small or large), and gender (single-sex or coeducational), and make the somewhat surprising case that the school characteristics which lead to greater academic achievement quite often have detrimental effects on a student's psychological wellbeing (Sampson, 2004). Sampson et al concluded that while private schools tend to have higher academic performance, this is not a result of school type, but rather a result of the selective nature of private schools. This research further found that small school size was a positive factor in a student's academic performance. This is directly related to class size, and academic performance in private or small schools is thus linked to the existence of small class sizes.

It is also highly relevant to our study of Saudi Arabian education (where education is strictly segregated between the genders) to consider the findings of Sampson et al with regard to single-sex versus co-educational schools. In doing so we need to bear in mind that the cultural and social differences between the two countries may mean that these findings are not immediately transferable. Nevertheless, an American study in 1986 found many positive academic effects for single-sex schools, particularly for all-girls schools, including greater academic achievement, a better attitude towards academic work and more time spent doing homework (Bryk, 1986). Another study (Smith, 1996) investigated two single-sex schools (one all-boys school and one all-girls school) that became coeducational and found a significant decline in scholastic achievement only among the students at the former all-girls school. Watson and Quatman (2002) found that girls at all-girls schools had significantly higher ideals and also higher career aspirations than did their coeducational counterparts (Watson and Quatman, 2002). These studies appear to indicate that for girls, single-sex schools have a positive effect on academic performance.

It is still interesting to note that except in rare circumstances where steps have been taken to avoid it, the school characteristics that yield the most positive academic effects tend to coincide with those that have the worst psychological impacts. It seems to be no surprise then that many of our age's greatest minds come so often from such dismal backgrounds.

Underlying causes: cultural capital or rational action

While the link between educational attainment and parents' SES has been firmly established, the underlying causes for this are much less clear. Some studies have referred to the concept of cultural capital as this provides a useful theoretical framework for explaining the relationship between parents' SES and their offsprings' academic performance. More recently, others have approached the problem as one of rational choices taken by individuals according to their perceptions of the costs and benefits associated with their actions. The following constitutes an introduction to some of the more significant theories.

What is cultural capital?

Cultural capital is defined as "instruments for the appropriation of symbolic wealth socially designated as worthy of being sought and possessed" (Bourdieu, 1977). It is also often referred to as "linguistic and cultural competence" that demonstrates itself in such behaviours as reading or purchasing books (Bourdieu, 1977), attendance at museums, theatre performances and concerts, styles of speech, interpersonal skills and so forth (Dimaggio, 1982, Robinson and Garnier, 1985). Bourdieu (1997) also described economic, social, and symbolic capital but of these various forms he

afforded cultural capital most significance (Bourdieu, 1997). Each form, however, constitutes a power resource; a way for groups to remain dominant or gain status.

Three types of cultural capital were identified by Bourdieu. First, objectified cultural capital refers to objects that require special cultural abilities to appreciate, such as works of art. Second, institutionalised cultural capital concerns educational credentials and the credentialing system. Third, embodied cultural capital concerns the wherewithal to appreciate and understand cultural goods. In other words, it is one's disposition to appreciate and understand cultural goods (Dumais, 2002). It is this third form that most researchers have tried to draw out in their studies by demonstrating students' interest in music or art.

Institutionalised cultural capital develops as a result of one having embodied cultural capital and successfully converting it via the education system. To appropriate and use objectified cultural capital, one needs embodied cultural capital (Bourdieu, 1997).

The notion of habitus

A key component to Bourdieu's theory is the concept of habitus, which may impact markedly on student academic performance. In Bourdieu's view, habitus does indeed play a large role in students' academic achievement with few exceptions (McClelland, 1990, Reay, 1995). Students' decisions to invest in their education, study hard and go to college depend on their place in the class system and their expectations of whether people from that class tend to be successful academically (Swartz, 1997). Bourdieu (1973) argued that one's habitus develops in relation to how much cultural capital one has; a person from the lower class is aware that people

from that class tend to have little cultural capital (albeit without thinking in terms of these concepts) and that without cultural capital they are unlikely to succeed educationally (Bourdieu, 1973). Therefore, lower-class students tend to self-select themselves out of the college-going track on the basis of their views of what is possible and what is not. On the other hand, exceptional students from the lower class may see the accumulation of cultural capital as a way to overcome the obstacles that are typical for those in their class position.

The education system and cultural capital

Despite increasing rates of student education, research shows little change in class differences in educational participation (Blossfeld and Shavit, 1993). Bourdieu's theory of social reproduction and cultural capital posits that the culture of the dominant class is transmitted and rewarded by the education system. Thus an underlying assumption of cultural capital theory is that unequal educational outcomes among children are attributable to the unequal distribution of cultural capital among social classes (Bourdieu, 1977, Bourdieu, 1997). To acquire cultural capital, a student must have the ability to receive and internalise it. Although schools require that students have this skill, they do not provide it; rather, the acquisition of cultural capital and consequent access to academic rewards depend on the cultural capital inherited from the family which also is largely dependent on social class. In the view of cultural capital theory, schools are "fashioned to guarantee the success of students from the privileged groups". and thus children who have more cultural capital (having been exposed to it from birth in their upper middle and upper class families) feel more comfortable in school, communicate easily with teachers, and are

therefore likely to do well in school (De Graaf et al., 2000). Students who have higher cultural capital are likely to receive better grades because teachers tend to favour those students and thus give them more attention and feedback (Dimaggio, 1982). On the contrary, those children who are not familiar with dominant cultural dispositions may not successfully adjust in school because they obtain neither the expected results nor teachers' recognition (De Graaf et al., 2000, Dimaggio, 1982, Dumais, 2002). From the cultural capital perspective, therefore, school success or failure is not a result of "natural aptitudes" (Bourdieu, 1997).

Bourdieu maintains that cultural capital "operates either by a principle of cumulative disadvantage or of cumulative advantage" (Aschaffenburg and Maas, 1997). So those children from higher SES families already possess more cultural capital when they enter school than children from lower SES families, so they will benefit most from cultural capital (Bourdieu, 1997, Bourdieu et al., 1977). From this perspective, therefore, the education system contributes to "the reproduction of the social structure by sanctioning the hereditary transmission of cultural capital" (Bourdieu, 1997).

Cultural capital and social mobility

Bourdieu's perspective on the role of cultural capital is by no means the only one. DiMaggio maintains that cultural capital presents a path of social mobility for children from lower SES families, yet not necessarily providing additional advantage for children from higher SES families (Dimaggio, 1982). From this perspective, cultural capital is less likely to be determined by family background, particularly in modern societies where "status cultures are more diffuse and more loosely bounded"

(Dimaggio, 1982). In a situation where prestigious status cultures become more generally accessible, active participation in such high cultures can be "a practical and useful strategy for low status students who aspire towards upward mobility" (Dimaggio, 1982). Thus it will be those children from low status backgrounds who benefit most from cultural capital.

Devine (2004), however, explores how middle class parents mobilise all their resources to help their children through the education system and into good jobs (Devine, 2004). Her work was conducted via an empirical research programme involving intensive interviews with middle-class parents in Manchester in the UK and Boston, Massachusetts in the US. Talking to the interviewees as adult parents, it was readily apparent that they were using their resources to help their children do well in school and beyond. In the less favourable economic and political climate of the 1980s and 1990s, however, the reproduction of advantage was not easy, the desired outcomes were not assured and a level of indeterminacy prevailed. The difficulties of trying to ensure that their children matched or bettered their social position left many parents unhappy with current educational provisions. Devine maintains that these concerns are not just middle-class preoccupations; they concern all parents whose children are currently in school and are especially pressing issues for the disadvantaged (Devine, 2004).

Goldthorpe – rational action theory and hypotheses

In 1996, Goldthorpe developed a theory that provides an alternative explanation of the link between parents' SES and their offsprings' academic performance, later refined by Breen and Goldthorpe (1997) to express a formal model of rational action

theory (Goldthorpe, 1996). Rational action theory, as formulated by Goldthorpe (1996) and by Breen and Goldthorpe (1997), makes two general assumptions (Breen and Goldthorpe, 1997, Goldthorpe, 1996). The first of these is that differentials in educational attainment come about through the operation of primary and secondary effects; an assumption that largely follows Boudon (1974). Goldthorpe (1996) defines primary effects as all influences that shape the distribution of ability in the earlier stages of schooling. Secondary effects are defined as those that condition the choices that people make. The second assumption is that educational decisions can be seen as rational choices made by individuals who evaluate costs and benefits of possible alternatives. Thus, within a given context individuals understand the society in which they live such that they can predict, to some extent, the outcomes to alternative courses of action. Evaluation of the costs and benefits of possible alternatives further depends on the constraints and opportunities that people face.

Breen and Goldthorpe (1997) then propose three mechanisms through which differentials in educational attainment may arise at the level of the preferences of individuals. The first of these is that people avoid downward mobility. The second mechanism allows class differences in average ability levels and, in turn, class differences in expectations of success. The third mechanism takes account of the costs of education and assumes that parental resources affect educational decisions. From this general model they derive a number of hypotheses, including: "the level of education students desire is at least the same as that of their parents". This is a significant and relevant driver for action as it relates to this particular study.

One of the first to pursue the idea that students make rational decisions was Boudon (1974), who sought to explain educational differentials by referring to primary and secondary mechanisms. Like Breen and Goldthorpe, he took care to point out that his

explanation in no way took into account the different values of pupils of different backgrounds. Breen and Goldthorpe presented an extended version of the theory of Boudon, and did so in a formalised manner that forced them to make explicit all underlying assumptions.

Other explanations within the rational choice tradition explain educational differentials by pointing toward class differences in aspirations (Murphy, 1981, Murphy, 1990), or to differences in the value that students attach to education (Gambetta, 1987).

In 1998, Morgan tried to explain educational differentials by combining rational choice theory and status attainment theory (Morgan, 1998). He argues that the status attainment theory of educational aspirations needs to be recast as a theory of educational intentions and grounded on the simultaneous cost–benefit calculations of students and their significant others (Morgan, 1998). The model that Morgan presents differs in two ways from that of Breen and Goldthorpe. First, following the status attainment literature, Morgan assumes that more education is always better. Breen and Goldthorpe, on the other hand, treat education as an investment good concerning class destinations, rather than as a consumption good. The mechanism of risk aversion that is crucial to the theory of Breen and Goldthorpe is absent from the rational choice explanation given by Morgan. Secondly, Morgan treats educational expectations differently. Whereas Breen and Goldthorpe distinguish between the level that students want to achieve and their expectations of the likelihood of success at that level, Morgan uses a measure of educational expectations that more or less combines these.

Conclusions

It was decided that this research would not engage with the IQ controversy. Many have accepted that variability in class outcomes in education is a reflection of intellectual differences between the social classes caused by environmental and genetic processes. In *Inequality*, one of the most cited texts in the sociology of education, Jencks et al (1972) thought it necessary to include a genetic component in their causal model of attainment differences between the social classes (Jencks, 1972). Other sociologists - of whom Boudon (1981) is the best known - have preferred to distinguish between 'primary effects' on attainment (those that might be attributed to intelligence) and 'secondary effects' (those that remain evident between social classes when prior attainment is controlled) (Boudon, 1981). Boudon argues that secondary effects contribute more to inequality of educational opportunity than primary effects (the critical moment happens when students from different social origins with the same level of qualification choose different destinations), and is thus not troubled by the decision to limit sociology to the residual variance due to social influences. The majority view in sociology is probably that adopted by Bourdieu (1993, p. 178), who rejects the entire IQ controversy: 'I think one should purely and simply refuse to accept the problem of the biological or social foundations of "intelligence", in which psychologists have allowed themselves to be trapped' (Bourdieu, 1993).

Up to now IQ tests have not been used in Saudi Arabia, which was another reason for sidestepping the controversies. It was decided to focus on the cultural capital and rational action explanations of any link between family SES and students' academic performances that might be found (and which was expected, and was in fact found) in the research data. The basic premise of rational action theory could be

Research Methodology

The research strategy adopted was to some extent dictated by limitations of the available data on the attainments of school-children in Saudi Arabia. Ideally, historical quantitative data from government ministries would provide a comprehensive and reliable source of information, but such information did not, and still does not exist. A large-scale survey of a nationally representative sample was beyond the resources available for this research. Details and justification of the approach actually adopted are as follows.

Target population

This study targeted students attending the second year of secondary schools. Two types of schools (private and public schools) were included in the research, educating both male and female students, studying science-based and arts-based subjects.

As for the academic level of the target population, it was decided to target the second year of the 3-year secondary system, owing to a number of considerations:

- It was expected that the students in this year would have had one year to settle into secondary school, and hence they were expected to exhibit a maturity and serious attitude that they might have lacked in their first year.
- Students in their second year were expected to have more time available to them than in their third year when they would be expected to be preparing for their end-of-year examinations.

- The second year is also the year when students are grouped onto arts-based and science-based programmes.

One area of concern was that students are generally expected to be less influenced by their family SES in late secondary education than in primary education. While clearly this was a concern, it was decided that there was insufficient evidence to preclude the sampling of second year secondary school students.

The age distribution in Saudi Arabia is such that there are approximately 1.3 million people in the age group 15-19, equivalent to 4.7% of the total population of 27.6 million (US Census Bureau, 2006). Secondary-school enrolment is currently estimated at 79%, of whom approximately 93% attend public secondary schools (Ministry of Education, 2008). The share of female enrolment is only marginally (3.7%) less than that of the male student population. An enrolment rate of 79% means that attrition could be (probably was) skewed as regards SES, and this needs to be borne in mind throughout the interpretation of the findings.

Study site

The study was in Madinah. The city is one of the largest in Saudi Arabia. It is situated in the north-west of the Kingdom. The population of Madinah region is approximately 1,490,840 and the growth rate is about 3.6% a year.

Madinah is the second (to Makkah) holiest religious site in Islam and attracts a huge number of tourists (pilgrims) throughout the year. However, Madinah is not just a tourist centre. It is a major city with a large resident population. Tourism is one source of employment, but so are the health, education and other public services. Farming (dates, mint and various fruits) takes place on the city outskirts. The city

contains food processing plants, mineral water plants, and many other factories including one dedicated to printing copies of the Quran. Foreigners (all of whom must be Muslims) are employed in education and health care, and also as drivers and housemaids. All this means that the city had more than sufficient numbers of residents and foreigners in all the classes of employment to supply the range of pupils required for the purposes of this study.

Although the initial choice of Madinah was due more to convenience than to science, it was believed that (given the above) the city was sufficiently culturally and socially diverse to serve as a suitable site as regards trends and tendencies in other parts of the Kingdom, both urban and suburban.

Madinah was selected because it was more appropriate for the researcher to conduct the study there as she live and have connections. Moreover, the city has a mixture of all social groups equally for Saudis and non-Saudis who work in diverse jobs as professional or as less skills ones which make it suitable to investigate such a subject. The proportions of students from other nationalities with different background were sufficient as these students involved in both types of schools. All non-Saudis in Madinah are Muslims.

Sampling

Two main considerations informed decisions about who to survey. First, deciding what kind of people to study (i.e. the target population described above), and second, how many should be surveyed (i.e. sample size). Correctly determining the target population is critical, as unless the correct and known types of people are surveyed,

the results will be difficult to interpret. This was addressed in the target population selection.

A sample must be chosen in such a way that it is representative of the group from which it is drawn (i.e. from the target population). However in this study the sample of schools used was not random to seek for statistical representativeness. It was chosen to come across appropriate balanced sample of schools for both sexes and for both types of schools public and private to participate in the research. The larger the sample, the more precisely it reflects the target group. However, as the sample size is increased, the rate of improvement in precision decreases, and as a general rule the sampling error decreases by approximately a half when the sample size is quadrupled. Decisions about the size of the sample will inevitably be influenced by factors such as the available time, budget and necessary degree of precision.

Of the population of Madinah of approximately 1.5 million, 4.7% are in the 15-19 year age group, and there is no reason to assume that the age distribution and other features of the demographic profile of Madinah differ significantly from the remainder of the Kingdom. As mentioned above, approximately 79% of the 70,500 people in this age group are enrolled in secondary school education. Of these students, approximately 2,500 are enrolled in private secondary schools. These statistical estimates compare closely with the figures for Madinah from the Ministry of Education that quote 49,898 students in total enrolled in schools (primary, intermediate and secondary) in the academic year 2006-07, of whom 3,875 were in private institutions. There are officially 172 secondary schools in the city, 79 of which are boys schools (of which 69 are public schools), and 93 are for girls (80 of which are public) (Ministry of Education, 2008).

The target population was therefore in the region of 36,000 students, roughly equally divided between males and females. The sample size required to achieve a given confidence level (z) and a margin of error or confidence interval (m) can be shown to be:

$$n = p(1 - p) \frac{z^2}{m^2} \approx \frac{z^2}{4m^2}$$

where z is the normalised value corresponding to the confidence level (1.96 for 95% confidence level, and 2.575 for a 99% confidence level), c is the margin of error or confidence interval, and p is the estimated value for the proportion of a sample that will respond in a given way to a survey question, assumed here to be 50%.

This sample size can further be corrected by taking into account the total population (n) giving the corrected sample size n_c as follows:

$$n_c = \frac{n}{1 + \frac{n-1}{N}}$$

In this case, in order to achieve a confidence level of 95% to within a margin of error of +/- 5%, a minimum of 384 responses was needed. Correcting for the population size has only a slight effect on the sample size, as the population is much larger than 384, bringing the corrected sample size down to 380. Increasing the confidence level to 99% results in an increase in the sample size to 654. These sample sizes were considered quite manageable and achievable.

Given these sample size indicators, and given the number of schools in the target population, an estimate was made as to the number of schools to be targeted. Given the time required to carry out a survey at any given school and given the resources available to the researcher, It was decided that no school would be visited more than once, and hence approximately 12 schools would need to be targeted in the survey,

divided as equally as possible between boys' and girls' schools, and between private and public schools. This would yield a total of approximately 600 valid responses, sufficient, according to the above calculations, to achieve results to a 99% degree of confidence, within a 5% margin of error. The rationale behind the choice of schools is discussed in the following section.

Areas of sampling concern

There were a number of aspects of the sampling process that remained sources of concern, and where further attention was required. The context surrounding the concern over these areas is outlined below, raising the following issues:

1. Nationality of the target population.
2. Ratio of private school students to public school students in the sample.

With regard to the nationality of the target population, the original intention of the study was to examine the effects of SES on the performance of students in secondary education in Saudi Arabia, thus including students of all nationalities. In the sample the group of non-Saudi students express those pupils coming from different countries with different nationality studying in the Saudi schools (because this research conducted in Madinah they are all Muslims). Usually they are coming with their families who work in different jobs either as professional or manual ones which make their SES varies. However, the nature of Saudi society is such that the immigrant population generally spends only a transitory period in the country, and thus never fully integrates into Saudi society. Having often been brought up abroad and studied abroad, their backgrounds and family profiles are not generally representative of Saudi society, and similarly the factors that motivate them and

influence their performance will not necessarily be the same as those in the host society. Indeed, it was believed that their SES could be biased, as immigrant Arab families living in the Kingdom were believed to be generally (although not necessarily) educated to university level. Furthermore, access to public education in Saudi Arabia is inherently biased toward the locals, with priority allocation given to Saudi children and those whose parents are civil servants or work for the government. For these reasons it was decided to analyse the non-Saudi group separately.

As for the ratio of students in private schools sampled to those in public schools, the issue here relates to the fact that there were considerably fewer private schools than public schools, reflected in the statistics quoted above, showing that less than 4% of students in secondary education were enrolled in private schools. If proportional sample sizes were taken, then the sample size for the private schools would have been too small to be able to conclusively report any significant findings with any degree of confidence. It was thus decided to attempt to collect a similar number of returns from the private institutions, despite the difficulty this might involve, owing to the smaller number and size of these schools compared to the public schools.

Methods

1. A formal letter was taken from the University of Liverpool to indicate the importance of this research and explaining that it was part of a PhD research programme. On receipt of this letter, another formal letter from the Saudi Arabian Cultural Bureau in London was obtained to ask the schools selected for this study to cooperate. These letters are reproduced in Appendix 1.

2. Six public and six private schools (three boys' schools and three girls' schools of each type) were selected (covering suburban and urban areas) in the Madinah region. This was to ensure that the sample would include adequate numbers of pupils of both sexes, from different social classes, and that it would also be possible to compare foreigners with Saudis, and those educated at private and public schools. However, due to some obstacles (discussed later) the number of schools investigated was only five public and four private.
3. The purpose of the study was explained to the head teachers, staff and students in each school.
4. It was stressed that all the data obtained in this research would be confidentially dealt with and used for research purposes only.
5. A pro-forma, to gather data on each student's academic performance plus some additional information, was originally planned, but ultimately was not used in the survey.

Research stages

Background

This included careful selection of the localities and schools to be targeted in the study in order to ensure that they were sufficiently representative of the city and country as a whole, and of the two classes of institution in question. It was important that not only were the institutions representative of their particular categories, but also that the institutions sampled in each category should be comparable to those in

the other category in order to avoid a selection bias with the potential to introduce internal invalidity into the study. As an example of such considerations, it is known that non-Saudi nationals resident in Saudi Arabia may only have limited places in the public schools and the vast majority of them study at private schools. So it was necessary to control for nationality as well as school type when analysing the findings from the fieldwork.

Questionnaire-based survey

As discussed above, it was expected that a total of 600 pupils would be included in the study - a sufficient number to undertake all the kinds of analysis needed to meet the research's objectives.

It was decided that the only practical method to obtain both the academic performance data and the host of socio-economic variables, was to conduct a questionnaire-based survey for the students' parents to answer anonymously during the first semester (2006/2007). Initially it was planned not to inform the parents of the specific purpose of this questionnaire, as this might detract from the authenticity of their responses and introduce a source of internal invalidity, rendering any conclusions suspect or invalid. This was partially due to the sensitive nature of the issue of socio-economic status (the questionnaire sought information about family income). However, academic and ethical reasons necessitated that the researcher was honest and up-front with the parents, and all relevant points were explained in a concise and direct manner.

The anonymous nature of the questionnaire was to ensure confidentiality for the sensitive socio-economic information that was sought. The questionnaire was targeted at the parents because it was the SES of the families that was under

investigation, and in addition it would have been unethical to ask young children to disclose private information about their families.

Designing the survey

Initial planning of the survey design and survey questions is extremely important in conducting survey research. Once surveying has begun, it is difficult or impossible to adjust the basic research questions or the tools used to address them since the instruments must remain stable in order to standardise the data set. As we understood this, considerable time and effort were devoted to creating the questionnaire. The researcher found that developing a well-crafted questionnaire was more difficult than it had seemed. Therefore, we carefully considered the type, content, wording, and order of the questions to be included.

The questionnaire was designed as a self-completion schedule. The order of the questions is a very important issue. It was decided to start with demographic data such as age, nationality, gender and other straight-forward questions, and end with more contentious matters.

The questionnaire contained 36 questions. The vast majority of them were closed, all self-completed by respondents. Open-ended questions were avoided.

The layout was designed to be easy to follow and understand. A grid format was used in some of the questions. Different ways of asking questions were considered to make the questions easy to respond to. A variety of choices were provided for answers so as to allow neutral and mid-way as well as unambiguous choices. Students' names were not entered on the questionnaires.

The questionnaire was intended to glean information about the families and their circumstances, such as family size and structure, housing type, main source of

income, parental education levels, and the parents' ambitions for their children. The only questions relating to the student were age, sex, hobbies and leisure activities (the measurements of cultural capital). Age could give a hint about the academic performance of the student when read in combination with the student's academic year. All told, the questionnaire was short and contained mainly multiple choices. It was essential for the questionnaire to be simple so as not to confuse parents who could be barely literate.

Issues addressed in the questionnaire

1. Demographic data.
2. Parents' status.
3. Household information.
4. Level of education of parents.
5. Employment and financial issues.
6. Hobbies of the student.
7. Education targeted for student (the measurement of parents' aspirations, related to rational action theory).
8. Academic progress.
9. Quality of education.

First draft questionnaire

The researcher first designed a draft questionnaire to address the issues and points that needed to be investigated in this study. A brainstorming session was held with some Saudi teachers who were doing postgraduate study at Liverpool, to generate as

many ideas as possible. They examined the variables containing the key concepts and theoretical constructs that were implicit or explicit in the research questions and hypotheses. The questions were then written and proof read by an English expert to correct any possible linguistic mistakes. The language used was very simple and easy to understand and only common terms were used. An English-Arabic translation expert made an English-Arabic translation of the questionnaire into Arabic. Another expert who had not seen the original questionnaire was then asked to translate from Arabic to English. Comparing this later translation with the original English copy showed no differences. In the first draft, we tried to ensure that the questions covered every relevant concept, and there was no duplication or excessive coverage of any area.

Pilot study

A pilot study to test the questions before the main fieldwork was carried out between May and June 2005. This stage was included in order to:

- 1: Conduct a final check that the questionnaire was understandable by parents of different backgrounds.
- 2: To assess the feasibility of the sampling and survey procedure.
- 3: To check which would be the best schools in which to administer the questionnaire.
- 4: To check the best time to perform the survey.

The pilot was conducted in four schools to obtain a variety of comments. In addition, teachers and staff in each school were invited to discuss and offer any suggestions that might improve the quality of the questionnaire.

After pre-testing the questionnaire, the researcher then met her supervisor and discussed the preliminary results of the pilot study and the questionnaire itself. Many points were raised during the meeting that helped to modify some statements or aspects to be better understandable by the participants.

From analysing the pilot study and feedback from the proof readers and respondents, the following modifications were found to be important to improve the questionnaire:

1. Slight modification to the question styles.
2. Adding some questions regarding the demographic data on the participants.
3. The field study would take more time, 4 - 6 months.
4. Boys' schools should definitely be included.

The final version of the questionnaire is in Appendix 2.

Field study

The head-teachers at the selected schools were contacted initially in person, and subsequently by means of a formal letter from the Ministry of Education indicating that the Ministry had approved the study, had approved the questionnaires to be used, and was satisfied with the procedures outlined in the study, such as issues relating to confidentiality, anonymity, privacy and handling personal data. A further letter from the University of Liverpool was provided, indicating the context, scope and importance of this research. Written approval from these schools was obtained, and a mutually convenient time was set to carry out the study.

Fieldwork summary

A questionnaire survey can take a wide range of forms and the questionnaires can be distributed using a variety of methods, but in this study the researcher used a self-completion questionnaire.

1. The purpose of the research was explained to school staff.
2. One volunteer teacher per school was chosen and trained, and one social worker.
3. The researcher gave a short talk to the students stressing the importance of the study.
4. One copy of the questionnaire was given to each student in a closed envelope.

Visit procedures

When conducting the survey, the nature and purpose of the study were briefly explained to the staff and the students at each school, and assurances were given that the data collected would be completely anonymised, and our confidentiality procedures were detailed. This was to dispel any fears that their responses might be used against them by the school management or other parties.

One week was spent at each school. The study was begun at the start of the week, these being the days when the largest proportion of students would be likely to attend. As the school week starts on Saturday and ends on Wednesday, the researcher usually visited the school on Saturday to arrange matters with the headteacher, then on Sundays questionnaires were distributed and collected the next day or the day

after. For students willing to participate but whose parents were too busy to fill out a questionnaire, extra time was given.

The questionnaire was designed for completion by the parents because it sought mainly information about the students' home backgrounds. The respondents were not asked to write names or addresses on the questionnaire, thus keeping these documents anonymous, but each questionnaire had a code number which enabled it to be linked to the schools' records, from which the students' marks were obtained. Each student had five marks (for Arabic, maths, English, science, and religion). These were combined to give each student an average score which became the main dependent variable, the measure of student academic achievement, in this study. We should note at this point that currently in Saudi Arabia students do not sit any marked examinations until intermediate level. The new plan which was introduced a few years ago does not require students to sit any externally marked examinations until the student seeks entrance to the universities. By this plan, throughout the primary, intermediate and secondary stages of education, students' work is always assessed internally, by the students' own teachers, though nowadays they may use examination papers drawn from a central 'bank'.

The outcome of the field study is summarised in Table 4.1.

Table 4.1 Summary of returns from field study

	MALE		FEMALE		TOTAL
	Private	Public	Private	Public	
Number Distributed	131	213	210	489	1043
Number Collected	64	154	130	320	668
Number Valid	40	99	70	275	484

A survey's response rate can be viewed as an important indicator of survey quality. As the response rate for research such as this was not likely to be high, some devices were employed to enhance participation. Students were given a brief talk to explain the importance of the research and how it would benefit them. This encouraged cooperation in taking and returning the questionnaires. Additionally, a covering letter was included to explain the purpose of the survey and its value to the participant as well as details regarding completing the survey and use of the supplied information. Assurance was also given as to maintenance of confidentiality and anonymity. Lastly, the layout of a questionnaire can have an effect on response rates. This was addressed by making the survey short and clear.

The table shows the numbers of distributed, collected and valid returned questionnaires. There are the two types of non-response; unit and item non-response. There were 375 non-responses due either to questionnaires being sent but not returned or simply unreturned to the researcher. Students were aware that

participation was entirely optional but decisions to withhold participation remained unvoiced to research staff. Follow-up letters and copies of the questionnaire were distributed to students who agreed to take part, but not all of these were returned. The final response rate was 64.05% (but including only usable questionnaires where all the questions were answered it was 46.40%), which was considered quite good for a questionnaire survey, and the final number was adequate for the research's purposes. As a female researcher, attending boys' schools was not possible, thus it was hard to follow up the questionnaires' distribution and collection. The relatively small number of returned boys' questionnaires is a result of either a lack of student motivation to participate (because of researcher absence) or weaknesses in the data gathering system. The preponderance of girls' schools is indicative of the researcher's ability to attend the schools herself, resulting in a higher number of participants. This may also be due to student motivation caused by interaction with the researcher.

Timetable

The research work was expected to proceed according to a schedule commencing in October 2005, and ending in March 2009, displayed here in steps of quarters, from Q1 to Q14. The timing was influenced to a large extent by the academic year in Saudi Arabia, which ends in June. The hashed boxes indicate that the literature survey was on-going, and the preparation of the final thesis would commence approximately 14 months before the expected submission time.

Figure 4.1: Study plan and timescale of activities

TASK	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q	Q1	Q1	Q1	Q1	Q1
	1	2	3	4	5	6	7	8	9	0	1	2	3	4	
Methodology	■	■	■												
Literature Survey		■	■	■			■	■	■	■	■				
Determining SES factors		■													
Selection of Sample		■	■	■											
Design of Q'nnaire	■	■						■							
Field Study					■	■				■					
Data collation					■	■				■					
Data Analysis							■	■	■	■	■				
Preparation of Thesis										■	■	■	■	■	■

Inclusion and exclusion criteria

All students at the participant schools, who were registered as full-time students for the academic year of 2006/2007, were included in this study. Part-time students were

not included. They could be employees, housewives, mothers etc who had dropped-out of school for different reasons and had returned to continue their education. These students are unable to attend the school regularly and in most cases they prepare themselves to sit exams at the end of each semester. Data collected from this group of students would have confounded rather than informed the study, so part-time students were excluded.

Time of the survey

The survey was conducted during the first semester of the academic year (2006/2007), when the researcher spent one week in each school. The questionnaire was distributed on the second day of the week (Sunday), and participants was asked to return it as soon as possible within the same or the following week.

Limitation

A limitation inherent in the methods adopted is that the research could examine only the primary effects of SES (and other predictor variables) on students' academic performances. Parental aspirations are likely to exercise much of their influence as secondary effects (next steps following a given level of academic performance), and we shall bear this in mind throughout the interpretation of the results.

Socio-Economic Status, Parental Attitudes and Students' Cultural Activities

Introduction

The previous chapter explained that the questionnaire solicited information about the students' parental backgrounds, which covered the educational levels of both parents, their occupations (if any) as well as monthly family income. The additional information gathered relating to the family included the number of members of the household, number of siblings, sequence of the student in his or her family, accommodation type and size, and whether or not the family had a servant and/or a driver.

Parents were asked for their opinions on the importance of education, satisfaction with their adolescents' progress, the quality of education at school, their top priority for their children (higher education, marriage or career) and target qualification.

The questions related to the students themselves enquired about their gender, age, courses of study, type of school, nationality, hobbies and cultural activities (such as reading, shopping, watching television, using the internet, sport, and travel), favourite subjects and difficulty with particular subjects. The dependent variables were the scores students achieved for the subjects Maths, Science, English, Arabic literature, and Quran and Islamic sciences. There were also scores for attendance, punctuality and behaviour, but these scores were not included in the composite measure of academic performance. The scores were taken from the students' certificates for their

first year of secondary school. An average academic score was calculated for each student, and this score is the main dependent variable throughout the analysis in this and subsequent chapters.

A total of 668 students responded to the invitation to take part in this research with 484 fully completed questionnaires received. Of these, 366 were Saudi nationals (Figure 5.1). At this stage only Saudi students will be analysed. Other nationalities will be introduced in the next chapter.

There were nine schools in the study; six of them were girls schools, half of them public and half private. Two of the boys' schools were public and one private. The first observation to make about this Saudi sample is that the majority (66.1%, N=242) were female and 75.1% (N=275) were from public schools as opposed to private schools (Figure 5.2). More than half (57.9%, N=212) of the sample were enrolled on "sciences" courses as opposed to "humanities". The overall achievement of those students is shown in Figure 5.3.

This chapter proceeds by profiling the Saudi sample. It then describes the construction of the derived variables that are used throughout the subsequent analysis (family SES, parental attitudes, and the students' cultural activities). The chapter ends by examining the relationships between these key derived variables.

Figure 5.1 Distributions of students by Nationality (Saudi Vs Non-Saudi)

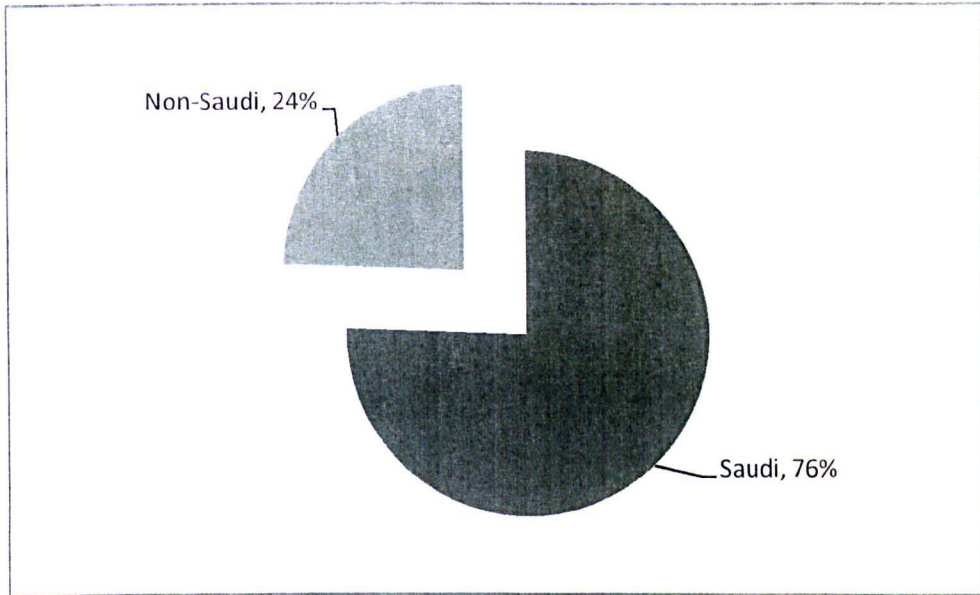


Figure 5.2 Distributions of valid questionnaires

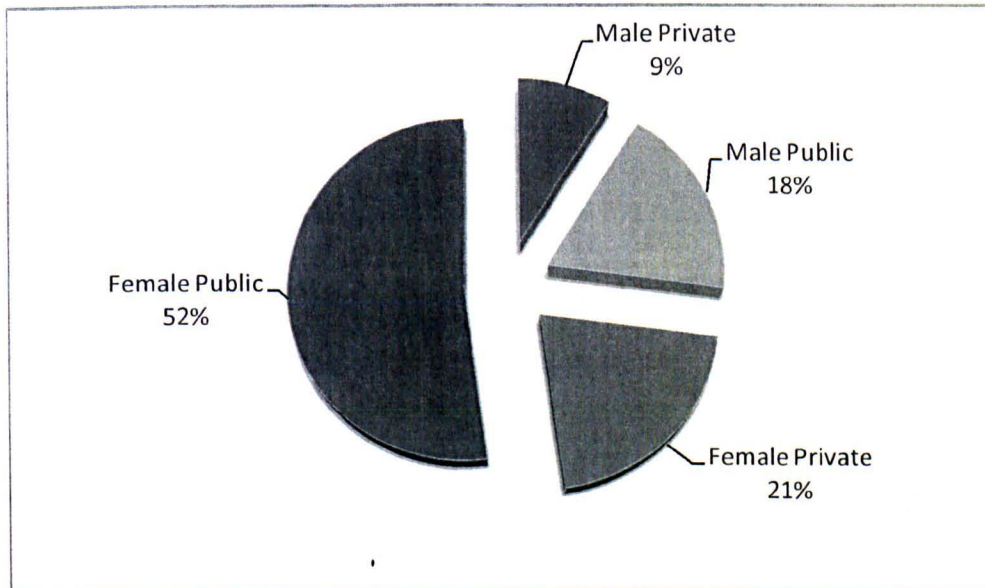
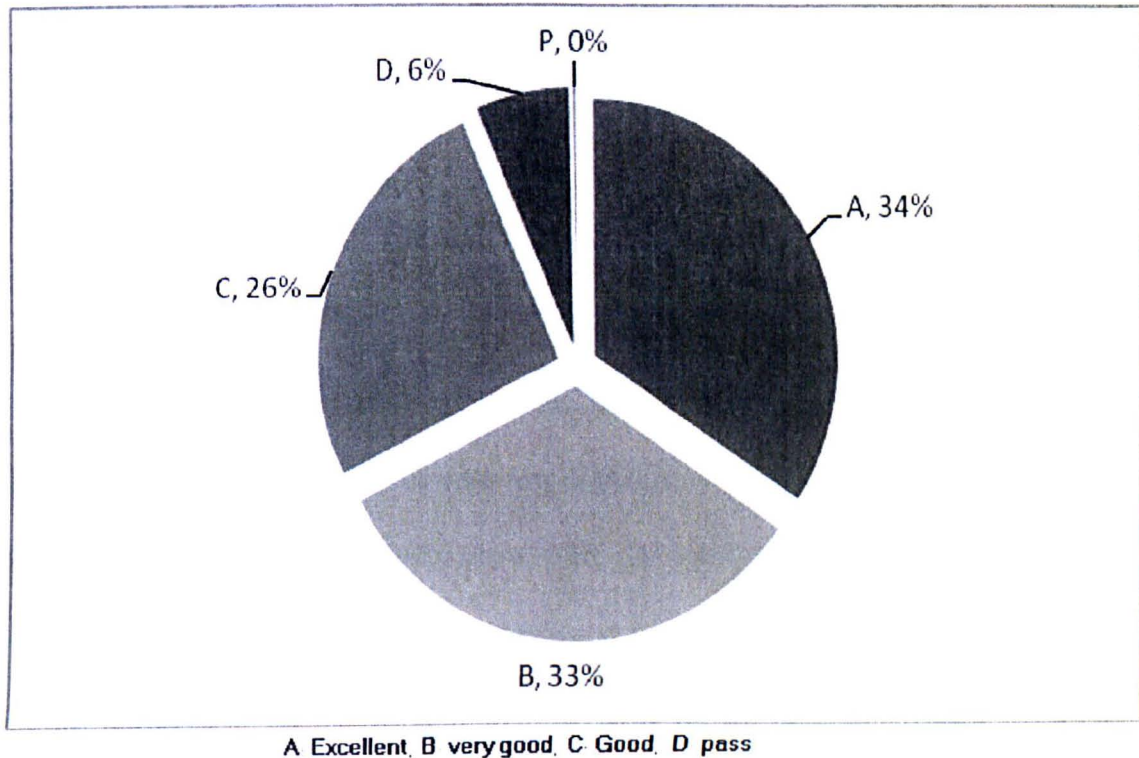


Figure 5.3 Distribution of students according to academic achievement



Parent's opinions and attitudes

The responses to the questions relating to parents' opinions on the target qualification for their children showed that a majority (62.6%) wanted their children to attain a postgraduate degree, whereas 32% were aiming toward just a first degree and only 5.5% were aiming for a secondary school education alone for their children. These were aspiring parents, certainly as regards their children's education. In terms of student performance it is perhaps unsurprising that the highest mean score (85.82%) was for those students whose parents targeted postgraduate studies.

Parents were asked for their opinions about education; 58.2% said they thought that education was essential, 36.6% declared it important, while only 1.6% said they thought it was not important and 3.6% did not know. Again, perhaps unsurprisingly, the highest mean score was for those students whose parents thought that education was essential (86.32%). Even the children of parents who considered education to be important had a relatively high score of 82.47%, compared to 76.33% and 76.15% for those whose parents answered “not important” or “don’t know” respectively.

In terms of priorities, 47% of parents prioritised higher education for their adolescents, followed by 38.3% who prioritised their children’s future careers. Only 14.8% of parents considered marriage as their first priority. Offspring of these parents showed little difference in their mean scores, which were all around 84% and 85%.

Students performed best when their parents rated the quality of education at their school as high, achieving a mean score of 86.35%. Almost 38% of parents rated the quality of education at their child’s school as very good, with a mean score of 84.69%. This score declined to 81.03% when parents considered the standard of education to be very poor.

In terms of satisfaction, 41.5% of parents were satisfied with their children’s progress and (predictably) their mean score was the highest at 87.42%. Another 33.6% were quite satisfied and their children’s mean score was relatively high at 84.05%. However, the mean score dropped to 80.93% for students whose parents were neither satisfied nor dissatisfied and to 77.47% for those who felt dissatisfied or very dissatisfied.

Students' lives

In this section information about students' home situations, hobbies and cultural activities will be presented. First, the data show that 85.5% of the respondents were living with both parents and their mean score was 84.53%. The percentage of students living with just one of their parents was very low as only 3.3% of them resided with their fathers while 9.6% were living with their mothers. The mean scores for these two groups were similar at 82.08% and 82.97%. A tiny percentage of students were found to be living with others (1.6%) and their mean score was 90%.

Hobbies

Only 9% of the participants claimed to have no hobbies and their mean score was the lowest at 79.55%. Students who chose using the computer (9.8%) as their main hobby had the highest mean score of 87.42%. The small group of 3.3% who chose going out emerged with a high mean score of 86.83%. Around 26% of the students chose sport and their mean score was 85.36%. The mean score of those declaring most interest in reading (25.7%) was 84.04%. An almost identical mean score was recorded by students who chose art, but just 9.8% declared this as their main enjoyment. Of the 5.2% who selected watching television and the 10.9% stating an inclination towards other hobbies, their scores were 83.42% and 83.93% respectively (Figure 5.4).

Reading

Almost 36% of students read on a daily basis and their mean score was the highest at 85.51%. In contrast, students who read just once a month (a very small group of only 3.3%) emerged with the lowest mean score of 78.42%. Even students who never read had a higher mean score (82.68%). Those reading once or twice a week had an

average mean score of 84% and those reading twice a month had a mean score of 83.42%.

Watching TV

The vast majority of the students (85.5%) watched television daily and their mean score was 84.23. Only 5.5% watched TV twice a week but their mean score was the highest at 89.65. The lowest scores were for students who never watched TV, or who did so less than twice a week.

Sport

Students who took part in sport at least once a week ranked highest with a mean score of 86.13%. Those who never did sport (28.4%) had the lowest mean score at 82.78%. Students who took part in sport daily (24.9%) scored 84.45%.

Shopping

Going shopping twice a month accounted for the largest percentage (44.5%) of students and their mean score was a little more than 84%. A similar average was found for those who went shopping once or twice a week or once a month. Only 2.2% went shopping daily and their mean score was 85.50%. This score was almost no different when students never took part in shopping.

Internet

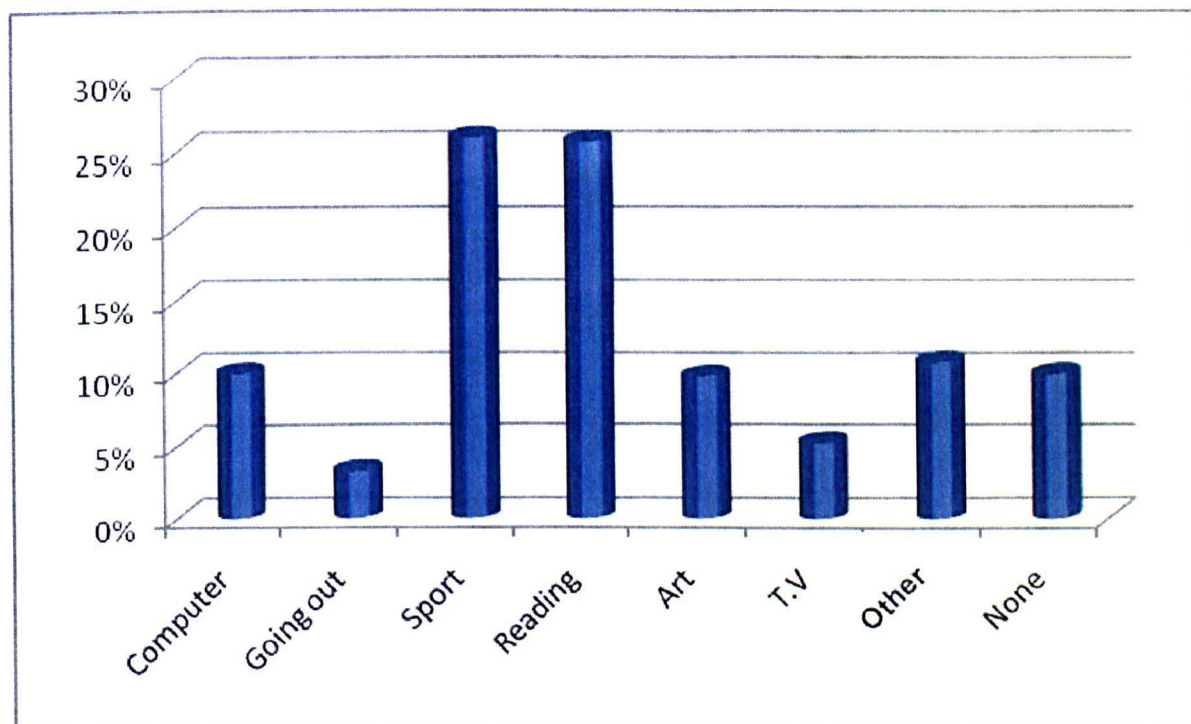
A large percentage (38.8%) of students never used the internet and their mean score was the lowest at 80.64%. Conversely, 19.7% of students used the internet on a daily basis and their mean score was the highest at 89.19%. Furthermore, students who used the internet twice a week also scored well with 88.10%. As students used the internet less so their mean scores decreased: 85.76%, 83.88% and 82.39%.

Holidays

The data show that 29.8% of the students had taken just one holiday away from home in the last 12 months and their mean score was 83.25%. The lowest score of 81.46% was recorded by those who had not taken any holiday in the previous 12 months. A certain trend is discernible in the relationship between the number of holidays and mean scores for students, as the highest mean score was for the students who had taken more than three holidays in the last 12 months (88.28%).

Students who spent their holidays in the city had the lowest mean score of 80.97%. Approximately 57% of students spent their holidays elsewhere in the Kingdom and they had a mean score of 84.41%. Only 16.1% spent their holidays outside the kingdom, their mean score being the highest at 90.1%.

Figure 5.4 Distributions of students according to their main hobbies



Students' preferred subjects

Well over the half of the students in the sample were ambivalent about physics. Only 11% could be said to have a passion for the subject. Meanwhile, passion for mathematics was somewhat stronger than that for physics but again, a significant proportion of students lacked enthusiasm for the subject (55.1%). Biology was a generally popular science subject as the percentages show that 65.5% of the students enjoyed this area of study. Regarding chemistry, the proportion of students who viewed it favourably, unfavourably and dispassionately were 29.7%, 26.9% and 43.2% respectively.

Within the humanities, history was enjoyed by a greater proportion of students than geography (39.7% - 35.9%).

The overwhelming majority of pupils regarded religion as an enjoyable area of study (82%). Those who held this topic in no esteem represented a tiny fraction of the sample.

With respect to art, there were approximately one-and-a-half times the number of students who took pleasure in this subject (53.1%) as compared to those who were unconcerned or unappreciative (36.8%).

English was a favourite subject as the number of students who regarded it either neutrally or positively represented the greatest percentage (70%).

The students were evenly divided when it came to a definitive opinion on rhetoric (26.4% - 25.6%), while 19.2% expressed neither a positive nor negative outlook concerning this subject. Literature was appreciated by over half the sample of students (56.6%). Of the three native language topics (rhetoric, Arabic and literature), literature was the most preferred and rhetoric was the least appreciated. Arabic also attracted a high level of ambivalence (28.9%).

Questions pertaining to the level of difficulty presented by the subjects revealed the following perspectives from the student sample. Many students did not appear to have a natural aptitude for physics. The data show that nearly half of the students found this topic difficult to some degree (48.3%). More students found mathematics an easy subject compared to physics - 30.3% and 27.3% respectively. On the other hand, biology seemed more attractive to the students as 76.9% encountered no struggle at all. A significant proportion of students experienced chemistry as a difficult topic

(43.6%). Of the three science subjects (biology, physics and chemistry), chemistry was found to be neither the easiest nor the hardest.

History and geography were very similar in all aspects of amenability to students. Thirty percent of pupils found both history and geography as being of no particular difficulty or ease. Nearly 28% of students found these two topics difficult, but almost 41% regarded the topics as intellectually demanding.

The vast majority of students found religion to be an easy area of study. Art was regarded unequivocally as it presented few difficulties to most students. This area of learning attracted 73.1 % of students who classified it as easy.

More students found the subject of English easy than those who found it hard (41.7% - 35.7%). Of the three native language subjects, Arabic was the least troublesome to students (15.5%). Literature, however, had the highest percentage of the students who encountered difficulty (20.6%).

Family backgrounds

This section presents information on the distribution of Saudi students' family background variables - monthly family income, fathers' and mothers' education levels, fathers' and mothers' occupations, family size, house size, accommodation type and whether or not the family had a servant and/or a driver. These variables were studied because they represented the socio-economic (and to some extent the cultural) contexts within which the students' educational careers had developed.

Monthly family income

The distribution of students according to their families' income is shown in Figure 5.5. The data show that only 17.8% of students were from families with monthly incomes less than SR2999 and these students' mean score was the lowest (79.35%). Another 22.1% of the students were from families with monthly incomes of between SR3000 and SR4999, and these students' mean score was 81.79%. Twenty-five percent of participants were from families with monthly incomes of between SR5000 and SR9999 and their mean score was 84.02%. Students from families with incomes of more than SR10000 amounted to 35% of the sample, and their mean score was the highest at 88.85%.

Parents' education levels

Firstly, it was obvious that fathers' education levels were related to students' attainments as the students' mean score was high, 88.58%, when their fathers had graduated from university. Mean scores declined sharply to nearly 82% when the fathers' education was of secondary level or below. The mothers' education level had an equally strong relationship with their children's achievements, as students scored 88.57% if their mother had graduated from university and 86.18% with just secondary education qualifications. However, 57.9% of the mothers' education was below secondary qualification and the offspring of these parents' mean score fell to around 82%.

Fathers' occupation

The distribution of fathers' occupations (Figure 5.6) reveals that 29.5% of fathers occupied professional and managerial positions and their children's mean score was

the highest at 88.39%. Eighteen percent of fathers did clerical and related work, and their children's mean score was 82.20%. Only 5.2% of fathers occupied manual jobs and their offspring had a mean score of 83.74%. Of the fathers who were self-employed (25.7%), their adolescents' mean score was 83.4%. We can also note that 9.8% of the fathers were unemployed and their adolescents' mean score came out the lowest, 79.03%.

Mothers' employment

The study found that the majority of mothers (74.9%) were housewives, with their adolescents' attaining a mean score of 83.46%. In contrast, only 24.6% of mothers were working and their children had a mean score of 87.31%.

Figure 5.5 The distribution of students according to their families' income

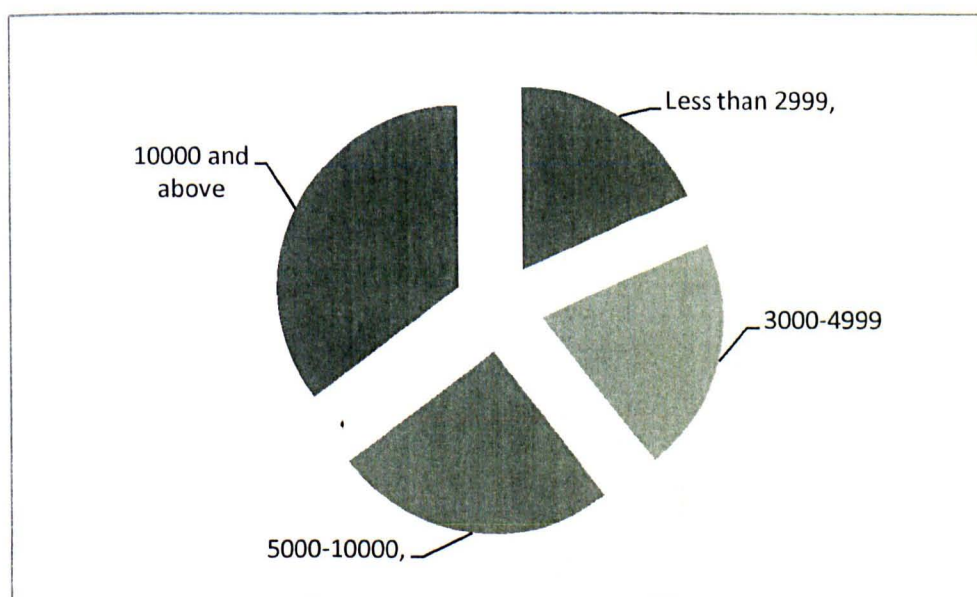
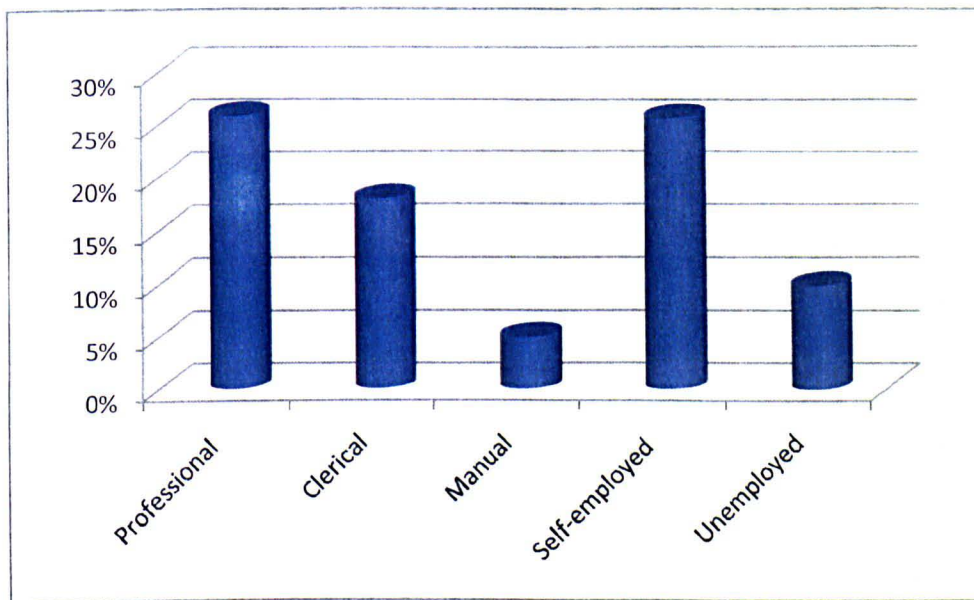


Figure 5.6 The distribution of students according to fathers' occupations



Other family circumstances

The majority of parents (86.6%) were found to be married and their adolescents' mean score came to 84.65%. The separated parents amounted to only 4.6% and the mean score of their children was 82.18%. Students who had experienced the passing away of one parent scored 81.89%. Only 1.1% of the students had both of their parents deceased, but they scored higher than any other groups (90.75%).

For the purposes of investigation into family size three categories were created; small (up to 4), medium (5-8) and large (9 or more). The majority of students (57.4%) were from medium-size families and they scored highest (85.46%). Thirty-three percent were from large families, and these scored lowest at 82.54%. Only 9.6% of respondents were from small families with a mean score of 84.37%.

Similarly, house size was split into four categories and it became clear that the larger the house the higher the mean score. Students with a small house scored 80%, medium houses 81.65%, whereas occupancy of a large house resulted in large jump to 86.91%. Finally, students in very large houses scored the highest, 88.62%. In other words, there was a positive relationship between house size and students' mean scores.

In terms of accommodation, most students (59.8%) were living in flats, 31.7% in a villa, and only 8.5% in rural accommodation. There was a clear relationship between type of accommodation and students' achievements as scores increased up to 87.35% when living accommodation was a villa and 83.39% for flats. Scores fell to 80.32% for those in rural accommodation.

Almost 67% of families lived in owned accommodation, and these students' mean score was the highest (84.80%). Rented accommodation (30.3%) resulted in a score of 83.68%. Students who lived in free houses constituted just 3% of the sample and their mean score was the lowest, 82.55%.

Nearly 60% of families had a servant and the mean score of these students was relatively high, 86.92%. In contrast, students whose families did not have a servant scored lower than the average, 80.79%. On the other hand, the presence of a driver, although less common (30.1%), resulted in a mean score even higher than with the presence of servant of 88.1%. The majority (69.9%) of students did not have access to a driver and registered a lower score of 82.79%. Nevertheless, this mean score was an improvement on those who declared the absence of any servant.

Derived variables

This section describes the procedures used to merge variables into different scales for analysis. There are four scales; firstly, student overall attainment (already used above); an average score out of 100 is given for all subjects.

The second scale is for SES which combines five variables into one scale and creates a hierarchy of socio-economic status. These variables were all related to each other, and all predicted student attainment. Therefore, one point was awarded for each of the following: in terms of parents' education, one point was given to both father and mother if they had graduated from university; another point to monthly family income if it was more than SR10.000; a further point to fathers with professions or management jobs; and finally a point for a working mother. This makes a scale ranging from 0 to 5 which describes the position of the family and its circumstances.

With this scale students are categorised into six groups. The largest is the nil group which represents 45.9%. The smallest groups are those with 4 and those with 5. Each of these two groups comprise around 7%. This scale shows that there is an obvious positive relationship between the achievements of a student and his or her family SES (Table 5.1). The first and second groups score nearly alike with 81%, the third group scores higher at 86.25% and the top three groups score similarly with approximately 90%. For further analysis this scale is sometimes collapsed into three SES groups - lower, intermediate and higher - and sometimes into just two groups, lower and higher.

Table 5.1 The relationship between the achievements of a student and family's SES

SES	Mean	N	Percent	Std. Deviation
0	81.35	168	45.9	8.937
1	81.74	46	12.6	8.850
2	86.25	52	14.2	8.700
3	89.47	49	13.4	9.168
4	90.24	25	6.8	10.289
5	89.81	26	7.1	8.845
Total	84.39	366	100.0	9.679

Upon analysis of the data it was found that parents' target qualification for their children and the importance of education from their point of view were closely related to each other and both predicted students' attainments. Again, it was decided to assign one point for parents who desired higher education for their adolescents and another point if they thought of education as essential. Thus, another scale was created consisting of three levels relating to parental attitudes. It is clear that a positive relationship existed between parents' attitudes and their children's achievements as the mean score was 76.50% in the bottom group, the score rose to 82.26% in the second group, and the highest score of 86.43% with the majority of students (57.1%) went to the third group (Table 5.2). In the analysis that follows the PA groups scoring 0 and 1 are combined to give a simplified scale of lower and higher groups.

Another important challenge was to draw together all cultural activities into one scale to give a clearer image. Therefore, the following procedure was used to construct a scale ranging from nil to six. One point was given to the students for each of the following activities: reading daily; watching TV daily or twice a week (students who

watched less frequently had lower education scores); taking part in any kind of sport at least twice a month; using the internet twice a week or more; having more than two holidays a year, and taking a holiday outside the Kingdom. Calculating these points divided the students into groups which indicated a strong correlation between a student's level of cultural activity and his or her mean academic score. Increased involvement in cultural activity led to a raised score, with a strong tendency that as students became involved in more cultural activities their mean scores improved (Table 5.3). In much of the following analysis this scale is collapsed into lower and higher scoring groups.

In the following analysis the cultural activities scale is used to assess the extent to which the superior educational attainments of pupils from the higher SES families were due to their superior 'cultural capital'. We should note here that the components of cultural capital have not been identified arbitrarily by the researcher. Rather, they have been incorporated into the scale because they were all related to family SES on the one hand, and to the pupils' academic performances on the other. The parental attitudes variable is used to assess the extent to which the link between academic performance and SES could be due to families in the different SES groups having different levels of ambition for their children.

Table 5.2 Parents' attitudes and student's achievements

PA scale	Mean	N	Percent	Std. Deviation
0	76.50	16	4.4	8.725
1	82.26	141	38.5	9.331
2	86.43	209	57.1	9.396

Table 5.3 Cultural activities and student's achievements

Cultural Activities	Mean	N	Percent	Std. Deviation
0	70.00	1	.3	.
1	79.40	55	15.0	8.993
2	82.57	122	33.3	8.774
3	85.07	99	27.0	10.112
4	87.93	59	16.1	8.934
5	91.14	21	5.7	7.261
6	94.67	9	2.5	4.093
Total	84.39	366	100.0	9.679

The main focus from this point is a statistical analysis and discussion of the links between family SES and student attainment. The Statistical Package for Social Sciences (SPSS) was employed in this study. Results were obtained for means, standard deviations and counts, in addition to one-way ANOVAs. The results are initially explored and discussed using the three variables described above - SES, parental attitudes and students' cultural activities.

Socio-economic status

As explained above, the SES indicator comprised a scale of six groups. These groups were tested by a one-way ANOVA which demonstrated a significant relationship between the achievements of students and the SES of their families (Table 5.4). The effect size ($=.16$) is a figure classified by Cohen as a large effect size (Cohen, 1988) in (Pallant, 2007).

Table 5.4 Achievements of students and the SES of their families (ANOVA)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4943.509	5	988.702	12.167	.000
Within Groups	29253.398	360	81.259		
Total	34196.907	365			

P<.05

Parental attitudes

The evidence shows a substantial relationship between the groups on the parental attitude (PA) scale and students' achievements. Despite reaching statistical significance, the size of the difference between the groups is just medium ($=.07$) (Pallant, 2007) (Table 5.5). The data shows that the PA scale is affected by family SES. An increase in SES results in a rise on the PA scale. In other words, parental aspirations towards the education of their offspring increase with the ladder of SES. At the lower end of the scale, 49% of parents have a positive attitude to their children's education, rising to 65.3% in the middle group of the scale and reaching 74.5% in the higher SES families.

Table 5.5 Achievements of students and the Parental attitudes (ANOVA)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	2500.516	2	1250.258	14.318	.000
Within Groups	31696.391	363	87.318		
Total	34196.907	365			

P<.05

There was a positive relationship between parental attitudes and children's attainments within all SES levels (Table 5.6). Regardless of a family's SES, a positive parental attitude improved the students' achievements. At the lower end of SES levels the mean score of 80.14% increased up to 82.72% with superior parental attitudes. Meanwhile, in the middle group of SES bands, their mean score of 84.49% with a low PA score increased up to 89.58% when the PA score was highest. Finally, in the highest group of SES students, mean scores improved from 87% to 91.05% when their PA was enhanced. However, whether parental aspirations were high or low, the students' attainments remained related to family SES. In other words, parental attitudes could explain some, but not all of the variation by SES in the children's academic performances.

Table 5.6 SES, parental attitudes and student attainment

SES	PA scale	Mean	N	Std. Deviation
1	Low	80.14	109	8.760
	High	82.77	105	8.885
	Total	81.43	214	8.899
2	Low	84.49	35	9.904
	High	89.58	66	8.065
	Total	87.81	101	9.031
3	Low	87.00	13	10.344
	High	91.05	38	9.088
	Total	90.02	51	9.486
Total	Low	81.68	157	9.408
	High	86.43	209	9.396

Cultural activity

The analysis also found a significant relationship between the students' cultural activities and their achievements. A large effect size ($= .15$) was observed (Pallant, 2007) (Table 5.7). The mean scores for the two bottom groups which were not

involved in more than two activities were the lowest, 79.23% and 82.57% respectively. In the two middle groups where they participated in three and four activities, they scored 85.07% and 87.93% respectively. Finally, the highest two groups who were involved in five and six activities attained better scores than the other groups (91.14% and 94.67% respectively), but the numbers in these groups were small (just 21 and 9) (see Table 5.8).

Table 5.7 Cultural activities and achievements (ANOVA)

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	4590.144	5	918.029	11.163	.000
Within Groups	29606.763	360	82.241		
Total	34196.907	365			

P<.05

Table 5.8 Cultural activities and student attainment

C A scale	Mean	N	Percent	Std. Deviation
1	79.23	56	15.3	8.993
2	82.57	122	33.3	8.774
3	85.07	99	27.0	10.112
4	87.93	59	16.1	8.934
5	91.14	21	5.7	7.261
6	94.67	9	2.5	4.093
Total	84.39	366	100.0	9.679

Looking at the distribution of student engagement in cultural activities and reflecting on their SES, we can deduce the following points (Table 5.9):

- 1) In the bottom SES groups substantial proportions of students (34% and 31%) participated in only two or three activities.

2) In SES group 1 (the bottom group) more than half the students concentrated on practising two cultural activities. Those engaging in three activities constituted 17.4% with only 4.3% of students partaking in five or more activities.

3) In SES group 2 the proportions of students engaging in two, three, and four activities were 28.8%, 25%, and 23.1% respectively. The number of participants in five activities increased to 5.8% and a similar percentage participated in six activities.

4) In SES group 3 the percentage of participants involved in only one activity was very low – just 4%. The distribution was concentrated in those engaged in two or three activities - 34.7%, and 32.7% respectively. The number of students who took part in five activities increased to 8.2%, and 4.1% of the students were involved in six activities.

5.) In SES group 4 more students (36%) were recorded as being involved in four activities. They were followed by 24% who engaged in five activities. The proportion involved in six activities reached its highest level in the study at 12%.

6.) In SES group 5 the largest percentage of students took part in four activities (42.3%) followed by 23.1% in three activities. Participation in two activities was just 19%, while 11% of the students in this group involved themselves in five or six activities. As can be observed in Table 5.9, participation in cultural activities peaked for students from high status families and was lowest for students from low status families.

Table 5.9 SES and cultural activities

		C A scale								Total
		0	1	2	3	4	5	6		
SES	0	Count	1	39	58	52	14	4	0	168
		% within SES	.6%	23.2%	34.5%	31.0%	8.3%	2.4%	.0%	100.0%
	1	Count	0	7	24	8	5	2	0	46
		% within SES	.0%	15.2%	52.2%	17.4%	10.9%	4.3%	.0%	100.0%
	2	Count	0	6	15	13	12	3	3	52
		% within SES	.0%	11.5%	28.8%	25.0%	23.1%	5.8%	5.8%	100.0%
	3	Count	0	2	17	16	8	4	2	49
		% within SES	.0%	4.1%	34.7%	32.7%	16.3%	8.2%	4.1%	100.0%
	4	Count	0	0	3	4	9	6	3	25
		% within SES	.0%	.0%	12.0%	16.0%	36.0%	24.0%	12.0%	100.0%
	5	Count	0	1	5	6	11	2	1	26
		% within SES	.0%	3.8%	19.2%	23.1%	42.3%	7.7%	3.8%	100.0%
Total		Count	1	55	122	99	59	21	9	366
		% within SES	.3%	15.0%	33.3%	27.0%	16.1%	5.7%	2.5%	100.0%

The data show that students within different SES bands who were involved in more cultural activities had better attainments than their counterparts (Table 5.10). This means that a greater degree of involvement in cultural activities improved the attainment of students at all SES levels. However, just as with parental attitudes, controlling for cultural activity does not eliminate all the differences between the SES bands, but cultural activity was clearly acting as an important mediator. We can see that the lowest SES group improved their attainment from 80.45% to 82.92% when they enhanced their activities. The middle SES group attained 84.53% with least involvement in cultural activities and their attainments improved to 89.97% when they did more activities. Finally, the highest SES group attained 83.44% with the

lowest participation in cultural activities and rose up to 91.43% with more participation in cultural activities. This seems to indicate that the higher the student's SES, the greater the value of increasing participation in cultural activities, though we should note that only nine students in the highest SES band had low cultural activity scores. We should note also that among students with low levels of cultural activity, the highest SES band did not have higher attainment scores than the middle SES group, yet once again we must be cautious because of the very small number of cases (just nine) in the high SES/low CA group.

Table 5.10 SES, cultural activities and student attainment

SES	C A scale	Mean	N	Std. Deviation
1	Low	80.45	129	8.411
	High	82.92	85	9.449
	Total	81.43	214	8.899
2	Low	84.53	40	9.492
	High	89.97	61	8.089
	Total	87.81	101	9.031
3	Low	83.44	9	11.631
	High	91.43	42	8.474
	Total	90.02	51	9.486

Summary

In summary, a strong relationship has been found between the SES of the family and the academic achievement of the children. This SES measure is based on family income, parents' education levels, father's occupation and mother's employment.

It has also been discovered that there is a positive relationship between parental attitudes and adolescent achievement. Moreover, within all SES levels, improvement in students' achievement was found with an affirmative parental attitude.

Similarly, it has been found that students' involvement in cultural activities such as reading, watching TV, using the internet, doing sport, and taking holidays outside the Kingdom had a strong positive impact on their achievement. The higher the parents' SES, the more accessible was cultural activity for their children. Nevertheless, it has been shown that family background need not be an obstacle to greater academic achievement provided that students involve themselves in increased cultural activities.

So it has been found that cultural activities apparently have a stronger positive affect on student achievement than parental attitudes in general, and also that the effects of cultural activities vary within different SES bands. However, we must acknowledge that parental attitudes may operate most powerfully in the secondary (rather than primary) effects of SES on ultimate academic attainment.

The questions now arise as to whether these same relationships are found among boys and girls, and Saudi and non-Saudi pupils. Also, could type of school (public versus private) be a so far unobserved but determining, or a crucial mediating or amplifying variable?

6

Gender, Nationality and School Type

Gender

In this section the differences between male and female students' achievements will be discussed in the light of their families' SES, parental attitudes and cultural activities.

Socio-economic status and gender

Looking at the mean scores of male and female students using the ANOVA test, a relationship is found (Tables 6.1a and 6.1b). However, despite reaching statistical significance the size of the difference between the groups is small ($= 0.01$) (Cohen, 1988, pp.284-7). So the family's SES affected the student's attainment with a very slight difference between the sexes. The results show that girls with low SES backgrounds attained less than boys of comparable status (80.82% and 83.07%). However, in the high SES group the achievements of the sexes were similar - 88.58% and 88.52% respectively (Table 6.2).

In Saudi Arabia males have been expected to out-perform females, so it is the narrow gender gap, and its non-existence among students from the higher SES families, that will be surprising in many quarters. As explained in chapter 2, it is only since the beginning of the 1960s that Saudi Arabia has provided any formal schooling for girls,

and until very recently their opportunities to gain a higher education have been very limited. Their employment opportunities are still heavily circumscribed, but the results of this study, and the numbers of young women now entering the universities, show that Saudi Arabia is changing. We must bear in mind that in most western countries, until just a generation ago, boys were out-performing girls in education. The fact that, in this research, boys were doing slightly better than the girls overall could be wholly or partly a product of teacher expectations: the school marks on which our measure of educational attainment is based were awarded by the students' teachers. We shall see below that nowadays Saudi parents who send their children to secondary school are just as ambitious for their daughters as for their sons. That said, we shall also see that girls are still not participating to the same extent as boys in the kinds of cultural activities which, according to the evidence reported here, are conducive to educational success.

Table 6.1a Test of homogeneity of variances

Levene Statistic	df1	df2	Sig.
.052	1	364	.819

Table 6.1b ANOVA

	Sum of Squares	Df	Mean Square	F	Sig.
Between Groups	468.028	1	468.028	5.051	.025
Within Groups	33728.879	364	92.662		
Total	34196.907	365			

P<.05

Table 6.2 SES, gender and student attainment

Gender	SES	Mean	N	Std. Deviation
Female	Low	80.82	156	8.699
	High	88.58	86	9.360
	Total	83.58	242	9.666
Male	Low	83.07	58	9.296
	High	88.52	66	9.091
	Total	85.97	124	9.548
Total	Low	81.43	214	8.899
	High	88.55	152	9.214
	Total	84.39	366	9.679

Parental attitudes and gender

It can be seen that 59.9% of the females' parents scored highly for parental attitudes, whereas only 51.6% of their male counterparts' parents had similar scores (Table 6.3a). However, a Chi-Square (Table 6.3b) test for independence (with Yates Continuity Correction) indicated no significant association between gender and the parents' attitudes toward education ($\chi^2(1, n = 366) = 1.9, p = .15, \phi = -.07$) (Table 6.3c). Again, the key finding in a Saudi context is that the parents were just as likely to be ambitious for their daughters as for their sons.

The data confirm the positive relationship between parental attitudes and students' achievements in general. This correlation holds for both sexes as girls improve their achievement from 80.55% to 85.61% through receiving more encouragement and support from their parents. In similar conditions, boys' attainment improves from 83.5% to 88.28% (Table 6.4). It is clear that parental attitudes have an overall

affirmative impact on the achievements of both genders, but boys out-perform girls with both high and low levels of parental encouragement.

Table 6.3a Parental attitudes and gender

				PA scale		Total
				Low	High	
Gender	Female	Count		97	145	242
		% within Gender		40.1%	59.9%	100.0%
	Male	Count		60	64	124
		% within Gender		48.4%	51.6%	100.0%
Total		Count		157	209	366

Table 6.3b Chi-square tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	2.308(b)	1	.129		
Continuity Correction(a)	1.982	1	.159		
Likelihood Ratio	2.300	1	.129		
Fisher's Exact Test				.147	.080
Linear-by-Linear Association	2.302	1	.129		
N of Valid Cases	366				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 53.19.

Table 6.3c Symmetric measures

	Value	Approx. Sig.
Nominal by Phi	-.079	.129
Nominal Cramer's V	.079	.129
N of Valid Cases	366	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 6.4 Parental attitudes, gender and student attainment

Gender	PA scale	Mean	N	Std. Deviation
Female	Low	80.55	97	8.976
	High	85.61	145	9.608
Male	Low	83.50	60	9.873
	High	88.28	64	8.688

Irrespective of SES, both sexes responded positively to their parents' support and encouragement. Moreover, for both sexes, a high SES contributed to better prospects of benefitting from a positive parental attitude. This is evidenced by the mean scores of high SES girls which increased with the parental attitudes scale from 84.36% to 90.03%, and for boys from 85.85% to 90.25% (Table 6.5). Thus a higher SES together with positive parental attitudes virtually eliminated what was in any case a very narrow gap between the boys' and girls' educational attainments.

Table 6.5 SES, gender, parental attitudes and student attainment

SES	Gender	PA scale	Mean	N	Std. Deviation
Low	Female	Low	79.43	75	8.317
		High	82.11	81	8.895
	Male	Low	81.71	34	9.609
		High	85.00	24	8.663
High	Female	Low	84.36	22	10.238
		High	90.03	64	8.656
	Male	Low	85.85	26	9.902
		High	90.25	40	8.189

Conversely, for the lower SES group the gap between the sexes remained even with higher parental attitude scores. The results show that when parents exemplify an inadequate attitude towards their children's education, girls score 79.43% in contrast

with boys who score 81.71%. However, both sexes' results improved with positive parental attitudes as girls scored 82.11% and boys 85%. In the lower SES band, parental attitudes were affecting the achievements of both sexes, but positive attitudes were widening rather than narrowing the gender gap.

Cultural activity and gender

Examining the distributions of girls and boys on the cultural activities (CA) scale with a Chi-Square test reveals a significant association between gender and participation in plenty of cultural activities (Tables 6.6a, 6.6b, 6.6c). The phi coefficient value is considered a small effect using Cohen's (1988) criteria (Pallant, 2007). However, a much higher percentage of boys (71.8%) participated in a wide range of activities and only 28.2% did not engage in so many cultural activities (Table 6.6a). In contrast, girls were much less likely to participate in these activities. A mere 40.9% of girls took part in plenty of cultural activities whilst the majority (59.1%) committed themselves to fewer such activities (Table 6.6a). In Saudi Arabia girls' social lives are still far more restricted than boys'. Girls are unlikely to be allowed to wander freely around their cities and neighbourhoods, to visit conventional cafes and internet cafes, and to play sports, without adult supervision. Our evidence strongly suggests that girls' progress in education suffers from this.

Earlier this analysis demonstrated a strong relationship between levels of student involvement in cultural activities and educational achievement in general. Related to students' sex, both males and females advanced their achievements with increased

participation in cultural activities. The results show that girls' attainments rose from 81.50% to 86.55% and boys' from 81.49% to 87.73% (Table 6.7).

Table 6.6a Gender and cultural activities

		cultural activity		Total	
		Low	High		
Gender	Female	Count	143	99	242
		% within Gender	59.1%	40.9%	100.0%
	Male	Count	35	89	124
		% within Gender	28.2%	71.8%	100.0%
Total		Count	178	188	366
		% within Gender	48.6%	51.4%	100.0%

Table 6.6 b Chi-square tests

		Value	Df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson	Chi-Square	31.266(b)	1	.000		
	Continuity Correction(a)	30.043	1	.000		
	Likelihood Ratio	32.094	1	.000		
	Fisher's Exact Test				.000	.000
	Linear-by-Linear Association	31.181	1	.000		
N of Valid Cases		366				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 60.31.

Table 6.6 c Symmetric measures

	Value	Approx. Sig.
Nominal by Phi	.292	.000
Nominal Cramer's V	.292	.000
N of Valid Cases	366	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Table 6.7 Gender, cultural activities and student attainment

Gender	Cultural activity	Mean	N	Std. Deviation
Female	Low	81.52	143	9.007
	High	86.55	99	9.856
Male	Low	81.49	35	8.870
	High	87.73	89	9.268
Total	Low	81.52	178	8.955
	High	87.11	188	9.575
	Total	84.39	366	9.679

Combining SES with cultural activities reveals that, generally speaking, both sexes advanced their attainment in all SES bands when participating in more cultural activities. In the low SES groups, females improved their attainments but only from 80.63% to 81.25% with more participation in cultural activities. Meanwhile, males having a similar SES improved their mean score from 79.52% to 85.08% (Table 6.8). This draws attention to the different implications for the respective sexes regarding participation in cultural activities. Engagement in extra cultural activities was of more benefit to boys from low SES backgrounds than their female counterparts. A likely reason is that boys' cultural activities were developing their independence and initiative, whereas girls were more likely to be participating under adult supervision.

Table 6.8 SES, cultural activities, gender and student attainment

SES	cultural activity	Gender	Mean	N	Std. Deviation
Low	Low	Female	80.63	108	8.536
		Male	79.52	21	7.865
High	High	Female	81.25	48	9.131
		Male	85.08	37	9.538
	Low	Female	84.29	35	9.955
		Male	84.43	14	9.748
	High	Female	91.53	51	7.731
		Male	89.62	52	8.678

Regarding high SES groups, females enhanced their mean score from 84.29% to 91.53% with increased involvement in cultural activities compared to males whose scores rose from 84.43% to 89.62%. This suggests that, for this SES group, girls have more to gain from doing cultural activities than boys of the same category. We should note also that the girls out-performed the boys in three of the comparisons with both SES and levels of cultural activity held constant. A likely reason here is that ambitious, high SES parents were allowing, even encouraging, their daughters to take part in cultural activities on much the same terms as boys in so far as this was possible in Madinah. Hence the educational benefits that high SES, culturally active girls were experiencing.

It is important to note here the interactive effects of parental attitudes and cultural activities for male and female students. For females, the results show that a low PA score reduced their chances to engage in plenty of cultural activities, as 70.1% of the female students did not participate much in these activities when their parents were lacking in providing support: only 29.9% of these girls engaged in plenty of cultural

activities in these circumstances. Meanwhile, a positive parental attitude enhanced girls' participation in cultural activities, rising to 48.3%. As previously noted, males participated more in cultural activities than females. A comparison with their parental attitudes discloses that a positive parental attitude increased male participation in cultural activities from 65% to 78.1%. This means that although boys in any case were more likely than girls to be involved in cultural activities, parental support was adding a further boost to their participation, as was the case for girls (Table 6.9).

Involvement in plenty of cultural activities advanced students' achievements from 79.69% to 84.28% for those with low parental attitude scores and from 83.35% to 88.71% if parental attitude scores were higher. In contrast, students with a higher score for parental attitude but who did not engage very much in cultural activities, improved their achievement from 79.69% to 83.35%. Participation in plenty of cultural activities raised their achievements from 84.28% to 88.71% when having the backing of a positive parental attitude. It may be inferred that cultural activity was having somewhat more influence than parental attitudes on students' achievements, but that positive parental attitudes were leading to higher levels of cultural engagement, and, for high SES girls in particular, very likely in ways that improved their educational performances.

Comparing the sexes and the interactions between parental attitudes and cultural activities; males' attainments were more advanced than females' with more cultural activity and more positive parental attitudes. Even so, girls' best attainment levels

were seen when they did plenty of cultural activities as well as benefitting from positive parental attitudes (82.59% - 88.19%).

Table 6.9 Gender, parental attitudes, cultural activities and student attainment

Gender			Cultural Activity		Total		
			Low	High			
Female	PA scale	Low	Count	68	29	97	
			% within PA scale2	70.1%	29.9%	100.0%	
				% within cultural activity	47.6%	29.3%	40.1%
		High	Count	75	70	145	
	% within PA scale		51.7%	48.3%	100.0%		
			% within cultural activity	52.4%	70.7%	59.9%	
		Total	Count	143	99	242	
	% within PA scale		59.1%	40.9%	100.0%		
		% within cultural activity	100.0%	100.0%	100.0%		
Male	PA scale	Low	Count	21	39	60	
			% within PA scale	35.0%	65.0%	100.0%	
			% within cultural activity	60.0%	43.8%	48.4%	
		High	Count	14	50	64	
	% within PA scale		21.9%	78.1%	100.0%		
			% within cultural activity	40.0%	56.2%	51.6%	
		Total	Count	35	89	124	
	% within PA scale		28.2%	71.8%	100.0%		
		% within cultural activity	100.0%	100.0%	100.0%		

Public and private schools

This section focuses on the differences between students' achievements according to the types of schools they attended (private or public). Looking at the distribution of students in each type of school in relation to their SES, a clear relationship is found. The majority (65.8%) of the students in public schools were from socially and economically relatively disadvantaged backgrounds. Conversely, within private schools the majority of students (63.7%) were from high SES backgrounds. A Chi-Square test for independence (with Yates Continuity Correction) indicated a significant association between school type and the SES of students (Table 6.10).

Table 6.10a Type of school: chi-square tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	24.595(b)	1	.000		
Continuity Correction(a)	23.393	1	.000		
Likelihood Ratio	24.406	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	24.528	1	.000		
N of Valid Cases	366				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 37.79.

Table 6.10b Symmetric measures

	Value	Approx. Sig.
Nominal by Phi	.259	.000
Nominal Cramer's V	.259	.000
N of Valid Cases	366	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

Given the general attitudes of high SES parents, students attending private schools were probably the more likely to be highly motivated. The data show that 63.7% of private school students were getting considerable encouragement from their parents in contrast to only 54.9% of students in public schools. It was also found that 59.3% of students in private schools were involved in a wide range of cultural activities. Within the public school sector only 48.7% of pupils were involved in the same degree of cultural activities. All these indicators suggest that private school students should have been out-performing those at public schools, but as we shall see, this was not consistently the case.

Socio-economic status and type of school

Here, as in the preceding sections, the SES variable is collapsed into just two groups – high and low. Students who were from low SES backgrounds demonstrated different levels of achievement according to the type of school attended. Their mean score showed an improvement from 80.9% in public schools to 84.2% in private. However, students from high SES backgrounds achieved similarly in both types of schools (88.5%) (Table 6.11). We need to be cautious before labelling any of these differences as school effects, but no such possible effect was apparent among students from high SES backgrounds. A difference in scores in favour of the private school students was found only among those from the lower SES groups.

Table 6.11 SES, school type and student attainment

Type of school	SES	Mean	N	Std. Deviation
Public	Low	80.93	181	8.885
	High	88.56	94	8.863
	Total	83.54	275	9.575
Private	Low	84.18	33	8.593
	High	88.53	58	9.836
	Total	86.96	91	9.589
Total	Low	81.43	214	8.899
	High	88.55	152	9.214
	Total	84.39	366	9.679

Gender and type of school

Students were performing differently according to the type of school they attended depending on their sex (Table 6.12). Girls' scores in the private schools were higher than in public ones. They achieved a mean score of only 81.8% in the public schools but were doing enormously better with a mean score of 89.2% in the private schools. In contrast, boys' mean score decreased in the private schools. Whilst they averaged 87% in the public schools their mean score fell to 83.3% in the private schools.

The evidence from this research does not enable us to establish beyond reasonable doubt in which direction causality was running. In present-day Saudi Arabia private schools market themselves on the basis of their superior facilities and teaching, and the improved results that parents can expect, primarily in terms of university admission. It is possible that high SES parents in particular were tending to send academically weaker sons to private schools in the hope that this would boost their results, in which case the findings from this research indicate that they stood to be disappointed because in academic performance the high SES boys in private schools

lagged behind similar boys in public schools. What about girls? It is possible that high SES families (those best able to afford private education) fear that bright daughters will not be sufficiently pressured or encouraged to aim and achieve high within the public schools, and therefore that these daughters are sent for private education. If so, the performances of the privately educated girls in this study were fulfilling their parents' hopes.

Table 6.12 Gender, school type and student attainment

Type of School	Gender	Mean	N	Std. Deviation
Public	Female	81.88	186	9.380
	Male	87.01	89	9.082
	Total	83.54	275	9.575
Private	Female	89.23	56	8.432
	Male	83.31	35	10.306
	Total	86.96	91	9.589
Total	Female	83.58	242	9.666
	Male	85.97	124	9.548
	Total	84.39	366	9.679

Parental attitudes and type of school

Regarding parental attitudes, previous chapters have noted the positive relationship with children's attainments within all SES levels and for both sexes. In order to investigate the effect of the type of school on student achievement in conjunction with their parents' attitudes, family SES backgrounds were simultaneously reviewed (Table 6.13). Pupils of low SES and with parents with less positive attitudes scored 79.6% in public schools but in the private schools this score shifted to 83%. Meanwhile, students of comparable backgrounds but with encouraging parents scored 82.2% in public schools and 85.1% in private institutions. This means that private

schools appear to offer great benefit to students from disadvantaged backgrounds whether or not they are highly motivated by their parents.

From the angle of parental attitude a slight difference was observed relating to those students in receipt of reduced parental encouragement. Students from advantaged backgrounds getting less parental encouragement recorded a decreased mean score in private schools in comparison to their counterparts in the public schools, achieving 82.9% in private establishments and a mean score of 86.5% in public schools. Hence private schools appear insufficient as a resource towards improved achievement for students from high SES backgrounds with unambitious parents. The significance of parental support is thus underlined. A greater level of achievement seemed possible for parentally encouraged high SES students if they attended private schools. In such circumstances students achieved 89.5% in public schools but improved to 91% within private schools. In summary, it may be said that private institutions are possibly a useful resource for the promotion from girls of high and low SES homes, for boys from lower SES families, but in the case of high SES male students, only if they are parentally encouraged.

Table 6.13 SES, parental attitudes, school type and student attainment

Type of School	SES	P A	Mean	N	Std. Deviation
Public	Low	Low	79.68	94	8.940
		High	82.28	87	8.676
		Total	80.93	181	8.885
	High	Low	86.50	30	9.398
		High	89.53	64	8.504
		Total	88.56	94	8.863
	Total	Low	81.33	124	9.479
		High	85.35	151	9.299
		Total	83.54	275	9.575
Private	Low	Low	83.00	15	7.131
		High	85.17	18	9.739
		Total	84.18	33	8.593
	High	Low	82.94	18	10.778
		High	91.05	40	8.357
		Total	88.53	58	9.836
	Total	Low	82.97	33	9.163
		High	89.22	58	9.144
		Total	86.96	91	9.589

Cultural activity and type of school

The previous chapter presented the evidence for cultural activities greatly impacting on student achievements at all levels of SES. However, private schools exemplify best the benefit of this (Table 6.14). Students from low SES backgrounds attending private schools improved their attainments from 81.5% to 87.7% when they were highly involved in cultural activities. Similar circumstances in public schools raised students' mean scores only moderately, from 80.2% to 82.9%.

Furthermore, in high SES cases it was found that an increased level of benefit could be acquired from more involvement in cultural activities when in a private school context. Such activities increased the mean scores from 85.1% to 90.2% in public

schools. Private schools showed an even greater gain - from 83% to 91%. So, private schools were yielding most benefit in attainment for students of all SES levels when the students participated fully in cultural activities.

In summary, in any combination, the following categories of students were standing to derive most benefit from a private school education; girls; low SES students and pupils experiencing diminished cultural activity alongside affirmative parental inputs.

Table 6.14 SES, school type, cultural activities and student attainment

Type of school	SES	C A	Mean	N	Std. Deviation
Public	Low	Low	80.26	110	8.527
		High	81.96	71	9.381
		Total	80.93	181	8.885
	High	Low	85.10	31	9.530
		High	90.27	63	8.057
		Total	88.56	94	8.863
	Total	Low	81.33	141	8.950
		High	85.87	134	9.691
		Total	83.54	275	9.575
Private	Low	Low	81.53	19	7.834
		High	87.79	14	8.514
		Total	84.18	33	8.593
	High	Low	83.00	18	10.375
		High	91.03	40	8.601
		Total	88.53	58	9.836
	Total	Low	82.24	37	9.060
		High	90.19	54	8.618
		Total	86.96	91	9.589

Saudi and non-Saudi students

Here students' achievements are compared in relation to their nationality. Students have been categorised into two groups; Saudi and non-Saudi. The number of cases with complete information is 484, with 118 being non-Saudi. In terms of sex, 71.3% (N=345) were females and 28.7% (N=139) males. Only 22.7% of the total number of all students (N=110) attended private schools. Thus the numbers of non-Saudi males and females, especially in private schools, are rather small.

Here the derived variables SES, PA, and CA are used in two categories each. According to SES 55.4% of participants were low SES. Of the total, 58.1% of parents were highly ambitious and 55.4% of the students participated in plenty of cultural activities.

Almost identical proportions of Saudi and non-Saudi students were from low SES backgrounds - 55.2% and 55.9% respectively (Table 6.15). Meanwhile, slightly more non-Saudi parents (61%) displayed high levels of aspiration and encouragement compared to their counterparts of whom only 57.1% displayed the equivalent amount of aspiration and encouragement (Table 6.16). Also, more non-Saudi students engaged in plenty of cultural activities (67.8%) compared to just 51.4% of their Saudi counterparts (Table 6.17). This was the largest difference between the two groups. We must bear in mind that the non-Saudis were of many different nationalities. They would have been more culturally heterogeneous than the Saudis. However, it is likely that most of the non-Saudi nationalities were restricting and supervising their adolescent children's free time activities less closely than the Saudi parents.

Table 6.15 Nationality and SES

			Nationality		Total
			Saudi	Not Saudi	
SES Scale	Low	Count	202	66	268
		% within nationality	55.2%	55.9%	55.4%
	High	Count	164	52	216
		% within nationality	44.8%	44.1%	44.6%

Table 6.16 Nationality and parental attitudes

			Nationality		Total
			Saudi	Not Saudi	
P A Scale	Low	Count	157	46	203
		% within nationality	42.9%	39.0%	41.9%
	High	Count	209	72	281
		% within nationality	57.1%	61.0%	58.1%

Table 6.17 Nationality and cultural activities

			Nationality		Total
			Saudi	Not Saudi	
C A Scale	Low	Count	178	38	216
		% within nationality	48.6%	32.2%	44.6%
	High	Count	188	80	268
		% within nationality	51.4%	67.8%	55.4%

Socio-economic status and nationality

The mean achievement scores of students in the high and low bands improved with higher SES irrespective of nationality. We have already seen that Saudi students as a group demonstrated greater achievement with higher SES (81.43% - 88.03%). However, non-Saudi students achieved more than their Saudi fellows at both levels of SES and overall. The mean score of non-Saudi students was 84.5% if they were from disadvantaged backgrounds (81.43 for Saudis) while their counterparts from higher

SES backgrounds achieved further - 91.46% (88.03 for Saudis) (Table 6.18). This finding should be of concern in Saudi Arabia. Why were Saudi nationals being out-performed in their own schools and in their own country?

Table 6.18 Nationality, SES and student attainment

Nationality	SES	Mean	N	Std. Deviation
Saudi	Low	81.43	202	9.038
	high	88.03	164	9.213
	Total	84.39	366	9.679
Not Saudi	Low	84.50	66	8.713
	high	91.46	52	7.563
	Total	87.57	118	8.897
Total	Low	82.19	268	9.041
	high	88.86	216	8.949
	Total	85.16	484	9.583

Parental attitudes and nationality

From the point of view of parental attitudes it appeared that lower SES non-Saudis were not benefitting from positive parental attitudes any more than their Saudi fellows. Fifty percent of non-Saudis compared to 48% of Saudis from lower SES families benefitted from high levels of aspiration and encouragement from their parents. For those from higher SES families, 75% of non-Saudis received the same amount of aspiration and encouragement in contrast to 68.3% of Saudis. A Chi-Square test for independence (with Yates Continuity Correction) indicated no overall significant association between the nationalities of students and positive parental attitudes ($\chi^2(1, n = 484) = .03, p = .52, \phi = .034$) (Table 6.19a, 6.19b, 6.19c).

Table 6.19a SES, nationality and parental attitudes

SES			Nationality		Total	
			Saudi	not Saudi		
Low	P A Scale	Low	Count	105	33	138
			% within nationality	52.0%	50.0%	51.5%
	High	Count	97	33	130	
		% within nationality	48.0%	50.0%	48.5%	
	Total	Count	202	66	268	
High	P A Scale	Low	Count	52	13	65
			% within nationality	31.7%	25.0%	30.1%
	High	Count	112	39	151	
		% within nationality	68.3%	75.0%	69.9%	
	Total	Count	164	52	216	

Table 6.19b Chi-square tests

	Value	Df	Asymp. Sig. (2-sided)	Exact Sig. (2-sided)	Exact Sig. (1-sided)
Pearson Chi-Square	.561(b)	1	.454		
Continuity Correction(a)	.412	1	.521		
Likelihood Ratio	.564	1	.453		
Fisher's Exact Test				.520	.261
Linear-by-Linear Association	.560	1	.454		
N of Valid Cases	484				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 49.49.

Table 6.19c Symmetric measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	.034	.454
	Cramer's V	.034	.454
N of Valid Cases		484	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

It has been shown above that parental aspiration and encouragement were improving attainment in general. As discussed in the previous chapter, if SES remained constant, Saudi students' mean scores improved with positive parental attitudes in low SES groups (80%-82.96%), and 85%-89.43% in high SES groups. Meanwhile, non-Saudi students of low SES achieved 81.91% with lesser degrees of parental aspiration, as opposed to 87.09% when parents demonstrated a positive attitude. In the higher SES, despite both strong and weak degrees of parental attitude, non-Saudi students achieved similarly - 91.08% and 91.59% respectively. However, we must note that the number of non-Saudis with affluent backgrounds and low parental attitudes was very small (N=13) (Table 6.20).

Table 6.20 Nationality, SES, parental attitudes and student attainment

Nationality	SES	P A Scale	Mean	N	Std. Deviation
Saudi	Low	Low	80.02	105	8.853
		High	82.96	97	9.032
		Total	81.43	202	9.038
	High	Low	85.02	52	9.688
		High	89.43	112	8.677
		Total	88.03	164	9.213
Not Saudi	Low	Low	81.91	33	7.844
		High	87.09	33	8.879
		Total	84.50	66	8.713
	High	Low	91.08	13	5.560
		High	91.59	39	8.181
		Total	91.46	52	7.563

Cultural activities and nationality

The distribution of students participating in cultural activities varied between Saudi and non-Saudi students in both SES groups. Non-Saudis were participating in plenty

of cultural activities; 60.6% if they were low SES and 76.9% if they were from higher SES groups. In contrast only 40.6% of Saudis from lower backgrounds and 64.6% from higher SES backgrounds were involved in similarly enhancing activities (Table 6.21a). A Chi-Square test for independence (with Yates Continuity Correction) indicated a significant association between the nationalities of students and their engagement in plenty of cultural activities ($\chi^2(1, n = 484) = .03, p = .003, \phi = .142$) (Table 6.21b). This indicates that the social lives of the Saudi teenagers were indeed relatively restricted, and we should note here that all the other nationalities were Muslims.

Table 6.21a Nationality, SES and cultural activities

SES				Nationality		Total
				Saudi	Not Saudi	
Low	C A Scale	Low	Count	120	26	146
			% within nationality	59.4%	39.4%	54.5%
		High	Count	82	40	122
			% within nationality	40.6%	60.6%	45.5%
High	C A Scale	Low	Count	58	12	70
			% within nationality	35.4%	23.1%	32.4%
		High	Count	106	40	146
			% within nationality	64.6%	76.9%	67.6%

Table 6.21b Chi-square tests

	Value	Df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	9.748(b)	1	.002		
Continuity Correction(a)	9.095	1	.003		
Likelihood Ratio	9.958	1	.002		
Fisher's Exact Test				.002	.001
Linear-by-Linear Association	9.728	1	.002		
N of Valid Cases	484				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 52.66.

Table 6.21c Symmetric measures

		Value	Approx. Sig.
Nominal by	Phi	.142	.002
Nominal	Cramer's V	.142	.002
N of Valid Cases		484	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

The data show that attainments improved if students involved themselves in sufficient cultural activities. Holding SES constant, a little progress emerged in low SES Saudi students' mean scores if they participated in plenty of cultural activities (80.4% - 82.94%). However their Saudi counterparts from superior SES bands were found to derive greater improvement with high cultural involvement (83.83% - 90.33%).

Non-Saudi students coming from lower SES backgrounds showed a different picture altogether. Those students less engaged in CA were achieving higher than their counterparts who participated in more cultural activities (85.69% - 83.73%). (Both these mean scores are higher than for Saudi students in comparable environments). However, in the higher SES band, student achievement progressed with more involvement in cultural activities, as their mean scores demonstrate (88.58% - 92.33%). Again, we must note that the number of high SES non-Saudi students who were less involved in cultural activities was small (N=12) (Table 6.22). These findings do not lend clear support to the hypothesis that it is the lesser social restrictions experienced by teenagers in non-Saudi families that were responsible for the students' superior academic performances.

Table 6.22 Nationality, SES, cultural activities and student attainment

Nationality	SES Scale	C Scale	A	Mean	N	Std. Deviation
Saudi	Low	Low		80.40	120	8.508
		High		82.94	82	9.617
	High	Low		83.83	58	9.478
		High		90.33	106	8.240
	Total	Low		81.52	178	8.955
		High		87.11	188	9.575
Not Saudi	Low	Low		85.69	26	9.686
		High		83.73	40	8.051
	High	Low		88.58	12	8.458
		High		92.33	40	7.163
	Total	Low		86.61	38	9.301
		High		88.03	80	8.721

School type and nationality

More Saudis appeared to be enrolling in private schools as 24.9% of them were enrolled in private schools while only 16.1% of non-Saudis were enrolled in this kind of institution (Table 6.23a). This suggests that the non-Saudi families had the greater confidence in Saudi Arabia's public schools. Of Saudis from a disadvantaged background, 14.4% were in private schools compared to 7.6% of non-Saudis (Table 6.23b). The percentages of students from the higher SES group who were in private schools increased for both groups (Saudis and non-Saudis, 37.8% and 26.9%). However, a Chi-square test for independence (with Yates Continuity Correction) indicated no significant association between the nationalities of students and their enrolling in a private institution ($X^2(1, n = 484) = .03, p = .065, \phi = -.09$).

Table 6.23a Nationality and school type

			nationality		Total
			Saudi	Not Saudi	
Type of school	public	Count	275	99	374
		% within nationality	75.1%	83.9%	77.3%
	Private	Count	91	19	110
		% within nationality	24.9%	16.1%	22.7%

Table 6.23b SES, nationality and school type

SES			nationality		Total	
			Saudi	not Saudi		
Low	Type of school	public	Count	173	61	234
			% within nationality	85.6%	92.4%	87.3%
	Private	Count	29	5	34	
		% within nationality	14.4%	7.6%	12.7%	
High	Type of school	public	Count	102	38	140
			% within nationality	62.2%	73.1%	64.8%
	Private	Count	62	14	76	
		% within nationality	37.8%	26.9%	35.2%	

Table 6.23c Chi-square tests

	Value	Df	Asymp. Sig. (2- sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	3.900(b)	1	.048		
Continuity Correction(a)	3.418	1	.065		
Likelihood Ratio	4.123	1	.042		
Fisher's Exact Test				.058	.030
Linear-by-Linear Association	3.892	1	.049		
N of Valid Cases	484				

a Computed only for a 2x2 table

b 0 cells (.0%) have expected count less than 5. The minimum expected count is 26.82.

Table 6.23d Symmetric measures

		Value	Approx. Sig.
Nominal by Nominal	Phi	-.090	.048
	Cramer's V	.090	.048
N of Valid Cases		484	

a Not assuming the null hypothesis.

b Using the asymptotic standard error assuming the null hypothesis.

The mean scores of Saudi students, if SES remained constant, progressed from 80.93% in public schools to 84.41% in private schools for those coming from lower SES backgrounds. Their higher SES counterparts showed little progress in their achievement (87.96% - 88.15%) within a similar school order. However, the higher SES students had a raised level of achievement in any case (Table 6.24). Non-Saudis appeared to benefit more from private schools no matter which backgrounds they came from. Considering the limited numbers in the sub-groups of non-Saudis enrolled in private institutions, we simply note that they exhibited the general pattern of higher attainments in private schools. Those from the lower SES group advanced their attainments when attending a private school from 84.1% to 89.4%. Their higher SES fellows appeared to gain even more from a private education (89.39% - 97.07%). Paradoxically, the non-nationals who appeared to benefit most were less likely than the Saudi families to be using private schools.

Table 6.24 Nationality, SES, and school type and student attainment

Nationality	SES	Type of school	Mean	N	Std. Deviation
Saudi	low	Public	80.93	173	8.976
		Private	84.41	29	8.986
	high	Public	87.96	102	8.952
		Private	88.15	62	9.700
	Total	Public	83.54	275	9.575
		Private	86.96	91	9.589
not Saudi	low	Public	84.10	61	8.665
		Private	89.40	5	8.649
	high	Public	89.39	38	7.730
		Private	97.07	14	2.814
	Total	Public	86.13	99	8.674
		Private	95.05	19	5.864
Total	low	Public	81.76	234	8.986
		Private	85.15	34	8.989
	high	Public	88.35	140	8.634
		Private	89.79	76	9.489
	Total	Public	84.22	374	9.404
		Private	88.35	110	9.542

Summary

Non-Saudi students were found to be in receipt of no greater degrees of parental encouragement but were more involved in cultural activities whatever their SES.

Non-Saudi students achieved more than their Saudi fellows in both bands of SES.

Holding SES constant, non-Saudi students achieved higher than their Saudi counterparts with positive parental attitudes in lower SES.

Within these same parameters, Saudis and non-Saudis of high SES achieved similarly.

Saudi students' achievements improved with more cultural activities at both SES levels but were more markedly improved in the higher SES band.

Non-Saudis from lower SES families achieved differently with levels of cultural engagement, but, for those who were less engaged in these activities, their mean score

was higher than their fellows with identical circumstances but who participated in more activities.

Non-Saudi students from advantaged backgrounds achieved better with enhanced participation in cultural activities.

Saudi students from higher SES backgrounds showed little progress in achievement if they attended private institutions compared to public ones.

Non-Saudis appeared to benefit greatly from a private education in both bands of SES.

Conclusions

Introduction

This research has aimed to better-understand the connection between family backgrounds in Saudi Arabia and young people's educational attainments. It has looked at family socio-economic status, parental attitudes toward education, and pupils' cultural activities having regard for differences by sex, type of school, and nationality.

In this chapter the main findings of the research will be summarised and discussed in the light of relevant theories. To help understand how family circumstances affect students' educational outcomes, Bourdieu's theory of social reproduction will be used. We shall note ways in which the theory fits, while in other ways it does not match the evidence that has been presented. In this way we will attempt to identify the processes whereby class and other determinants affect the educational attainments of young people in the specific context of Saudi Arabia in the 21st century. This chapter will also offer some recommendations to policy-makers on education in Saudi, critical reflections on the project, and make suggestions for further research.

Summary of findings

All the following were found to be related to educational attainment:

- i. Family SES
- ii. Parental attitudes

- iii. Cultural activities
- iv. Attending a private school (for some categories of students)
- v. Gender: boys outperform girls
- vi. Nationality: non-Saudis outperform Saudis.

The other predictors (our mediating variables - parental attitudes, cultural activities, and attending a private school) explain part of the relationship between family SES and educational attainment but the relationship remains with each of the other predictors controlled.

There are some exceptions to the above, many of which involve small Ns. The exceptions based on larger Ns are:

- i. Gender differences disappear in the highest SES band, and in low bands when participation in cultural activities is low.
- ii. Parental attitudes have stronger effects among boys than among girls.
- iii. Private schools confer most benefit among girls, non-Saudis, and low SES students with low levels of cultural activity but when parental attitudes are positive. Private education confers no benefits in the highest SES bands, and overall boys do better in public schools.
- iv. Low SES non-Saudis do best when levels of cultural activity are low.

In the following discussion these exceptions are used to gain insights into why 'the rules', the positive relationships with educational outcomes, normally hold.

The context: education and status attainment in Saudi Arabia

When interpreting the findings from this research we must bear in mind that its evidence about students' performances is from a particular stage (within secondary schools) in what can be regarded as a much longer status attainment process. All school education is free in Saudi Arabia but none is compulsory (Al-Hariri, 1987). Even so, nowadays 97% of children complete elementary school (age 6-12), and among those who complete elementary school 95% progress into intermediate school (age 12-15) (Ministry of Education, 2008). Here, as in entry to secondary schools (age 15-18), there is no academic selection, except that the preceding level of education must have been completed. Whether a young person enters intermediate, then secondary school, is up to the parents (and maybe the young person's own preferences). Altogether, 86% of those who complete intermediate school then enter secondary school (Ministry of Education, 2008). Nowadays families in all social strata are keen for their children to achieve in education. Attrition following elementary and intermediate school is most likely to be related to family SES, but staying-on is now the norm at all social levels. There are few jobs available for early leavers of Saudi nationality, and lower SES families know that education is the way in which their children can be given chances of better lives than their parents led. Progression levels in Madinah are roughly the same as in Saudi Arabia as a whole. There is little difference between the progression rates for boys and girls (Table 7.1).

Table 7.1 Progression rates in education in Saudi Arabia in 2007 (Ministry of Education, 2008)

	Gender	Male		Female	
		Total	First Year	Total	First Year
Saudi	Intermediate	485858	164464	462137	156851
	Secondary	414629	138572	401513	135987
Madinah	Intermediate	27688	9265	27955	9220
	Secondary	23905	8003	23163	7980

After secondary school progression becomes more difficult. There are university places for only around seven out of every ten secondary school graduates. However, this means that just over 55% of all young people are now entering higher education. The top performers at secondary school and in the university entrance examinations receive their higher education free and are awarded stipends worth \$300 a month. Other students may be admitted without stipends, and on payment of fees.

All secondary school leavers can be accommodated in some form of post-secondary education, but university is nearly always the young people's (and their parents') target. Hence the importance of achieving good results in secondary school, and being well-prepared for the university entrance examinations. Higher education does not guarantee anything, but it has become essential for entry into any non-manual employment in both the private and public sectors, with the latter being most students' preference because the jobs are both better-paid and more secure. Employment

opportunities for Saudi non-graduates are extremely limited. Employers prefer to hire cheaper immigrants in manual occupations. In any case, Saudis tend to dislike physical labour and are unwilling to countenance menial jobs. There is a government Saudi-isation policy which aims to replace immigrants with Saudis in more occupations, with vocational schools as the entry route, but as yet this policy is simply not working.

All the factors and processes that affect success in secondary school may well discriminate at additional stages in education and thereby in the longer-term status attainment process. This is particularly likely in the case of family SES. At present we cannot be absolutely sure (the data does not exist) but sociologists will feel certain that students from higher SES families will be the most likely to enter secondary schools, and then subsequently progress into higher education. Differences in attainment within secondary education will not indicate the full scale of ultimate inequalities in outcomes by social class. However, by focusing in detail on one stage, and a crucial stage, in education, this study can seek insights into processes that, in all probability, also operate at other stages. This applies to gender and nationality as well as SES.

Unpacking SES

Although a few previous studies have addressed the factors affecting students' education in Saudi Arabia (Al-Ajaji, 1999, Al-Sarhan, 1986), these studies have never analysed together all the potentially relevant variables so as to provide a detailed picture of this issue in the country. In addition, comprehensive knowledge of the role of SES and academic achievement in Saudi Arabia is limited by the nature of the

previous studies in this area. The value of some of these studies is further restricted as some include only female students (Al-Ajaji, 1999). Also, few of the available studies are recent enough to have a meaningful bearing on the current situation in Saudi Arabia - the majority of the studies were conducted two to three decades ago (Ali, 1976, AlKahimi, 1982, Al-Qadi et al., 1981, Al-Sarhan, 1986, Al-Turki, 1991). Since then Saudi society has undergone significant developments (Albrithen, 2006). Even so, it is vital to take account of Arabian published work on the topic because this will be devoid of the particular biases (some culturally-embedded, others responding to western educational specificities) in western published work. However, we should note that although different studies have reported different factors affecting academic achievement, parental education has always been found to play an important role (Al-Ajaji, 1999, Al-Sarhan, 1986, Al-Turki, 1991). Other factors such as home facilities and family size have also been seen to have an impact on academic achievement (Ali, 1976, AlKahimi, 1982, Al-Qadi et al., 1981).

The data from this study shows that a family's SES has a positive impact on a student's attainment, as students from higher SES bands achieve better than their fellows from lower SES families. Despite some variation, parents' socio-economic status (SES) remains one of the most important determinants of children's educational outcomes in most (if not all) countries. While we must still examine the findings from this research more thoroughly to see exactly how family background is linked to children's educational success in Saudi Arabia, we can note that many studies have used the concept of cultural capital to provide a useful theoretical framework for explaining this link. In addition, however, many studies have linked SES and its association with educational outcomes to the economic status of the family (Craft,

1970, Havighurst and Levine, 1979, Levine and Levine, 1996). We need to avoid the either/or trap. Both causal forces may operate. Indeed, since cultural capital can be converted into economic capital and vice-versa, each set of processes is likely to intensify the other.

To offer a the widest possible picture a measure of SES has been used here which includes several variables. Here SES is a composite measure of family income, parents' education levels, father's occupation and mother's employment. The model is, to some extent, similar to De Graaf's (1986) which has four main components: parental SES (father's education, mother's education, father's occupation); parental reading climate (serious reading, library visits); parental formal cultural climate (theatre visits, museum visits, historic building visits); family's educational attainment (oldest sibling's education, second sibling's education); along with financial resources (parents' and siblings' incomes) (De Graaf, 1986). However, in this research parental attitudes and students' cultural activities have been separated from the basic SES variables (parents' education, employment and income).

Each of the components measures a different aspect of SES. Parental income reflects the potential for economic resources to be made available to a student. Parental education is believed to be one of the most stable aspects of SES because it is established in the earlier stages of life and then tends to remain the same over time. The occupation of a given parent not only predicts income and education, but also indicates the prestige and culture of a given family (Sirin, 2005).

The data demonstrate a positive relationship between families' SES and students' attainments. Students from affluent SES tend to benefit from positive parental attitudes and more engagement in cultural activities. Higher levels of SES mean that children in these families have access to the support they need as they progress to advanced stages in their learning.

Parental education.

Many of the advantages in education that accrue to children in high SES families are likely to be due, at least in part, to the parents being well-educated. Our findings show that there is a relationship between parents' educational levels and student performance since the average mark for students in each category increased monotonically with parents' education level - from 81% to 87% to 89%. Many previous studies (in fact every single study that has examined the topic) have shown that parents' education is an important factor in the outcome of their children's education (Al-Sarhan, 1986, Craft, 1970, Othman, 1993).

The level of parents' education has a clear impact on that of their offspring, and can do so in many different ways. For example, it has been found that a low level of parental education results in a decreased perception of the importance of education. Hence, these parents may be less likely to provide their children with a suitable study environment at home which, in turn, may culminate in a negative impact on the children who will perform less well in school and neglect their homework. Furthermore, uneducated (illiterate or semi-illiterate in Saudi) parents may find it difficult to help their children in their schoolwork and respond to their queries, again creating adverse affects upon academic achievement (Al-Sarhan, 1986). In contrast,

educated Saudi parents are not only willing to help their children to go to a good (secondary) school but are also keen to assist with their children's homework and give them the time and space required to fulfil their potential. Moreover, they will instill good habits and attitudes that are conducive to successful study such as valuing knowledge as well as the notion that learning may be procured from a range of sources; for example, by reading non-school books, playing games and solving puzzles. Furthermore, the right attitude and interest will be relayed to these students from their educated parents who have more awareness when it comes to demonstrating and explaining the importance of learning. Also, professional parents are familiar with schools, particularly the curriculum of schools, when compared to lower status parents (Bourdieu, 1997). Halsey (1997) claims that lower class and working class families do not value education as highly as middle-class families. Therefore we can easily understand why the level of parental education appears to be a contributory factor in student performance amongst Saudi students with results favouring the children of well-educated parents. Even so, these will be just one set of the advantages that favour children in high SES families.

Family income.

An affluent SES indicates that a student will not experience lack of resources and can usually rely on receiving materials to support learning such as electronic devices (calculators, computers, DVDs, TV learning channels), private tuition, learning experiences gained by being able to visit different places and travelling inside or outside the Kingdom. All these should stimulate success in attaining the best grades in school. The data show that students who belong to low income families consistently have the lowest achievement whereas students of middle and high income families do

better, though children in all income bands vary in their academic achievement. In this study there was a large gap in achievement between students from low income families and the other groups, whereas there was just a small gap between middle and high income families. The role model theory applies here, as parents can act as inspiration for their children if they have more education and higher incomes.

It seems, therefore, that economic capital may play an important role within the overall effect of family SES on academic achievement with regard to its relationship to many factors including; attending a private school, access to cultural activities, parental attitudes and private tutoring, for example. Poor families who lack access to these assets are often placed at a disadvantage, whereas children of wealthier parents benefit.

The findings in this investigation, demonstrating the impact of SES on students' achievements, confirm those of Sharaz (2006) who emphasises the importance of factors such as family income and parents' employment (Sharaz, 2006). In addition, these findings agree with Devine's (2004) assertion that middle class parents can mobilise all manner of resources to help their children through the education system and into good jobs (Devine, 2004).

The findings show that the economic factor seems to have a great (negative) bearing upon the achievement levels of low economic status students – much more so than upon students of very high economic standing. This observation has been made before. Ali (1976) found that the academic achievement level for students who had middle economic status was better than for students from poor families. Ali's research

involved an investigation into the relationship between higher incomes and improved academic achievement. The results showed that motivation for education was a key factor, rising in line with social and economic status. Ali also found that the value placed on education increased whenever the status of the family increased. This explains the tendency for the economic middle and higher social classes to ascribe greater value to education than the lower classes.

Employment and the role of the mother.

Our data also show that the mother may play a particularly important part in students' achievements. The mother's education level had as strong a relationship with children's achievements as the father's education, as students scored 88.57% if their mothers had graduated from university and 86.18% if the mothers had attained secondary education qualifications alone. Most significant of all, 57.9% of the mothers' education was below secondary qualification and the scores of these parents' offspring fell to around 82%. This finding was also observed by Al-Ajaji (1999) who found a strong relationship between maternal education and children's achievement.

This finding can be explained by the fact that among Saudi fathers who are middle-aged there is a common habit of spending evenings with friends, away from the family home. Married women do not have this freedom and typically spend most of their time at home. Moreover, Saudi culture dictates that mothers follow-up on their children's education whilst fathers are permitted to have minimal participation in the education of their offspring. In Saudi families the father is typically the main breadwinner and the rate of maternal employment is rather low (this study found 24.6%).

Families in Saudi are relatively large and on average there are at least three children at school which increases the cost of obtaining materials etc. A mother's employment is likely to show a positive relationship with better school performance as her additional income might be used to improve the family's resources. However, economic benefit will not be the sole advantage resulting from a mother's employment. Students of working mothers learn traits and practices from the mother's lifestyle that differ from their counterparts whose mothers do not have a job. Working mothers will be busier, and maybe not as available to their families, as non-employed ones. However, in both cases a Saudi mother is in charge of the housework, cooking, family relationships and child rearing which includes helping with study. These are commitments shared by both employed and non-employed mothers but constitute an additional obligation for working mothers. The vast majority of Saudi families (88.7%) have a housemaid to help with household chores and sometimes also the cooking as Saudi families tend to be large and the mother is usually responsible for all homemaking (unofficial data, Al-Watain Newspaper, 2008). Nevertheless, employed mothers, whether they have help in the house or not, will adopt a different routine than others in handling everyday life and their responsibilities. This could convey to the children a good approach to coping with their schoolwork and facilitate the development of time management and organisational skills.

Cultural capital

These findings will now be considered with regard to Bourdieu's thesis that there is a link between social origin, performance, and discrimination in his ideas about social reproduction. According to Bourdieu (1997), children from middle-class families are

advantaged in gaining educational credentials due to their possession of cultural capital. Bourdieu states that cultural capital consists of familiarity with the dominant culture in a society and especially the ability to understand and use educated language. He argues that the possession of cultural capital varies with social class, yet the education system assumes the possession of the dominant strata's cultural capital. Thus, cultural capital is unequally available and is manifested in forms such as language, aptitudes, informal knowledge about the school, manners, personal style, and taste used in social selection (Bourdieu, 1997). As a result, lower class pupils may find it harder to succeed in the education system because these students may suffer cultural as well as material deprivation. Their economic position means that it is not as easy to secure their basic everyday needs, or to acquire additional materials that could help with learning. Moreover, parents may not demonstrate much interest in their children's education so fostering a poorer attitude toward education. These conditions would make it hard for the children to attain as well as their peers from higher SES.

We must note at this point that cultural capital is an extremely broad concept and that Bourdieu (who was writing about education in France in the 1950s and 60s) emphasised the importance of one particular type of cultural capital, and specific processes whereby that kind of cultural capital became educationally efficacious. The cultural environments in their homes may equip children with several different types of cultural capital, namely:

- 1/ Knowledge and skills that improve their performances in school (and possibly also in employment). These assets are commonly referred to as 'human capital'.
- 2/ High aspirations, which motivate children to achieve.

3/ Tastes, language, interests and manners that lead to a pupil feeling 'at home' in a school setting, and lead teachers to define such children as educable. Bourdieu argued that this kind of cultural capital (associated with high, classical culture in France) operated to include children from high SES families while excluding others, whose own presenting cultures were subjected to daily symbolic violence. These processes operated via hidden rather than official school curricula.

In common with developed countries such as United States (Dimaggio, 1982, Dumais, 2002) and France (Bourdieu et al., 1977), a substantial link has been found between the SES of the family and the academic achievement of the Saudi Arabian children. This finding is consistent with evidence in numerous studies (Aschaffenburg and Maas, 1997, De Graaf et al., 2000, De Graaf, 1986, Dimaggio, 1982, Dimaggio and Mohr, 1985, Dumais, 2002, Kalmijn and Kraaykamp, 1995). In most countries there is clear evidence suggesting that cultural capital plays a significant role in educational outcomes. However, in certain countries (e.g., Greece), cultural capital appears to have a less significant role and several countries such as Sweden and the Netherlands report a steady decline in the impact of family background on children's educational success (De Graaf et al., 2000).

In Bourdieu's social reproduction, cultural capital "operates either by a principle of cumulative disadvantage or cumulative advantage" (Aschaffenburg and Maas, 1997). In other words, children from higher SES families already possess more cultural capital when they enter school than children from lower SES families, meaning that the higher SES will benefit most from cultural capital. Hence, from this perspective,

the education system contributes to "the reproduction of the social structure by sanctioning the hereditary transmission of cultural capital" (Bourdieu, 1997).

That said, it seems from the evidence presented above, perhaps unsurprisingly, that Saudi parents of all social classes with children at secondary school recognise the benefits of their children gaining higher education qualifications despite the fact that different SES levels continue to separate children in terms of their actual achievements. As has been noted, ability to provide additional resources to students is a factor in attainment inequality between SES groups. Participation in cultural activities may be viewed as an example of such resources and has a definite bearing on student achievement (see below). Parents across social classes may value educational credentials equally and share similar interests for their children to obtain a higher education, but still social class determines the level of resources afforded to school age children. Bourdieu et al (1977) emphasise that this is how the upper class use higher education for social reproduction (Bourdieu et al., 1977).

Parents' attitudes

The evidence in this study shows that whatever their backgrounds, positive parental attitudes advance children's educational outcomes. High SES parents have the most positive attitudes, and thereby have an increased positive influence on their children's attainment. There are no exceptions in the evidence in this study. Positive parental attitudes were associated with positive academic outcomes in all SES bands, among boys and girls, Saudis and non-Saudis, and in private and public schools. This is an example of one type of cultural capital in action. Cultural capital, split into its various forms, can be used to shade in the details of social reproduction through a focus on

how social class advantage is maintained through everyday practices. Perceptions, thoughts and actions are transmitted to children who are, by nature, highly receptive.

However, as noted above, high aspirations were not what Bourdieu meant by cultural capital. In his view of the world, working class parents and their children could be highly ambitious, then flounder in education because they lacked a different kind of cultural capital. Arguably, this was happening in Saudi in that lower SES pupils were performing beneath the levels of higher SES pupils with parental attitudes controlled. Bourdieu claimed that the education system presupposed the possession of appropriate cultural capital, which only a minority of students in fact possessed; thus there was a great deal of inefficiency in pedagogic transmission. This could be because students simply did not understand the relevance of what their teachers were trying to get across. Bourdieu also claimed that social inequalities were legitimated by the educational credentials held by those in dominant positions. This meant that the educational system was playing a key role in maintaining the socio-economic status quo.

Goldthorpe (1996), in contrast, suggests that length of participation in education depends on one's economic position, aspirations, and judgments of risks and the costs of socio-economic progression, rather than on taste and judgment (Goldthorpe, 1996). The rational action perspective emphasises that the important reason for inequality in educational attainment is the variation in the perceived and actual costs and benefits of higher education, and that economic resources are important for educational choices. Such a perspective can be applied to social inequality in all countries. From the viewpoint of the working classes, university education seems to be relatively expensive as well as very risky because of the correlation between social stratification

and expected failure in tertiary education. Furthermore, despite the fact that the educational investments to attain a university degree do not differ for working class students and upper class students, university training seems more risky to working class students because, from their position, the benefits of higher education seem uncertain. Moreover, the investments that are required are high, relative to these families' resources. Economists, among others, have suggested that other characteristics, additional kinds of cultural capital possessed by rich people - traits such as ability, drive, reliability, and so forth - are transferred to their children who therefore tend to do well at school (Cameron and Heckman, 1998, Mayer, 1997).

The evidence from this research shows that parents' attitudes have a substantial effect on Saudi Arabian secondary school academic achievement, and will therefore have a bearing on admission to university and thus future opportunities. Moreover, as stated above, this relationship has been found within all SES levels. Regardless of the family's SES, an ambitious parental attitude seems to improve the student's performance. The mediating processes are likely to include the instilling of ambitions and expectations, as well as mentoring and such factors as have previously been found to have a positive impact on the achievements of students in Saudi Arabia (Othman, 1993). Conversely, a parent's lack of support may take different forms. For example, if the parents are too busy, this may lead to neglect of children's educational problems. In this regard, it is worth mentioning that positive views towards education in Saudi Arabian families have not always been found to have a strong relationship with educational achievements (Al-Sarhan, 1986). Two previous Saudi studies on female education in the country found that the importance of education to the parents had no impact (positive or negative) on the academic achievement of girls (Al-Ajaji,

1999, AlKahimi, 1982). However, as stressed throughout this thesis, in recent decades Saudi Arabia has been a rapidly changing country. (The gender-specific aspects of our evidence will be discussed further below).

The majority of Saudi Arabian families with children in secondary schools are investing quite heavily in the education of their children, and the students spend a huge portion of their time studying and preparing for examinations, particularly during the last two years of the secondary school - an important stage which determines admission to university. Moreover, the success of a son or daughter in entering a 'good' university is a source of great pride. This approach may be explained by the dramatic socio-economic and educational transformation that has occurred over the last few decades. As a result, the majority of Saudi Arabians believe that they or their children can achieve upward mobility through education if they work hard. This has led to a situation where many Saudi parents are willing to sacrifice whatever it takes to provide their children with a good education.

Bourdieu's theory of class reproduction indicates that the habitus is a system of competences and dispositions that are formed early-on in the family environment. After they are formed these dispositions are resistant to any change or transformation. This means that parents are able to impart a habitus regarding the value of education which is commensurate with the culture and practices in educational institutions, and paves the way to success. The transmission of cultural capital, in its embodied expression, is a major part of the formation of the habitus. Typically, the habitus is formed in its essentials by what Bourdieu calls "domestic" influences and is then further developed through the individual's own subsequent experience of 'class

conditions'. Bourdieu emphasises that the habitus acquired within their families by children of the dominant classes is then underwritten, as it were, in the course of their education. Only in quite exceptional cases would he allow for the possibility of schools serving to radically redress or "make over" forms of habitus that children bring with them.

The rational action theory, focusing on the economic perspective, may appear unlikely to apply among Saudi children who are attending secondary schools since their families are already investing, nearly always in pursuit of university qualifications for their children. However, our evidence has shown that the different levels of parental ambition for their children play a major role in academic performance. Moreover, when the family's financial position overshadows the importance of education in their eyes, this may have a negative impact on the children's academic achievement. On the basis of this research, we can say that parental attitudes towards education in Saudi Arabia have a definite relationship with educational achievements (Al-Sarhan, 1986). Thus the academic achievement of the child is not only influenced by economic status but also by parental aspirations.

Cultural activities

In Pierre Bourdieu's view, the culture that benefitted students was classical French culture – the source of the judgments, tastes and interests which teachers expected of bright, educable children. Irrespective of whether this still applies in 21st century France (and indeed whether it really applied in the 1950s and 60s), this is not the dominant culture in present-day Saudi Arabia. The latter has an international

reputation as a highly religious, and a religiously conservative country. It is true that a Wahhabi version of Sunni Islam is the official religion, that the law is Sharia, and that the country is strongly patriarchal (women still cannot drive let alone vote). One could be led to believe that the cultural capital that worked to students' advantage would be knowledge of holy texts and frequency of worship. Actually present-day Saudi Arabia is more complex than this. Religious fundamentalism is an internal terrorist threat. The country is the birthplace of Al-Qaeda, whose main enemy is the Saudi government. Present-day Saudi Arabia has a growing middle class whose culture values shopping, high levels of consumer spending, using the internet, foreign languages etc.

The list of cultural activities that seemed likely to benefit pupils, and which was incorporated into the research, was composed by the researcher, and the choice of items was vindicated in so far as these activities were performed most frequently by students from high SES families, and predicted educational performance within all SES bands. Such tastes are closer than parental attitudes to the kind of cultural capital that Bourdieu considered crucial in the reproduction of socio-economic inequalities. As with parental attitudes, there were no exceptions *among the Saudi students* to the 'rule' that high rates of participation in the listed cultural activities improved academic performance. This applied in every SES band, among girls and boys, and in private and public schools. However, the situation among non-Saudi students was rather different, and we will return to this exception below.

The evidence shows that involvement in plenty of the listed cultural activities by Saudi students had a positive impact on educational attainments whatever their

backgrounds. This backs up the idea of a "domestic transmission of cultural capital" (Bourdieu, 1997). As with parental attitudes, controlling for cultural activity does not eliminate all the differences between the SES bands, but nevertheless these activities act as important mediators. The data show that parental attitudes and cultural activities both have a positive impact on students' achievements, but an attainment gap between the SES levels remains.

In general, children with higher achievements were the more involved in all the types of the listed cultural activities. This finding is consistent with evidence from other countries such as the United States (Dimaggio, 1982, Dumais, 2002) and France (Bourdieu et al., 1977). In terms of Saudi Arabia, Ali (1976) found that when students gained access to facilities to increase their knowledge (such as television, newspapers, radio, magazines and other tools for general knowledge), this had a positive impact on their academic education.

In view of the fact that many Saudi parents want their children to devote themselves fully to preparing for the exams at least for the last two high school years, both Saudi Arabian students and parents may tend to view cultural participation as wasted time that could have been better devoted to study. Thus one may have suspected that cultural capital would not have a great bearing on student achievement in Saudi Arabia where the education system is characterised by uniformity of educational standards, long hours of study and competitive examinations (for admission to the universities). The Saudi school system remains relatively uniform in terms of content and standards in order to ensure fairness in the university entrance examinations. This is despite the recent introduction of additional criteria when determining admittance.

Therefore, such characteristics of the education system may have been expected to suppress any possible effects of cultural capital on student achievement. On the other hand, it could be argued that cultural capital may play an increasing role in the process of educational and social reproduction in a context where individual universities now choose students using a variety of non-examination criteria, including written tests (e.g. essay), interviews and high school principals' recommendations. Additionally, as noted previously, with regard to the cultural capital theory, students who have familiarity with dominant cultural dispositions and tastes are more likely to be recognised as educable by their teachers than those who lack such dispositions because cultural capital serves "as a signal to teachers who are predominately middle class and tend to have a high regard for culture" (Dumais, 2002). Teachers' reduced recognition or expectations may depress a student's self-image and effort, and thereby the student's academic achievement (Farkas et al., 1990). Teachers then may play an important role in rewarding children with higher cultural capital and converting cultural capital into academic success within the school system, indicating that social reproduction occurs partly through schooling.

Gender, nationality and school type

The main gender difference (boys out-perform girls) is fully consistent with the efficaciousness of cultural processes in achievement in secondary education. Saudi Arabia is a patriarchal society. Males are expected to be the leaders, the achievers, the main providers for their families. In contrast woman's primary role is that of nurturing mother and housewife (Sabbagh, 1996). Thus girls in school, even if they are making the effort to study, still have obstacles to achieving their potential. This situation is not relevant for their boy peers who can go as far as they desire because they are expected

to do well. The obstacles that Saudi girls face, in terms of academic progression, emanate from a family (and thus societal) context of expectations regarding the structure of relationships and procreation, and contribute to a girl's mindset about her place in the world. These expectations and the mindset they foster in girls are particularly strong, and displays of perceived deviance are likely to provoke family and societal disapproval. Moreover, Saudi education policy aims to prepare students to play the appropriate role in society according to their gender. Thus the importance of education varies for each sex, but benefits males more substantially. The Saudi education system grooms females to be obedient wives and good mothers. Further imposition of this responsibility comes via families, the media, teacher attitudes and some extra lessons at school.

Our evidence shows that parents with children in secondary school are just as keen for their daughters to succeed as for their sons, but boys seem to be more influenced, and gain the most benefit in terms of academic attainment, from having ambitious parents. Males have more opportunity to participate in most of the cultural activities that are related to academic success, and the evidence from this research shows that boys benefit from this as they have more access to cultural activities. Girls are disadvantaged in being prohibited from sports at school and will also experience hindrance if access to the internet is not available in their homes. Boys, however, may access the internet at friends' houses or the internet cafe – a privilege permanently denied to girls. Additionally, boys have more freedom to go out with their peers and to travel. Therefore it can be claimed that boys have an advantage when it comes to participation in cultural activities and subsequently achieve more than girls. Nevertheless, a high SES reduces this inequality between the sexes, meaning that

girls' performances may be on a par with those of boys if the education of their parents and their access to resources are also of a decent standard.

The boys appear to need this stimulus (participation in cultural activities), especially those from low SES families, who do not out-perform their girl peers unless the boys score high on cultural activities. Although one may argue that boys and girls will receive much the same cultural training if they are in the same social class, their habitus may be quite different, on account of their socialisation and the views they form of the opportunity structure available to them (Dumais, 2002). Pupils in Saudi receive tuition in single-sex schools with teachers of the same sex. Despite receiving a largely similar curriculum, differences exist according to gender which may then lead boys and girls to their different positions in adult society. For example, even from the earliest years of schooling the boys' curriculum involves physical education whereas their female contemporaries are obliged to pursue activities of a more sedate and domestic nature.

There are also gender-specific aspects of Saudi female education such as formal schooling becoming available to girls around 30 years later than for boys. Additionally, limited opportunities for girls in higher education and beyond have restricted them to pursuing merely teaching or medicine. This situation has improved in recent years but one would expect that education's history will still have a significant bearing upon female progression and degrees of ambition.

It could be that many Saudi parents tend to favour sons' education and feel it is more important for them than for their daughters, so they make more educational

investment in boys than girls. As the father has the financial responsibility in the family, parents may believe that there are economic benefits in educating their sons since they will have the responsibility of supporting a household, and are also likely to provide support to their parents in retirement and old age. In short, parents may practise different strategies for sons and daughters. There will be a difference in their views on the importance of education for a boy compared with a girl from a comparable background with similar resources.

Social and economic concerns may not always work together. Some parents may see the economic benefits of educating their children, both boys and girls, but may still be wary of the potentially negative cultural impact of formal schooling. An education may enhance a girl's status in the community but can be perceived as adversely affecting her ability to be a good mother. Thus, some families might view education as enhancing the character of a boy but regard it as a threat to the maintenance of their proper social role in respect of girls.

That might be most true in lower class families who lack education and have limited economic resources, but will be less likely to apply in the case of affluent educated families. In the latter families, parents have both reached a certain educational level and can be expected to want their offspring to reach at least the same level. For girls, the education of the mother will probably be especially important. Those mothers who have succeeded in completing a certain level of education have lived the experience of the value of education and will believe that their daughters can reach that level. Moreover, financially these families can support their children's education easily without being forced to favour their sons' or daughters' chances.

The exceptions to 'the rule' that boys do best offer some indications of the socio-cultural climate in present-day Saudi Arabia. Gender differences disappear entirely in the highest SES band. This indicates that in present-day Saudi Arabia the middle classes are the socio-cultural modernisers (certainly in respect of gender roles) and the lower SES groups are the more traditional in their outlooks.

It is noteworthy that girls, but not boys, do better in private than in public schools. We can also note here that both sexes from low SES families perform better in private than in public schools, whereas attending a private school appears to confer no academic benefit on those from high SES families. Private schooling also appears (from the evidence presented above) to be especially beneficial in terms of academic attainment when pupils' levels of cultural activity are low but when the parents are keen for their children to do well. The evidence from this research cannot explain any of these relationships, but a hypothesis that will explain all the differences is that private schools need to stimulate all pupils to achieve to their maximum because recruitment to the schools depends on their academic reputations. The mere fact that pupils are enrolled in private schools (for which the parents are paying) can be regarded as evidence that the parents are keen for their children to do well. The pupils who benefit the most are always those who would be most disadvantaged in public schools; namely girls, low SES groups, and any pupils with low levels of cultural activity.

The most intriguing, and the most difficult to explain finding from this research is that non-Saudis were out-performing Saudi pupils. One might have expected immigrant

groups to be systematically disadvantaged by Bourdieu-vian cultural processes. So why were the non-Saudis doing better? The higher attainment of non-Saudis was not an SES-effect: the difference existed within all SES bands. Nor could the difference be explained in terms of levels of parental aspiration or the pupils' cultural activities. Could it be that there are specificities of Saudi culture that depress achievements in education in all social strata, among boys and girls, and whether they attend private or public schools? Religion cannot be the difference because Madinah is a 100% Muslim city.

Non-Saudis were defying a number of 'rules' otherwise evident in the findings from this research. The non-Saudis were deriving the greater benefit from attending private schools, defying the general 'rule' that normally under-achieving groups benefitted most from private education. In the lowest SES band, non-Saudis with low levels of cultural activity were doing better academically than non-Saudi pupils with higher levels of cultural participation. Maybe the former were benefitting from lack of contact with lower class Saudi peers and their cultural milieu.

This evidence of Saudis consistently (irrespective of gender, SES and type of school) under-performing must be among the findings from this research of interest and concern to the Saudi authorities.

Policy recommendations

Saudi Arabia's economy is not in urgent need of a more highly qualified workforce. Already over 50% of young people enroll in higher education. The country is not coping with a shortage of highly educated labour, but with an acute shortage of

corresponding employment. Reducing unemployment, and spreading the benefits of the country's oil wealth to all strata, requires investment in additional industries, and strengthening and widening routes into technical and skilled occupations. These types of employment can easily be re-imagined. They are no longer physical, and they are certainly not menial.

The fact that Saudi children are out-performed by children of other nationalities, and that this applies among both boys and girls, from all SES groups, and in both public and private schools, should be of concern to Saudi policy-makers. Are there features of Saudi culture that depress educational attainment? Progression through the school system is not highly demanding. Mere completion of elementary then intermediate school is sufficient for progression to the next level. However, this also applies in the USA, up to and including college entrance. There is a strong case in present-day Saudi Arabia for keeping the doors of intermediate and secondary schools wide open, and for simultaneously endeavouring to reduce social class inequalities in progression rates. Many children from present-day lower SES homes are the first in their families to attend school. Many of their parents are illiterate Bedouins who have recently moved from rural (desert) settlements into towns and cities. If these children under-achieve, and leave education during or after elementary, intermediate or secondary school, Saudi society could solidify into a new prosperous middle class and an impoverished lower class.

So how might inequalities in attainment be reduced? This research has underlined the value of high rates of participation in cultural activities. These could be made much more widely available – to girls as well as to boys, and from all social strata. Schools

could have access to facilities in which they could encourage all pupils to take part in sports classes. There could be libraries, linked to all schools, in which pupils could access books, computers and the internet. Such participation could then become part of all children's education.

This research has also underlined the benefits of parental support and encouragement for children to aim high. There is a case for education to outreach to families, especially those where the parents are uneducated. They could be offered adult learning in basic skills such as reading and writing. Alongside this, they would learn about how the Saudi education system works – the importance of regular school attendance, prompt time-keeping etc which are well-understood in families where the parents are well-educated.

This research has also shown (or at least the findings strongly imply) that low family incomes are partly responsible for the SES-effect on children's attainments. These could be mitigated by introducing family child benefits, graduated by age, provided the children attended school. This would encourage families to prioritise education, as well as making it easier for them to provide books and to enable their children to take part in cultural activities.

The research has also found that lower SES pupils, and girls, are the groups who are most likely to benefit from attending a private school. The numbers who are able to do so could be enlarged by introducing scholarships and grants (pocket money), maybe linked to school performance, for students from low income homes.

In summary, there is much that can be done. The reward for the country will be enhanced rates of upward social mobility, and a reduction in the numbers who are at risk of forming an impoverished, under-employed lower class in an increasingly prosperous country.

Further research

This research has surely demonstrated beyond reasonable doubt that there is an SES-effect (very similar to the SES-effect recorded in all other countries where relevant investigations have been undertaken) in Saudi education. This is still queried in some sections of Saudi society. Their reasoning is that Saudi Arabia remains traditional in many ways, that high status families are still directly passing-on their positions to their children, that only the lower classes need to succeed in education, and that they should therefore out-perform their social betters. The normal SES-effect is produced by the now substantial Saudi middle class that relies on education to give its children the best possible starts in life.

Uncertainty has persisted due to the very limited quantity of previous research into the determinants of attainment in Saudi schools. Ignoring this huge issue has been related to the fact that it is still considered unnecessary to make any school education compulsory. Hopefully, the findings from the present study will lead to further enquiries. This research was conducted in just one location – Madinah. One could call for similar research elsewhere to confirm or dispute the findings. However, this kind of straight replication should not be a priority. We can be confident that the findings would be very similar. Likewise there is a case for investigating SES-effects at other levels and junctures in the status attainment process. Again, we can be sufficiently

confident that the findings would be similar to those reported above to relegate such research down the list of priorities.

Three kinds of follow-up enquiry are more easily justified. First, to establish the full scale of social inequalities in educational attainment, for which it will be necessary to follow-up a sample of children throughout their educational careers. This would be best achieved through a longitudinal birth cohort study, ideally to be repeated at intervals, so as to record any changes. Such research would follow-up its panel into their employment careers - a crucial stage in status attainment in which social capital (connections) could become efficacious.

Second, studies with much larger samples than in the present enquiry are needed to properly unpack SES and to disentangle the processes whereby educational outcomes are influenced. This research has suggested (strongly) that parents' occupations and education, family income, parental attitudes and children's cultural activities all contribute to the SES-educational attainment relationship, but the numbers have been too small to apportion weights to the various SES components. Likewise this research has begun to separate the processes - economic and cultural - whereby SES determinants become educationally efficacious. Full unraveling will require a larger sample, and probably more sophisticated measures of the various kinds of cultural capital. Ideally, such a large sample would include adequate numbers from upper class (royal) families. Maybe they would prove exceptions to 'rules' that otherwise operate.

Finally, there should be action research to measure the impact of the policy measures (recommended above) which will hopefully follow the publication of the results of this study.

Critical reflections

On completing a project all researchers reflect on whether they might have done things better, and this study and this researcher are not exceptions. Sometimes, even on reflection, I feel that certain critical decisions, taken right at the outset, were the right decisions.

It would have been useful to study a larger sample. Unpacking the influence of the different variables, especially the separate components of family SES, was hampered due to the limited number of respondents in some sub-categories. However, the sample size was sufficient to meet the study's main objectives, and therefore, given the limited resources available, the original decision on sample size appears vindicated.

Restricting the study to just one city (her home city) was convenient for the researcher, and useful while conducting fieldwork. It was always recognised that it would not be possible to generalise from the findings to Saudi Arabia as a whole. A national study would have required far more resources, and was always impractical. This apart, operating in just one city held 'contextual' factors constant, while allowing the research to focus on its main objectives – establishing the influence of family SES, and also gender, type of school and nationality.

There are some things that *could have been done*, and which, if starting again, I would do differently. First, the study relied entirely on quantitative methods. At the outset it seemed that these methods would be sufficient. On reflection, it would probably have been better to seek additional resources to fund another field trip to conduct interviews with parents to illuminate some of the results of the statistical analysis.

Second, the choice of students' level in the secondary schools (second year) was based on this being the most convenient, the least disruptive, for the schools and the students. It now appears that, notwithstanding the initial consideration, it would have been better to study final year secondary school students. By then those who were intending to progress directly into higher education would have been clearer. This would have allowed the research to explore the secondary as well as the primary effects on attainment of family SES and other predictors.

Third and finally, the questionnaire included questions about students' cultural activities related to modern aspects of life in Saudi Arabia. The findings have confirmed the original hunch/hypothesis; participation in these activities was related to improved levels of educational attainment. As Saudi is known worldwide as a highly conservative society, certainly in religious terms (though most Saudis would describe themselves as religious moderates), it would have been helpful to have included an additional set of questions related to religiosity to see if this bore any relationship to educational attainment. However, religion is a highly sensitive issue in Saudi Arabia at present. The selection and construction of such questions would have needed to be thought through carefully. Also, the questions might have made it more

difficult to secure the cooperation of the *schools and families in the research*. Even so, if starting the study again, the attempt (and the risks) would be judged worthwhile.



وزارة التربية والتعليم
Ministry of Education

الإدارة العامة للتربية والتعليم
بمحافظة المنيا
(٧٨١)
وزارة التربية والتعليم
الإدارة العامة للتربية والتعليم
بمحافظة المنيا
(بنين)

الرقم: ١٢١٢٧/٢٣٦٧
التاريخ: ١٥/١١/٢٠٢٤
المشروعات:

وحدة التخطيط والتطوير التربوي - الدراسات والبحوث التربوية

تعميم إلى المدارس الثانوية حسب البيان المرفق

المحتوى

إلى : مدير مدرسة /
من المدير العام للتربية والتعليم بمنطقة المنيا
بشان : تطبيق استبانة الباحث / غلود بنت عبد الله الرجرجي
السلام عليكم ورحمة الله وبركاته . . . وبعد .

المعاقف لخطابنا رقم يدون وتاريخ ٥ / ٧ / ٢٠٢٧هـ بشأن الموافقة على تطبيق ورشة
الباحثة غلود بنت عبد الله الرجرجي بعنوان " العوامل الاقتصادية والاجتماعية المؤثرة
على التحصيل الأكاديمي للطلاب بالمملكة العربية السعودية " وذلك على عينة من
طلاب المدارس الثانوية بالمنطقة .

تفيدكم بأنه سوف يقوم من ينوب عنها بتطبيق الاستبانة الخاصة بالدراسة
واستلامها منكم بنفسه ، تأمل تسهيل مهمته والتعاون معه ونحن على ثقة باهتمامكم
لأعمال البحث التربوي التي تسهم في تطوير العملية التربوية والتعليمية .
ولكم تحياتي ، ، ،

د. بهجت بن محمود جليل

الأخت

مودة لخدمة الدراسات والبحوث التربوية
مودة الأخت
مودة اللاصحات

رقم قسم الدراسات والبحوث التربوية : ٠٢٠٧٧٨٨٧٨ (استقر) ٠٢٠٨٢٢٥٨٢٢٥ (توعية) ٠٢٠٤

Dear Parent and student,

We are fortunate in this country to have available to us vast resources which have made it possible to benefit from free education and to develop our nation from modest beginnings. This questionnaire intends to investigate the various social and economic relationships that may affect student achievement at school. This will help in developing policies and academic solutions to aid in the academic progress of this country, to build a better future for all of us.

We would appreciate your honesty in filling out the questions. Please note that these questionnaires are anonymous and the results will be used only within this academic research.

Researcher
Kholoud Al-Rajraji

1. Name of school:
2. Sex:.....
3. Age of student:
4. Section: 1) Science 2) Art
5. Type of school: 1) Public 2) *private*
6. Nationality:
7. Student lives with: 1) Both Parents
2) Father only
3) Mother only
4) Other
8. Parents' status: 1) Married
2) Separated
3) One parent passed away
4) Both parents passed away
9. Number of members of household:
10. Number of siblings:
11. Sequence of student in family:
12. Accommodation type: 1) Villa
2) Flat
3) Rural
13. Number of rooms :(Excluding Bathrooms, Kitchen, Utility room, etc):
.....
14. Is this accommodation: 1) Owned
2) Rented
3) Free
15. Father's education level: 1) University
2) Secondary
3) Below secondary
16. Mother's education level: 1) University
2) Secondary
3) Below secondary

17. Father's employment: 1) Professional
 2) Manager
 3) Officer
 4) Soldier
 5) Clerk
 6) Manual
 7) Self employed
 8) Unemployed
 9) Other...

18. Mother's employment: 1) Professional
 2) Manager
 3) Officer
 4) Soldier
 5) Clerk
 6) Manual
 7) Self employed
 8) Unemployed
 9) Other...

19. Monthly family income: 1) Less than 2999 SR
 2) 3000 - 4999 SR
 3) 5000 - 9999 SR
 4) More than 10000 SR

20. Does the family have a: 1) Servant (Yes/ No)
 2) Driver (Yes/ No)
 3) Cook (Yes/ No)

21. Hobbies: How often does student take part in?

	Daily	Twice a week	Once a week	Twice a month	Once a month	Never
Reading						
Watching TV						
Sport						
Shopping						
Internet						

22. Where are main holidays usually spent? 1) In the city
 2) In the Kingdom
 3) Outside the Kingdom

23. How many holidays away from home in last 12 months.....

24. Targeted qualification from point view of parents: 1) Secondary School
 2) University
 3) Postgraduate

Study

25. Is the education: 1) Essential
 2) Important
 3) Not Important
 4) I do not know

26. Parents' top priority for student: 1) Job
 2) Marriage
 3) Higher education

27. Student's favorite subjects: How would you describe these?

	Likes very much	Likes	Neither likes nor dislikes	Does not like	Does not like at all
Math					
Science					
Literacy					
Religious education					

28. Student's most difficult subjects: How difficult are these subjects?

	Very difficult	Difficult	Neither difficult nor easy	Not difficult	Not difficult at all
Math					
Science					
Literacy					
Religious education					

29. How would you rate the quality of education in the school?

1 High quality	2	3	4	5 Low quality

30. How satisfied are you with the student progress?

Very satisfied	satisfied	Neither satisfied nor dissatisfied	Don't know	Dissatisfied	Very dissatisfied

31. Please give the student's marks from first secondary year transcript

Subject	Marks
Math	
Physics	
Chemistry	
Biology	
English	
History	
Geography	
Arabic	
Rhetoric	
Literature	
Quran	
Haddith	
Tuheed	
Feqh	

32. The overall result

33. Number of day's student absence.....

34. Number of day's student absence (authorized)

35. Number of day's student absence (unauthorized)

36. Attendance mark

36. Behaviour mark

Thank you very much.

Please return the questionnaire via the student to school in the envelope provided.

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