

PRIVATE VS. PUBLIC SCHOOL EDUCATION AS A PREDICTOR FOR SUCCESS FOR FEMALE STUDENTS AT A PRIVATE UNIVERSITY IN SAUDI ARABIA

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ABSTRACT

This article analyzes the academic performance of the first graduating class (178 females) from a private university in the Eastern Province of Saudi Arabia, which are categorized according to school type (private or public school education). The study specifically compares the academic achievements of the students at admission and later at graduation in correlation with school description. The analysis of the admission distribution revealed that 63% of the direct undergraduate admission students graduated from private secondary schools, and they substantially outperformed the public school graduates in the preparatory level only. While the analysis of the CGPA at graduation, 4-5 years later, showed that once the English language skills were learned, the public school students quickly bridged the gap and even surpassed their private school peers. The final outcomes provide a new path for research in the area of school type vs. prolonged academic achievement and suggest that public education can prepare students for academic success.

Keywords: School Types, Private, Public, Saudi Arabia, Preparatory Program, Female Students.

INTRODUCTION:

For decades, in many countries, academic school ‘type,’ private or public, as a predictor of or factor in future academic success has been researched and debated (Lubienski & Lubienski, 2006; Peterson & Laudet, 2006; Somers, 2001; and many more). It is a dilemma for governments, communities, organizations, and parents alike. Private education is often associated with higher tuition and consequently a higher socioeconomic status, a perceived ‘better’ peer group, and more flexible curriculum and school guidelines. Public or sometimes referred to as ‘government’ education is often considered the education of the masses, more aligned with cultural identity and norms in many countries including Saudi Arabia and more consistent.

In the Kingdom of Saudi Arabia, education begins formally at the age of 6 or Grade 1, public or private. Saudi schools are overseen by the Ministry of Education (international schools for the estimated 6-8 million expatriates often follow different regulations) and are gender segregated at all levels including higher education. Girls’ education began in 1960 (Tracy, 2002; Arebi, 1994) and has gone through tremendous growth and change. The literacy rate for girls compared to boys aged 15-24 was 98.6% in 2010 as compared to 85.9% in 1990 as one the Kingdom’s Millennium Development Goals (UN Development Program, 2012). Nearly 51% of the students enrolled in and graduated from institutions of higher education in the Kingdom are women.

Although little research has been done on public (referred to as government) and private education as a predictor of success in Saudi Arabia, the obvious main reasons for sending children to private schools in the Kingdom are more flexible ‘school’ curricula, enhanced learning environment academically, socially, and technologically, and the earlier introduction of the English language. The English language is introduced as a foreign language in public schools in the 6th grade (although the Ministry of Education has introduced the language in 4th grade in an expanding educational project). In private schools, English is introduced from the Kindergarten level, which allows English to be acquired more naturally and fluently. Government education is free for all Saudis with the government expending a large portion of the country’s budget (about 1/5) on education; HRH King Abdullah bin Abdul Aziz has strongly promoted education and life skills through the Project for General Education Development (Al-Seghayer, 2011). Private schools have tuition scales that vary based on curriculum, facility, location, and services, both academic and extracurricular. All Saudi schools, whether public or private, are required to implement the government curriculum and are led by Saudi principals. The private schools (usually owned by an individual or group of individuals) then often add their own curriculum and teach in parallel with the required government curriculum.

Currently, the government education sector oversees 6,855 primary schools, 3,729 intermediate schools, and 2,391 secondary schools for girls in the Kingdom (Al-Seghayer, 2011). The girls’ numbers nearly mirror the boys’ in the government education sector. In private education as of 2008-2009, there were 628 elementary, 404 intermediate, and 307 secondary schools in the Kingdom for girls. What is notable is not the difference in the number of schools for boys and girls, which is comparable throughout the Kingdom but the number of students and ratio between girls and boys. In private education, according to Al-Seghayer, by the time the children reach intermediate and secondary school, the number of girls enrolled is nearly half of the numbers of boys enrolled (59,716 boys to 29,750 girls intermediate; 129,516 boys to 60,433 girls secondary). This statistic suggests that the public or government/private choice may also be determined by gender as well as cost, facility, and other factors.

This study analyzes the variable of educational background of the female students (specifically private or public school education) as a predictor of overall academic success measured by the cumulative grade point average (CGPA) at a private university in Saudi Arabia. First, a brief background on school education type and the university being used in the study will be presented followed by the methodology, data analysis and results and finally conclusions.

BACKGROUND:

School Education Type and Academic Performance:

Public and private education is offered throughout the world and has been an issue of debate that often pares down to parental preference or choice based on a variety of factors. Factors such as cost vs. worth, elitism vs. community, consumer-oriented vs. bureaucracy-oriented, choice vs. mandate, and a number of others are considered and discussed as part of literature about the ‘private school effect.’

Certain early studies such as Coleman, Hoffer, and Kilgore (1982) found that the private school had an overall positive effect even when taking into account students’ environmental factors. However, also in the same decade, other studies using a more growth-based longitudinal approach including Willms (1985), criticized and disagreed with the original controversial Coleman, Hoffer and Kilgore study and the subsequent Coleman and Hoffer study (1987) and “found little or no evidence of a private school effect in the data” (Lubienski & Lubienski, 2006, p. 10).

Research studies lead by Bryk (Bryk, Lee, & Holland, 1993; Bryk et al., 1984) showed a positive private school effect on overall performance at Catholic schools. These findings, nearly two decades past, are supported by a report from the Center on Education Policy (CEP, 2007) written by Dr. Harold Winglinsky. He noted “a second exception is that one special type of private school, Catholic schools run by holy orders...did have some positive academic effects” (p. 2). Catholic school students were also shown to have higher achievement than their public school peers in mathematics but lower skills in reading (Lubienski & Lubienski, 2006; Kim & Placier, 2004). The variable of religion, although a unifying and supportive factor, is not valid in determining the success of private or public education within Saudi Arabia. All Saudi schools whether private or public teach Islamic principles and texts along with secular subjects. However, one could debate whether the support system, both academically and socially, rooted in religion affects students’ overall future success.

The CEP report (2007) found that ‘low-income students from urban public high schools generally did as well academically and on long-term indicators as their peers from private high schools, once key family background characteristics were considered’ (p. 2). Further, the study found that at 26 years old, the former private school students were neither further ahead in their careers nor more engaged in community activities. The only other exception, a substantial one, according to the report was that private high school students performed better than public high school students on the SAT exam which strongly supports college admission. The authors argued that this finding could be due to explicitly taught test-taking strategies in the private schools. Lubienski and Lubienski’s study (2006) supported the CEP report in 4th grade mathematics (as did Peterson and Llaudet, 2006) using the same data from the National Center for Education Statistics. In 8th grade the private school students did outperform their public education peers in reading. However, overall, the researchers found that when accounting for demographic factors, the difference between private and public school student performance is not substantial.

All of the above-mentioned studies focus on the American educational system and the possible benefits of parental choice, but what about in an international context, in Saudi Arabia and the region? While specific studies comparing private and public education could not be found, a study from the perspective of secondary public school principals in Al Ahsa (Eastern Province) found that the overall efficiency of the public secondary system is ‘low’ and ‘weak’ (Abu Nasser, 2009).

Other studies, specifically about private and public education, from different parts of the world may provide insight on the unique Saudi Arabian private/public educational context. Jimenez and Lockheed (1995) compared private and public secondary education students in 5 developing countries including Columbia, Philippines, Thailand, Dominican Republic, and Tanzania. The cross-sectional study concluded that private education students outperformed public school students on standardized exams and that private education was better resourced and more organized providing students with more efficiently delivered instruction. Somers, McEwan, and Willms (2001), studied the effectiveness of private schools in 10 Latin American countries. The researchers concluded that there was “substantial and consistent differences in the achievement of private and public schools” (p. 29) but mostly due to the ‘better’ peer group characteristics. After this variable was considered, the positive private effect was no longer an issue and not significant.

Kamwendo (2010) studied the private/public question and pass rates for secondary education in Malawi. The study found that girls performed best at non co-educational or single sex public schools followed by co-educational private schools. In this case, gender played a significant role in the pass rates. Further, Kamwendo noted the lack of regulation of private schools could affect the overall efficiency and performance of the students. Oketch (2009) studied the perception of public and private universities by secondary students in Kenya and found that most students preferred public universities at the higher education level. While this does not directly affect the public/private K-12 education question, it does reflect the paradoxical perceptions of K-12 private education as compared to private higher education. This perception is held in many developing countries in the world, where K-12 private education is considered ‘elite’ but many ‘elite’ students opt for public higher education options for stability and a perceived ‘higher’ degree or choose to study in a different country.

As shown there is very little research on the private/public education question in Saudi Arabia. Some of the problems with government and private education mentioned above are not factors. The Kingdom has consistent oversight and regulation of the Saudi private schools and excellent funding for the government schools but the overall curricula (both public and private), introduction of the English language, class sizes, and instructional methodologies are distinguishing factors.

The Private University: PMU

The higher educational system in Saudi Arabia consists of 24 recognized public universities and 8 private universities and 36 private colleges (Education, Royal Embassy of Saudi Arabia, 2012; Al-Seghayer, 2011). Education has grown rapidly in Saudi Arabia since the Kingdom’s unification in 1932 and there are more universities planned. Unlike the public universities (which are overseen entirely by the Ministry of Higher

Education (MOHE) and the students are given free access to education and a stipend for living expenses), the private universities have different tuition scales and offer variation in curricula, campus life activities, and learning environment.

Prince Mohammad Bin Fahd University (PMU) opened its doors to both male and female students in 2006 in the Eastern Province of Saudi Arabia and graduated its first batch in Spring 2011. At this time, only the preparatory program and the undergraduate general education referred to as the “Core Curriculum” were opened to students. The early plan of the university would include three colleges: College of Business, College of Information Technology (renamed as the College of Computer Engineering and Science), and College of Engineering. Of the 11 original majors, 10 were offered to male students, and 8 were offered to female students. The only differences in major offerings were in the College of Engineering due to the nature of the work and job availabilities for students. Male students could major in the various engineering programs while female students could study Interior Design. All three colleges remain today; the addition of the College of Arts and Science was added in Spring 2011. Two additional undergraduate majors and two graduate programs have been added to the original PMU design. The PMU faculty is multinational with over 20 nationalities represented (Academics, 2012). All courses are delivered in a face-to-face format with technology-infused content and language learning.

PMU is unique in the Eastern Province as it is the only university that uses the English language as the medium of instruction and is based entirely on North American curriculum. Yet, the university adheres to the Kingdom’s rich cultural and Islamic background. The only courses not taught in English are the MOHE-required 4-course series of Islamic Studies. These courses constitute only 8 credits of the 125-136 degree programs (Degree Plans, 2012). The use of the English language has a strong effect on the success and learning environment for the students as about 96% of the students use Arabic as their native language (L1). The curriculum entirely immerses the students in the English language and all content area knowledge is obtained through this language. This combination of international curriculum and English as a lingua franca with the deep Saudi traditions and cultural ties provides the PMU graduate with the tools to become a global citizen in the international world.

METHODOLOGY:

Participants:

This study analyzes the background and performance data of female students (total 178) who attended PMU and graduated during the period from 2006 to Spring 2011 throughout their academic career from admission to graduation. The participants were matriculated into the university in 2006 (71.68%, 129 students), 2007 (25.44%, 44 students), and 2008 (1.74%, 3 students).

Students from eight different nationalities graduated with a majority being Saudi nationals (91%). Nearly 83% (143 students) came from the Dammam-Dhahran-Khobar area of the Eastern Province with only 2 students (1.16%) coming from the Jeddah area in the Western Province of the Kingdom.

The first batch of PMU female graduates graduated mostly from private secondary schools (61.85%) with about one-third graduating from public secondary schools. Over 75% of graduates came from the ‘science’ stream in their secondary studies while the remainder came from the ‘arts’ stream (21.97%) or international program with varying curriculum. Further, the data shows that over 96% of the female graduates had an L1 of Arabic; only 8 credits in the students’ 125-136 credit-hour degree programs are in the students’ native language with the medium of instruction for all other courses being in English (Degree Plans, 2012).

Just over half of the graduates began in the preparatory program (57.8%, 101 students) consisting of English, mathematics, and study skills courses while 76 (41.62) students were admitted directly into one of the 9 undergraduate degree programs. The average female student spent 1-2 semesters in the prep program with a slight majority (24.86%) admitted in the intermediate level followed by those admitted in the advanced level (18.50%).

Students graduated from all three colleges (Business, Engineering, and Computer Engineering and Science) with the College of Business graduating the largest number (66.47%, 118 students). The Finance major alone graduated 72 (41.04%) students of the total number of 178 graduates. The other two colleges graduated nearly equal numbers of students, slightly above 16% of the graduates.

Quantitative Analysis and Results:

We started by classifying students according to their school type whether they are from state-funded public (i.e government) schools or private schools. For the sample of graduates used in this study, it was found that approximately 61% of the graduates were from private schools where there is strong emphasis on the English language and in some cases it’s adopted as the language of instruction. Non-state schools are also primarily

known for their smaller class sizes and rigorous individual attention and follow-ups.

Table 1: Secondary School Score vs. School Type

GCE score	Government\ Public	Private	Private International	N/A	Total
<60 or NA	0	0	0	5	5
60-65	1	0	0	0	1
65-70	0	0	0	0	0
70-75	1	1	2	0	4
75-80	6	9	0	0	15
80-85	9	7	4	2	22
85-90	11	20	0	0	31
90-95	14	45	0	0	59
95-100	16	25	0	0	41
Total	58	107	6	7	178

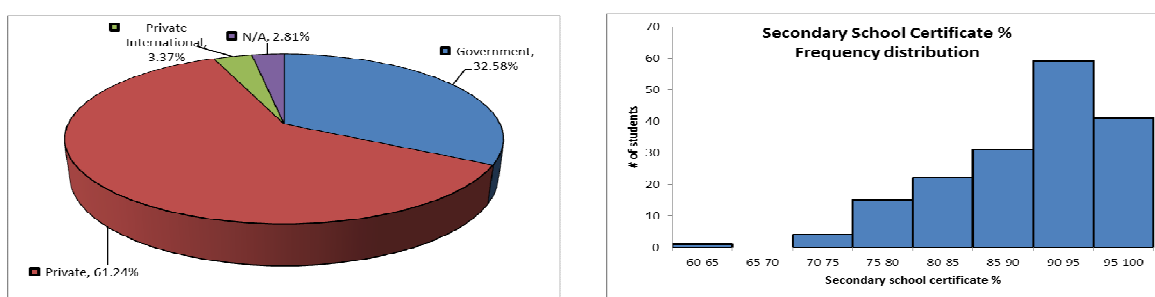


Figure 1: (a) Percentage distribution of admissions classified by school type indicated on secondary school certificate. (b) Frequency Distribution of secondary school scores grouped into classes of width 5.

Upon grouping the students according to their attained score in high school, it is noticed that the majority of the students (100 graduates) are high achievers with score greater than 90% on the secondary school certificate and only 10 students were admitted with high school score of less than 75%.

The admission process in PMU is based on the achieved score from the general certificate of education in Saudi Arabia or its equivalent strongly coupled with the results from an in-house PMU-English-Placement test and PMU-MATH-placement tests. The PMU English placement test is three-fold, and rigorously tests the students' skills on reading, writing and communications. The primary objective of these tests is to correctly place the students on their preparatory English levels in order to prepare them for an all-English medium undergraduate study. Those who pass these tests are then directly admitted to their undergraduate program starting with the core curriculum, while those who do not pass are placed according to their score in three levels. These preparatory English levels are set in ascending order as Advanced, Intermediate and Beginner.

Table 2: Frequency Distribution of Admission Level vs. School Type

School Type	Direct Admission (Core)	Preparatory Advanced Level	Preparatory Intermediate Level	Preparatory Beginner Level	Total
Public	18	10	22	8	58
Private	50	28	21	10	109
International	6	0	0	0	6
N/A	3	2	0	0	5
Total	77	40	43	18	178

For our school types groups, it is found that approximately 43% of the students from private schools pass the English placement test and are directly admitted to the colleges. In other words, students from private schools make up approximately 65% of those directly admitted to the colleges. Thus rigorous English language instruction and adoption of English as language of instruction in private schools significantly and positively correlates with direct admission to undergraduate program with minimal or zero time spent at preparatory level.

It is also found that private schools outperform public schools on the three levels of English preparatory program at PMU if not admitted directly to the core curriculum. The 101 students admitted to the preparatory program spent not more than a year (1-2 semesters) before being re-tested for English proficiency and promoted to their respective undergraduate program.

The participants were studied again during their undergraduate (credited) program to see how they were progressing. An extra variable is included, their cumulative GPA. The sample studied for their annual progression and cumulative GPA is that of 167 participants (public school 58, private school 109).

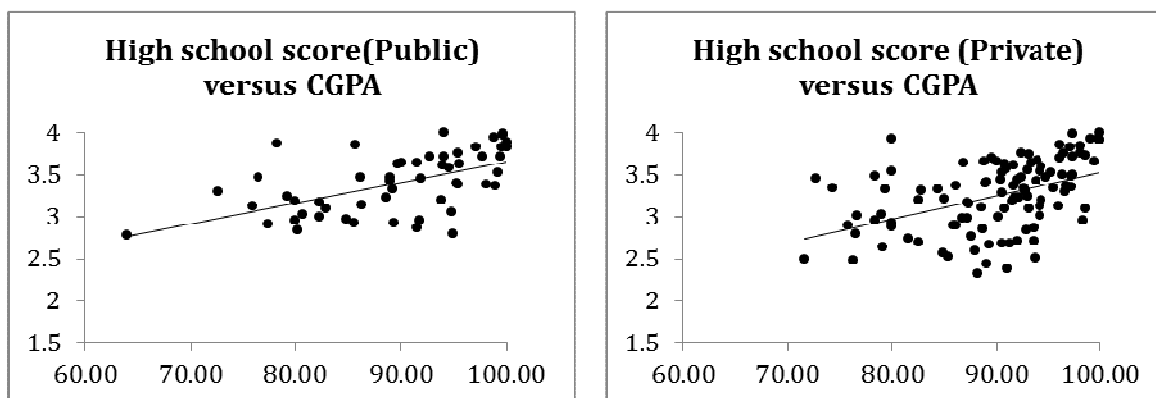


Figure 2: The distribution of cumulative GPA versus high school score categorized into (a) Public and (b) Private.

The CGPA analysis revealed that out of the 58 participants from public schools, there are 43 with CGPA greater than or equal to 3.0. This amounts to 75.86% of the population of the public school participants. On the other hand, there are 77 private school participants, out of 109, who achieved a CGPA of 3.0 and above. This is equivalent to 70.64% of the entire population of the private school participants.

Moreover, it is found that there are 5 participants out of 109 private school participants (i.e. 4.59%) who achieved a CGPA below 2.5 as opposed to none (i.e. 0.0%) from public school participants. This is a clear indicator that on the overall undergraduate program (credited courses), participants from public schools outperform those from private schools.

CONCLUSION:

Although this is only the study of one private university in Saudi Arabia, it serves as a starting point for more research on private/public education as a predictor for academic success. This study shows that students who graduated from private secondary schools are fluent and started their undergraduate with this advantage. On the other hand, students who graduated from public secondary schools had a distinct disadvantage at the beginning of their academic career and required a boost of their language skills. However, the results show that once the English language skills were learned, the public school students quickly bridged the gap and even surpassed their private school peers. This final result provides a new foundation for contradicting the widely acclaimed notion that private school students are consistently outperforming public school students.

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