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EDUCATION OF JORDANIANS: OUTCOMES IN A CHALLENGING ENVIRONMENT

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Abstract

This paper employs the Jordan Labor Market Panel Survey 2010 and 2016 waves to investigate the educational enrollment and attainment of Jordanians, as well as variations in school characteristics and student performance. While enrollment in education deteriorated slightly in 2016 compared to 2010, educational attainment has improved in 2016 relative to 2010. Household socioeconomic conditions, especially the wealth and education of parents, are related to enrollment in education and educational attainment. There are disparities in enrollment based on gender, between urban and rural areas, and across the Middle, North, and South regions. Enrollment rates were higher among females than males and the urban South region was disadvantaged. Disease, poverty, and the wishes of parents and individuals were the main barriers to entering education for the younger generations, while poverty, traditions, and lack of schools were the main barriers for older generations. The decline in lower levels of educational attainment was offset by more adults who obtained a university degree.

Keywords: Education, Enrollment, Attainment, JLMPS, and Jordan.
JEL Classification: I21

ملخص

تستخدم هذه الورقة استقصاء فريق سوق العمل الأردنية لعامي 2010 و 2016 للتحقيق في الالتحاق والتحصيل التعليمي للأردنيين ، وكذلك الاختلافات في خصائص المدرسة وأداء الطلاب. في حين أن نسبة الالتحاق بالتعليم تدهورت بشكل طفيف في عام 2016 مقارنة بعام 2010 ، فإن التحصيل العلمي قد تحسن في عام 2016 مقارنة بعام 2010. وترتبط الظروف الاجتماعية الاقتصادية الأسرية ، وخاصة ثروة وتعليم الوالدين ، بالتسجيل في التعليم والتحصيل التعليمي. هناك تباينات في القيد على أساس الجنس ، وبين المناطق الحضرية والريفية ، وعبر المناطق الوسطى والشمالية والجنوبية. فقد كانت معدلات الالتحاق أعلى بين الإناث مقارنة بالذكور وكانت منطقة الجنوب الحضرية محرومة. وكانت الأمراض والفقر ورغبات الآباء والأفراد هي العوائق الرئيسية أمام دخول الأجيال الشابة في التعليم ، في حين كان الفقر والتقاليد ونقص المدارس الحواجز الرئيسية للأجيال الأكبر سنا. وفى مقابل الانخفاض في المستويات الدنيا من التحصيل العلمي، زاد عددالبالغين الذين حصلوا على شهادات جامعية.

1. Introduction

Human capital positively influences economic growth, development, and well-being through several channels, and education is the main channel to accumulate human capital (Ozturk, 2001, Kreishan and Al Hawarin, 2011, Afzal et. al. 2011, Barro, 2013, Pekgas, 2014, Pribac and Anghelina, 2015). Education is important not only for its economic effects, but as a human right. The right to education was adopted by the United Nations in 1948, and was reinforced by the Millennium Development Goals and Sustainable Development Goals as a universal right to be guaranteed to all children.

The education system in Jordan faces increasing pressure due to the influx of refugees that added to the already strong demand for education in Jordan. The government and local communities are working to meet the demand for schooling in the face of financial difficulties (Al-Hawamdeh and El-Ghali, 2017). There is also substantial mismatch between education outcomes and labor market needs (Assaad et. al., 2017). This paper investigates the education of Jordanians in this challenging environment.

The paper is mainly focused on enrollment in the three educational levels: basic schooling (from 6 to 16 years of age), secondary schooling (17 to 18 years), and university or post-secondary education (19 to 22 years). Enrollment rates represent the percentage enrolled in a given level of education among those of the age for that level. In addition, the paper focuses upon educational attainment. Enrollment in education and educational attainment are examined by household's socioeconomic indicators such as wealth, parents' education, and place of residence.

The Jordan Labor Market Panel Survey (JLMPS) 2010 and 2016 waves are used to compare enrollment in education and educational attainment evolution over time. Krafft and Assaad (2018) provide a detailed introduction to the 2016 wave of JLMPS[2]. While enrollment and attainment are compared in 2010 versus 2016, other aspects of education are described focusing on JLMPS 2016. Weights are used in all calculations so that the analysis is nationally representative.

The paper is organized as follows. The next section provides background on education in Jordan. The third section investigates enrollment in education and the fourth investigates educational attainment. School quality is covered in section 5. Absenteeism and repetition are discussed in section 6. Tutoring and help with studies are described in section 7. Section 8 discusses the types of universities and grades of graduates. Section 9 examines literacy skills, and section 10 concludes.

2. Background

In the 1990s Jordan began reforms of the education system to help students develop knowledge and skills necessary for competitiveness, economic growth, and development. The main

[2] The JLMPS data are publicly available from the Economic Research Forum Open Access Micro-data Initiative at: http://www.erfdataportal.com

objective was to enhance the education system at the early childhood, basic, and secondary levels, as well as to equip graduates with the skills needed to transform the Jordanian economy into a knowledge economy. Higher education development programs were launched to improve the quality, relevance, and efficiency of Jordan's higher education and to achieve integration in education system across education levels (World Bank, 2003 & Ministry of Education 2008).

2.1 Educational system

The education system in Jordan comprises 2 years of (optional) pre-school education, ten years of basic education and 2 years of either academic secondary or vocational secondary schooling. The 10 years of basic are compulsory education, from age 6 to age 16. The Tawjihi, or secondary education certificate, is awarded upon the completion of two years of secondary education from age 17 to 18. If the student selects vocational secondary education, a completion certificate is awarded upon graduation. A "diploma" or post-secondary education is a two-year degree, while a university undergraduate degree is a four-year program in most fields; however, dentistry, pharmacy, and engineering are five years, whereas medicine is a six-year program. Finally, graduate studies include masters and doctorate courses in some selected fields in public and private schools.

2.2 Infrastructure

Jordan in 2017 had 7,238 schools and employed 125,460 teachers who taught 1,932,209 students across the twelve Jordanian governorates[3]. Amman, the highest population governorate, had 2,347 schools. Aqaba had the least, with 131 schools, although it was not the lowest population governorate. The total number of Syrian students was 141,129, of whom 91% studied in four governorates: Amman, Mafraq, Irbid, and Zarqa. The overall total student–teacher ratio (STR) was 15.4 students per teacher (17.0 for girls, 14.8 for boys, and 15.2 when schools are mixed). Zarqa schools were most crowded with STR 19.8, whereas the STR was lowest in Ma'an with 10.1 students per teacher. Jordan had 10 public and 20 private universities. Two universities are regional, meaning that they operate in other countries in the region. The academic staff of higher education in Jordan included 10,836 instructors of whom 67% work for the 10 public universities The number of bachelor students who were admitted to universities in 2016 was 64,091 in addition to 6,781 master students, and 1,189 PhD students. The total number of students enrolled at the Jordanian universities in 2016 was 300,731 of whom 71% were at public, 26% at private, and 3% at regional universities. Half (51%) of the total were women.

3. Enrollment in Education

This section describes education enrollment rates of Jordanians by educational level following the educational structure described in section 2.1 above.

[3] Numbers, ratios, and percentages in this paragraph are either reported or calculated using Department of Statistics (DoS) Annual Statistical Report on Higher Education 2015 - 2016, or School – data 2017.

3.1 Pre-schooling

Pre-schooling, or kindergarten, is two years, optional, and provides children with early childhood education before compulsory education, which starts at age of six. Figure 1 shows whether Jordanians attended any form of pre-schooling, for Jordanians born between 1975 and 2010, by sex. Jordan witnessed an increasing trend in pre-schooling attendance that reached above 60% by the mid-2000s. There were not substantial or consistent differences in having attended preschool by sex. Household wealth and educational attainment of parents were closely related to pre-schooling as shown in Figure 2 and Figure 3. Figure 2 shows preschool attendance for those aged 6-18 in 2016 (of an age to still be residing in their natal households). A steady increase in past pre-school attendance with household wealth quintile can be seen. Among youth from the poorest 20% of household, only 25% had attended kindergarten compared to 73% of the richest. Figure 3 shows that attendance of pre-schooling increased with the educational attainment of fathers (results for mothers are very similar, but not shown). Around a quarter (27%) of those with illiterate fathers attended pre-school compared to 67% when fathers' education was university. Children belong to richest households and/or born to more educated parents were advantaged to join pre-schooling.

3.2 Enrollment in basic, secondary, and university education

Enrollment rates across levels are an important measure of the quantity of education. Figure 4 compares enrollment in education of Jordanians aged 6 to 24 years in 2010 vs. 2016 by sex. The rate of enrollment in education in 2010 was quite similar to that in 2016 for children aged 6 to 14 years. While the enrollment rate was 92% at age six, that rose to 97%-98% at age seven. Enrollment was close to 100% among children aged 8 to 13 years. Education enrollment rates started to decline at age 14, and continued to decline thereafter with age. Nevertheless, rates were greater than 84% at the age of 16 years, which is the end of basic schooling stage of education in Jordan. Enrollment rates in 2016 were lower than those in 2010 from ages 14-22, particular for male youth. Female youth already had higher enrollment rates in 2010, and while their enrollment rates over ages 14-20 declined slightly, they did so less than for male youth, thus creating a wider gender gap. At the end of secondary schooling age, 18 years, enrollment rates declined particularly steeply from 2010 to 2016. The transition to university, at 19 years, was also lower in 2016 than 2010, in part due to declines in progress through preceding levels. The only age with rising enrollments from 2010 to 2016 was for post-graduate degrees (ages 23-24).

3.3 Enrollment in education and household wealth

Enrollment in education depends on a household's wealth. Figure 5 demonstrates enrollment of Jordanians in the three educational levels, basic (for ages 6-16), secondary (for ages 17-18) and higher education (for ages 19-22), in 2016 by household's wealth quintile (results for 2010 are similar). The results for university must be interpreted with some caution as youth aged 19-22 may have left their natal household and wealth may be the result, rather than the cause, of education outcomes. Education enrollment disparities by wealth were greater in secondary and higher education than basic schooling. The basic schooling enrollment gap was 8 percentage

points between the poorest (90%) and the richest (98%) in 2016. The gap in secondary enrollment was 52 percentage points (29% for the poorest vs. 81% for the richest). At the higher education stage, the gap was 36 percentage points (16% enrollment for the poorest versus 52% for the richest).

3.4 Enrollment in education and parents' education level

Links between the education of parents and children show the intergenerational transmission of education and socioeconomic status. Figure 6 shows enrollment rates in each educational level by mother's education in 2016, for those of an age to be in that level. Results for father's education were similar. While the basic school enrollment gap between those with illiterate and university educated mothers was 9 percentage points (89% vs. 98%), it was 47 percentage points (45% versus 92%) in secondary schooling. The gap in enrollment rates in university education was 50 percentage points (16% vs. 66%). These outcomes suggest the importance of mothers' education level on school enrollment of sons and daughters.

3.5 Place of residence and enrollment in education

Enrollment in education varies across urban – rural areas and regions of Jordan. Figure 7 graphs enrollment in education by place of residence and education level, for those of an age to be in that level, in 2016. There are few differences at the basic level, with just a slightly lower enrollment rate in the urban South (93%) compared to other areas. Disparities increase at the secondary level. Although overall enrollments were similar across urban and rural areas at around 77-79% (not shown), the urban South again had lower enrollments (51% compared to 62-82% in other regions and areas). Enrollment in higher education was similar in rural and urban areas (31-33%), and varied only slightly across regions and locations (from 27% in the rural South to 34% in the urban Middle).

3.6 Barriers to education

When barriers to education are identified, it becomes possible for education officials to build strategies and polices that allow more children to access education. This section addresses main obstacles to education that Jordanians faced.

3.6.1 Never attending school

Never attending school strongly limits human capital accumulation. The percentage of Jordanians aged 19 to 64 years who never attended school was 4% in 2016 that declined to only 1% among children aged 6 to 18 years. Figure 8 show major barriers to education comparing school age children (6 – 18 years) and adults (19 – 64 years) in 2016. The goal is to identify main barriers to education that recent generations faced and to see changes in these barriers. Among those aged 6-18 in 2016, the most common reason was "other" (36%) indicating that reasons are increasingly heterogeneous among the small group that did not attend. After "other" disease and disability explained why 32% of Jordanians aged 6 to 18 years never attended school. Parents' wishes (12%) and poverty (11%) were the next most common obstacles among the young. For relatively older generations, customs and traditions were the most common reason (19%), followed by parents' wishes (18%), poverty (15%), no available school (14%),

and the individual's own wishes (13%). Comparing across generations, lack of schools was a major barrier to education that officials overcame with time. The role of customs and traditions and parents' wishes was a major barrier that prohibited females and to a lesser extent males from attending school and disappeared recently. Poverty was an obstacle that both generations faced to accessing education. For those few Jordanians still out of school, disease and disability was the most common specified barrier, suggesting that special education services are an important area to address in including the remaining youth who do not enroll.

3.6.2 School exit

School exit refers to a student who entered and has since left school, either because they completed their education or because they dropped out. Figure 9 demonstrates the main reasons behind school exit by age group (6-18 versus 19-64) in 2016. Those who exited by age 18 would likely have completed less than a secondary education. Apart from the 7% who completed all stages, the individual's decision was the main reason students aged six to 18 years left (43%), followed by doing poorly in school (25%). Among those 19-64, 35% completed all stages, 25% did not want to finish, and 18% left because of poor performance. To a lesser extent, marriage, poverty, and work contributed to exit.

4. Educational attainment

Educational attainment is defined as the highest level of education that an individual has successfully completed. The focus in this section is upon the level of education obtained by young adults aged 25 to 29 years, compared to the older population aged 30 - 64 years.

Educational attainment of young adults has improved compared to older adults (Figure 10). There is a low percentage of illiterates (3% young adults versus 8% older generations) and a decrease in the percentage who can only read and write (from 17% among older adults to 11% in the younger generation). A flat 28% had basic education. The percentage with secondary education also remained stable at 17%.

The percentage with post-secondary attainment decreased by four percentage points, while there was a doubling of university attainment, from 15% to 30% comparing the younger and older age groups. An important gender shift occurred across generations; while in the older generation women were more likely to be illiterate, that is no longer the case. On the opposite end of the educational spectrum, while previously there was parity in higher education (15%), women are now more likely (33%) to attain a university degree than men (27%).

4.1 Parents' educational level and education attainment

Household socio-economic status plays an important role in human capital formation (Strauss and Henriques, 1991, Case et. al., 2002, Haas, 2006, Deaton, 2007, and Currie 2009). One of the most influential indicators of socio-economic conditions is the education of parents. Figure 11 graphs the educational attainment of Jordanians aged 25-64 by the educational level of their mothers (similar results pertain to fathers). There is clear evidence of the intergenerational transmission of education and socio-economic status. When mother's educational level was

illiterate, read and write, or basic education, then individuals too tended to themselves have less education, the most common level being basic education (28-30%) for own attainment. On the other hand, when the mother's educational level was university, 77% of individuals attained university education as well. Even when mothers had secondary or post-secondary education, an individual most commonly (51-52%) attained university.

5. Quality of schools

In addition to the interest in educational enrollment and providing all individuals equal chances to access education, nations target the quality of education to equip individuals with knowledge and skills necessary for growth and sustainable development. This section investigates the characteristics of schools, which may relate to quality, including the type of schools, specialization in secondary school, computer availability, physical punishment, and grades. Analyses are for individuals who were students in 2016 enrolled in either basic or secondary education.

5.1 Type of school and specialization

Among students who were enrolled in basic schooling in 2016, 77% attended public schools whereas 15% were enrolled in private schools and 9% in UNRWA schools. For secondary or vocational students, 92% of students were attending public schools, 7% were in private schools, and less than 1% in other types.

Students at secondary educational level can choose the branch to pursue their education. Most (83%) of secondary students in 2016 were enrolled in the general, or academic, branch whereas 17% were enrolled in the vocational branch of secondary school or vocational school. Students in the academic branch were mainly distributed across three major specializations; 34% studied sciences, 55% arts, 10% in management, and 2% in other fields.

5.2 Computers availability

Computers are a measure of the technological learning infrastructure available to students. Figure 12 shows availability of computers for students who were enrolled in basic and secondary education in 2016. Only 5% of basic school students and 6% of secondary students had access to computers every day in 2016. While only 15% of students in basic schools had access to computers frequently, 44% of secondary students did so. The most disadvantaged groups were 31% in basic schooling and 12% in secondary schooling for whom no computers were available during their school.

Figure 13 shows availability of computers for students who were enrolled in basic and secondary education in 2016 by household wealth quintile. There are clear differences in computer access by household wealth quintile. For example, while 42% of basic students from the poorest quintile had no computers available, only 23% of basic students from the richest quintile did so. In contrast, while only 9% of basic students from the poorest quintile had computers available every day or frequently, 28% of basic students from the richest quintile did so. Differences are

even sharper at the secondary level. While 28% of secondary students from the poorest quintile had no computers and 24% from the second poorest quintile, only 9-10% of students in the third through richest quintiles had no computers.

5.3 Physical punishment

Physical punishment is a form of violence that is delivered by teachers or school administrators. Punishment may cause injuries to students and promote violence, fear, and dislike of school, which in turn may increase drop-out (Steven et.al., 1991, Greydanus et. al., 2003, and Gershoff, 2017). Figure 14 shows students' exposure to physical punishment during basic and secondary school in 2016. Less than 1% of basic and secondary students were exposed to punishment every day. Few (2-4%) reported frequent punishment. However, the percentage of students who were exposed to physical punishment "sometimes" was 20% among both basic and secondary school students. Around a quarter of students (28% of basic and 23% of secondary students) reported rarely experiencing physical punishment. Finally, about half of students in the two school levels were never exposed to physical punishment. Further work needs to be done to end physical punishment in schools.

5.4 Test scores

Test scores achieved at the end of a given schooling grade are a product of both the quality of schooling and factors related to household socioeconomics such as wealth, parents' education, private tutoring, and school type. Test scores were analyzed for individuals who recently completed a level, specifically those aged 16-25 for basic and 18-25 for secondary. The mean score of basic students was 75, as was the mean secondary score.

The score of these youth is examined by mother's education in Figure 15 (results for father's education are similar). Test scores were associated with mothers' educational level. When mothers were illiterate, the mean score was 71 for basic and 73 for secondary/vocational, which rose to 81 for basic and 83 for secondary with a university educated mother. Thus, one of the mechanisms that plays a role in the intergenerational transmission of socio-economic status is performance in school.

6. Absenteeism and repetition

Absenteeism, in general, can be linked to poor individual performance and increase risk of drop out. This section investigates absenteeism (not including school vacation) of basic and secondary school students in 2016 and the reasons why students were absent. The percentage of students who were absent during the week prior to the interview was 3% in basic school and 4% in secondary/vocational. Given the small number of secondary/vocational students absent, we can only analyze the reasons and duration of absence for basic students. Of basic school students, 37% were absent due to bad weather, 35% because of sickness or disability, 3% because the teacher was absent, 3% to help family or work, and 21% due to other reasons. The average number of days absent in the preceding week for basic students was 1.5.

In the Jordanian educational system, a student repeats a grade if he or she fails four subjects or more or is absent more than 10% of schooling days (20% in case of a formal excuse, such as health issues). Among youth aged 16-25 who had attended basic school, 2% had repeated at least one grade. Among those who repeated, 91% repeated only one grade, 7% two grades, and the remainder more. Among youth aged 18-25 who had attended secondary school, 21% repeated at least one grade. Among those who repeated, 92% repeated only one grade.

7. Private tutoring and family help with studies

Tutoring can be a form of educational assistance that supports learning, but also may be the product of inadequate education during the school day (Sieverding et. al. 2017, Assaad and Krafft 2015). The percentage of students enrolled in school, 6 to 18 years of age, in 2016 who used private tutoring in the past academic year was 4%. Family help with studies was more common than tutoring, as the share of students aged 6-18 who received help with studies from relatives was 48%. In 75% of cases, the mother was the one who helped, 10% elder siblings, 9% both parents, and 4% of the time it was the father who helped with studies. These outcomes emphasize again the relative importance of mothers' education as they are the ones who mainly help children with their studies.

8. Type of higher education and grades

This section describes the experiences of young adults who attended higher education. Among those who were 25-29 in 2016 who had attended higher education, 11% went to public community college for their studies, 6% to private community college, 63% to public university, 18% to private university, and 3% to other types of higher education. While 4% of young adults attained their degree with an "excellent" final grade, 27% attained very good, 58% good, and the grade of the remaining 10% was average.

9. Illiteracy and Literacy skills

The educational attainment of Jordanians was discussed Figure 7, where illiteracy rate among young adults was 3% while it was 11% among older adults (aged 30-64). In this section we examine the experiences of illiterate individuals aged 15-64. Writing is a greater barrier to literacy than reading; while 22% of illiterate adults can read a newspaper or letter, only 3% can write a letter. Illiteracy is also associated with lack of numeracy; only 28% of those who are illiterate can do simple arithmetic (add or subtract). Among individuals who had never attended school, only 5% had joined an adult literacy program. Only 11% of adults who never attended school could read and write, with some clearly acquiring these skills outside of literacy programs.

10. Conclusions

Investment in human capital continues to be a strategic choice for the Jordanian government. Since education is the main tool to provide individuals with the knowledge and skills necessary for development and prosperity, this paper focused on the main aspects of education for Jordanians. Enrollment in education, educational attainment, barriers to education, quality of

school, absenteeism, repetition, private tutoring, grades of university graduates, and literacy skills were the main aspects this paper investigated. The main findings are as follows. While enrollment in education deteriorated in 2016 compared to 2010, especially for boys, educational attainment has been improving across generations. The illiteracy rate among young adults was low, and we observed more young adults who obtained university degrees. Literacy programs had not, however, reached many of the illiterate.

Household socioeconomic conditions, especially the wealth and education of parents, were influential for enrollment in education and educational attainment. Disparities in education enrollment were observed based on gender, between urban and rural areas, and across middle, north, and south regions. Enrollment rates were higher among female youth than male youth and the urban South was disadvantaged.

Disease, poverty, and the wishes of parents and individuals were the main barriers to education for younger generations, while poverty, traditions, and lack of schools were the main barriers for relatively older generations. Individuals' decisions and poor performance were the main reasons for school exit.

In terms of school infrastructure and pedagogical practices, the results were mixed. While most current students had some access to computers, some students did not, and the frequency of access was both uneven and related to socio-economic status. Physical punishment did occur throughout schools, but not necessarily very frequently. Rates of tutoring were low, but family help was important, particularly from mothers. These differences in the education and support young people experience likely contribute to the socio-economic disparities and intergenerational transmission of human capital.

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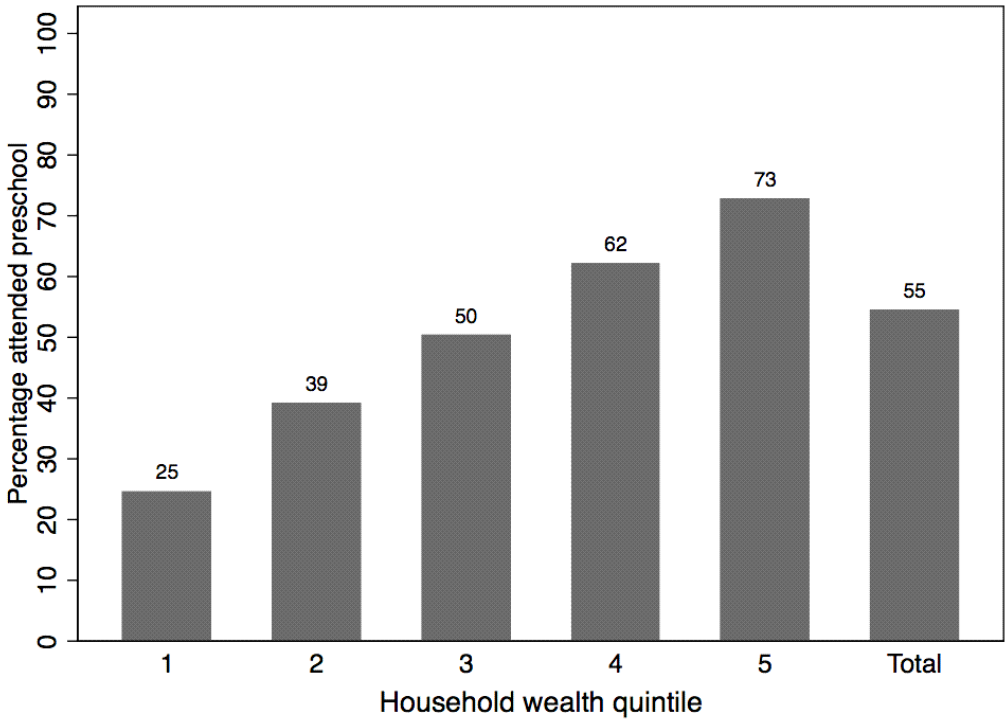
Appendix

Figure 1. Ever attended pre-school (percentage) by year of birth and sex, Jordanians born 1975-2010

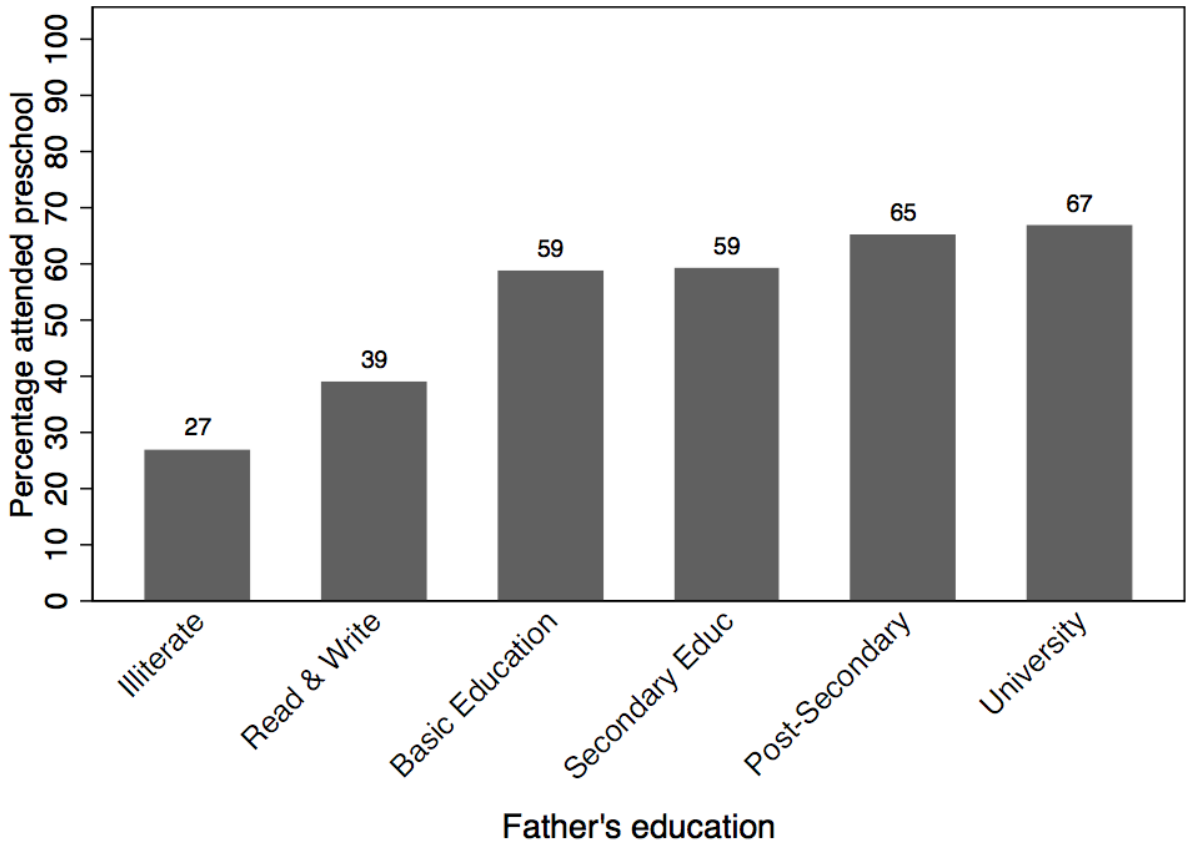
Source: Author's calculations based on JLMPS 2016

Figure 2. Percentage ever attended pre-school by household wealth quantile, Jordanians aged 6-18, 2016



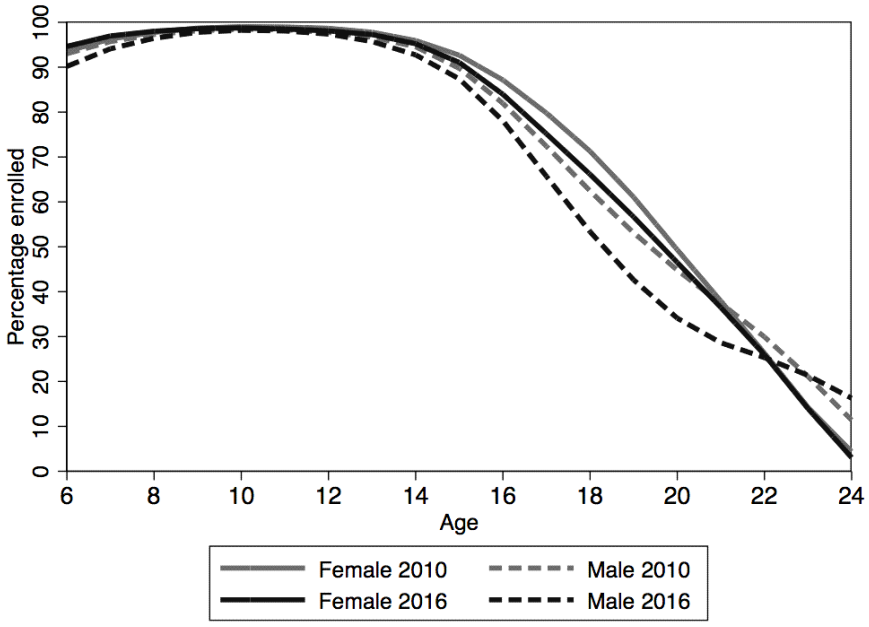
Source: Author's calculations based on JLMPS 2016

Figure 3. Percentage ever attended preschool by father's education, Jordanians aged 6-18, 2016



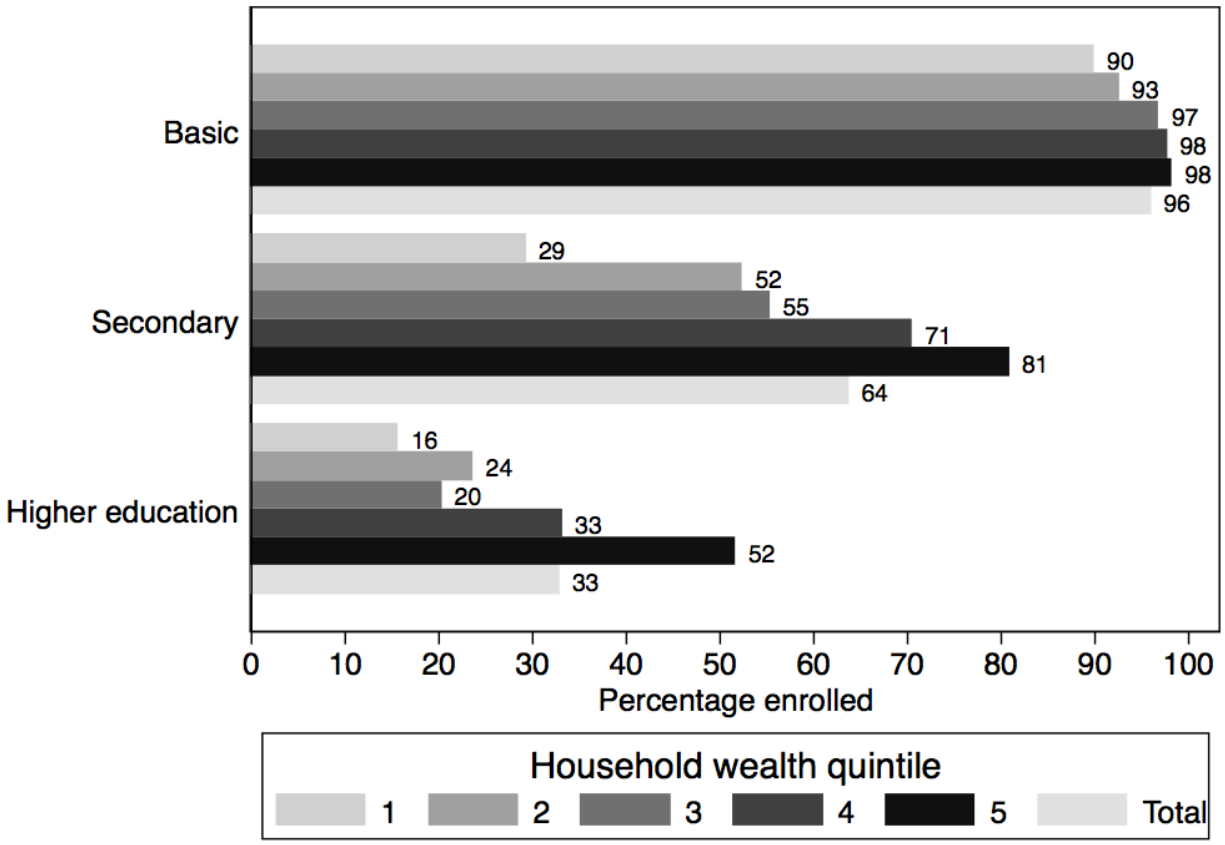
Source: Author's calculations based on JLMPS 2016

Figure 4. Enrollment in education (percentage enrolled) by age, sex, and wave, Jordanians aged 6 – 24, 2010 and 2016



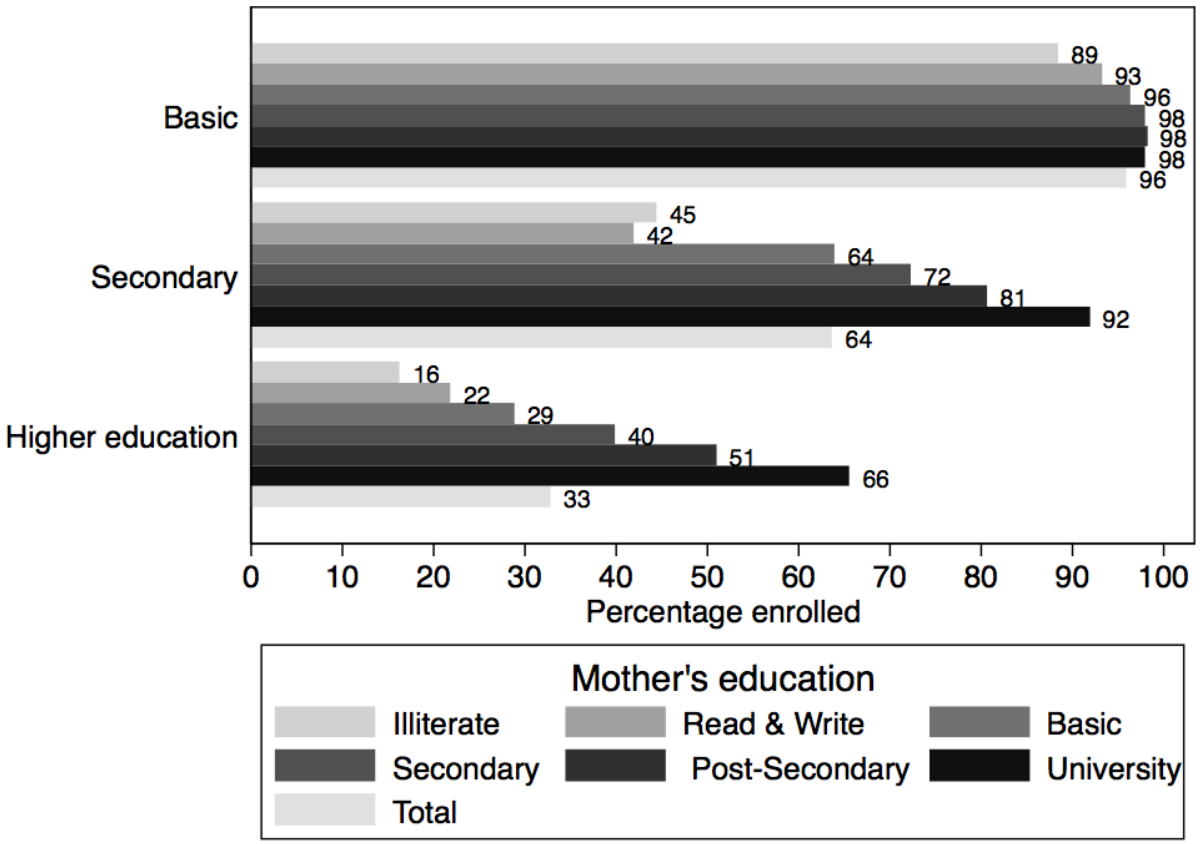
Source: Author's calculations based on JLMPS 2010 and JLMPS 2016

Figure 5. Enrollment in education by household wealth quintile and level, percentage of Jordanians of an age to be enrolled in that level, 2016



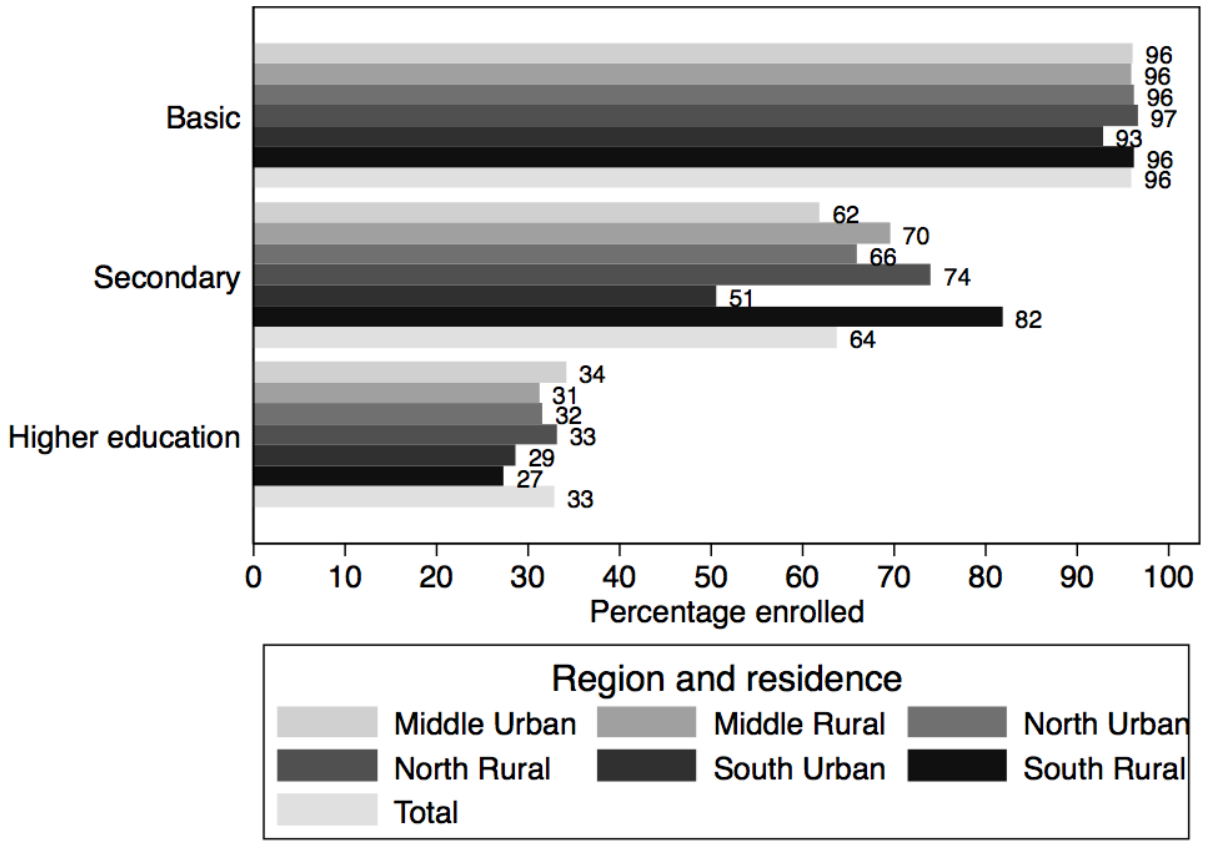
Source: Author's calculations based on JLMPS 2016

Figure 6. Enrollment in education by mother's education and level, percentage of Jordanians of an age to be enrolled in that level, 2016



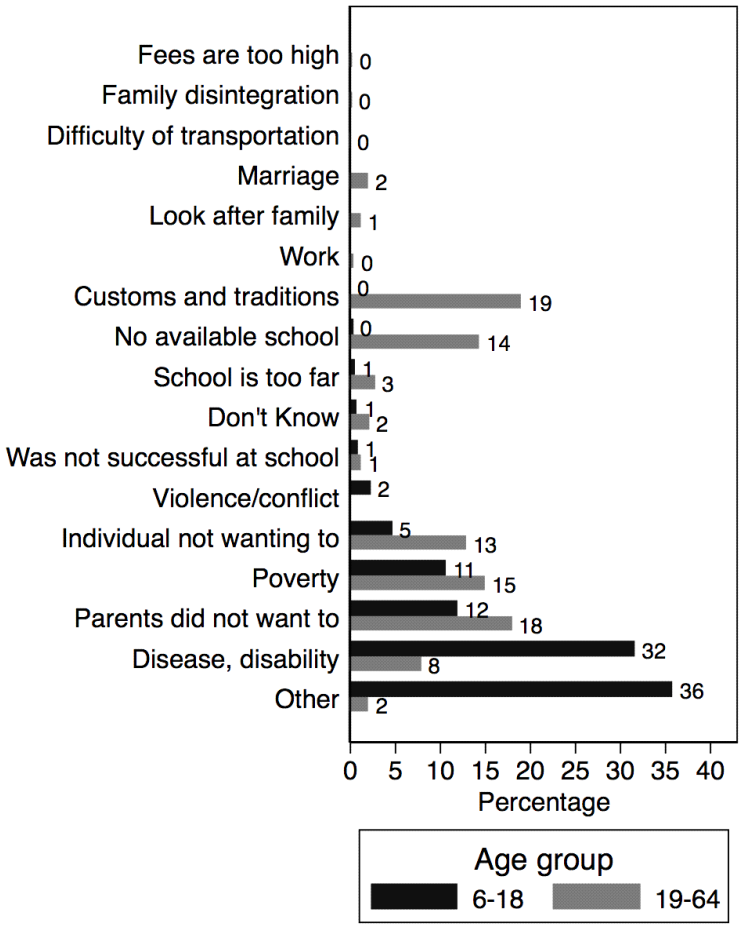
Source: Author's calculations based on JLMPS 2016

Figure 7. Enrollment in education by level, place of residence and region, percentage of Jordanians of an age to be enrolled in that level, 2016



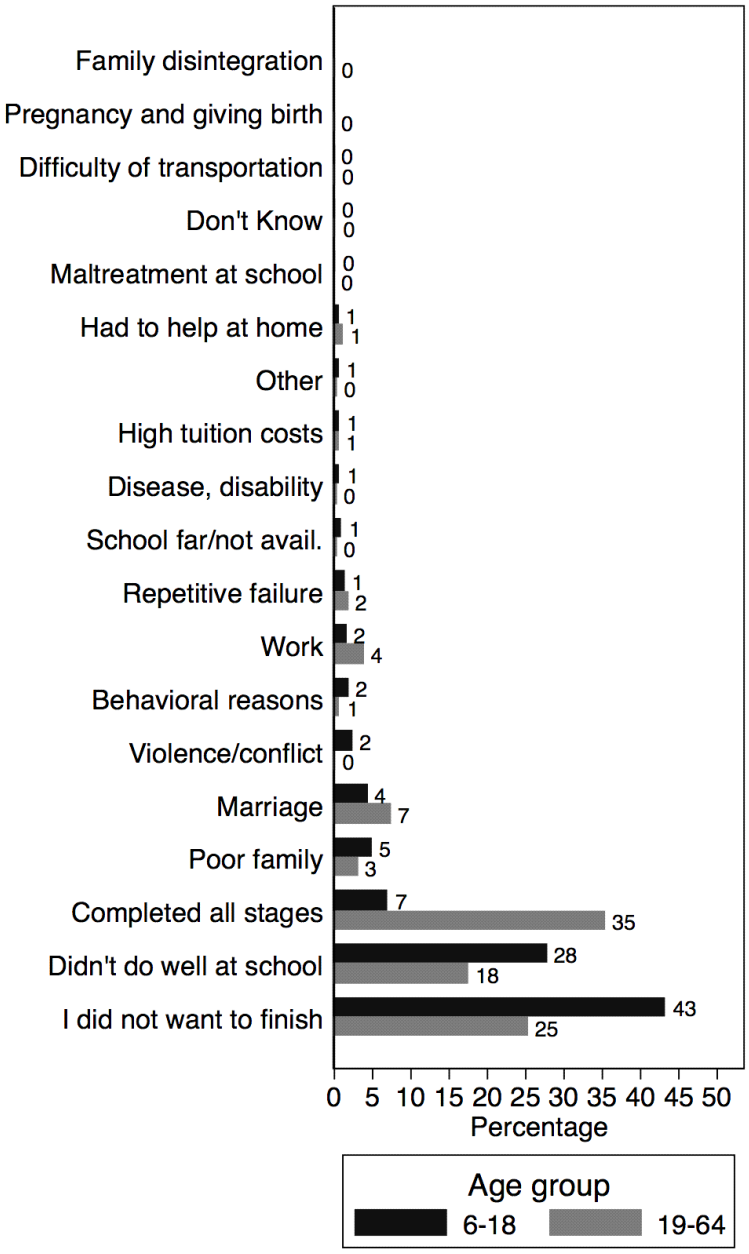
Source: Author's calculations based on JLMPS 2016

Figure 8. Main reason for never attending school by age group, percentage of those who never attended school, Jordanians aged 6-64, 2016



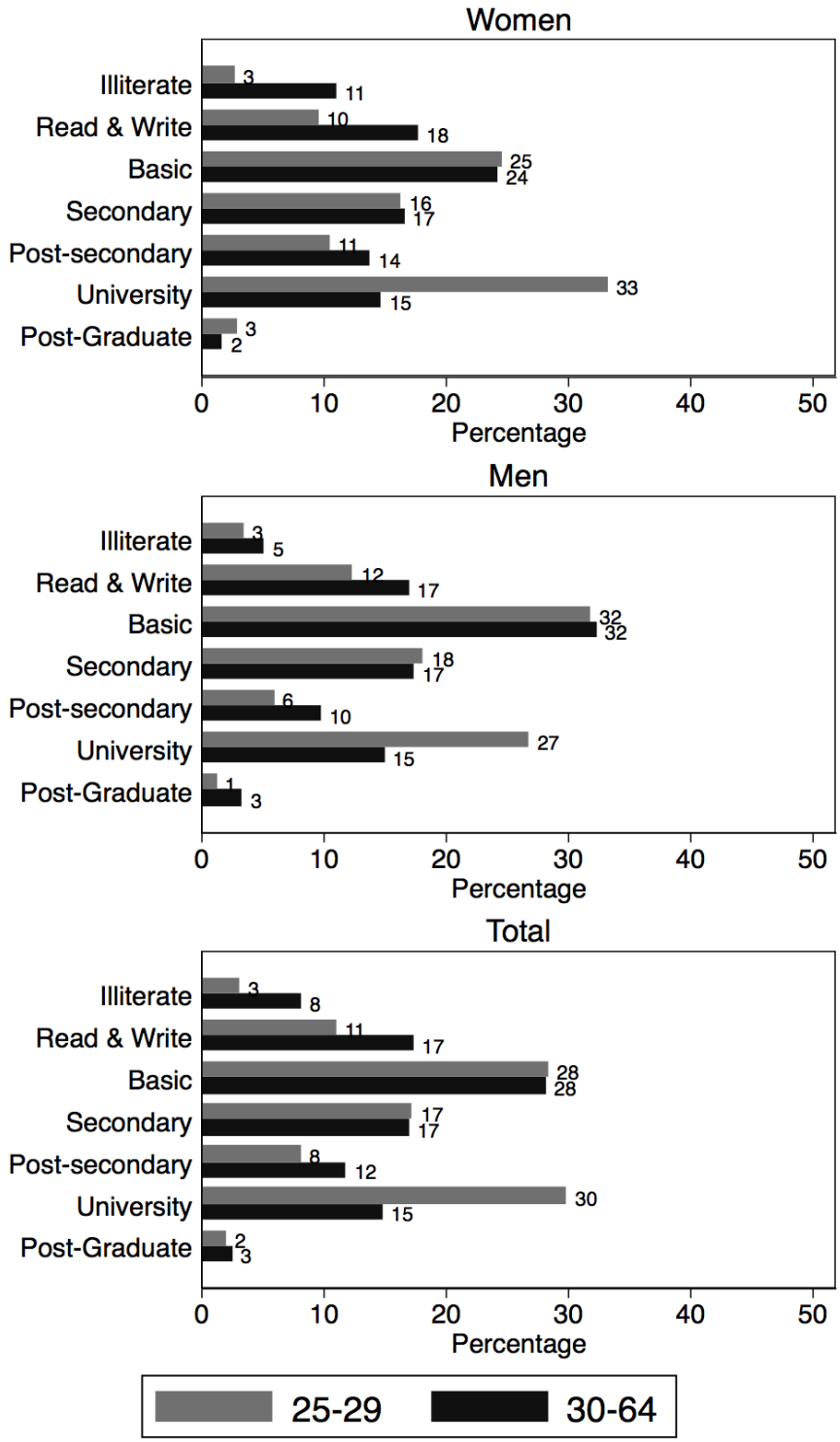
Source: Author's calculations based on JLMPS 2016

Figure 9. Main reason for exiting school by age group, percentage of those who exited school, Jordanians aged 6-64, 2016



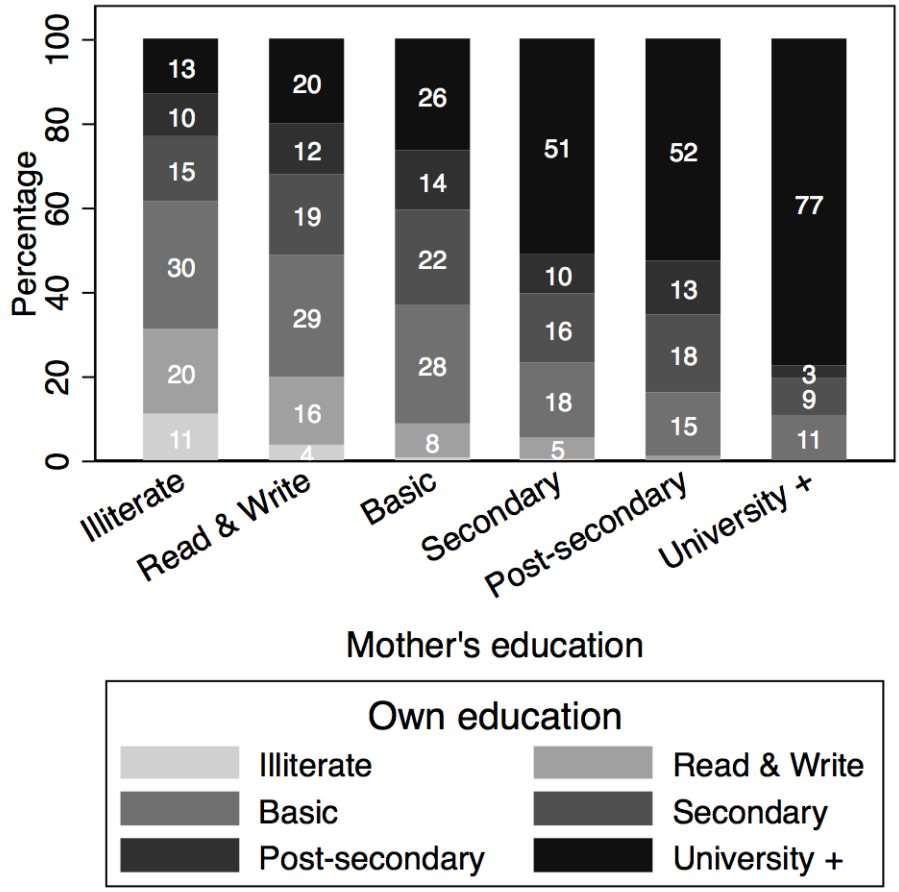
Source: Author's calculations based on JLMPS 2016

Figure 10. Educational attainment (percentage) comparing young adults (aged 25-29) and older adults (aged 30-64), Jordanians, 2016



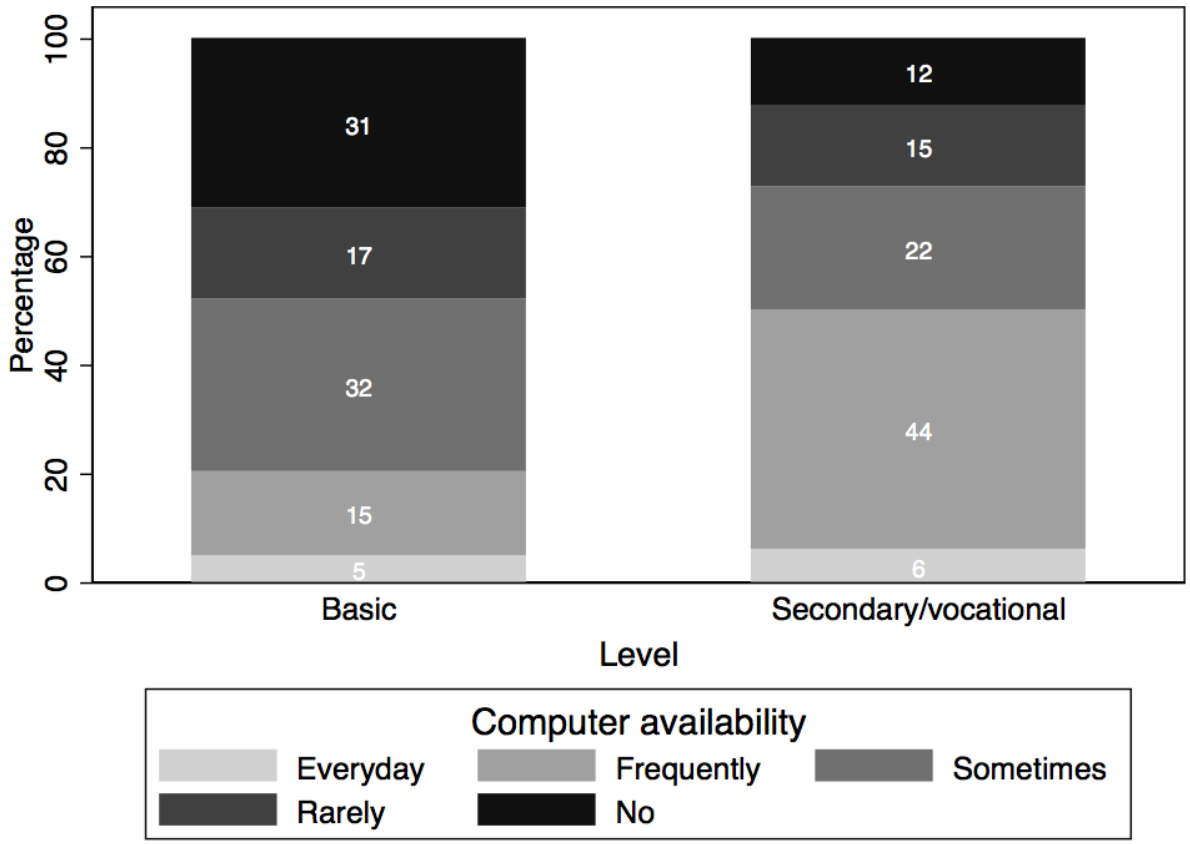
Source: Author's calculations based on JLMPS 2016

Figure 11. Educational attainment by mother's education (percentage), Jordanians aged 25-64, 2016



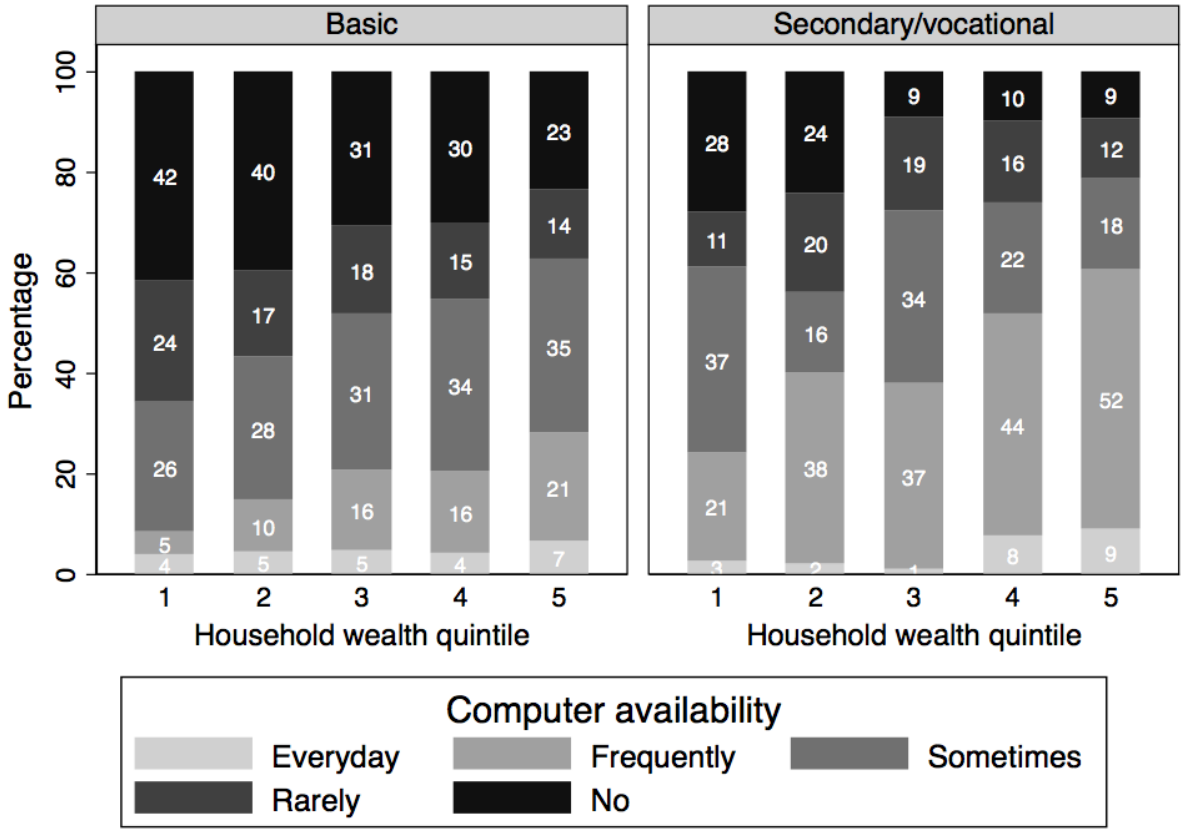
Source: Author's calculations based on JLMPS 2016

Figure 12. Computer availability in basic versus secondary/vocational school, percentage of current students, Jordanians, 2016



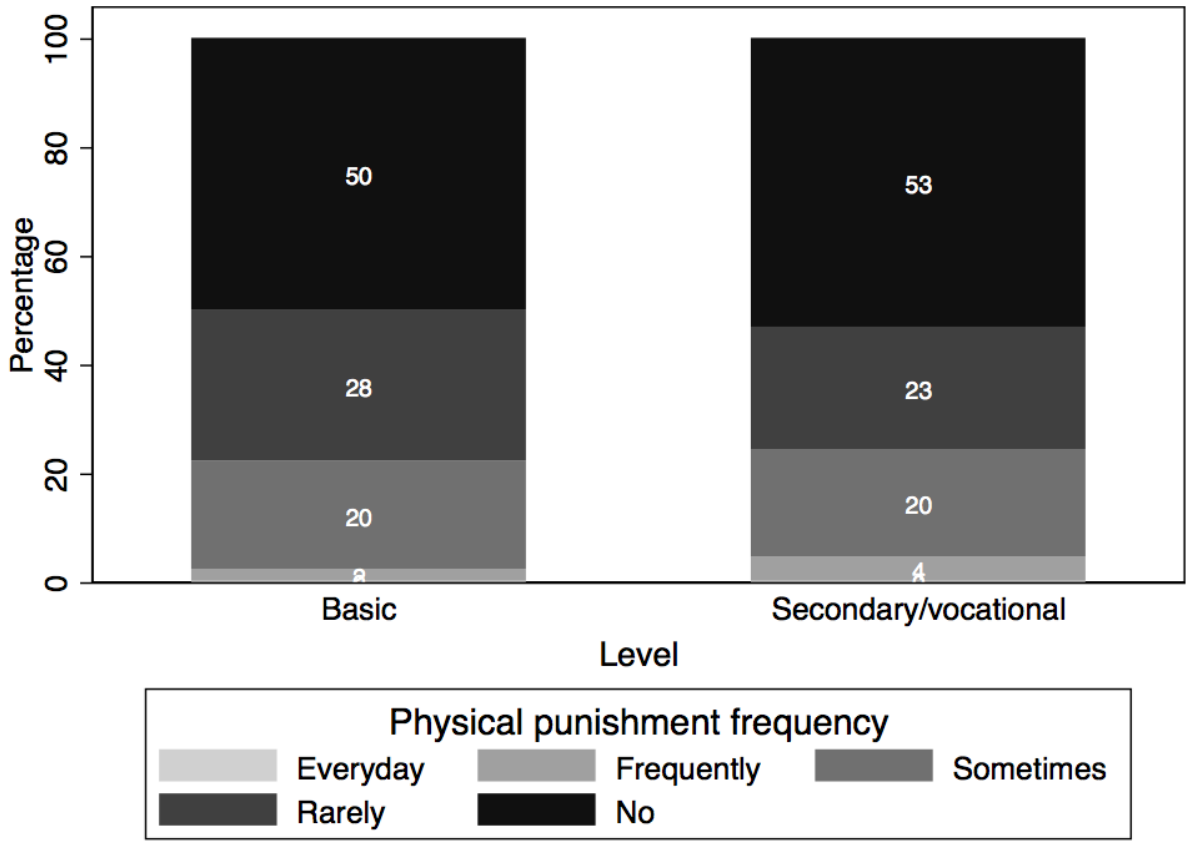
Source: Author's calculations based on JLMPS 2016

Figure 13. Computer availability (percentage) in basic and secondary/vocational school by household wealth quintile, current students, Jordanians, 2016



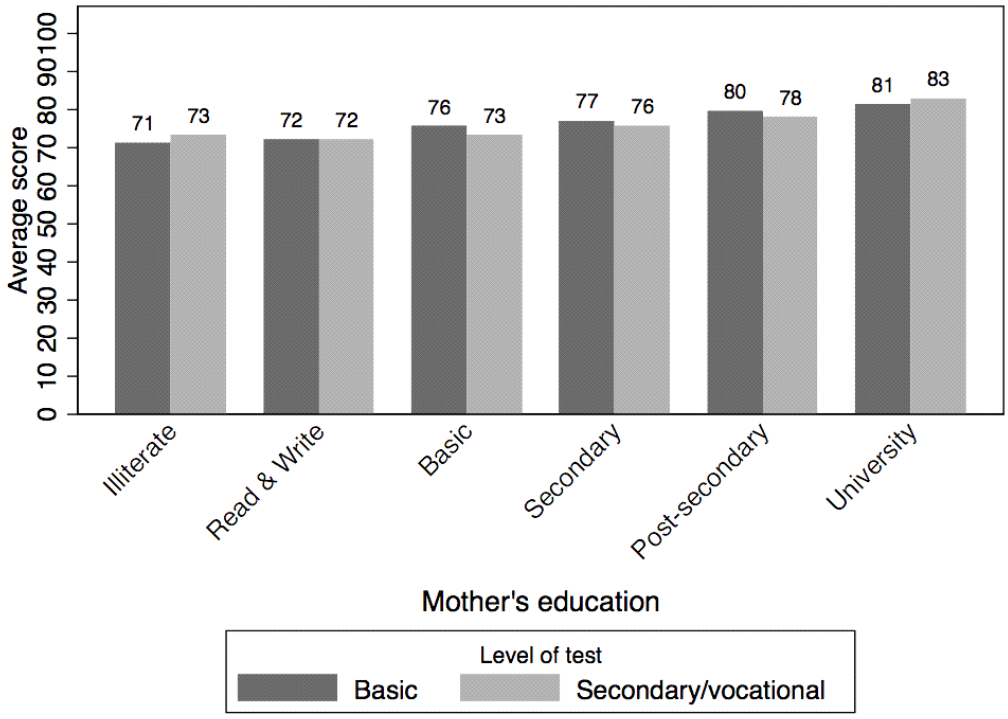
Source: Author's calculations based on JLMPS 2016

Figure 14. Physical punishment frequency by level, percentage of current students, basic versus secondary/vocational school, Jordanians, 2016



Source: Author's calculations based on JLMPS 2016

Figure 15. Average test scores by mother's education and level of test, Jordanians aged 16-25 (basic) or 18-25 (secondary), 2016



Source: Author's calculations based on JLMPS 2016