# Institutional settings and adolescent paths out of school and into the labor force in Buenos Aires, Lima and Mexico City<sup>\*</sup>

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#### (Preliminary Version)

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### ABSTRACT

Certainly, the patterns of inequality that prevail in the Latin American countries are linked to the different opportunities for young people and the timing of the transitions into adulthood, in this case from school-to-work. The institutional settings linked to the organization of the school system and to the labor market contribute to explain the route out of school and into the labor market as they define the structure of opportunities for the youth and as they play a role as mechanisms of social integration or segregation since early adolescence.

The aim of this paper is to conduct a comparative analysis of the age at leaving school and entering the labor force in three Latin American metropolises: Buenos Aires, Lima and Mexico City. We explore the heterogeneous situations that young people face regarding these two transitions in three settings. We hypothesize that in contexts where the school system regulates more the life of the youth, we will find less heterogeneous paths in the process of leaving school during adolescence. Furthermore, we expect that in the same contexts, family characteristics will play less a role as determinants of the labor and enrollment status of adolescents.

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### **INTRODUCTION**

Throughout the two last decades, Latin American countries have experienced profound socioeconomic transformations, which have had consequences for the social inclusion of diverse sectors of the population (Portes, Roberts and Grimson, 2005). The processes of economic de-regulation and liberalization, as well as the institutional changes that accompany them, have a strong impact on the social field. The structure of opportunities for the youth has changed, particularly regarding the possibility of accumulating human capital through the access to formal education and regarding the availability of well-paid and/or secure jobs (CEPAL, 2003). In other words, the transformations of two of the key institutions linked to the transition to adulthood—school and the labor market—have contributed to consolidate the heterogeneous and unequal paths to adulthood.

The definition of "youth" may vary from one context to the other (given the multiplicity of social, ethnic and cultural contexts). However, there is certain agreement around some of the events linked to the passage into adulthood: starting to work as an entry into the productive sphere, the constitution of one's family and leaving the parental home. The timing, sequencing and occurrence of the events linked to these transitions may vary depending on

the educational opportunities available and on the labor options that may facilitate the economic independence of young people.

Although there are large differences among the Latin American countries, the access to education has notoriously increased in most of the countries for the past decades (CEPAL 2004; SITEAL 2000). Nonetheless, in spite of the progress in educational indicators, there still exist large gaps in the access to the formal education required to improve the labor opportunities among the youth (Abdalá 2002, CEPAL 2004, Filmus 2001, Gallart 2000). In addition, the increasing heterogeneity regarding the quality of education has also contributed to the deepening of the prevailing social inequalities (Sidicaro and Tenti Fanfani, 1998). On the other side, the increase in the access to formal education among young people has occurred simultaneously with two main changes in the labor market: (1) there has been an increase in the level of education that is required to use the new technologies and participate in the productive processes, and (2) there has been a devaluation of educational credentials, which is linked to the deficit in the creation of formal jobs. These factors determine to a large extent the possibilities of social inclusion, specially among young people living in poor households.

The departing point for our research is that the current transitions to adulthood for the Latin American youth are linked, on one side, to the existing social structures, which define the family access to symbolic and material resources and, on the other, to the services and labor opportunities provided by the institutional contexts and available in different ways to the diverse social groups. The interaction between these two dimensions structure the trajectories of individuals from adolescence through early adulthood. It does have an influence on whether they leave school early or not, whether they start looking for a job or whether they stay out of school and work. At the individual level, the decisions that young people take, conditioned by the social context, will have strong consequences on their future adult life. At the aggregate level, such decisions will result in a reproduction or deepening of social inequalities.

This paper constitutes a first stage of a larger research project aimed to understand, from a comparative perspective, how the mechanisms of social integration and segregation interact with the transition to adulthood in three metropolises: Buenos Aires, Lima and Mexico City.<sup>1</sup> In broader terms, with this research we expect to contribute to the understanding of how social and institutional mechanisms promote heterogeneous paths for the youth. We hypothesize that the historical and current differences in the welfare regimes in the three settings is linked to the reproduction of social structures and to the building of institutional frameworks that have an impact on the social integration of the youth (Filgueiras and Filgueiras, 2002). Thus, the diversity of labor and educational trajectories in each setting will be the result to a large extent of the characteristics of the educational systems (access to different levels of education, duration of the cycles, norms regarding compulsory attainment, requirements, facilities and so on), the labor market (regulation, structure, dynamism, return rates) and the social programs for the whole population and for the youth.

# INSTITUTIONAL CONTEXTS AND THE HETEROGENEOUS PATHS TO ADULTHOOD

Prior research on the transitions to adulthood in the developed world had suggested a close link between the institutional context and the standardization and timing of the transitions to adulthood (Fussell, Gauthier, Evans, 2007; Vogel, 2002; Buchman, 1989; Fussell, 2006;

<sup>&</sup>lt;sup>1</sup>. This specific project is part of a broader project on *Marginalised Paths to Adulthood in the Developing World* coordinated by Marlis Buchman (Zurich University) and Suman Verma (Government Home Science College, India) funded by Jacobs Foundation.

Modell, 1989). In the early stages in the life course—specifically during adolescence institutions such as the educational system and the labor market have played a large role in age-grading and standardizing the transition to adulthood in the economic sphere (leaving school and working). Social institutions are linked to the structure of opportunities for the youth at the time the transitions to adulthood occur (Vogel, 2002) and also define cultural and normative rules regarding such transitions (M. Buchmann, 1989). They define the resources available and their social distribution. In addition, they play different roles as integrative mechanisms and have an impact in the reproduction of social inequality.

We argue that the institutional framework is useful to understand the timing and heterogeneity in the transitions to adulthood in developing countries; furthermore, even within a similar setting—such as the comparison of Latin American metropolises—we assume that the differences in the paths to adulthood on the productive sphere (school and work) can be linked to differences in the institutional settings built by the State, specifically to the characteristics of the welfare model, the educational system and the labor market. For example, the maturity of the educational system can be linked to larger enrollment and completion rates at the secondary level in some of the Latin American countries. In some contexts, such system has been more able to structure the life of adolescents and integrate into school a larger proportion of the population during this stage of the life course. In others, highly stratified educational systems with large differences in terms of accessibility and resources available depending on the socioeconomic status create an environment of more constrained educational opportunities for the youth, reproducing the schemes of social inequality since adolescence and increasing the dependence on family resources. A similar argument can be used to explain the differences in the labor participation of the youth. The early entry<sup>2</sup> into the labor force can be considered as a coping mechanism of young individuals and their families to respond to situations of social exclusion and low income in contexts of prevalent economic and social vulnerability and exclusion. Compensatory mechanisms through social programs for the youth or for the most vulnerable population may have an impact in delaying the entry into the labor force favoring the educational attainment and the school enrollment beyond the early adolescence.

Finally, in the reference to family regimes, the analysis of the historical changes in the developed countries suggests that as the social institutions outside of the family realm consolidated and matured, they became more important in structuring the life course during the adolescences than family resources. However, in the contexts of developing countries, where the institutional settings that regulate the transitions to adulthood may be not as consolidated and are far from delivering basic living standards to most of the population, adolescents rely more on family resources for the definition of their educational and labor alternatives. Furthermore, contrary to the context of most of the developed countries, depending on the socioeconomic status, adolescents may play a role or may have greater responsibility in the reproduction of the household. These two aspects, the dependence on family resources and the potential economic role of adolescents in contexts of weak welfare institutions and policies, will surely define more heterogeneous paths to adulthood regarding the school and work transitions in developing countries. Also different from the processes of certainty and predictability under which adolescents take the decisions regarding their educational and labor

 $<sup>^2</sup>$ . Here we refer to the term "early entry" as an entrance into the labor market when young people have not finished acquiring the minimum years of education required to have better job opportunities in the future. The threshold may vary by country, but given the importance of the secondary education in Latin America, we can consider early any entry that occurs before the completion of this level (around age 17 for Lima and after age 18 in Mexico City and Buenos Aires)

uncertainty—linked to the weakness of social institutions outside the family realm—will be greater.

### Common paths and institutional variations in three metropolitan areas in Latin America: Buenos Aires, Lima and Mexico City

Metropolitan cities in Latin-American societies have experienced significant societal changes especially throughout the nineties that clearly transformed the circumstances under which young people are growing up. In the first place, they all experienced intensive processes of structural adjustment after a decade of economic stagnation and setbacks. Such processes were linked to a liberalization of the economy, a change in fiscal policies targeted to reduce the public deficit and a reduction of the role of the State in the economy. By the end of the nineties, most of the Latin American metropolises faced a situation of persistent social inequality and increasing urban poverty.

This process was reinforced by the economic globalization which implied, among other things, a greater flexibilization of the labor markets, in a context characterized by weak implementation or definition of labor regulations and expansion of an already large informal sector. In the three settings analyzed for this paper, there was a deterioration of the labor conditions and a decrease in the proportion of the working population in formal jobs. By the year 2000, between forty and sixty percent of the working population had no benefits, social security or any legal labor protection in Buenos Aires (43.6%), Lima (61.3%) and Mexico City (50.0%) (Portes and Roberts, 2005: 40-41).

Secondly, although these changes affected also rural settings, the metropolitan areas were also the space for important processes of cultural changes. New spaces have been created by the intensification of the links between the local cities and the global culture but also by the intensive processes of internal and external migration. Cities are being transformed simultaneously into hybrid and global spaces. This has important consequences for the setting of institutions that regulate the life of the youth and for the definition of the normative youth development and the expectations regarding the trajectories and alternative paths. As suggested by Meyer, Thomas, Boli and Ramirez (1997), in the context of expansion of a "global culture", the institutions follow worldwide models and ideas that shape similarly preferences and tastes among the youth.

For our particular case, comparing the metropolises versus doing the analysis at the national level allows us to look at contexts that are similar in terms of the recent economic processes but also in the social processes linked to cities and globalization. We purposely search to minimize the differences in the contexts to be compared in order to stress the role of the variations in the institutional settings outside the family realm that may explain different outcomes during adolescence. Our study attempts to analyze to what extent the distinct institutional settings shape differently the life course trajectories for the youth under a common structural context.

Although the economic and cultural forces described before shaped similarly our three cases, the interaction between state building, class structures and alliances and the level of economic development throughout the last century resulted in different institutional settings (Huber, 1995). According to Huber (1995) and to Filgueiras (2005 and Filgueiras and Filgueiras 2002), the paths toward the building and expansion of welfare regimes in Latin America were different depending on the political structure—more or less authoritarian—and the strength of local elites. Although we cannot talk about a welfare state in Latin America as defined in the developed world (Esping-Andersen, 1990 and 1991), the system of social policies and social protection provided or regulated by the state varies throughout the region. Between the 1930s and the 1970s, the Latin American state assumed a leading role in the process of social development (Filgueiras, 2005: 10). In the entire region, the participation of the state was

marked by a bias in the distribution of the resources and benefits from the periods of economic growth and/or modernization. Varying by country, certain sectors of the society (urban sectors, formal workers, state employees) had a greater access to resources, benefits and services from the newly formed social institutions regulated by the State that formed the foundations of the welfare regimes.

Depending on the difference in the resources invested in the building of a social infrastructure and in the provision of social services, the more or less restricted accessibility to such services and based on the gaps in the quality of the services, Filgueiras and Filgueiras, 2002 grouped the welfare regimes in Latin America in three categories: (1) stratified universalism, (2) dual regimes and (3) exclusionary. Argentina is taken as an example of a "stratified universalism" system, which means that the type of social security system covered a majority of the population through the provision of social security and health care. The Argentinean welfare regime also led to a rapid increase in the access to primary and secondary education among the majority of the population. Although the provision of services is widely spread, the system is still defined as stratified system given that the quality and access to the social services is largely differentiated between more and less privileged sectors of the population. In spite of this stratification, the specialists in the social regimes in Latin America consider that it led to a more egalitarian society as "it cushioned rather than reinforced the prevailing pattern of social stratification" (Filgueiras and Filgueiras, 2002).

Mexico is defined as a country with "dual regimes"; although there was a large investment and expansion of educational services, which meant an almost universal access to primary education, other social services—such as health and labor protection—were highly stratified since their original constitution. The dual character of the welfare regime in Mexico is given by the different access to social services between those in the formal labor market, including State employees, and in urban settings, and a virtual absence of benefits and access to social services for the majority of the population. In addition, social services are geographically distributed in a heterogeneous way; while some regions may have benefitted to a larger extent, others were excluded. This would explain the prevalent greater social inequality in Mexico compared to Argentina, Uruguay and Chile. This kind of system exacerbates the social stratification between the sectors incorporated into the modern framework of protection and those excluded.

Peru is defined as a country with an "exclusionary regime"; that is, an elitist system, with low population coverage, limited options in services and large differences in their quality. The state in Peru was only able to develop a weak and restricted social protection system with modest attainments in urban infrastructure, housing and education. In the educational system, the welfare regime resulted in a limited supply of options for the majority of the population, a greater dependence in the private education—even at the elementary level, but more clearly seen at the secondary an tertiary levels—and large differences in the quality of the educational options for the youth. The almost absent schemes of labor protection and regulation are also reflected in the highest proportion of the working population in informal jobs among the three sites considered in this study.

### Hypothesis

From the comparative framework previously described, we have three different welfare regimes which coincide with the three countries of the metropolises under study. We hypothesized that the welfare regimes are linked to different patterns in the transition out of school and into the labor market. In each context, the welfare regimes play a more (Argentina) or less (Peru) dominant role in expanding the educational opportunities of

marginalised adolescents. To a larger extent, we also expect to find that in the more exclusionary context, the institutions will be less successful in structuring the lives of adolescents. Under the more universalistic model, we could expect institutions to be more connected to the trajectories and decisions of the marginalized youth. Institutions in those settings are more influential in defining and assigning the status of children, adolescent and young adults to the individuals as they progress through the life course (Baker and Letendre, 2007). Under that kind of institutional development, institutions are working more closely to its modern script mandate: to compensate private differences between individuals<sup>3</sup>. In those contexts, we can expect less institutional decoupling because the commitments toward egalitarian citizenship are supported by congruent policies and practices (Meyer and Rowan, 1977; Meyer et al 1997). In addition, the paradoxes between formal discourses and real practices surrounding the expectations for the youth, or what Hafner-Burton and Tsutsui (2005) call the paradoxes of empty promises, are also less evident and perceived.

Under exclusionary regimes, the degree of decoupling is stronger. Inequalities within societies are less effectively targeted by institutions. Either because inequalities are higher or because institutions are less oriented to solve them, the outcome is that the public intervention towards reducing the social inequality is far from being the general practice. Formal rituals around the youth and the structure of opportunities are then disconnected from the real practices of individuals located at the bottom of the social structure. The "paradox of empty promises" is more evident among the marginalised social sectors. Institutions linked to the state and the welfare regime are not helping or facilitating the transitions to adulthood for the youth.

<sup>&</sup>lt;sup>3</sup> This is not to say that public institutions are being necessarily the ones that reduce inequalities. It could be the case that historically inequalities have been less pronounced in the universalistic contexts.

In contexts of more decoupling, where institutional markers are weak and the institutions are less influential than family resources, the poor youth may face greater obstacles to remain attached to institutions such as the school. They have more problems to accomplish the regular and expected educational and labor transitions. On the contrary, in contexts of less decoupling, where institutional markers are strong and institutions more influential, youth paths are more homogenous and structured by different compensatory policies. This does not mean that they are exempt of patterns that reproduce the social inequality. It means that the trajectories of adolescents in marginalised contexts are more structured by institutional forms, while the reproduction of the unequal access to resources and opportunities may become evident later in the life course.

The reproduction of inequality patterns is not cushioned by the institutional setting and is more pronounced in exclusionary regimes, while universalistic regimes will be more successful in compensating for private differences through compensatory policies or complex institutional developments. We can summarize these arguments in the two following hypothesis:

Hypotheses 1: Decoupling of the social institutions that regulate the life trajectories of the youth and the educational and labor trajectories of adolescents. In contexts where the social institutions (educational system, labor market and welfare policies) have little effect in modifying the inequalities in the structure of opportunities for the youth, we would expect to find more heterogeneous patterns in the school and work statuses of adolescents. In other words, when social institutions have less influence in standardizing the life course of the youth, there may be more heterogeneous timings in the school-to-work transitions during adolescence.

*Hypotheses 2: The effect of institutional and family resources on the life trajectories of the youth.* When social institutions play more a role as integrative mechanisms for the youth, we would expect that individual characteristics (such as gender) and the socioeconomic background will have less influence in determining the educational and labor trajectories of the youth. On the contrary, in contexts where social institutions have little effect on modifying the unequal opportunities for the youth, the dependence on family resources will have a greater influence on defining the school and work outcomes during adolescence.

In the case of the three metropolises under study, we expect to find more diverse paths and a greater decoupling with the institutional settings in Lima given the exclusionary nature of the welfare regime in that metropolis, and less variation in the trajectories in Buenos Aires during adolescence compared to the other two settings. The hypotheses regarding the specific three settings under study for this paper are illustrated in Figure 0:



Figure 0. Hypothesis regarding the diverse trajectories of adolescents in three institutional settings

#### DATA AND METHODS

We used data from household surveys conducted in Buenos Aires in 2003 (Encuesta Permanente de Hogares) and Lima in 2004 (Encuesta Nacional de Hogares). In the case of Mexico, we used the micro-data sample of the 2000 Census. The selection of these data sets was based on comparability and quality criteria. The three data sources include information on the current education and work status of individuals. However, they do not provide retrospective information of the labor and educational trajectories of young people. Therefore, our analysis is based on cross-sectional information. With this cross-sectional data we adopt a synthetic cohort approach to obtain information on the age-pattern of the school-work transition in the three cities.

Our analysis focuses on the adolescent years (ages 14 to 19). The selection of this particular age group was based on both theoretical and practical reasons. As we explained in the introductory sections, we expect differences among cities to be higher in the adolescence, due to the differences in the degree of institutionalization of the early life course associated to the operation of the educational system and the labor market. On the other hand, since we are interested in exploring the effects of SES on the school-work transition, we must find a way to measure SES for the family of origin. Given that the selected data sources do not provide direct information on the socioeconomic characteristics of the family of origin, we must estimate it trough the household-level information available for those individuals who still live with their parents. By restricting our sample to the age group 14-19, we focus on a stage

of the life course where most individuals still live with their parents, and therefore we can use the socioeconomic data of the household to obtain a reliable SES measure.<sup>4</sup>

The school and work statuses are measured through two dichotomous variables, indicating whether the individual attended or not to school and whether the individual was working or not at the moment of the survey. The combination of these dichotomous variables produces a third variable, which we name "school-work status". The advantage of using this combination is that it allows us to visualize certain intersections of statuses that illustrate the variations in the patterns of integration (or disintegration) of individuals into the educational system and the labor market. Thus, for example, the combination of "studying" and "working" may be used as an indicator of the flexibility of the educational system and the labor market to accommodate individuals with a dual integration (as well as a marker of the economic urgencies of a fraction of young individuals who remain in the educational system), and the combination of "not studying" and "not working" may provide an idea of the extent of exclusion from school and work in the early life course.

The data analysis section is divided in two parts. In the first part we present descriptive measures of the variations among cities in the school and work statuses, both using the dichotomous variables and the school-work combination. Since we have relatively small data sets in Lima and Buenos Aires, in these cities we estimate the proportions of individuals in each status using moving averages for groups of three contiguous individual ages.<sup>5</sup> In order to empirically test the first hypothesis (differences in heterogeneity of statuses), we calculate separate Theil's entropy indexes by city and sex for the combined school-work status variable

<sup>&</sup>lt;sup>4</sup> In fact, the proportion of individuals within the 14-19 age group who declared themselves to be the household head or his/her spouse was only 1.7% in Buenos Aires, 1% in Lima, and 4.4% in Mexico City. These individuals were excluded from the sample when SES was included as an independent variable in the analysis.

<sup>&</sup>lt;sup>5</sup> For example, the proportion of individuals not attending school at age 20 is estimated using the proportion for the individual ages 19, 20 and 21.

in each age. The entropy index has been proposed as an indicator of heterogeneity in discrete life-course statuses at specific ages (Fussell 2005). The index is obtained through the application of the classical Theil's entropy measure for discrete variables. In our particular case, individuals can be assigned to four different states (s), and the entropy index can be calculated as:

$$E = \sum_{i=1}^{4} p_s \log\left(\frac{1}{p_s}\right)$$

where  $p_s$  is the proportion of the population in state *s*. To facilitate its interpretation, the obtained value of the index was transformed into a proportion of its maximum possible value (1.3863 in this case), so it indicates the extent in which individuals concentrate in a particular state, being (close to) 0 the maximum concentration (or minimum heterogeneity) and 1 the minimum concentration (or maximum heterogeneity).

In the second part of the data analysis section we focus on our second hypothesis (differences in the effects of SES on the school-work transition). We adjust multinomial logistic regression models using as dependent variable the school-work status combined variable, and as independent variables the individuals' age, sex, and SES. As we mentioned before, we used household data to measure the SES of the family of origin. We estimated a SES index using the available information at the household level in three dimensions: education (per capita age group-standardized average of educational attainment for individuals over age 20); income (per capita income in the household) and possession of assets (with a different list of assets in each city depending on the availability of information).<sup>6</sup> The resulting index is then

<sup>&</sup>lt;sup>6</sup> In the three settings, the factor analysis produced a one-factor solution. We do not present the results of the factor analysis, but they are available from the authors upon request.

interpreted as a standardized measure of the SES of the family of origin, which can be used to contrast the effects of SES on the school-work status across cities.

# ADOLESCENT'S ENROLLMENT AND LABOR PARTICIPATION IN THE THREE METROPOLISES

Given the differences in the economic and social development and the organization of the educational systems in the three settings analyzed, the patterns of leaving school early in the life course diverge among Buenos Aires, Lima and Mexico. Table 1 and Figures 1 and 2 show the percentage of adolescents not in school by age and by sex in the three metropolises. Leaving school during adolescence occurs more often in Mexico and in Lima than in Buenos Aires. Nonetheless, in all cases, there is an important sector of the population that is leaving school early in the life course. Even for Buenos Aires, before the completion of secondary school (around age 17), around one in every five adolescents will no longer be enrolled.

In Lima, most of the adolescents will leave school between ages 16 and 18. After that, enrollment changes more gradually (ages 19 to 21). In contrast, in Mexico the process of leaving school occurs in a more disperse way along the adolescent years. The organization of the educational system partially explains the differences in the rate of change in the enrollment during adolescence in Lima and Mexico City. The ages under analysis cover two terminal options (lower secondary and upper secondary) for Mexico City, while for Lima, leaving school concentrates at the expected ages for finishing the secondary education and obtaining a diploma (around 17 years of age). In Lima there is a clear moment for finishing secondary school that represents a turning point in the life of Peruvian adolescents. In contrast, in Mexico there is a less clear standard age for leaving school. Furthermore, in spite of the earlier dropout from school in Lima compared to Mexico City, the graduation rates

from secondary are larger which suggest that the educational system in Lima is more efficient in graduating in time the students that finish secondary while in Mexico the retention rates and the dropout before getting the secondary diploma are higher. According to the data used in this paper, 82.4% of the population between 19 and 21 years of age living in Lima would have finished secondary (equivalent to 11 years of education), while the same proportion for Mexico City was below forty percent (37.9%).<sup>7</sup>

#### [Table 1 about here]

[Figures 1 and 2 about here]

Table 1 also shows the pattern in the sex differentials in enrollment in the three settings. Even though we are analyzing urban contexts, the capital cities for the three countries, there is a large gender differential in school attendance in Lima after age 16 that consistently grows during the ages included in Table 1. By age 21, the gender gap in enrollment is close to fifteen percent points. This pattern largely contrasts with Buenos Aires, where the differential is either negligible or even favors women. In Mexico City, young men and women attend school in similar proportions up to age 18; however, the data shows that the enrollment rates of young men and women favor the former after that age, which coincides with the expected timing for the entry into tertiary education. Although the gender gap in enrollment after age 18 is smaller than in Lima, it remains constant up to age 24 (between three and four percent points).

<sup>&</sup>lt;sup>7</sup>. The educational system in Mexico is divided in lower secondary (nine years of education) and upper secondary (twelve years of education). The 37.9% refers to those in the age range (19 to 21) who have twelve years of education or more. The percentage of those 19 to 21 who finished lower secondary was 78.7%, which is closer to—but still below –the completion rates for Lima.

What we have illustrated so far is that the pattern for leaving school in the three settings is different. Although there are variations in magnitude, in the three settings there is a group of adolescents with constrained opportunities to continue their education, which will mark a clear difference in terms of their future options and paths. In Lima, the educational system is more efficient in graduating a large proportion of the youth during the adolescent years. However, after completing their secondary education, they face limited options to continue their tertiary studies and most of them are driven out of the school system-and most probable into the labor market-earlier than in the two other contexts. In Mexico City, the low graduation rates from lower and upper secondary school suggest that, although the time for leaving school is delayed, there is a large problem in grade repetition. However, the variety of options to continue their secondary education (academic track, vocational options, night school, among others) allows adolescents to remain somehow connected to the educational system. Nonetheless, the low graduation rates suggest that-in spite of this variety of options and the flexibility that they offer for those who do not follow a stable educational trajectory-at the end, the longer stay in school compared to Lima does not necessarily reflect in higher attainment.<sup>8</sup>

In Buenos Aires, the school system structures the life of individuals during most of their adolescent years. Around age 19, more than half of the youth will still be at school. In these terms, Buenos Aires shows a more mature educational system that will also absorb a larger proportion of those finishing secondary school into tertiary education. Although the timing for leaving school may be delayed beyond the adolescent years for most of the young people in Buenos Aires, the data also suggest very different paths for a half of them who are able to stay beyond their years of secondary school.

<sup>&</sup>lt;sup>8</sup>. In fact, the proportion of the youth (20 to 24) with at least one year of tertiary education is higher in Lima than in Mexico City.

In the two contexts where the timing for leaving school are more clearly defined (Buenos Aires and Lima), there is a large coincidence with the timing of entering into the labor force (see Table 2 and Figures 3 and 4). In the case of Lima, the participation rates of the youth are already high before the legal age to work. By age 14, one in five and close to one in four male and female adolescents respectively will be working. However, the participation rates for men and women increase sharply between ages 16 and 18, which coincide with the end of their secondary education. In the case of Buenos Aires, the percent of adolescent working is particularly low until around age 18 where there is a rapid increase in the figures for young men and women. For men, the participation rates even rise higher than the same rates in Mexico City and Lima after age 20; this can be considered as further evidence of the greater influence of institutions—in this case, the labor market—in structuring the life of the youth in Buenos Aires compared to the other two settings when, even after leaving school, there may be more diverse paths. In Mexico, we find again the pattern of a more gradual increase in participation rates along the period analyzed, especially for young men. Furthermore, although more dispersed along the adolescent years, there is still a proportion of males that is starting to work even before the expected age for finishing lower secondary (16).

The legal norms on the minimum age to start working are the same in the three settings.<sup>9</sup> The ability of the educational system to integrate or exclude the youth during their adolescent years will largely explain the differences in the labor participation rates for adolescent males in the three settings. Nonetheless, there may also be different cultural norms around their participation in the labor market and their responsibility in contributing economically to the

9.

The minimum age to start working without any type of restrictions is sixteen.

household income which make more or less acceptable adolescent labor in each metropolitan context.

#### [Table 2 about here]

#### [Figures 3 and 4 about here]

The differences in the labor participation of adolescent females illustrate how cultural norms around working may also contribute to explaining the diverse paths in the three metropolitan areas. As already mentioned, Mexico has the lower female participation rates of the three settings. Thus, it is not surprising that it is more common for girls to stay out of the labor force, even when they have already left school (see table 3). The proportion of women working in Mexico City remains lower than the same figure for Buenos Aires and Lima even beyond the school years. In Buenos Aires, the participation rates of women remain low before age 18 mainly because most of them will still be in school. In Lima, even since the early teen years, the participation of adolescent females remains high and close to that of males. From this figures, we can conclude that the labor market still plays a weaker role in structuring the life of young women in Mexico, while it may be more relevant in Lima and Buenos Aires. At least for the Mexican case, we would expect that events in the family realm (such as marriage and parenthood) will be more important as determinants of their participation in the labor force.

To explore the coordination of the timing in leaving school and entering the labor force and the combination of statuses (in this case the student and worker roles), table 3 shows the distribution of adolescents using four possible statuses that combine school enrollment and labor participation. We divided the analysis between the early years of adolescence (14-16)—

when we can define any dropout from school as early in normative terms—and a second group that includes ages 17 to 19, where we would expect the transitions out of school and into the labor force to occur given that a large proportion of the youth in the three settings ends their secondary studies. The information is also presented separately by sex to account for the differences in the trajectories of male and female adolescents.

#### [Table 3 about here]

During the early adolescence, as expected, in the three settings the most frequent status is that of full time student (studying and not working), although with large differences in the percentages that correspond to the differences in the enrollment rates all ready described (table 1). In Argentina is clear the little combination or overlap of statuses (school and work); between 14 and 16 years of age, the youth is concentrated in their role as students. At these same ages, almost one in every five adolescents in Lima is combining school and work. Lima is the context which allows, at this age, a larger combination of statuses. In contrast, in Mexico most of those working are no longer in school in the case of male adolescents, while females who are not full time students fall mainly in the category "not working and not studying". This different trend for male and female adolescent is capturing the divergent paths in the labor trajectories of Mexican men and women, which can be traced even since the early adolescence.

For those between 17 and 19 years of age, being a full time student concentrates the majority of cases in Buenos Aires (55.6% for females and 53.8% for males). In the other two settings, most of the youth has moved into other statuses. In Lima adolescents are more homogeneously dispersed along the different work and school combinations. The

combination of work and school remains as an important category that differentiates the paths of adolescents in Lima compared to the other two settings. Around 17 percent of the young males 17 to 19 were studying and working in Lima. In contrast, only around one in ten male adolescents were in school and working in Buenos Aires and in Mexico City. According to the data on Table 3, in Lima, the combination of work and school is equally common in early and late adolescence for males and it also remains high for women. Although in the other two contexts it shows lower levels, the percent of adolescents in this category increases in the last teen years.<sup>10</sup>

Another interesting hint into the understanding of what adolescents are doing in each site is the comparison of the percent not studying not working. For women, it can be largely identified—but not exclusively—with the participation in domestic work, especially for the case of Mexican women. For men, it can be read as idleness. The city differentials for men are wide. In Lima, 23.2 percent of adolescent males 17 to 19 are not working nor studying. The same percentage decreases to 11.0 in Mexico and 6.1 in Buenos Aires. Interestingly, the concentration in the status of not working and not studying is very similar for male and female adolescents in Lima. As already mentioned, female adolescents in this metropolis have lower chances of staying in school during their teen years than men. It is clear that, in this context, leaving school for young females is closely related to their participation in non domestic jobs. For the ages 17 to 19, four out of ten females in Lima will be working and out of school. One in four will be neither out of the labor force nor in school. While we can expect that a large proportion of those females not working nor studying in this age group are participating in housework and childcare, it is less plausible that this explanation applies to

<sup>&</sup>lt;sup>10</sup>. Our analysis ends in the teen years. However, the proportion who combine school and work increases rapidly in Buenos Aires in the early twenties, when a large proportion of the youth enter the tertiary education. It seems that during this period, the flexibility of the educational system allows a more frequent combination of the student and worker statuses.

understand the large proportion of young males in Lima who are idle. In any case, the data suggest that for a large proportion of the adolescents in this city, the social institutions that regulate the transitions to adulthood (in this case, the school and the labor market) have a weaker role in determining the paths of the youth.

For Mexico City, the paths of men and women between 17 and 19 years of age again illustrate the different gender expectations regarding the entrance into the labor force in this setting. The percentage of women not working and not studying (22.7%) doubles the same figure for men (11.0%).

### HETEROGENEOUS PATHS OUT OF SCHOOL AND INTO THE LABOR FORCE IN BUENOS AIRES, MEXICO CITY AND LIMA

In prior sections we hypothesized that the greater coupling of the social institutions with adolescents' lives would result in lower heterogeneity in Buenos Aires and higher in Lima, with Mexico in an intermediate position. Figures 5 and 6 show the entropy measures of heterogeneity for school and work statuses for males and females between 14 and 21 years of age in the three settings. The age pattern depicted in both figures supports the hypotheses of greater heterogeneity in the life trajectories of the youth in Lima and the lowest in Buenos Aires. By age fourteen, in Mexico City and Lima the heterogeneity index is already high compared to Buenos Aires. The low levels of heterogeneity in the latter are explained by the low combination of statuses (school and work) and the high enrollment at this age. The data corroborates to what extent the educational system structures and standardizes the life of the adolescents in Buenos Aires, while in the other two contexts there are more diverse paths. In Lima, the heterogeneity keeps rising steadily after age 14 and reaches its maximum peak—close to one—by age 17. After that, it stays high but slowly decreases for men, while for

women it decreases more steeply and then remains stable around age 19. For the youth in Lima, age seventeen represents a turning point in the life course, and it coincides with the completion of secondary education. The entropy index remains high, suggesting that there is a diversity of possible paths for the youth after that age; however, the slow decrease is explained by the process of leaving school for the overall population.

#### [Figures 5 and 6]

In Buenos Aires, the entropy index rises rapidly between age 16 and 18 and it reaches a turning point by ages 19 and 20. The turning point coincides with the expected ages for finishing secondary education and starting tertiary studies. The largest heterogeneity occurs during the ages where the youth leaves school, and then it remains high but constant (or slowly decreases for females) after that process. It is not surprising in any case that the entropy remains high after the period where the youth finishes school in Lima and Buenos Aires. In Mexico, differently from the other two contexts, it is not so easy to define a transitional time for leaving school that may raise the entropy index at first. This supports our argument that the time (age) for leaving school in Mexico is not as clearly defined as in the other two contexts.

Regarding the differences by sex in the three settings, it is clear that, after the expected age or period where the majority of the youth will complete their formal education, the heterogeneity tends to decrease more rapidly and clearly for men than for women. In this case, the reason for the higher levels of heterogeneity among young women reflects the variations in the labor participation patterns and the greater interference of other events in the reproductive sphere (such as the entry into union or the arrival of the children) over the decisions to work and/or study. In other words, the entry into the labor market standardizes the life of young males after they leave the formal educational system, while we do not see the same process for women.

# FAMILY VERSUS INSTITUTIONS IN THE STRUCTURING OF THE LIFE COURSE IN BUENOS AIRES, LIMA AND MEXICO CITY

Our second hypothesis refers to the influence of the social institutions outside the family realm in defining the paths of adolescents depending on the context and the characteristics of the specific institutional setting. According to this hypothesis, we would expect that in Lima and Mexico City, the socioeconomic backgrounds of the youth will be more important in differentiating the trajectories during the adolescent years, while in Argentina—where the school system and the labor market play a greater role in standardizing the trajectories—this variable will be less influential. To test the hypothesis, tables 4 and 5 summarize the effects of the socioeconomic background on school enrollment and work statuses for male and female adolescents in the three settings. The tables included the estimated probability of working and/or studying at three different ages (14, 16.5 and 19) for an individual in the twentieth (low SES) and the eightieth (high SES) percentiles of the socioeconomic index. Along with the estimated probabilities, we present the differences between the two scenarios (low and high SES). The lower the gap in the estimated probabilities, the lower the influence of SES will be in defining diverse paths for adolescents in terms of their working and school enrollment statuses. In addition, we would expect that the effect of SES will be weaker during the early adolescent years, especially in Buenos Aires where most of the children were only studying. As age increases, we can expect that the influence of SES will be also more relevant in explaining the enrollment and working outcomes for the youth.

We first analyze the differences in the probabilities of studying and not working, that is, the probabilities of delaying the entry into the labor market and the transition out of school. In this specific case, the evidence supports in general our hypotheses of weaker effects in Buenos Aires and larger in Lima and Mexico City during the early adolescent years. In the three settings, the differentials between the estimated probabilities for low and high SES scenarios are the largest in this category and increase—in general terms—with age. For male adolescents, in the scenarios for ages 14 and 16.5, Lima has the largest differentials, followed by Mexico City, and all the differences are significant. However, by age 19 Lima shows another trend. While in Mexico and Buenos Aires the differential by SES remains high, for Lima it is notoriously reduced (from 0.378 for the estimated probability at age 16.5 to 0.151 at age 19). The reverse in the trend for Lima may be linked to the timing for completing the secondary education in that city. Although the probabilities of attending school and being only a student are small in the low SES scenario, they are also small—the smallest by far for the three settings—in the high SES context.

#### [Tables 4a and 4b about here]

For women, the evidence for Lima is even more contradictory. In none of the cases and categories, the differences in the probabilities for the high and low SES scenarios were significant, suggesting a very weak effect of socioeconomic background on the school and work statuses. We had seen before that the enrollment rates are notoriously low for women in Lima compared to the other settings and that there is a large gender gap between male and female adolescents in this metropolis. This result suggest that a personal attribute—gender—is more important in defining the opportunities to stay in school and delay the entry into the labor force than SES in the Peruvian case. It also points to the importance of considering

other individual attributes to understand the sources of inequality in the structure of opportunities of the youth and, thus, in the school and labor outcomes during adolescence.

In contrast with the results for Lima, the comparison of the results for females between Mexico City and Buenos Aires do support our hypothesis. The differentials by SES for female adolescents are larger in Mexico City than in Buenos Aires in the three age scenarios included in table 4b for the estimated probabilities of "only studying".

The estimated probabilities in tables 4a and 4b also suggest how SES influences the different paths after leaving the role of "only student" in the three metropolises. The results again vary by gender. For male adolescents in Lima, it is clear that SES has a strong influence in starting to work since early ages (scenario for age 14). When adolescents are not full time students, a low SES is largely linked to greater probabilities of working and studying and, increasingly, with only working as age augments. In the descriptive statistics we saw that the percentage of not working and not studying (idle) is high in Lima. Our results suggest that SES is not linked to the probability of being not working nor studying among the male adolescents in this city.

For Mexico, it is clear that the probabilities of combining statuses (work and school) are low regardless of the SES and that the differences in the paths are defined by the entry into the labor force linked to leaving school. Although the probabilities of combining statuses are low, the results from the multinomial models suggest that they are positively associated with a higher SES. Finally, in Buenos Aires, even when moving into the labor force, the paths vary by SES. According to the scenario by age 19, the probabilities of working and studying are higher in the high SES simulation and the differentials are the largest for the category "only

working" where the probabilities are notoriously higher for the low SES simulation. The positive significant differential in the probabilities of combining statuses that we see for the Mexican and Argentinean case suggest that for higher SES adolescents, the possibility of combining work and school may represent an option to stay longer in school.

For women in Buenos Aires, the pattern is similar to the one observed for men. By age 19, the estimated probabilities suggest that the highest the SES, the more frequent combination of statuses. In contrast, in the low SES scenario the probabilities of only working or of being out of the labor force are significantly higher. For Mexico City, it is interesting to note that the differentials in the probabilities of working are small between the two SES scenarios estimated in table 4b. The difference in the paths of female adolescents lays in the greater probabilities of staying longer in school in a high SES scenario versus staying out of school and out of the labor market in low SES contexts.

In summary, the analysis of the differences in the estimated probabilities by SES suggests the need to reformulate and be more specific regarding the second hypothesis so that we consider the timing of the transitions or the turning points in the three experiences under analysis. We do find some evidence that during the early adolescent years, the weight of the socioeconomic background is more important in Mexico City and Lima than in Buenos Aires, where the trajectories of the youth are more standardize. The reproduction of the patterns of social inequality can be traced since early adolescence in Mexico City and Lima, where the resources and opportunities for the low SES youth are notoriously more constrained compared to those in a more favorable socioeconomic contexts. However, linked to the timing in leaving school and entering the labor force, SES will play a greater role in defining the paths of the youth in Buenos Aires later in their lives (probably in the late teen years and early

twenties). The influence of SES in defining the probabilities of staying in school and out of the labor force weakens as age increases for those settings where the timing of the transitions occur early (Lima and, to a less extent, Mexico City) mainly because even some of the high SES youth will have experienced one or both transitions. Secondly, the results for women in Lima suggest that there are other dimensions—in this case gender—which may be more important as sources of inequality in the access to resources and opportunities defining greater heterogeneity in the experiences of the youth during the adolescent years.

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	Males			Females		
Age	<b>Buenos Aires</b>	Lima	México	<b>Buenos Aires</b>	Lima	México
14	1.7	9.8	12.1	0.0	4.1	12.3
15	6.8	16.4	22.0	4.6	11.2	24.0
16	14.1	27.7	32.3	8.5	27.3	33.1
17	22.2	44.1	41.2	20.9	49.6	41.9
18	35.6	58.4	51.0	32.0	66.1	53.7
19	45.9	60.6	57.1	43.8	75.7	60.1
20	54.3	62.4	63.6	49.2	77.6	66.6
21	59.9	63.6	65.9	54.5	78.3	69.5
22	60.3	70.5	72.1	61.6	78.2	75.9
23	64.4	79.0	76.7	66.1	80.8	81.5
24	68.3	80.7	81.4	74.8	85.6	85.9

 Table 1. Percent who dropped out from school by age, city and sex. Buenos Aires,

 Mexico City and Lima\*

\* For Lima and Buenos Aires, the percents were calculated using moving averages.



Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.



Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

	M	lales		Females				
Age	<b>Buenos Aires</b>	Lima	México	<b>Buenos Aires</b>	Lima	México		
14	2.9	19.5	10.4	0.0	23.6	5.9		
15	3.8	30.3	19.1	0.0	26.4	11.7		
16	9.9	42.6	28.1	3.1	31.0	18.2		
17	21.6	49.8	38.8	14.9	47.6	24.5		
18	41.0	56.2	50.3	29.8	56.0	31.3		
19	58.8	60.5	58.1	42.2	63.6	35.6		
20	72.5	63.5	65.6	50.0	65.2	38.5		
21	79.8	72.4	70.1	58.5	68.5	40.4		
22	82.8	79.7	76.5	65.5	69.9	42.7		
23	83.5	84.8	81.3	69.7	68.2	45.2		
24	86.8	84.2	85.5	70.7	67.0	47.6		

Table 2. Percent working by age, city and sex. Buenos Aires, Mexico City and Lima\*

\* For Lima and Buenos Aires, the percents were calculated using moving averages.



Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.



Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

	Ma	ales	Females			
	Age 14-16 Age 17-19		Age 14-16	Age 17-19		
Buenos Aires						
Studying - Not working	90.8	53.8	95.7	55.6		
Studying - Working	2.4	11.4	0.0	13.6		
No studying - Working	1.4	28.8	0.0	17.7		
No studying - Not working	5.5	6.1	4.3	13.1		
Total	100.0	100.0	100.0	100.0		
Lima						
Studying - Not working	64.2	24.4	70.8	18.9		
Studying - Working	19.2	17.0	18.0	14.8		
No studying - Working	6.1	35.5	5.4	42.3		
No studying - Not working	10.5	23.2	5.8	24.1		
Total	100.0	100.0	100.0	100.0		
México City						
Studying - Not working	71.9	41.9	74.9	46.1		
Studying - Working	6.4	10.2	3.7	7.5		
No studying - Working	12.6	36.9	7.8	23.8		
No studying - Not working	9.2	11.0	13.6	22.7		
Total	100.0	100.0	100.0	100.0		

Table 3. Percent distribution of the school enrollment and working statuses by age, cityand sex. Buenos Aires, Mexico City and Lima





Source: Authors' calculations based on the *Encuesta Permanente de Hogares 2003* in Buenos Aires, the *Encuesta Nacional de Hogares 2004* in Lima and the *2000 Census Sample* for Mexico City.

Age 14											
	Estimated probability, SES=20 pctile			Estimated probability, SES=80 pctile			Estimated difference				
Status	<b>Buenos Aires</b>	Lima	México	<b>Buenos Aires</b>	Lima	México	<b>Buenos Aires</b>	Lima		México	
Studying - Not Working	0.942	0.695	0.725	0.984	0.918	0.905	0.042	* 0.223	*	0.180 *	
Studying - Working	0.010	0.174	0.052	0.008	0.031	0.045	-0.002	-0.142	*	-0.008 *	
No Studying - Working	0.006	0.048	0.115	0.001	0.008	0.025	-0.005	-0.040		-0.090 *	
No Studying - Not Working	0.042	0.084	0.108	0.007	0.042	0.026	-0.035	* -0.042		-0.082 *	
Age 16.5											
	Estimated probability, SES=20 pctile		Estimated prob	Estimated probability, SES=80 pctile			Estimated difference				
							Buenos				
Status	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Aires	Lima		México	
Studying - Not Working	0.709	0.265	0.418	0.899	0.642	0.743	0.190	* 0.378	*	0.325 *	
Studying - Working	0.055	0.278	0.079	0.055	0.092	0.097	-0.001	-0.186	*	0.017 *	
No Studying - Working	0.124	0.262	0.347	0.025	0.084	0.107	-0.100	* -0.178	*	-0.240 *	
No Studying - Not Working	0.112	0.196	0.156	0.022	0.182	0.053	-0.090	* -0.014		-0.103 *	
Age 19											
	Estimated probability, SES=20 pctile		Estimated probability, SES=80 pctile			Estimated difference					
							Buenos				
Status	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Aires	Lima		México	
Studying - Not Working	0.147	0.042	0.148	0.440	0.192	0.440	0.293	* 0.151	*	0.293 *	
Studying - Working	0.085	0.183	0.074	0.200	0.116	0.150	0.114	* -0.068		0.077 *	
No Studying - Working	0.686	0.586	0.640	0.324	0.357	0.331	-0.362	* -0.229	*	-0.310 *	
No Studying - Not Working	0.082	0.190	0.138	0.038	0.335	0.079	-0.045	0.145		-0.059 *	

# Table 4. Effects of Socioeconomic Status on School Ernollment and Working Status, Males, Buenos Aires, Lima and Mexico City Age 14

\* The difference in the estimated probabilities for the low and high SES is significant (p<=0.01)

	Estimated probability, SES=20 pctile		Estimated probability, SES=80 pctile			Estimated difference					
							Buenos				
Status	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Aires	Lima	México		
Studying - Not Working	0.982	0.778	0.770	0.995	0.843	0.901	0.013	0.065	0.131 *		
Studying - Working	0.000	0.141	0.026	0.001	0.089	0.029	0.001	-0.052	0.003 *		
No Studying - Working	0.001	0.029	0.055	0.000	0.027	0.036	-0.001	-0.002	-0.020 *		
No Studying - Not Working	0.016	0.052	0.149	0.003	0.041	0.035	-0.013	-0.011	-0.114 *		
Age 16.5											
	Estimated prob	ability, SE	S=20 pctile	Estimated proba	Estimated probability, SES=80 pctile			Estimated difference			
							Buenos				
Status	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Aires	Lima	México		
Studying - Not Working	0.837	0.417	0.502	0.928	0.497	0.724	0.092	* 0.080	0.222 *		
Studying - Working	0.011	0.208	0.048	0.031	0.145	0.065	0.020	-0.063	0.017 *		
No Studying - Working	0.039	0.217	0.160	0.015	0.221	0.127	-0.024	* 0.005	-0.032 *		
No Studying - Not Working	0.114	0.157	0.290	0.026	0.136	0.084	-0.088	* -0.021	-0.207 *		
Age 19											
	Estimated probability, SES=20 pctile		Estimated proba	Estimated probability, SES=80 pctile			Estimated difference				
						Buenos					
Status	Buenos Aires	Lima	México	Buenos Aires	Lima	México	Aires	Lima	México		
Studying - Not Working	0.235	0.085	0.227	0.360	0.104	0.421	0.125	* 0.019	0.194 *		
Studying - Working	0.083	0.116	0.062	0.337	0.084	0.107	0.254	* -0.033	0.045 *		
No Studying - Working	0.417	0.621	0.319	0.220	0.654	0.327	-0.197	* 0.033	0.008		
No Studying - Not Working	0.266	0.178	0.392	0.084	0.159	0.145	-0.182	* -0.019	-0.247 *		

# Table 5. Effects of Socioeconomic Status on School Ernollment and Working Status, Females, Buenos Aires, Lima and Mexico City Age 14

\* The difference in the estimated probabilities for the low and high SES is significant (p<=0.01)