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Nina Guyon, Elise Huillery

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Track choice and socioeconomic origin: measuring and explaining academic inhibition

Nina Guyon

RÉSUMÉ

nina.guyon@sciencespo.fr

Nina Guyon is an assistant professor at the National University of Singapore (NUS) and research affiliate at LIEPP-Sciences Po. Les élèves d'origine sociale modeste aspirent à des filières académiques moins sélectives que leurs pairs de même niveau scolaire mais d'origine sociale favorisée. Plusieurs raisons sont mises à jour : premièrement, les élèves d'origine modeste sous-estiment leurs capacités scolaires actuelles par rapport aux élèves d'origine favorisée ; ensuite, ils anticipent une forte différence dans leurs chances de succès dans le futur ; en outre, ils ont tendance à se conformer à leurs pairs. Par ailleurs, l'action des parents et des enseignants dans le processus d'orientation tend à accroître ces inégalités d'aspirations pour les élèves faibles, tandis qu'elle réduit ces inégalités pour les élèves au-dessus de la médiane. Ces résultats permettent de proposer des pistes d'interventions permettant de réduire les inégalités sociales d'aspirations scolaires.

Elise Huillery

ABSTRACT

elise.huillery@sciencespo.fr

Elise Huillery is an assistant professor at the Department of Economics at Sciences Po and research affiliate at LIEPP-Sciences Po. Pupils from modest socio-economic backgrounds choose less selective academic tracks than others at the same level of ability. Pupils from more modest backgrounds underestimate their own ability; they believe that they are less likely to succeed in a selective academic track, and they have a tendency to conform to the choices of their peers. In addition, outside influence (from the parents or school) over the course of the last year of junior high tends to exacerbate the gap for weaker students, but narrow the gap for stronger students. We propose specific policy interventions based on these findings.

1. Background

The degree to which socio-economic background determines academic performance is a key policy question: how much of school performance is determined by where, and to whom, you are born? In France, a great deal of the difference in performance on standardized tests is explained by differences in economic and social background of the students - more than in other OECD countries. This means that children from more modest backgrounds may not tend to do better than their parents, and that overall income mobility may be reduced. Such a dynamic can lock generations and social groups into a cycle of low achievement.

* Les auteurs adhèrent à la charte de déontologie du LIEPP disponible en ligne et n'a déclaré aucun conflit d'intérêt potentiel.

The structure of the education system could reduce or exacerbate such a tendency. The role that the education system plays in determining intergenerational mobility is thus important to understand. School should provide opportunities for all participants, rather than reinforcing socioeconomic classes. However, it may not play this role, particularly if it supports the reproduction of the social structure, aided by the internalization, by the students themselves, of social attitudes about the capabilities of people from their own background (Bourdieu, 1966).

Inequalities in academic track choices related to socio-economic origins in the context of France have been analyzed by Girard and Bastide (1963), Duru-Bellat and Mingat (1985), and Broccolichi and Sinthon (2011). The weight of the evidence is that, at the same level of ability, pupils from modest backgrounds chose less selective academic tracks after completing junior high. Yet there is little empirical evidence that can shed light on the mechanisms behind this phenomenon. In particular, there is no quantitative evidence on the extent to which differences in track choice are due teachers (discrimination) or to (inhibition).

This brief explains new research on this role of academic inhibition in reinforcing socioeconomic class.

2. Description of the Data

In three regional education authorities from the Parisian region (Créteil, Paris and Versailles), six thousand pupils in 59 junior high schools (roughly half of which were labeled a "Priority Education Zone") were interviewed at the beginning (fall) of their final year of junior high (see Box 1). These students were tested on their mathematical ability, provided information on their family origins, their preferred academic track for the following year, as well as a self-esteem questionnaire related to academic ability. In addition, some of the questionnaires were framed

to measure the taste for conforming to peers, the fear of peer rejection, and the role of social stereotypes. To better measure the importance of information, one group of questionnaires included a list of available academic track options.

addition, administrative data was collected for the same three authorities, including socio-economic status of the parents, the academic track chosen after junior high school, the score on the national end-of-junior-high exam and information on school characteristics. Socioeconomic status is measured by the parents' profession: a pupil is considered to come from a high SES background if he or she has at least one parent who has a high-SES job.

3. Findings

Pupils from more modest backgrounds aim for less selective academic tracks than pupils from advantaged backgrounds at the same level of ability. When asked at the beginning of the last year of junior high, students from modest backgrounds are, overall 11% less likely to report that they would prefer to follow the GT track, controlling for grades, and are more likely to prefer to enroll in vocational school. For students above average, those from weaker origins have low aspirations relative to their good grades they do not aim as high as they could, whereas this is not true anymore for top students. For the weakest students, those from more advantaged origins have high aspirations relative to their poor grades – they aim higher than they should.

Pupils from more modest backgrounds end up making choices that are less selective than pupils from advantaged backgrounds at the same level of ability. Pupils from modest backgrounds were 5% less likely to go to the GT track and 74% less likely to repeat the last grade of junior high (in an effort to gain access to the GT track). They were, however, 93% more likely to go to a vocational high school and 169% more likely to go for apprenticeships. However, not all

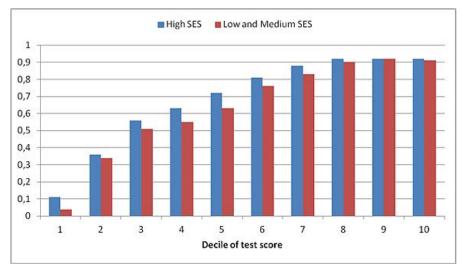
Box 1. Academic Track Options in France

When finishing junior high in France (referred to as "troisième", the equivalent of 9th grade in the United States, at about 14 years old) pupils either begin the GT track (General or Technical high school) or the Vocational track (Professional High School or Apprenticeships).

- The GT track is more selective and offers the possibility of further higher education. General high school studies include literature, social studies & economics, and sciences.
- · Technical high school includes management, industrial technology, health, laboratory science, art, life sciences, and hospitality.
- · Professional High school and Apprenticeships lead to careers in construction, sanitation, mechanics, electrical technicians, commerce, secretaries, agriculture, and other services.

Pupils - obviously in consultation with their parents - first express their preferred track, and the school then decides on the track that would best fit the student's skills. If the school thinks that the pupil is not sufficiently strong to begin the GT track, the pupil can repeat the last year of junior high and attempt to gain access to the GT track. In one case out of two, the school's decision is different from families' initial choice (DEPP, 2013). In such a case, parents can appeal the school decision to the regional education authority, and a third of them do it. What happens is almost always that parents want their child to access the GT track, and the appeal procedure works in 60% of the cases.

Figure 1. Percent of pupils actually choosing the GT track, by decile of performance on the end-of-junior high national exam. At higher levels, there is little difference between pupils from advantaged (blue) or modest (red) backgrounds, but from the first through seventh decile there is a significant difference.



students are affected in the same way by their social origins. The students in the upper third of the grade distribution (strongest pupils) generally go to the GT track regardless of background. For students in the middle third of the grade distribution, students from modest origins are less likely to go to the GT track and more likely to vocational school or apprenticeships. For the weakest students, from the bottom third of the grade distribution, students from more modest origins were less likely to repeat 9th grade in an attempt to access the GT track, and more likely to go for vocational school or apprenticeships.

Outside influences during the school year (likely to be school guidance, parents, or peers) decreased the gap for stronger pupils and increased it for weaker pupils. There are many outside influences that might be responsible for differences between students' aspirations at the beginning of the year and actual assignment at the end of the year, most notably the efforts of

parents and schools to guide the choices of the pupils. For the strongest pupils, there is no change over time. For average to stronger pupils, these outside influences helped equalize differences in orientations: students from modest origins were more likely to enter the GT track, relative to their expressed preferences at the beginning of the year. However, outside influences for the weakest 20% of pupils had the effect of increasing the gap between students from modest and advantaged backgrounds: weak pupils from advantaged backgrounds were more likely to repeat, in an attempt to gain access to the GT track.

Pupils believe that if they are from a modest background, they are less likely to succeed. All students believe that the social and family factors (living in a poor neighborhood, having foreign parents, having a professionally successful family) have a large influence on the chances of future success at a given grade level. Whether or not this belief is correct, it can explain

Figure 2. Percent of pupils choosing vocational school or apprenticeships, by decile of performance on the end-of-junior high national exam. At higher levels of performance, very few pupils choose the vocational track, but at lower levels of performance, pupils from modes origins (red) are more likely to choose vocational school than those from advantaged origins (blue). Pupils from advantaged origins are more likely to choose to repeat a year in an effort to gain access to the GT track.

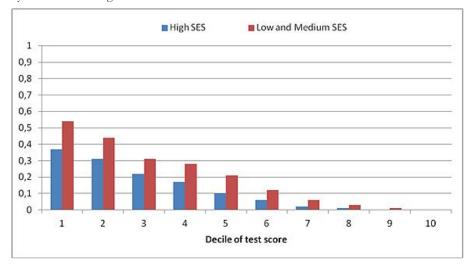
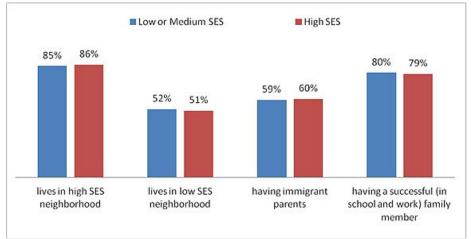


Figure 3. Pupils perception of the relationship of success to family background. The figure shows the average response to the question "What is the percent chance that a good student will be able to complete their chosen academic track if they are..."



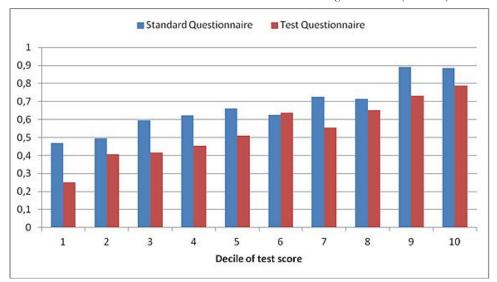
some of the difference in academic choices relative to socio-economic background. If this belief is also shared by teachers and parents, it might also explain the differences in advice that the students get. If the belief is correct, then students may be simply making the best trade-off between policy choices. If it is not correct, then it may be a selffulfilling prophecy. The policy conclusions in each case would be different, and further research is needed on the subject.

Pressure from peers and a desire to conform may sway the choices of pupils from more modest backgrounds. Half of all pupils stated that their academic track choice might negatively impact their social life, either through separation from friends, creating resentment among friends, or inviting teasing from peers. Students from more modest backgrounds tend to conform to the choices of their peers, while students from more favored backgrounds are more willing to differentiate themselves when their peers choose less selective tracks. We also observe that a substantial proportion of students do not want to tell their peers that they want to pursue a GT track (but are willing to disclose their preferences for less selective tracks).

Pupil's assessment of their own ability is strongly related to socio-economic origin: from modes backgrounds themselves as less capable, even at the same ability level. At the same grade level, pupils from modest backgrounds rate themselves academically less capable than others from privileged origins. The difference in academic selfesteem related to socio-economic origin is not related to the school environment, and still explains a part of the difference in academic track choices.

Differences in academic track choices are not explained by differences between schools or by differences in grading practices. The variation in the choices of academic track is explained by differences in the home environment, not what kind of school a pupil attends. In particular, we observe that the gap in GT track choice between pupils from modest backgrounds those from advantaged backgrounds is and

Figure 4. Effect of anticipating that preferences will be shared with the class on declared preferences for the GT track, by decile of grades. A sample of pupils received a modified questionnaire that suggested their responses would be shared with their class (red bars). They were less likely to state that they wanted to pursue the more selective GT track than those that did not think their answers might be shared (blue bars).



observed more strongly in better-off schools (those that are not in "Education Priority Zones"). The gap in the rate of going to vocational schools or apprenticeships (as opposed to repeating a year in order to access the GT track) is observed across all schools.

In terms of grading, at the same ability level, pupils from modest backgrounds get slightly higher grades than pupils from privileged backgrounds, and this is a function of the types of schools they are enrolled in (pupils from modest backgrounds are more likely to be in schools with lower overall grades). However, these differences cannot explain the observed differences in preferences.

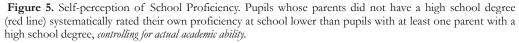
Information about available options and concerns about the cost of education do not explain preferences about what pupils will do immediately after junior high, but they may explain variation in preferences academic choices further in the future (after high school). Very few pupils from modest backgrounds believe that they will face logistical or financial difficulties in pursuing any of the options immediately following junior high school, but 1 out of 4 pupils indicate that at least one higher education (post-secondary) option would force them to borrow money. Since pupils from more modest origins are likely to have more trouble borrowing than those of privileged origins, this may influence academic track choices, and indeed differences in beliefs about the need to borrow explain a part of the difference in preferences. Differences in information about education options do not explain differences in preferences after junior high, though they do explain some of the difference in preferences for education after high school.

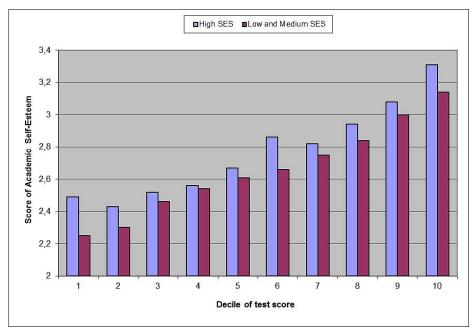
4. Policy Implications and Paths for Future Research

The data presented here show that socioeconomic origins play an important role in the choices that young people make about their academic track following junior high, in part because of academic inhibition (average and good pupils), and in another part because of outside influences (weak pupils). We find that academic inhibition of pupils from modest origins is likely to go through the mechanisms of peer pressure and conformity on the one hand, and through pupils underestimation of their own present and future abilities on the other hand.

The first issue – peer pressure and conformity – implies that programs or policies that encourage young people to develop their own sense of self apart from that of their group of social origin may be beneficial. There are several studies suggesting the effectiveness of such programs in different contexts (for example, Desert et al., 2009, Oyserman et al., 2006, and Croizet et al., 2004). Piloting such a project in France might be a low cost and high return public policy investment.

The second issue – lower estimation of ability and lower expectations of success for pupils from more modest backgrounds – must be addressed carefully. There is evidence that pupils entering secondary from modest backgrounds perform worse than pupils from more favored backgrounds, even if they have similar initial levels of achievement. This may be because there is less support at home. The public policy implication of this is to increase support – tutoring, advice – for pupils from modest backgrounds entering the GT track. Over time, such an investment may change





the rate of success and thus change the expectation of success that currently reduces academic ambition. Moreover, the lower performances of pupils from modest background in high school might be the consequence of lower expectations of success, discouragement resulting in lower effort, lower investment and lower motivation. Programs enhancing the sense of self-efficacy and dedication (for example one like in Lent, 2008) might thus also help to change expectations and reduce the gap associated with socio-economic origins.

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Le rapport d'évaluation complet sur ce projet est consultable en ligne :

http://www.sciencespo.fr/liepp/fr/content/stereotypesautocensure-et-reussite

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Directeurs de publication:

Bruno Palier Etienne Wasmer

Maquette:

Alexandre Biotteau Andreana Khristova

Sciences Po - LIEPP 27 rue Saint Guillaume 75007 Paris - France +33(0)1.45.49.83.61