TCH05016

Effects and Strategic Potential of Extracurricular Activity in Higher Education

Dr. Guy TCHIBOZO[1]
LISEC EA 2310 & BETA UMR 7522 – Louis Pasteur University of Strasbourg (France)

Abstract

This paper focuses on the effects of extracurricular activity on graduates' transition towards employment. The study is based on a survey of 600 graduates conducted in 2004 mainly in Canada, in France and in the United Kingdom. The data gathered cover five types of social and leisure activities which the graduates carried on while studying: sports, student associations, activities in the social sector, citizenship activities and cultural activities. Five dimensions of the transitional process are also covered, i.e. access to job security, access to employment in large firms, occupational status, wages and unemployment. Data were analysed by means of linear and logistic regression models. Results show that extracurricular activity has a statistically significant influence on school-to-work transition. First, graduates with extracurricular experience are less likely to start their careers with open-ended contracts and earn lower first-job wages. Second, within the group of graduates with extracurricular experience, the nature of the experience matters. As compared with the most frequently observed extracurricular behaviour (sports within associations), three other extracurricular profiles could be distinguished. These results suggest extracurricular strategies for graduates and for educational and guidance institutions.

Keywords

Academic advising – Counselling – Curriculum vitae – Education market competition – Employment – Extracurricular profiles – Extracurricular trajectories – Guidance – Higher education – Labour market – Non-market activities – Recruitment – School-to-work transition.

---

[1] Mailing and e-mail addresses: Faculté des sciences économiques – 61 AV. FORET NOIRE – 67085 STRASBOURG CEDEX – France – TchibozoGuy@aol.com

Introduction

This paper aims to explore how student life may influence later labour market entry of tertiary education graduates.

Higher education students' time use often consists of four main parts: curriculum (which may include practical training); employment (to sustain academic life); non-profit activities; and recreational activities.

Many authors have already analysed the effects of studying (e.g. Brunello & Comi 2004, and more generally the abundant literature on the rate of return to education) and of employment while studying (Ehrenberg & Sherman 1987; Chaplin & Hannaway 1996; Light 1999, 2001). On the contrary, little research has been done on the influence of students' non-profit recreational and social activities.

Social activities include for example international volunteerism, student unions, scouts, child care and helping disabled or drug addicted people. Sports, culture and arts are examples of leisure activities. These social and leisure activities constitute non-market activities. This paper addresses the influence of these extracurricular non-market activities on graduates' later access to the labour market.

Analysing the effects of extracurricular activity is important first to students and graduates. Given the educational background of a graduate, having been involved in a certain type of extracurricular activity may influence this graduate's transition process towards the labour market, for instance by speeding up or slowing down the access to employment. Therefore, understanding the effects of extracurricular activities is particularly important to students and graduates in their strategies of transition from higher education towards employment.

This field of research is also important to educational and guidance institutions. Extracurricular activity is important because of its potential effect on reinforcing and marketing the outcome of the education system. As stressed in a recent international report (OECD 2004: 51-55), most guidance institutions in higher education generally concentrate on courses choice and on psychological counselling to deal with students' emotional and study problems, whereas less attention is paid to career guidance. However, as educational institutions are faced with increasing competition for students and resources, the labour market outcome of graduates is becoming a key marketing argument. Therefore, as a contribution to developing knowledge on the process of transition from higher education to the labour market, analysing the effects of extracurricular activities is critical to guidance services and to educational institutions.

Very few papers have been published so far on this topic in the international academic literature. Of course, extracurricular activities have often been analysed. However, most attention has been focused on the factors affecting participation in these activities (Gager *et alii* 1999; Flores-Gonzalez 2000; McNeal 1999) and on the influence of extracurricular activities in college choice decision-making (DesJardins *et alii* 1999; Suloc 1982; Weiler 1996), on academic achievement (Amato *et alii* 1996; Gerber 1996; Grinder *et alii* 1999; Madsen *et alii* 2002; Tucker 2004), and on alumni generosity (Clotfelter 2001; Tucker 2004). On the contrary, little attention has been paid to the influence of extracurricular activities

on the outcome of the school-to-work transition process. Eide & Ronan (2001) have shown that, in the United States, participation in varsity sports may have a positive effect on earnings, though differently according to the ethnic group. But authors have generally ignored the role of other types of extracurricular activities as well as the effects of these activities on the non-salary conditions (search duration, job status …) of labour market entry. Therefore, this paper should be relevant to audience interested in higher education, especially students, guidance researchers and practitioners, and educational administrators interested in rethinking and refining the place of extracurricular activities in higher education and in graduates' labour market entry.

The paper is organized as follows: Section 1 introduces the interpretative framework. Section 2 describes the method of analysis. Section 3 presents the main results obtained.

1. Interpretative framework

Statistical discrimination theory (Phelps 1972; Arrow 1973; Viscusi 1980; Blau & Kahn 1981; Ragan & Smith 1982; Renes & Ridder 1995; Garcia-Minguez & Sanchez-Losada 2003) state that employers pay particular attention to the non-market activities of job applicants. Sattinger (1998) has given an idea of how things work. On the one hand, some employers value the non-market activities of job applicants. These employers consider that the involvement in non-market activities demonstrates the existence of some sense of responsibility, citizenship and maturity. They also consider that these qualities will be of advantage to the firm. On the other hand, other employers consider that candidates involved in non-market activities should be kept at a distance. The main concern of this second type of employers consists of excluding high turnover rate ('*high-quit-rate*') candidates, because turnover is costly to firms (costs of finding and training a replacement). Since the turnover propensity of an applicant cannot be observed directly, these employers divide applicants into two groups: a high-attrition-rate group and a low-attrition-rate group. They negatively associate worker turnover with non-market activities (involvement in family life, in leisure activities or in social activities) which are believed to increase the likelihood of quitting. Consequently, applicants considered as belonging to the high-attrition-rate group are faced with stricter employment criteria, lower wages, fewer interviews and may be totally excluded from the recruitment process, even when they are as qualified as other candidates.

Students' extracurricular non-market activities are part of those activities which employers may consider as sources of turn-over. Therefore, the statistical discrimination approach provides an interesting framework to interpret the relationships between extracurricular activity and labour market entry.

2. Method

The study is based on a survey conducted in 2004. The survey was designed within the Research Laboratory in Theoretical and Applied Economics (Beta) at Louis Pasteur University of Strasbourg (France). Associations, offices and networks of alumni from higher education were contacted in Canada, in France

and in the United Kingdom, and were requested to invite their members to respond a questionnaire on the survey website. In addition, graduates whose e-mail addresses had been published on the internet were contacted personally and asked to participate.

Questionnaire

The questionnaire was divided into three parts. Part 1 focused on personal details (gender, nationality, age) and educational attainment (graduation year, country, specialty and level of the highest degree completed). In Part 2, respondents had to describe the extracurricular non-market activities which they practiced while they were studying. For each activity, respondents were requested to specify the type of activity (for instance child care or environmental protection), the time spent in the activity, the intensity of the involvement (simple participant or leadership level) and the context of practice (solo practice, family practice, practice with friends, practice within an association, and practice as a client of some service supplier). Respondents also had to specify their family situations while studying and before entering the labour market: married, with a partner or single, and the number of dependent children.

The third part of the questionnaire described the respondents' situations throughout the transition from higher education to the labour market. The transitional period was defined as the three years following graduation. The respondents were asked to specify any unemployment period, jobs under fixed-term or open-ended contracts, wages, working time and socioeconomic class of their positions at the beginning and at the end of the transitional period. They also had to describe the size, country and economic sector of the firms where the jobs were located.

Respondents

629 individuals responded the questionnaire. They constitute the population of the study. 51% were men. Ages ranged from 22 to 71, but the average age was 29. Thirty nationalities were represented in this population, the most frequent being French (58%), then British (15%), Canadian (14%) and Belgian (4%).

Most respondents (67%) held a master's degree, 28% a bachelor's degree and 4.45% a doctorate. The major fields of study were represented: mathematics, physics, chemistry, natural sciences, biology, geology and social and human sciences.

The year they graduated, the respondents were generally (73%) neither married nor living with a partner. Only 4% had dependent children. Most respondents (57%) engaged in extracurricular non-market activities. These activities were split into five types: sports (35% of all extracurricular activities), student associations (30%), activities in the social sector (e.g. public charities, homework help, legal aid, disaster relief: 14%), culture and spirituality (arts, literature, religion: 14%) and citizenship activities (politics, environmental protection, public safety: 4%). While most respondents were simple participants, 45% engaged at leadership level, for two years on average. Non-profit associations were the most frequent context for these activities (56%), but

participants also practiced with friends (18%), solo (9%), as clients of service suppliers (8%) or with their families (2%).

Statistical procedure

The data obtained were processed using regression methods. Five explanatory variables were taken into account, i.e. involvement (participation or not in extracurricular activities), type of extracurricular activity (sports, student associations, social sector, culture, citizenship), time spent in the activity, intensity of the involvement (simple participant or participation at leadership level), and context of practice (solo, with family, with friends, member of associations, client of service suppliers).

The effects of these potential factors were investigated as regards five categories of dependent variables, which were job security (access to open-ended contracts), occupational status, access to employment in large firms, wages, and unemployment. For each category, several alternative indicators and specifications were used.

Links between factors and dependent variables were analysed by means of linear and logistic regression models. Linear regression analysis was used when the dependent variables were quantitative (for instance wages or duration of unemployment). The linear regressions were run using ordinary least squares (OLS). Logistic regression analysis was used when the dependent variables were qualitative (for instance benefiting open-ended contracts or not, occupying managerial positions or not, being unemployed or not, and so forth).

A two-step estimation procedure was adopted. The first step consisted in estimating the effects of involvement alone. First-step estimations were run for the whole sample. The second step consisted in estimating the effects of all other factors put together. Second-step estimations were only run within the group of respondents with extracurricular experience.

In both linear and logistic estimates, explanatory variables were handled as qualitative variables, except for the time spent in activities, which is quantitative. Each qualitative explanatory variable was transformed to two (or more where necessary) dummy variables. The most prevalent dummies served as reference behaviours for interpretation. In both estimates, White's estimator was used because of its robustness to heteroscedasticity of unknown form.

3. Results

The first result is that extracurricular involvement in itself does not provide graduates with crucial advantage in their transition towards employment. In the sub-sample from France, no difference could be observed between graduates who involved and graduates who did not. In the sub-sample from the United Kingdom, as compared with the graduates who did not involve, those who did had more chances to begin their careers as managers, but have been unemployed for a significantly longer period of time before getting their first jobs. In some cases, extracurricular experience can even put graduates at a disadvantage. In the Canadian sub-sample, graduates with extracurricular experience were more likely to work under fixed-term contracts within the first three-year period, had less

chances to be employed in large firms, received lower wages, and had been unemployed for a longer period of time throughout the period. Finally, in the whole sample, it could be observed that the net effect of extracurricular experience upon the transition from higher education to work is rather negative. As compared with graduates who involved, those who did not were more likely to get an open-ended contract right from the first job and were employed under fixed-term contracts for a significantly shorter period of time within their first three-year period in the labour market. They also earned higher first-job wages. In the whole sample, no major difference between men and women could be observed. Within the interpretative framework inspired from statistical discrimination theory, this result means that employers generally tend to consider graduates' previous extracurricular involvement as a predictor of future turnover and costs.

The second result is that within the group of graduates with extracurricular experience, the nature of the experience matters. As can be seen from Tables 1-2 (please see Annex), school-to-work transition processes may differ according to the type, duration, intensity and context of the extracurricular activity. Four main processes could be observed.

First, most frequently in the population studied, graduates had been participating in sports within associations, without engaging at leadership level. The way the graduates which meet this profile enter the labour market defines the reference process.

A second process overperforms the reference process. Process 2 is defined as the trajectory followed by graduates who practiced with family or engaged at leadership level in student associations. These graduates benefited from more job security than those which met the standard extracurricular profile. They have had more chances of being working under open-ended contracts at the end of their first three-year period. Within these first three years, they have been unemployed for a shorter period of time. They also had a better access to employment in large firms right from the first job on. According to the interpretative framework of this study, Process 2 characterizes extracurricular behaviours which employers regard as less risky in terms of later turnover.

On the contrary, Process 3 underperforms the reference process. Process 3 characterizes the path followed by graduates who practiced solo and/or engaged in arts, culture, literature, religion, or in citizenship activities (politics, environmental protection, public safety), or in activities in the social sector. As compared with the graduates meeting the standard profile, these graduates experienced more job insecurity. They had less chances of getting an open-ended contract right from the first job on, and were more likely to experience unemployment within the three-year period, particularly before getting their first jobs. They also had less chances of getting a managerial position right from the first job on, and were more likely to begin their careers as office employees. It seems that employers have interpreted the extracurricular activities of these graduates as factors of high later turnover rate, and therefore restricted the access of these graduates to employment.

To end, Process 4 is characterized by ambiguous effects in comparison with the reference process. The first example of Process 4 is that of graduates who practiced for a long time as clients. These graduates were less likely to start their careers under open-ended contracts but also had less risks of being unemployed at the end of their first three-year period. Graduates who practiced with friends are another example of a twofold-effects process: they had more chances of being employed under an open-ended contract at the end of the first three-year period, but were unemployed for a longer period of time before getting their first jobs. Such mixed effects might mean that employers' attitudes towards these extracurricular behaviours are diverse and contradictory.

Conclusion

The objective of this paper was to explore some effects of students' extracurricular activity on their later access to the labour market. Results show that extracurricular activity has statistically significant effects on graduates' access to the labour market. As compared with others, graduates with extracurricular experience may be disadvantaged as regards labour market entry, especially in terms of job security and wages. Next, within the group of graduates with extracurricular experience, the very nature of the experience matters. Practice with family and participation at leadership level in student associations give access to better employment conditions than average as regards access to large firms, job security, and protection against the risk and duration of unemployment. On the contrary, signalling solo practice and participation in cultural, social or citizenship activities complicates and lengthens the access to job security, to protection against unemployment and to good occupational statuses.

Theoretically, these results raise the questions of the way employers derive a probability of turnover and quitting from the nature of the extracurricular activity. For instance, why would participation in cultural activities be considered as generating more turnover than participation in student associations? But practically, however that may be, the results obtained suggest ways for strategic use of extracurricular activity in students and graduates' transition to the labour market. These findings also suggest that reconsidering the place of extracurricular activities in education might be of advantage to institutions in the higher education market competition.

References

AMATO L., GANDAR J. M., TUCKER I. B. & ZUBER R. A. (1996), Bowls versus playoffs: the impact on football player graduation rates in the national collegiate athletic association, *Economics of Education Review*, 15(2), 187-195.

ARROW K. (1973), The theory of discrimination, in O. ASHENFELTER & A. REES (eds), *Discrimination in Labor Markets*, Princeton University Press, 3-33.

BLAU F. D. & KAHN L. M. (1981), Race and sex differences in quits by young workers, *Industrial and Labor Relations Review*, 34, 563-577.

BRUNELLO G. & COMI S. (2004), Education and earnings growth: Evidence from 11 European countries, *Economics of Education Review*, 23(1), 75-83.

CHAPLIN D. & HANNAWAY J. (1996), *High school employment: meaningful connections for at-risk youth*, Research report, The Urban Institute, 2100 M Street, NW, Washington, D. C. 20037.

CLOTFELTER C. T. (2001), Who are the alumni donors? Giving by two generations of alumni from selective colleges, *Nonprofit Management and Leadership*, 12(2), 119-138.

DESJARDINS S. L., DUNDAR H. & HENDEL D. D. (1999), Modeling the college application decision process in a land-grant university, *Economics of Education Review*, 18(1), 117-132.

EHRENBERG R.G. & SHERMAN D.R. (1987), Employment while in college, academic achievement, and postcollege outcomes: a summary of results, *Journal of Human Resources*, 22(1), 1-23.

EIDE E. R. & RONAN N. (2001), Is participation in high school athletics an investment or a consumption good?, *Economics of Education Review*, 20(5), 431-442.

FLORES-GONZALEZ N. (2000), The structuring of extracurricular opportunities and Latino student retention, *Journal of Poverty*, 4(1-2), 85-108.

GAGER C. T., COONEY T. M. & CALL K. T. (1999), The effects of family characteristics and time use on teenagers' household labor, *Journal of Marriage and the Family*, 61(4), 982-994.

GARCIA-MINGUEZ P. & SANCHEZ-LOSADA F. (2003), Statistical discrimination and growth: should we subsidize discriminated against workers?, *Economics Letters*, 79(2), 255-261.

GERBER S. B. (1996), Extracurricular activities and academic achievement, *Journal of Research and Development in Education*, 30(1), 42-50.

GRINDER B., COOPER D. W. & BRITT M. (1999), An integrative approach to using student investment clubs and student investment funds in the finance curriculum, *Financial Services Review*, 8(4), 211-221.

LIGHT A. (1999), High school employment, high school curriculum and post school wages, *Economics of Education Review*, 18(3), 291-309.

LIGHT A. (2001), In-school work experience and the returns to schooling, *Journal of Labor Economics*, 19(1), 65-93.

MCNEAL R. B. JR. (1999), Participation in high school extracurricular activities: investigating school effects, *Social Science Quarterly*, 80(2), 291-309.

MADSEN E. R., DONOHUE S., BROSNAHAN A., MCALLISTER T., VALDEZ I. & BRAVERMAN M. T. (2002), Survey explores influences on youth workforce preparation, *California Agriculture*, 56(2), 48-54.

OECD (2004), *Career guidance and public policy – Bridging the gap*, Paris.

PHELPS E. (1972), The statistical theory of racism and sexism, *American Economic Review*, 62(4), 659-661.

RAGAN J. F. & SMITH S. P. (1982), Statistical discrimination as applied to quit behavior, *Quarterly Review of Economics and Business*, 22, 104-112.

RENES G. & RIDDER G. (1995), Are women overqualified?, *Labour Economics*, 2, 3-18.

SATTINGER M. (1998), Statistical discrimination with employment criteria, *International Economic Review*, 39(1), 205-237.

SULOC J. M. (1982), The demand for community college education, *Economics of Education Review*, 2(4), 351-361.

TUCKER I. B. (2004), A reexamination of the effect of big time football and basketball success on graduation rates and alumni giving rates, *Economics of Education Review*, 23(6), 655-661.

VISCUSI W. K. (1980), Sex differences in worker quitting, *Review of Economics and Statistics*, 62, 388-398.

WEILER W. C. (1996), Factors influencing the matriculation choices of high ability students, *Economics of Education Review*, 15(1), 23-36.

Annex

Table 1. The effects of the nature of the extracurricular activity – Coefficients of the linear estimates (T-stats are in parentheses)

	Size of the firm where the first job was located N = 332	Duration of unemployment preceding the first job N = 313	Total duration of unemployment within the first three-year period N = 319
Type of extracurricular activity			
Student associations	0.01 (0.15)	0.32 (0.58)	1.06 (1.40)
Activities in the social sector	-0.001 (-0.009)	0.75 (1.01)	0.57 (0.71)
Citizenship activities	-0.18 (-0.84)	0.07 (0.11)	0.67 (0.64)
Culture and spirituality	0.008 (0.06)	1.10 (1.48)	1.65 (1.54)
Sports: reference category – Omitted			
Time spent in extracurricular activities	0.0008 (0.58)	-6.29e-4 (-0.14)	0.007 (0.80)
Intensity of the involvement			
Leadership level	0.09 (0.92)	-0.59 (-1.42)	-1.12* (-1.83)
Simple participant: ref. category – Omitted			
Context of the practice			
Solo	-0.22 (-1.34)	0.24 (0.27)	0.29 (0.30)
With family	0.40** (2.23)	0.03 (0.003)	-1.95* (-1.76)
With friends	-0.06 (-0.51)	1.11* (1.67)	0.13 (0.20)
As clients of service suppliers	-0.10 (-0.58)	-0.66 (-1.52)	-0.10 (-0.13)
Within non profit associations: ref. category – Omitted			
Constant	2.26*** (20.16)	1.11** (2.09)	1.76*** (2.66)
R^2	0.0301	0.0498	0.0252

***: Significant at the 1% level
**: Significant at the 5% level
*: Significant at the 10% level.

Table 2. The effects of the nature of the extracurricular activity – Odds ratios of the logistic estimates (Z-ratios are in parentheses)

	Probability of								
	getting an open-ended contract right from the first job N = 317	being employed under an open-ended contract at the end of the first three-year period N = 227	occupying a managerial position right from the first job N = 322	being in a managerial position at the end of the first three-year period N = 239	reaching a managerial position within the first three-year period N = 297	beginning one's career as an office employee N = 322	getting an office employee position within the first three-year period N = 253	experiencing unemployment before getting the first job N = 313	being unemployed at the end of the first three-year period N = 139
Type of extracurricular activity									
Student associations	0.63 (-1.19)	5.15** (2.54)	1.03 (0.08)	1.54 (0.92)	1.80 (1.20)	1.05 (0.12)	1.05 (0.11)	1.48 (0.96)	1.60 (0.37)
Activities in the social sector	0.68 (-0.94)	1.79 (1.02)	1.01 (0.02)	1.31 (0.55)	1.23 (0.41)	0.99 (-0.005)	0.88 (-0.24)	2.24* (1.91)	-
Citizenship activities	1.31 (0.38)	2.97 (1.06)	1.00 (0.01)	1.83 (0.74)	1.38 (0.39)	0.89 (-0.13)	0.62 (-0.56)	1.89 (1.02)	18.05** (2.09)
Culture and spirituality	0.68 (-0.95)	1.08 (0.16)	0.58 (-1.42)	1.06 (0.12)	0.78 (-0.50)	2.91** (2.48)	2.31* (1.95)	2.48** (2.24)	2.01 (0.47)
Sports: reference category – Omitted									
Time spent in extracurricular activities	0.99* (-1.91)	0.99 (-0.63)	1.00 (0.26)	0.99 (-0.63)	1.00 (0.04)	1.00 (0.45)	1.00 (0.86)	1.00 (0.40)	0.95** (-2.43)
Intensity of the involvement									
Leadership level	0.67 (-1.32)	0.60 (-1.16)	0.80 (-0.73)	0.73 (-0.82)	0.76 (-0.71)	0.82 (-0.54)	0.74 (-0.83)	0.69 (-1.18)	0.49 (-0.83)
Simple participant: ref. category – Omitted									
Context of the practice									
Solo	0.40** (-2.01)	1.31 (0.35)	0.46* (-1.75)	0.86 (-0.24)	0.68 (-0.66)	2.03 (1.46)	1.59 (0.93)	0.58 (-0.99)	0.46 (-0.58)
With family	0.40 (-1.03)	-	1.39 (0.39)	1.03 (0.04)	0.74 (-0.33)	0.48 (-0.60)	0.82 (-0.22)	0.59 (-0.59)	-
With friends	1.03 (0.09)	2.85* (1.78)	1.08 (0.22)	2.14 (1.49)	1.74 (1.07)	0.89 (-0.26)	0.70 (-0.78)	1.22 (0.61)	-
As clients of service suppliers	0.36** (-1.96)	1.22 (0.31)	1.74 (0.96)	4.51* (1.74)	6.30* (1.67)	0.54 (-0.90)	0.49 (-1.07)	0.69 (-0.66)	-
Within non profit associations: ref. cat. – Omit.									
Pseudo-R²	0.0421	0.0693	0.0235	0.0340	0.0373	0.0409	0.0313	0.0281	0.1467

***: Significant at the 1% level
**: Significant at the 5% level
*: Significant at the 10% level.