

From Education to the Labor Market in Lithuania: The Role of Youth and Parental Education

By
RUTA BRAZIENE

This article examines how the education of youth and parents influences the transition of youth from schooling to the labor market. I use a representative survey of youth aged 16 to 29 ($N = 1,590$) in Lithuania in 2013 to create an analysis that yields estimates of the influence of family education on factors such as youth employment, obstacles to finding a first job, and difficulties in the first job. My hypothesis that youth from families with less education have greater difficulties in the labor market transition was confirmed. My hypothesis that the higher the parents' education, the easier it is for young people to adapt in the first workplace was also confirmed. Results also reveal that lower parental education means that their children lacked general workplace competencies, had less-decent working conditions, and faced other difficulties in the labor market.

Keywords: youth; labor market; role of education; youth transition; school-to-work transition

Shifting labor markets and prolonged education have destabilized youth transitions from education to the labor market. Economic globalization and social transformation have resulted in increased uncertainty about the future of young people in the labor market (Blossfeld et al. 2005). Social change has affected all young people, but there are considerable variations across countries, reflecting differences in education and employment systems, as well as differences in preferences and cultural norms (Schoon and Lyons-Amos 2016).

In many European countries, the question of whether youth can successfully transition from education to the labor market has been a

Ruta Braziene is chief researcher at the Lithuanian Research Centre, Labour Market Research Institute. She is an expert in the fields of labor market and employment policies, labor market participation, and employment of different groups (youth, women, elderly, and the disabled).

Correspondence: ruta.braziene@dsti.lt

DOI: 10.1177/0002716220908254

central concern. Expansion of higher education and skill-based technological progress have changed the youth labor market, and the school-to-work transition has become more complex as clear and normative linear life trajectories no longer characterize young people's movement through education, work, and personal relationships (European Group for Integrated Social Research [EGRIS] 2001). Young people spend more time in education than previous generations, and the school-to-work period in which individuals settle into the labor market takes relatively longer.

Lithuania presents an interesting case study of youth transitions because of the profound social, economic, and political changes that have taken place in the country during the last decades. After regaining independence in the 1990s, there was a complete restructuring of the educational system and the labor market in Lithuania. The last decade in the country has been characterized by a huge educational expansion, labor market restructure, and enormous emigration of young people from the country.

There are myriad studies of the youth transition from school to work, and many different ways of evaluating the quality of the school-to-work transition have been considered in the scientific literature. Most of them focus on the first job duration, whether the person finds a job immediately after exiting education, or experiences of unemployment (Arum and Shavit 1995). Research on Western and Eastern European countries has highlighted the central role of educational qualifications for the labor market integration of youth (Kogan 2011; Müller and Shavit 1998). Scholars often question whether education creates any labor market advantages, that is, whether there are any positive returns to education. This is because social ties, not education, are assumed to be the key resource that helps not only in finding a job quickly but also in accessing good ones (Kogan 2011; Kogan, Matković, and Gebel 2013). This article adds to the broader literature by providing an analysis of how household education (the education of youth and parents) influences transitions from school to the labor market in a European country that is undergoing transformative social and economic change.

Understanding School-to-Work Transitions

The transition from education to the labor market is one of the most important factors that determines professional socialization and social integration (Masdonati 2010). Scientific literature presents numerous concepts of youth transition from school to the labor market (e.g., Brzinsky-Fay 2008, 2013, 2011; International Labour Organization [ILO] 2009; Elder 2009; Marchetti et al. 2001; Green, Owen, and Wilson 2001). The transition from education to the labor market can be described as having *achieved the status or position in the labor market during the relevant period of time*. Most of the research on the transition from education to the labor market defines this period as between youth exit (15–29 years old) from the education system (acquisition of appropriate education or completed training/study) before the first proper job search. In recent years there has been a lot of adjustments in the definition of the first job. The most common definition

of first job describes it as “the first significant work, in which a person worked for at least six months or a year,” eliminating short periods of employment in temporary jobs. Marchetti et al. (2001) describe the transition from education to the labor market as “the process leading from the education system to a relatively stable position in the employment system” (p. 63). The ILO defines the transition from education to the labor market as the period between learning completion and the first permanent/decent work obtained.¹ In this research, “decent work” was defined as a workplace with contractual arrangements that meet the expectations of the youth worker (salary, working hours), offer satisfactory work security, and offer basic employment benefits.

Youth transition from school to work is a complex multidimensional phenomenon determined by multiple interacting factors, in particular macro-level factors: *demographic indicators* (the share of youth in the general population), *local and global labor market structures* (flexibility, economic cycles), and *regulatory wages mechanisms* (minimum rates of pay, minimum wage) (e.g., Hannan, Raffé, and Smyth 1996; ILO 2012; Versnel et al. 2011; Saar, Unt, and Kogan 2008). Over the past decades, this transition has been accompanied by globalization processes (e.g., changing labor market structures, migration, digitalization) that have determined significant socioeconomic transformations and, as a result, significant changes in the structure of employment (Castells 2005; Reitzle and Silbereisen 2000; Minguez, Pelaez, and Sánchez-Cabezudo 2012). As Buchholz and Blossfeld (2012) have stressed, the labor markets of modern societies have become segmented and marked by increased social inequalities. Young people are the social group that is particularly vulnerable to fluctuations in employment opportunities.

Despite the abundance of research on youth transitions from education to the labor market, and the diversity of aspects covered by such research, many scholars acknowledge that there is still no unified theoretical explanation for the youth transition from education to the labor market (Brzinsky-Fay 2011, 2013). According to Brzinsky-Fay, the most disagreement is observed when analyzing micro-level processes in the transition from education to the labor market (Brzinsky-Fay 2013; Raffé 2008). A large part of empirical research is based on the application of human and social capital theories (Becker 1993), economic theories (i.e., job-seeking theories; Mortensen 1986; van den Berg 1990), theoretical access to acquired occupational and labor market needs (Jovanovic 1979), and macroeconomic approaches (Mortensen 1986).

Educational attainment is very important for both employment and social reasons (Kogan 2011; Müller and Shavit 1998). OECD data have shown educational attainment links to higher education (OECD 2010). Higher educational attainment is also associated with higher occupational status (Müller and Shavit 1998) and higher social and cultural capital (Bourdieu 1973; Lamont and Lareau 1988; Lareau 2011). For many decades, scholars have examined the effect of family background on the educational achievement of children (Blau and Duncan 1967). In one model, the Wisconsin model of status attainment, family contributions include the socioeconomic contributions made by parents for their child's future educational and occupational outcomes—intergenerational transmission

of opportunities (Hauser 2009; Hauser, Sewell, and Alwin 1976). The model describes intergenerational transmission of opportunity as a chained pattern with family resources affecting youth in ways that subsequently influence educational attainment, future income, and occupational status. Young people from poor families often have lower educational levels or work for lower financial rewards. Poverty is one of the key factors preventing children/young people from gaining education and vocational training, both of which ensure a smoother transition from education to the labor market. Stages of an individual's life cycle, such as leaving school, getting married, giving birth, and so on play an important role in the further stages of the individual's life, and also influence the welfare of future generations of the family. According to the ILO (2012), there is a statistically significant correlation between families with no member employed and youth unemployment. On the other hand, a central hypothesis of the modernization theory is that as Western societies are becoming more open, individuals' educational and socioeconomic outcomes are increasingly based on their own achieved characteristics and less tied to their social background or origins (Blau and Duncan 1967; Erikson and Goldthorpe 1992).

Depending on the institutional infrastructure in European countries, there are very different patterns of young people's transition from education to the labor market (Brzinsky-Fay 2011). Researchers argue that the shift in these patterns is determined by the education and training system's standardization and stratification level (Allmendinger 1989), vocational training (Wolbers 2007), and the employment system (Wolbers 2007; Breen 2005), among other factors. As noted by Pastore (2007), in the early 1980s the main instrument that increased youth employment was labor market flexibility, which later proved to be insufficient, until the emphasis on education and training reform took over.

Most European societies have undergone huge educational expansions, at all levels. The expansion of education means more opportunities for students from lower socioeconomic or disadvantaged backgrounds. Educational expansion means such students are still competing for high-status postschool education, whereas in previous generations, most would have already left school. Unfortunately, educational expansion does not always lead to stable and well-paying positions in the labor market. The job opportunities for young people also depend on the job supply and general labor market characteristics. According to some researchers (Green, Owen, and Wilson 2001; Müller and Shavit 1998), the more the education system corresponds to the needs of the labor market, the more successful young people will be in the labor market. In other words, qualifications and competences will be more in line with labor market needs, and young people's transition from education to the labor market will be smooth and successful. How education systems are organized is another important factor and one of the key aspects in studies of intercultural comparative youth engagement or transition into the labor market (Chisholm et al. 2011). There are also other important factors, such as educational and employment policy, minimum school-leaving age, opportunities for lifelong learning, and the quality of vocational training.

Education and the Labor Market in Lithuania

Lithuania is an important case study, because there has been a great deal of social and economic change during the last decades. The planned economy has been replaced by a market economy, and new political institutions have been created. Also, the country is representative of emerging European economies, with rapid economic growth—increasing gross domestic product (GDP), real wages, household income, and consumption levels. When there was a planned economy, “the transition from school to work was smooth, as the first workplace was often assigned to the young people by state agencies, supported by employers and secured for all school leavers, virtually irrespective of their level of education” (Saar, Unt, and Kogan 2008, 34). This article examines the transition of young people from the education system to the labor market in a transformed socioeconomic context.

Comprehensive analysis of youth transitions from education to the labor market and the role of youth and parental education is rather limited in Lithuania; however, there are a handful of studies aimed at the youth school-to-work transition in Lithuania (Braziene and Dorelaitiene 2012; Braziene and Merkys 2013). The majority of the studies in Lithuania are focused on the general youth integration into the labor market, integration of socially vulnerable groups (long-term unemployed, disabled youth, and so on), and the role of nongovernmental organizations (NGOs) in youth integration into the labor market (Okunevičiūtė-Neveauskienė and Moskvina 2008; Okunevičiūtė-Neveauskienė and Šlekienė 2008). During the Soviet period in Lithuania, the transition from education to the labor market was smooth—most of the time, the state decided where a graduate from a high school or vocational school would work and, in most cases, even be assigned to a specific job (Saar, Unt, and Kogan 2008). The structure of education and curriculum content were divided into two types: general and vocational. The link between the level of education and future work was clearly defined.

Social and economic transformations fundamentally changed the education system and the labor market in Lithuania. Lithuania, like other post-Communist countries, inherited a highly centralized educational system (Saar, Unt, and Kogan 2008). Changes in the infrastructure of the educational system included education content (the development of curriculum content, organizational structure of educational institutions) and the emergence of private schools (primary, secondary, and higher education). If the content of study in the Soviet period was very closely linked to the specifics of the workplace, there is a growing gap between the content of the curriculum and the specific needs of the workplace now. This is evident in the fact that in the last two decades, the number of students in universities and other types of higher education institutions, as well as people with higher education in the general population, have increased very rapidly in Lithuania. Secondary school in Lithuania is not segregated, and Lithuania has a comprehensive secondary school model. Generally, the majority of young people complete secondary education with university entrance qualifications, with the exception of graduates of youth schools (schools with certified

secondary education programs for students facing difficulties in learning, behavioral disorders, or living in disadvantaged neighborhoods) and adult education centers. Participation in tertiary education has increased considerably in Lithuania during the last decades. The tertiary educational level shows an increasing trend in the population for those aged between 20 and 34 (20–24, 25–29, and 30–34 years old). The tertiary educational attainment for the 30- to 34-year-old group is one of the highest in the European Union (68.8 percent for women and 48.1 percent for men).³

Significant expansion of higher education is undoubtedly due to changes in the labor market and, consequently, the need for specialists in the relevant fields. A corresponding trend is also observed in other countries in Eastern and Central Europe (Saar, Unt, and Kogan 2008). According to the European Commission (2009), the nature of the Lithuanian labor market can be described as low employment rate, high skills, and qualifications mismatches similar to other labor markets of transitional economies. One of the consequences of this education expansion is a mismatch between the skill supply and skill demand in the labor market. In addition, an ILO (2012) study concluded that Lithuania has a high degree of inconsistency between acquired qualifications and occupied job posts.

Data and Method

This article is based on data collected from the research project “Transition of Lithuanian Youth from Education to the Labor Market: Development of Monitoring Indicators” (TRANSMONITOR). This research was supported by a Lithuanian Science Council National Research Programme called “Social Challenges for National Security” (2012–2014). A representative survey ($N = 1,590$) of youth aged 16 to 29 in Lithuania creates an opportunity for a factor analysis of influences in the school-to-work transition. Out of forty-eight indicators (see Table 1), six scales, representing different aspects of an (un)successful transition from education to the labor market, were created: difficulties in finding the first job, evaluation of employability, unemployment (causes) index, lack of preparation for work (education and experience), decent working conditions, and family roles and responsibilities as obstacles to successful employment.

The quality of the scales presented in Table 1 reflect high coefficients of reliability and high factor loadings of primary indicators. The differences between the groups were controlled by using the one-factor analysis of variance (ANOVA) and the Kruskal Wallis test.² Based on the Cohen Effective Size Concept, only those differences that were above the 0.20 z -scale were considered. Also, contingent analysis and chi-square statistics were used to evaluate the relationship between categorical variables. While differences among groups are statistically significant, only group comparisons were used for further analysis. I used the K-mean cluster analysis to find youth employability types.

TABLE 1
Scales' Characteristics and Items

Scales	Statements	N Items	Cronbach's α Coeff.	Spearman Brown Coeff.
Difficulties in the first job	<ul style="list-style-type: none"> • The job was physically very hard • I lacked practical skills • I lacked theoretical knowledge • I lacked team work skills • I lacked communication skills • I was controlled by an employer too much 	15	.88	.81
The Scale for Evaluation of Employability (joint scale)	<ul style="list-style-type: none"> • I have no appropriate education • I have no suitable profession in the labor market • I have no working experience • The supply of work in the labor market is poor • The proposed salary in the labor market is too low • I'd rather be unemployed than work almost for free • I will work only if I find a job with a good pay 	11	.79	.70
Unemployment (causes) index	<ul style="list-style-type: none"> • I have no appropriate education • I have no working experience • I have no suitable profession in the labor market • There is no work in my residential area • I have no compulsion to work • I can't find a work that is attractive to me • The proposed salary in the labor market is too low 	7	.663	.663
Lack of preparation for work (education and experience)	<ul style="list-style-type: none"> • I have no appropriate education • I have no working experience • I have no suitable profession in the labor market 	5	.599	.600
Decent working conditions	<ul style="list-style-type: none"> • The job was physically very hard • My salary was very low and I needed to work very hard • I had to work long hours and overtime 	5	.697	.755
Family roles and responsibilities as obstacles to successful employment	<ul style="list-style-type: none"> • I am taking care of disabled/elderly relative • I am taking care of a young child • It is difficult for me to reconcile family and work responsibilities 	5	.797	.948

Independent variables

The independent variables used for further analysis were (1) parents' educational level and (2) the type of school completed by youth. Parents' education was operationalized as a three-step ordinal scale variable, reflecting the parents' three educational groups: *none of the parents has tertiary education; at least one of the parents has tertiary education; both parents have tertiary education*. For the comparison of the groups' ANOVA and Kruskal Wallis, nonparametric tests were used. The independent variable reflecting the respondents' completed school type was operationalized into three stages in the ranking scale: (1) completed gymnasium,⁴ (2) completed secondary school, and (3) completed youth school or adult education center.⁵ It is important to note that completed school type can systematically influence different transition indicators. For the comparison of group estimates, single-factorial dispersion analysis and a nonparametric criterion for Kruskal Wallis were used. All scales included in the analysis were formulated as z -scales of the standard normal distribution. When comparing group estimates, the statistical reliability of the test took into account the size of the sample subsets and also the effective size. Working with standard zeros, it was not necessary to calculate the effect size, but just the differences between the groups that were: (1) equal to or greater than one-fifth of the standard deviation or 0.20 z -score or (2) condition satisfied $p \leq .05$. The research hypotheses were as follows: (1) Youth from less educated families have relatively greater difficulties during the first work transition and adaptation. (2) The higher the parents' education, the easier it is for a young person to adapt to their first job.

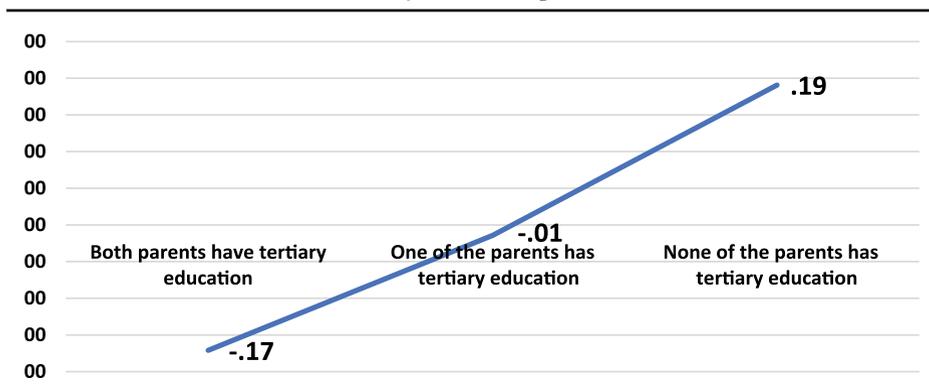
Research Findings

After analysis of differences in three educational groups of parents using *difficulties in the first job* z -scale, I found that the higher the education of parents, the less difficulties young people experience in their first job. The difference between the extreme is 0.36 z -scale, or slightly more than one-third of the standard deviation (see Figure 1). The research results clearly indicate that youth from families with less-educated parents have relatively higher adaptation difficulties in the first job. This can be explained by the fact that youth from a lower educational background naturally bring to their first workplace "weaker" social and cultural capital, their own class experience, and a social and cultural capital deficit. All these make these young people's adaptation into the first job rather less smooth and successful.

Further analysis of youth experiences in the labor market according to the completed type of educational institution indicate that the graduates of youth schools/adult education centers tend to experience more difficulties in the first job (see Figure 2).

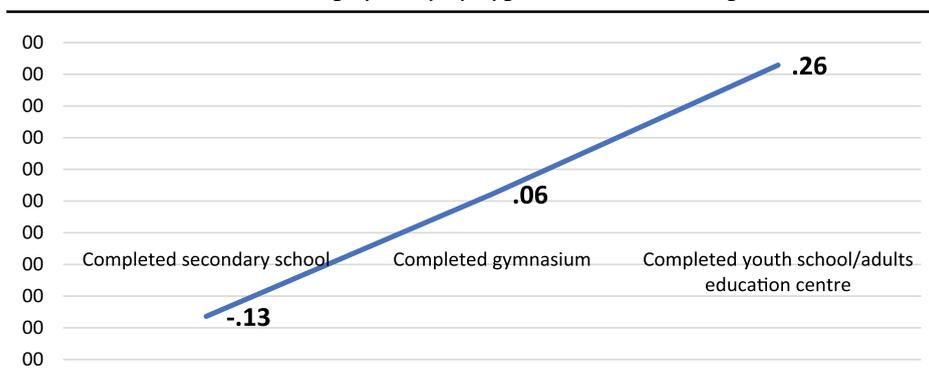
Single diagnostic construct scales show statistical regularities in that the lower the parents' education, the more respondents emphasized their lack of general competences (the difference between extreme groups reaches 0.26 z -scale

FIGURE 1
Difficulties in the First Job according to Parental Education



NOTE: ANOVA, $F = 6.198$, $df = 2,540,542$, $p = .002$; when $\alpha = .01$.

FIGURE 2
Evaluation of Employability by Type of Education Completed



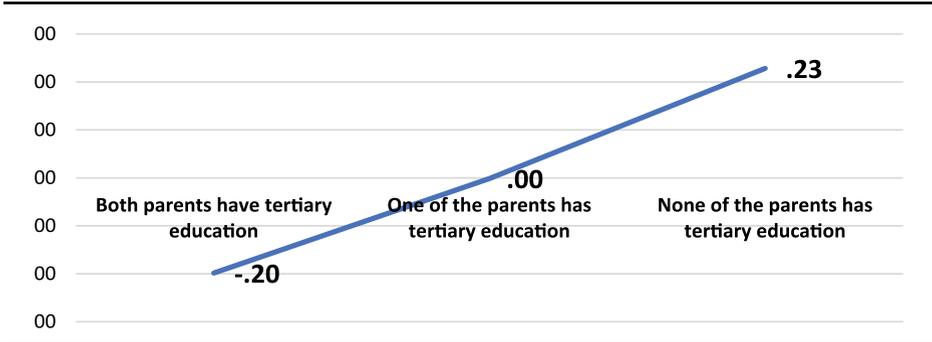
NOTE: ANOVA, $F = 3.665$, $df = 2,528,530$, $p = .026$; when $\alpha = .38$.

points). The lower the parents' education, the more emphasis is placed on the unpleasant circumstances that the respondents encounter in the first job, e.g., *hard work for a very low salary* (difference -0.43 z-score) (see Figure 3).

Important statistical differences were found while using *hard work for a very low salary* z-scale. Young people from socially weaker families may be more willing to work for low wages than their peers who come from more educated families. Also, there is a trend that young people from higher social background families find better jobs. This can partly be explained by the transfer of socioeconomic status from generation to generation.

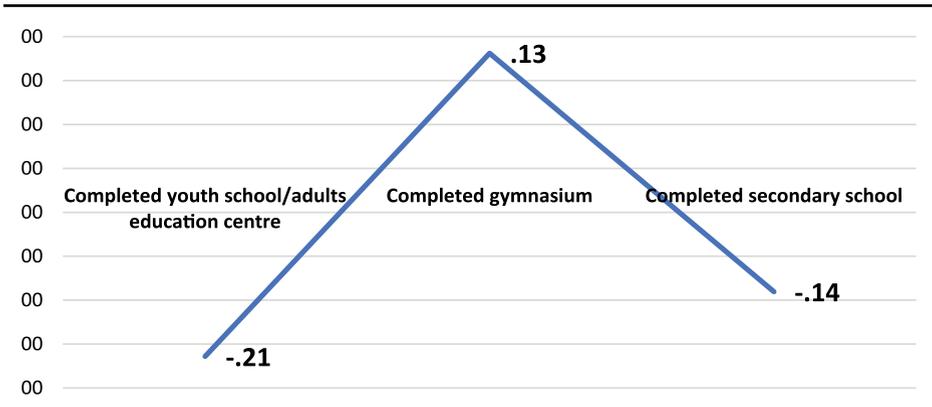
Graduates of the gymnasium (especially when compared with graduates of youth and adult education centers) feel less prepared for the transition and feel they lack relevant experience (Figure 4). The difference between in-group estimates by this attribute is approximately one-third of the standard deviation (or 0.35 z-score

FIGURE 3
Decent Working Conditions



NOTE: ANOVA, $F = 8.960$, $df = 2,568,570$, $p = .000$; when $\alpha = .01$.

FIGURE 4
Lack of Employability Skills (Education and Work Experience)



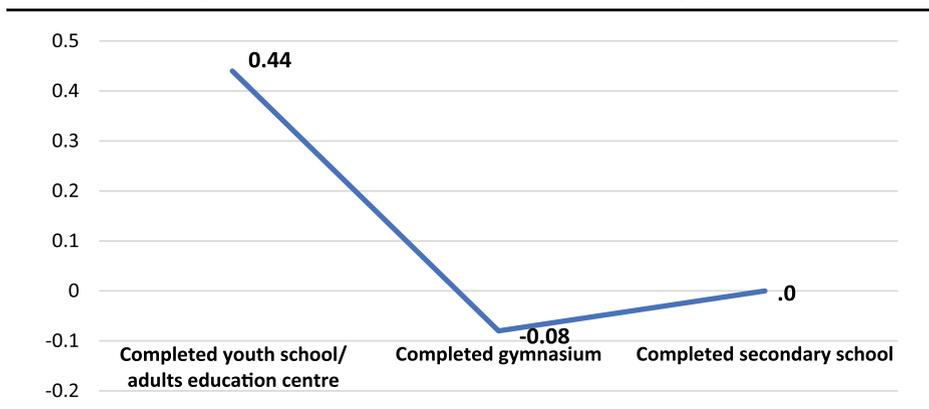
NOTE: ANOVA, $F = 5.506$, $df = 2,548,550$, $p = .004$; when $\alpha = .001$.

points). Family education and cultural capital are very important independent variables that affect children’s and youth achievements in different school subjects, for example, natural sciences, reading skills (e.g., TIMSS,⁶ PIRLS⁷).

Family responsibilities are another obstacle to a successful and smooth transition to employment, and they are more often relevant for graduates of youth schools and adult education centers (Figure 5). The difference between groups is (0.52 z-score). The very different educational path of youth school graduates in Lithuania explains the difference between groups. A large portion of youth school graduates represent the most disadvantaged part of Lithuanian society.

For K-mean cluster analysis,⁸ the unemployment (causes) index was used. The aim was to determine what statistical types could be found that are likely to exist in the Lithuanian youth population according to their perceived obstacles to successful employment. The aim was to identify the groups of youth that are facing major challenges to a successful transition from education to the labor market. The initial

FIGURE 5
Family Responsibilities as an Obstacle for Successful Employment, z-Scale



NOTE: ANOVA, $F = 4,063$, $df = 2,542,544$, $p = .018$; when $\alpha = .01$.

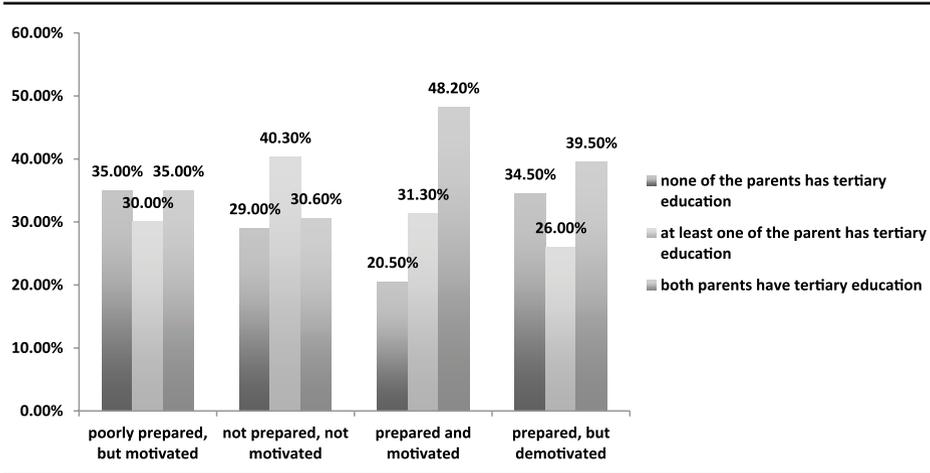
variables are presented in Table 2. In total, they were classified according to seven primary survey indicators. In the table, the cluster analysis results are presented: (1) formed groups (clusters) and their relative names, (2) z-estimates of all three subscales inside each cluster, and (3) prevalence of the population of the group (statistical type) in the studied population. Iteratively, models 2, 3, and 4 were tested for clustering. Subsequently, the model of four clusters in the theoretical interpretation was reduced to the classification model of two groups, for example, the socially favorable group, characterized by satisfactory employment; and the socially unfavorable group, characterized by unsatisfactory employment. As a result of cluster analysis, four statistical types of youth according to their potential employability were found. One type, “ready and motivated,” makes up a relatively small group (15 percent). The youth in this group usually choose their studies and profession based on internal motives, and their adaptation in their first job is smooth. Another group is “insufficiently prepared but motivated” (22 percent). For this type, a positive motivation to work is a key predictor of behavior and their success. Twenty-three percent of youth belong to the most disadvantaged group. This type is called “poorly prepared and weakly motivated.” This type is characterized by the most unfavorable estimates of all three subscales on which the clustering was based. Finally, the most common type, with a prevalence of 40 percent, is characterized by moderate readiness and poor job motivation. These two types of disadvantage in terms of employability are characterized by the fact that they have chosen the profession and studies on the basis of ad hoc motives with lack of responsibility. They did not have effective teaching practice, and in their first job they experienced more adaptation difficulties than other groups of young people.

The contingency analysis found that the largest group of youth that is prepared and motivated for the labor market originate from families where both parents have tertiary education. The analysis of how the employability of young people related to other sociodemographic characteristics (e.g., gender, the type of school completed) is not statistically significant.

TABLE 2
Parents' Clusters by Education

Parental Educational Categories				
Four-clusters model	Both parents have completed tertiary education	Mother with tertiary education, father without tertiary education	Father with tertiary education, mother without tertiary education	None of the parents has tertiary education
Three-clusters model	Both parents have completed tertiary education	At least one of the parents has completed tertiary education		None of the parents has tertiary education

FIGURE 6
Youth Employability Types according to Parental Education



NOTE: Four-clusters model; N = 1,580.

These results can be explained by Bourdieu's cultural and social reproduction theory (Bourdieu 1973, 1986; Bourdieu and Passeron 1990; see Figure 6). Results indicate that the higher the education, and cultural and social capital of a young person's family of origin, the more likely the transition from school to work will be successful for that young person.

Conclusion

The findings from this research demonstrate that parental education is important to youth transitions from school to work. Family origin and socioeconomic background play an important role in youth educational and labor market outcomes.

The findings confirm previous research (Bourdieu 1984, 1998; Bourdieu and Passeron 1990; Lareau 2011) that emphasize the role of parental education, family social and economic background, and social and cultural capital. Parents with higher education levels have greater expectations of their children's achievements in education and work. Moreover, families provide different resources to facilitate children's education. Family social capital, parental education, and parental educational expectations of their children are important mechanisms by which parental social status is transmitted to the next generation.

There are myriad studies in Western countries aimed at analysis of the youth transition from education to the labor market (e.g., Brzinsky-Fay 2011, 2013). However, analysis of this phenomenon in post-Communist countries, and Lithuania in particular, is limited. This study contributes to a better understanding of the role of youth and parental education in the transition from education to the labor market in the post-Communist countries. The research results clearly indicate that youth from families with less educated parents have more difficulties in the labor market and the first job.

Finally, this study is limited by the fact that only Lithuania was analyzed, and only one educational indicator was used. Future research could conduct similar studies in other countries with different welfare state regimes and education systems. Such research could provide a better understanding of the role of social origin and education in youth transitions from school to work.

In Lithuania, there is a need for more comprehensive analysis of links between the education system and the labor market—for example, monitoring education and human resources, forecasting qualification needs, and training specialists. There have been first attempts to harmonize the transition from education to the labor market in Lithuania with comprehensive reforms of the education sector. In higher education, one reform has aimed to (1) optimize the network of higher education institutions by merging overlapping programs and (2) implement curriculum that better satisfies the needs of the labor market. There are still challenges to overcome, such as the asymmetry between higher education and vocational training, and the mismatch between education and labor market demands. This study disclosed the weaknesses of the labor market system in Lithuania. To remedy those weaknesses, early vocational guidance for students is necessary.

Notes

1. ILO (2009, 17) defines “decent work” as having the following characteristics: (1) has contractual arrangements that meet the expectations of the young worker; (2) does not qualify as underemployed; (3) does not qualify as overemployed; (4) pays at or above the average monthly wage rate of young workers; (5) offers satisfactory job security, association of workers; and (6) offers the possibility for worker participation in labor unions or association of workers offers basic employment benefits, among which are paid sick and annual leave (characteristic not applied to self-employed youth).

2. The Kruskal Wallis test is the nonparametric alternative to one-way ANOVA. The test determines whether the medians of two or more groups are different.

3. See Eurostat, https://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=edat_lfs_9903&lang=en.

4. A gymnasium is a type of school with certified secondary education programs for students with the highest academic achievements. Admission to gymnasium only occurs after successfully completing entry exams.
5. A youth school or adult education center is a type of school with certified secondary education programs for students facing difficulties in learning, behavioral disorders, or living in disadvantaged neighborhoods. It has no admission requirements.
6. International Results in Mathematics Study.
7. International Results in Reading Study.
8. K mean cluster analysis is an algorithm that groups similar objects into groups called clusters.

References

- Allmendinger, J. 1989. Educational systems and labour market outcomes. *European Sociological Review* 5:231–50.
- Arum, Richard, and Yossi Shavit. 1995. Secondary vocational education and the transition from school to work. *Sociology of Education* 68 (3): 187–204.
- Becker, Gary S. 1993. *Human capital. A theoretical and empirical analysis with special references to education*, 3rd ed. Chicago, IL: University of Chicago Press.
- Blau, Peter M., and Otis D. Duncan. 1967. *The American occupational structure*. New York, NY: Wiley.
- Blossfeld, Hans Peter, Erik Klijzing, Melinda Mills, and Karin Kurz. 2005. *Globalization, uncertainty and youth in society*. New York, NY: Routledge.
- Bourdieu, Pierre. 1973. Cultural reproduction and social reproduction. In *Knowledge, education and cultural change*, ed. Richard Brown, 71–112. London: Tavistock.
- Bourdieu, Pierre. 1984. *Distinction: A social critique of the judgement of taste*. Trans. R. Nice. Cambridge, MA: Harvard University Press.
- Bourdieu, Pierre. 1986. The forms of capital. In *Handbook of theory and research for the sociology of education*, ed. John G. Richardson, 241–58. New York, NY: Greenwood Press.
- Bourdieu, Pierre. 1998. *The state nobility: Elite schools in the field of power*. Stanford, CA: Stanford University Press.
- Bourdieu, Pierre, and Jean-Claude Passeron. 1990. *Reproduction in education, society and culture*. London: Sage Publications.
- Braziene, Ruta, and Agne Dorelaitiene. 2012. Transition of youth from education to the labour market: The case of Lithuania. *Socialiniai Mokslai* 3 (77): 30–40.
- Braziene, Ruta, and Gediminas Merkys. 2013. Transition of Lithuanian youth from education to the labour market: Theoretical presumptions and empirical evidence. *Filosofija Sociologija* 24 (2): 82–91.
- Breen, Richard. 2005. Explaining cross-national variation in youth unemployment. Market and institutional factors. *European Sociological Review* 21:125–34.
- Brzinsky-Fay, Christian. 2008. Get the balance right. Risk and flexibility in school-to-work transition sequences. In *Innovating European labour markets. Dynamics and perspectives*, eds. Peter Ester, Ruud Muffels, Joop Schippers, and Ton Wilthagen, 275–96. Northampton: Edward Elgar.
- Brzinsky-Fay, Christian. 2011. What difference does it make? The outcome effects of the European employment strategy on the transition from education to work. *German Policy Studies* 7 (1): 45–72.
- Brzinsky-Fay, Christian. 2013. The measurement of school-to-work transition as processes. About events and sequences. *European Societies* 16 (2): 213–32.
- Buchholz, Sandra, and Hans Peter Blossfeld. 2012. Changes in the economy, the labor market, and expectations for the future: What might Europe and the United States look like in twenty-five years? *New Directions for Youth Development* 135:17–26.
- Castells, Manuel. 2005. *Tinklaveikos visuomenės raida*. Kaunas: Poligrafija ir informatika.
- Chisholm, Lynne, Syika Kovasheva, Maurizio Merico, Maurice Devlin, David Jenkins, and Andreas Karsten. 2011. The social construction of youth and the triangle between youth research, youth policy and youth work in Europe. In *European youth studies: Integrating research, policy and practice*, eds. Lynne Chisholm, Syika Kovacheva, and Maurizio Merico, 11–44. Innsbruck: University of Innsbruck.

- Elder, Sara. 2009. *ILO school-to-work transition survey: A methodological guide*. Geneva, Switzerland: International Labour Organization.
- Erikson, Robert, and John H. Goldthorpe. 1992. *The constant flux: A study of class mobility in industrial societies*. New York, NY: Clarendon Press.
- European Commission. 2009. *Executive summary – The labour market integration of young people: A challenge for Europe*. Brussels: European Commission.
- European Group for Integrated Social Research (EGRIS). 2001. Misleading trajectories: Transition dilemmas of young adults in Europe. *Journal of Youth Studies* 4 (1): 101–18.
- Green, Anne, David Owen, and Rob Wilson. 2001. Regional differences in labour market participation of young people in the European Union. *European Urban and Regional Studies* 8 (4): 297–318.
- Hannan, Damian F., David Raffe, and Emer Smyth. 1996. Cross-national research on school to work transitions: An analytical framework. Available from <https://search.oecd.org/education/skills-beyond-school/1925587.pdf>.
- Hauser, Robert M. 2009. The Wisconsin Longitudinal Study: Designing a study of the life course. In *The craft of life course research*, eds. Glen H. Elder Jr. and Janet Z. Giele, 29–50. New York, NY: Guilford.
- Hauser, Robert M., William H. Sewell, and Duane F. Alwin. 1976. High school effects on achievement. In *Schooling and achievement in American society*, eds. W. H. Sewell, Robert M. Hauser, and D. L. Featherman, 309–41. New York, NY: Academic Press.
- International Labour Organization (ILO). 2009. *ILO School-to-Work Transition Survey: A methodological guide*. Geneva: International Labour Office.
- International Labour Organization (ILO). 2012. *Global employment trends 2012. Preventing a deeper jobs crisis*. Geneva: International Labour Office. Available from http://www.ilo.org/wcmsp5/groups/public/@dgreports/@dcomm/@publ/documents/publication/wcms_171571.pdf.
- Jovanovic, Boyan. 1979. Job matching and the theory of turnover. *Journal of Political Economy* 87 (5): 972–90.
- Kogan, Irene. 2011. When informal is normal. . . On the role of credentials and contacts for the job entry in Serbia. *Research in Social Stratification and Mobility* 29 (4): 445–58.
- Kogan, Irene, Teo Matković, and Michael Gebel. 2013. Helpful friends⁹ Personal contacts and job entry among youths in transformation societies. *International Journal of Comparative Sociology* 54 (4): 277–98.
- Lamont, Michele, and Annette Lareau. 1988. Cultural capital: Allusions, gaps and glissandos in recent theoretical developments. *Sociological Theory* 6 (2): 153–68.
- Lareau, Annette. 2011. *Unequal childhoods. Class, race, and family life*, 2nd ed. Berkeley, CA: University of California Press.
- Marchetti, M. P., T. S. Light, J. Feliciano, T. W. Armstrong, Z. Hogan, and P. B. Moyle. 2001. Physical homogenization and biotic homogenization in aquatic systems. In *Biotic homogenization: The loss of diversity through invasion and extinction*, eds. J. L. Lockwood and M. L. McKinney, 259–78. New York, NY: Kluwer Academic Publishers.
- Masdonati, Jonas. 2010. The transition from school to vocational education and training: A theoretical model and transition support program. *Journal of Employment Counseling* 47:20–29.
- Minguez, Almudena M., Antonio L. Pelaez, and Sagrario A. Sánchez-Cabezudo. 2012. *The transition to adulthood in Spain. Economic crisis and late emancipation*. Social Studies Collection 34. Barcelona: Welfare Projects, “la Caixa” Foundation.
- Mortensen, Dale T. 1986. Job search and labor market analysis. In *Handbook of labor economics*, eds. Orley C. Ashenfelter and Richard Layard, 849–920. Amsterdam: North Holland.
- Müller, Walter, and Yossi Shavit. 1998. An institutional embeddedness of the stratification process: A comparative study of qualifications and occupations in thirteen countries. In *From school to work. A comparative study of educational qualifications and occupational destinations*, eds. Yossi Shavit and Walter Müller, 1–48. New York, NY: Clarendon Press.
- OECD. 2010. *Education at a glance 2010*. OECD Indicators. Geneva: OECD.
- Okunevičiūtė-Neveauskienė, Laima, and Julija Moskvina. 2008. Socialiai pažeidžiamo jaunimo problemos integracijos į darbo rinką kontekste. *Filosofija Sociologija* 19 (2): 41–54.
- Okunevičiūtė-Neveauskiene, Laima, and Kristina Šlekienė. 2008. Nevyrtausybių organizacijų įtaka jaunimo integracijai į darbo rinką. *Filosofija Sociologija* 19 (4): 10–21.

- Pastore, Francesco. 2007. Employment and education policy for young people in EU: What can new member states learn from old member states? IZA Discussion Papers, Bonn, Germany.
- Raffe, David. 2008. The concept of transition systems. *Journal of Education and Work* 21 (4): 277–96.
- Reitzle, Matthias, and Rainer K. Silbereisen. 2000. The timing of adolescents' school-to-work transition in the course of social change: The example of German unification. *Swiss Journal of Psychology* 59:240–55.
- Saar, Ellu, Marge Unt, and Irena Kogan. 2008. Transition from educational system to labour market in the European Union: A comparison between new and old members. *International Journal of Comparative Sociology* 49:31–59.
- Schoon, Ingrid, and Mark Lyons-Amos. 2016. Diverse pathways in becoming an adult: The role of structure, agency and context. *Research in Social Stratification and Mobility* 46 (A): 11–20.
- van den Berg, Gerard. 1990. Search behaviour, transitions to nonparticipation and the duration of unemployment *Economic Journal* 100 (402): 842–65.
- Versnel, Joan, Christopher DeLuca, Nancy L. Hutchinson, and Peter Chin. 2011. International and national factors affecting school-to-work transition for at risk youth in Canada: An integrative review. *Canadian Journal of Career Development* 10 (1): 21–31.
- Wolbers, Marten. 2007. Patterns of labour market entry: A comparative perspective on school-to-work transitions in 11 European countries. *Acta Sociologica* 50 (3): 189–210.