# **Intergenerational Interdependence of Labour Market Careers among Immigrants**

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Young adulthood is the defining decade for future life prospects and welfare. It is a time when young peoples' identity takes shape, choices are made about their future occupation, where to live, some will find a partner and start a family (Elder and Giele, 2009). It is also a time when young people set their future labour market trajectories, influencing later earnings, life opportunities and health (Sirniö et al., 2016; McVicar and Anyadike-Danes, 2002; Brzinsky-Fay and Solga, 2016; Brzinsky-Fay, 2007). However, transitioning from school-to-work can be a rather turbulent time (Guvenen et al., 2015; Lorentzen et al., 2019), shifting between several temporary employments, education and unemployment, with strong implications for the future labour market attainment (Barone and Schizzerotto, 2011).

How young peoples' school-to-work trajectories unfold may be influenced by childhood circumstances, such as parents' occupational attainment (Almquist and Brännström, 2016; Haapakorva et al., 2017; Barone and Schizzerotto, 2011; Mortimer et al., 2014; Mastekaasa, 2009). Life course theory highlights youth as a sensitive period in individual life course (Elder and Giele, 2009), where access to social and economic resources matters most (Caspi et al., 1998; Vauhkonen et al., 2017; Gustafsson et al., 2012), and for children and adolescents parental resources may be the most important source of financial support. According to the life course perspective, disadvantages in early adulthood may have its roots in childhood and youth (Elder and Giele, 2009) and then these disadvantages accumulate over time (DiPrete and Eirich, 2006). For example, children growing up with unemployed parents may face difficulties finding employment when they themselves enter the labour market (Haapakorva et al., 2017; O'Neill and Sweetman, 1998), forming intergenerational reproduction of unemployment. Similar intergenerational patterns have been shown for parents' low-wage employment, parental poverty and welfare receipts (Kauppinen et al., 2014). Overall, parental labour market situation during childhood and adolescence may influence the type of trajectory that young adults end up with after they start their own working life (Vauhkonen et al., 2017). This calls for a question: How do children's labour market trajectories differ depending on parental labour market outcomes.

Intergenerational transmission of disadvantage is of particularly concern among the most vulnerable labour market groups (Bratberg et al., 2005). One such group are second-generation immigrants, whose parents face multiple labour market difficulties (Åslund et al., 2017; Åslund and Rooth, 2007; Dunlavy and Rostila, 2017), and have generally low chances for upward occupational mobility (Alder et al., 2017). In addition, focusing on immigrants in the study of intergenerational transmission of disadvantage is important because the mechanisms that normally support intergenerational mobility may not operate the same way among immigrants and natives. Policies that are meant to foster social mobility, such as scholarships or subsidies for entrepreneurship, may be oriented towards the native population. Further, the knowledge about these policies may be restricted among immigrants and their descendants.

Although intergenerational reproduction of disadvantage is most likely among the most vulnerable groups, such as immigrants, prior research tended to focus on the native population or captured only a few measurement timepoints in parental and young adults' occupational careers. Thus, little is known how young second-generation immigrants' labour market integration unfolds across the life course, and which factors related to parents labour market attainment in childhood youth can influence the process. The present study fills this gap. By using sequence analysis methods and longitudinal data, this study reveals which particular patterns of ordering and timing of parental labour market transitions restrict career opportunities of second-generation of immigrants. In addition, this study provides insights on how parents labour market trajectories can influence their children's school-to-work transition and how if differs depending on the region of origin and gender. Studying heterogenous effects is important in life course research because the average effects often mask the differences that are crucial for identifying the population subgroups where disadvantages accumulate (Brand and Thomas, 2013).

### Method

The present study used longitudinal microdata from Swedish national registers. These registers contain sociodemographic and socioeconomic indicators for the entire Swedish population, linked through unique personal identity numbers assigned to all residents at birth or at time of immigration. With the high validity and low attrition rates in these longitudinal

data (Ludvigsson et al., 2016; Ludvigsson et al., 2011), we were able to follow a large cohort of children born in 1985 in Sweden and their parents across 26 years. The selected sample contained 72 409 young people (n=37 224 men and n=35 185 women) and their parents, of whom 26% of the children were regarded as second-generation immigrants. Parents labour market trajectories were followed each year from the age of 5 until age 18 (1990-2003), while children's school-to-work trajectories were followed from age 19 until 30 (2004-2015).

#### Measurements

Different income-registers were used to measure participants' primary source of income each year. The key variable used for reconstructing labour market trajectories comprised of six different states: 'student' 'low-wage employment', 'high-wage employment', 'unemployment benefits, 'parental-leave', or 'NEET' (not in education, employment, or training). Information of gender, age and region of origin was obtained through the Total Population Register and the migration register. Parents region of origin was grouped into natives, Nordic countries, European countries (excluding Nordic) and Non-European countries. Children with at least one foreign-born parent was regarded as second-generation immigrants. Parents educational level and civil status was also measured.

### Statistical analysis

Sequence analyses with Hierarchical Cluster Analysis was applied as the main analysis. A sequence is defined as an ordered list of states across time, where the transition-taking process corresponds to the change from one state into another across time. The order these states occur and the number of transitions between different states can then entail important knowledge for how and when different labour market patterns unfolds across the life course. Once the sequences were constructed, we aggregated unique sequences (Studer, 2013), calculated the pairwise 'distance' between the sequences using Optimal Matching (OM) algorithm (Sankoff and Kruskal, 1983; Arpino et al., 2018) and applied Hierarchical Cluster Analysis using the Ward linkage. With this technique we clustered sequences by largest possible within group-similarities and between-group dissimilarities forming typical trajectories (Sankoff and Kruskal, 1983; Arpino et al., 2018). Finally, the relationship between parents labour market sequences and labour market trajectories of their children were

assessed in a multinomial logistic regression, controlling for parents' age, region of origin and education. All analyses were stratified by gender.

## **Preliminary results**

Five-sequence clusters were identified separately among women and men, and labelled: Stable high-wage employment (T1), Education bridge (T2), Labour market exclusion (T3), Trapped in low-wage employment (T4), and Low-wage as stepping-stone (T5). Among parents, a six-sequence cluster solution were identified separately for mothers and fathers. In similarity to the children, clusters of Stable high-wage employment, Labour market exclusion, Trapped in low-wage employment and Low-wage as stepping-stone were shown. In addition, parents cluster of Unemployment and among mothers Parental-leave and fathers High-wage and labour market instability were identified. Native-born constitute the majority across all trajectories due to the relatively low share of migrants in the population. However, within group descriptive statistics shows that 15-20 % of the second-generation immigrants are found in clusters of Low-wage into labour market exclusion, Low-wage stepping-stone and Trapped in low-wage employment. Similar patterns are found among parents, where the majority of foreign-born are found in clusters of labour market instability.

Results from the multinomial logistic regression indicate a strong intergenerational reproduction of labour market disadvantages. Young people whose parents' labour market trajectories were characterised by unemployment, low-wage and labour market exclusion showed higher risk of themselves end up in trajectories of labour market exclusion or being trapped into low-wage employments. Furthermore, having parents with European and non-European origin increased adult children's probability of Labour market exclusion and Education bridge.

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