

Commentary

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A job for life: How the transition from education to employment predicts early mortality

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The idea of adolescence as a distinct phase of life, between childhood and adulthood, emerged at the turn of the twentieth century as public education replaced child labour in many places. Adolescence grew longer after the Second World War as both secondary and tertiary education came to play a pivotal role in preparing young people for jobs in economies of growing technical complexity [1]. Education has subsequently become the biggest investment governments make in young people. The benefits have been spectacular in economic development and improving financial circumstances of successive generations, particularly for women [2]. They extend well beyond income: quality education remains the single best investment governments can make in health with benefits extending across the lifecourse and into the next generation [3].

However, many benefits depend on getting a good job, one that provides security, a fair income and prospects for personal development. That transition into the workforce is becoming more difficult almost everywhere. In Europe, as in many other parts of the world, good jobs are harder to find: instead temporary and part-time employment, most recently through the 'the gig economy' have become the norm. Across the high income world, globalisation has reduced the demand for less skilled jobs that commonly provided an entry point into the labour market. And young workers have been the most affected in economic crises including the 2007 sovereign-debt crisis and the current COVID-19 recession. As Doring et al. report, staying longer in school has become a compensatory strategy for failures in the labour market, but one that has not worked for many [4].

In the UK in the 1980's, concerns about a growing vulnerability of many young people in the labour market led to the adoption of 'not being in education, employment or training' (NEET) as a marker. Nora Doring and her colleagues suggest another indicator of the

transition into employment should also be adopted: students not about to qualify (SNAQ) [4]. In this [4] impressive 26-year linkage study of over half-a-million Swedes born in the mid-seventies, they compared injury deaths, suicide and all-cause mortality in 18-yearolds classified as SNAQ, NEET or employed with those who successfully gained an educational qualification. Deaths were over three-fold higher in males categorised as SNAQ, reducing to a two-fold risk after adjustment for confounders including previous mental health problems. These risks were similar to those in young NEET men, but more significant given the extent to which a far greater proportion fell into the SNAO category. Associations for young women were generally slightly lower with the exception of predicting suicide [4]. Surprisingly, risks for suicide in young employed women were also high, perhaps reflecting the poor quality jobs available to girls to who leave school early [5]. This impressive study has some inevitable limitations as noted by the authors: migrants are vulnerable in the labour market and were not included; and an inpatient diagnosis will not fully capture earlier mental health problems, perhaps accounting for some of the associations.

The study reminds us that, education systems are struggling in the race with technical change. Artificial intelligence and automation is likely to make it even more difficult. As a result many young people will miss out on a decent job. A failure of education systems to keep pace with change will not only lead to greater socio-economic inequality but also consequences for health, including early loss of life.

So how might the different sectors respond? Doring and colleagues point out that staying in education because of job scarcity is not a good enough solution. Education systems need to do better in meeting the needs of this generation including the promotion of social and emotional development. The reciprocal relationships between mental health and educational success begin in childhood with a cumulative loss of literacy and numeracy in those with emotional problems, extending to academic failure in adolescence [6,7]. The social and emotional skills that underpin good mental health and educational success, are equally essential in the modern workplace. Employers commonly complain they are missing in young workers. Educators need to extend their focus beyond cognitive skills alone: creating mental health promoting schools would be a good place to start.

The paper also raises questions about the pathways beyond education that lead to poor health and life outcomes. Some young people in the SNAQ category will become unemployed: many more will find

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themselves in poor quality jobs. Unemployment has a clear bidirectional relationship with poor mental health and substance abuse [8]. Job insecurity is independently associated with poor mental health and injury, as are poor quality and hazardous jobs [5,9,10]. A better tracking of pathways to a good job is needed. In this context, the inclusion of SNAQ, makes good sense. It carries implications for education systems in how well they are adapting to the changing needs of young people. Given its significance for health, it could bring a common focus for health, education and labour market sectors. With pandemic disruptions, cooperation across sectors is needed more than ever to guarantee the well-being of young people.

Author Contributions

George Patton drafted the manuscript and both Monika Raniti and Nicola Reavley provided critical review.

Declaration of Interests

None of the authors have any conflict of interest.

References

- [1 Drucker PF. Managing in a time of great change. Harvard Business Press; 2009.
- [2] Rodríguez-Pose A, Tselios V. Education and income inequality in the regions of the European Union. J Reg Sci 2009;49(3):411–37.
- [3] Patton G, Sawyer S, Santelli J, et al. Our future: a lancet commission on adolescent health and wellbeing. Lancet 2016;387:2423-78.
- [4] Doring N, Lundberg M, Dalman C, et al. Labour market position of young people and premature mortality in adult life: a 26-year follow-up of 569,528 Swedish 18 year-olds. Lancet Reg Health Europe 2021. doi: 10.1016/j.lanepe.2021.100048.
- [5] Davis M, Hoyt E. A longitudinal study of piece rate and health: evidence and implications for workers in the US gig economy. Public Health 2020;180:1–9.
- [6] Mundy LK, Canterford L, Tucker D, et al. Academic performance in primary school children with common emotional and behavioral problems. J Sch Health 2017;87 (8):593–601.
- [7] Rodwell L, Romaniuk H, Nilsen W, Carlin JB, Lee K, Patton GC. Adolescent mental health and behavioural predictors of being NEET: a prospective study of young adults not in employment, education, or training. Psychol Med 2018;48(5):861–71.
- [8] Bartelink VH, Zay Ya K, Guldbrandsson K, Bremberg S. Unemployment among young people and mental health: a systematic review. Scand J Public Health 2020;48(5):544–58.
- [9] Law P, Too L, Butterworth P, Witt K, Reavley N, Milner A. A systematic review on the effect of work-related stressors on mental health of young workers. Int Arch Occup Environ Health 2020:1–12.
- [10] Canivet C, Bodin T, Emmelin M, Toivanen S, Moghaddassi M, Östergren P-O. Precarious employment is a risk factor for poor mental health in young individuals in Sweden: a cohort study with multiple follow-ups. BMC Public Health 2016;16 (1):1–10.