



Adolescent psychological distress, unemployment, and the Great Recession: Evidence from the National Longitudinal Study of Youth 1997



Mark Egan^{a,*}, Michael Daly^{a,b}, Liam Delaney^{a,b}

^a Behavioural Science Centre, Stirling Management School, Stirling University, FK94LA, United Kingdom

^b UCD Geary Institute, University College Dublin, Belfield, Dublin 4, Ireland

ARTICLE INFO

Article history:

Received 19 September 2015

Received in revised form

23 February 2016

Accepted 10 March 2016

Available online 14 March 2016

Keywords:

Mental health

Psychological distress

Unemployment

Recession

Longitudinal studies

Sibling fixed-effects

ABSTRACT

Rationale: Several studies have shown a link between psychological distress in early life and subsequent higher unemployment, but none have used sibling models to account for the unobserved family background characteristics which may explain the relationship.

Objective: This paper uses the National Longitudinal Study of Youth 1997 data to examine whether adolescent psychological distress in 2000 predicts higher unemployment over 2000–11, whether this relationship changed in the period following the Great Recession, and whether it is robust to adjustment for family effects.

Methods: 7125 cohort members (2986 siblings) self-reported their mental health in 2000 and employment activities over 2000–11. This association was examined using Probit and ordinary least squares regressions controlling for intelligence, physical health, other sociodemographic characteristics and family background.

Results: After adjustment for covariates and compared to those with low distress, highly distressed adolescents were 2.7 percentage points (32%) more likely to be unemployed, 5.1 points (26%) more likely to be unemployed or out of the labor force and experienced 11 weeks (28%) more unemployment. The impact of high distress was similar to a one standard deviation decrease in intelligence, and double the magnitude of having a serious physical health problem, and these estimates were robust to adjustment for family fixed-effects. The highly distressed were also disproportionately more likely to become unemployed or exit the labor force in the years following the Great Recession.

Conclusion: These findings provide strong evidence of the unemployment penalty of early-life psychological distress and suggest that this relationship may be intensified during economic recessions. Investing in mental health in early life may be an effective way to reduce unemployment.

© 2016 The Authors. Published by Elsevier Ltd. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

1. Introduction

The unemployed consistently report worse mental health than the employed (Paul and Moser, 2009). Unemployment has adverse mental health consequences. However, it remains unclear whether pre-adulthood mental health leads to success in avoiding unemployment. Psychological distress, as indexed by low mood, anxiety, neuroticism, depression and psychiatric conditions, has been shown to predict worse employment prospects in longitudinal studies following both adults (Chatterji et al., 2007; Ettner et al.,

1997; Layard, 2013; Uysal and Pohlmeier, 2011) and children and adolescents for several years and even decades (Egan et al., 2015; Fergusson et al., 2007; Goodman et al., 2011). While these studies typically adjust for important potential confounding variables such as parental socioeconomic status and intelligence, they have not been able to rule out the possibility that unobserved family background characteristics explain the relationship between mental health and subsequent unemployment.

A smaller set of studies have attempted to isolate the link between early life mental health and labor market outcomes by comparing the outcomes of siblings and twins, an analytic strategy which accounts for a large portion of unobserved heterogeneity by capturing unmeasured factors within the family and/or

* Corresponding author.

E-mail address: mark.egan@stir.ac.uk (M. Egan).

neighborhood environment. [Smith and Smith \(2010\)](#) showed that siblings who recalled having had childhood psychological problems went on to work seven fewer weeks on average in adulthood than their siblings who did not recall such problems. [Currie et al. \(2010\)](#) found that children diagnosed as having attention deficit hyperactivity disorder (ADHD) or conduct disorders before the age of 18 were 10 percentage points more likely to receive social assistance as adults. [Fletcher \(2013\)](#) found that differences in depression levels in grades 7–12 predicted 7–8 percentage points lower employment when participants were aged 30 on average, reducing to a non-significant 5 points when controlling for family fixed-effects. Finally, [Lundborg et al. \(2014\)](#) used data on Swedish males born between 1950 and 1970 to show that mental health conditions at 18–19 years of age strongly predicted within family variation in employment in 2003.

Whilst this literature has examined broad outcomes such as social assistance ([Currie et al., 2010](#)) and employment ([Fletcher, 2013](#); [Lundborg et al., 2014](#); [Smith and Smith, 2010](#)), no studies have utilized sibling models to examine unemployment specifically as an outcome. Those studies which have examined employment have derived their outcome measures as a function of earnings (e.g., creating a binary employment variable where 1 = positive earnings) or examined the total number of weeks worked in a year. This approach does not uniquely categorize the unemployed, nor adequately distinguish between those who are unemployed versus out of the labor force, making precise comparisons between the employed and unemployed difficult. Additionally, all four of these studies examined the labor market outcome only at a single point in time and before unemployment rates increased dramatically around the world as the Great Recession began to affect global labor markets in 2008–09.

This paper adds to this literature by using the National Longitudinal Study of Youth 1997 (NLSY97) data from the United States to examine whether adolescent psychological distress in 2000 predicts greater unemployment over 2000–2011 while using sibling fixed-effects analysis to isolate the link between mental health and unemployment. It makes three main contributions. First, it examines unemployment specifically as an outcome. Second, it uses the extremely rich weekly employment history data in the NLSY97 to examine unemployment trends continuously over a 12-year period. Our analytic strategy therefore allows for a precise delineation of the effect of psychological distress during the important transition from education into the labor force. Third, the time period observed (2000–2011) allows for an examination of whether the employment penalty of psychological distress intensified following the Great Recession.

2. Data and method

2.1. Participants and procedure

Participants were from the NLSY97, a nationally-representative cohort from the United States of 8984 individuals (including 3855 siblings) born in 1980–1984 and interviewed in person or via telephone on an annual basis since 1997. During these interviews the cohort members were asked to describe their recent employment history in detail. These variables were used to examine the relationship between the cohort members' mental health in 2000 and their self-reported weekly employment histories from January 2000 to December 2011. Sibling fixed-effects analysis was used to examine this relationship while accounting for unobserved family background characteristics. Difference-in-difference analyses were used to test whether those with poor mental health were more likely to become unemployed or exit the labor force (UOLF) after the onset of the Great Recession. The main analysis used a

maximum sample of 4,002,558 observations for 7125 cohort members and the sibling analysis used a maximum sample of 1,684,984 observations for 2986 cohort members.

2.2. Measures

2.2.1. Mental health

[Table S1 and Figure S1](#) describe the mental health variable used in our analysis (see [Supplementary Materials](#), Section 1). The NLSY97 evaluates the cohort members' mental health using the 5-item version of the Mental Health Inventory (MHI-5; [Berwick et al., 1991](#)), an established predictor of depression and anxiety disorders ([Rumpf et al., 2001](#)), which has been validated for use with adolescents ([Ostroff et al., 1996](#)). When the cohort members were aged 16–20 in 2000, they were asked to rate on a four-point scale from 'none of the time' to 'all of the time' how often they felt "nervous/calm and peaceful/down or blue/happy/depressed" over the previous month. In order to create the main independent variable, these answers were coded so that a higher score indicated worse mental health, and were then summed (Cronbach's $\alpha = 0.77$) to create a composite mental health variable with a score range of 0–15 (Mean [M] = 4.7, standard deviation [SD] = 2.5). Because there is not a single validated cut-off score for the MHI-5 ([Kelly et al., 2008](#)), our analysis followed the approach of [Evans-Lacko et al. \(2013\)](#) and classified those individuals scoring at least 1 SD above the mean MHI-5 score as experiencing high levels of distress (corresponding to 942 cohort members out of 7125). Henceforth those scoring below this cut-off point are referred to as having 'low distress' and those above as having 'high distress'. The proportion of cohort members defined as having high distress using this cut-off (13%) is similar to recent estimates of the 12-month prevalence of a major depressive episode among American 16–17 year olds (11.4%) and the proportion of 18–25 year olds having any diagnosable mental illness in the past year (19.6%) ([National Institute of Mental Health, 2015](#)).

Although the MHI-5 has been administered to the cohort members every two years since 2000, our analysis used only the initial measure as our main independent variable. Our aim is to evaluate the cohort members' mental health before they have accumulated significant experience in the labor market. Using a measure of mental health elicited in adolescence should mean that labor market experiences (such as prolonged unemployment) have not yet substantially affected the mental health of the cohort members. This assumption was tested in sensitivity analyses, described in Section 4 of the [Supplementary Materials](#), which found that our results were not substantially affected by excluding cohort members who had experienced unemployment before the mental health measure was elicited in 2000.

2.2.2. Employment outcomes

There were three outcome variables. The first was a binary variable tracking employment status over 626 weeks (January 2000–December 2011), coded as 0 if the cohort member was in full- or part-time employment, and coded as 1 if they were unemployed. This variable was used to estimate the average probability of unemployment over the 12 years surveyed. Second, a variable measuring disengagement from employment more broadly was coded as 0 for the employed and coded as 1 if the cohort member was unemployed or out of the labor force (i.e., UOLF), the latter category including those in education, homemakers, the disabled or any other non-employment status. Finally, a continuous variable measuring total weeks of unemployment over 2000–2011, was created by summing the weekly unemployment variables ($M = 40.6$, $SD = 52.6$, range = 0–449). For this measure, 54% of cohort members reported 6 months or less of

متن کامل مقاله

دریافت فوری ←

ISIArticles

مرجع مقالات تخصصی ایران

- ✓ امکان دانلود نسخه تمام متن مقالات انگلیسی
- ✓ امکان دانلود نسخه ترجمه شده مقالات
- ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
- ✓ امکان دانلود رایگان ۲ صفحه اول هر مقاله
- ✓ امکان پرداخت اینترنتی با کلیه کارت های عضو شتاب
- ✓ دانلود فوری مقاله پس از پرداخت آنلاین
- ✓ پشتیبانی کامل خرید با بهره مندی از سیستم هوشمند رهگیری سفارشات