FISEVIER

Contents lists available at ScienceDirect

#### Children and Youth Services Review

journal homepage: www.elsevier.com/locate/childyouth



### Childhood risk factors for disability pension among adult former Swedish child welfare clients: Same or different as for majority population peers?



Lars Brännström<sup>a,\*</sup>, Henrik Karlsson<sup>b</sup>, Bo Vinnerljung<sup>a,c</sup>, Anders Hjern<sup>c,d</sup>

- <sup>a</sup> Department of Social Work, Stockholm University, Sweden
- ь FoU-Nordväst, Sollentuna, Sweden
- <sup>c</sup> Clinical Epidemiology, Department of Medicine, Karolinska Institutet, Stockholm, Sweden
- <sup>d</sup> Centre for Health Equity Studies, Stockholm University, Karolinska Institutet, Sweden

#### ARTICLE INFO

## Keywords: Child welfare Cohort study Longitudinal Prevention Social exclusion

#### ABSTRACT

This study contributes to the literature on preventing social exclusion, here indicated by collecting disability pension in adulthood, by asking whether the pattern and strength of childhood related risk factors is the same for high-risk child welfare clients, as for their peers in the majority population. Longitudinal register data on > 500,000 Swedes, including around 18,000 former child welfare clients, were analyzed by means of linear probability models and calculations of population attributable fractions. Systematic comparisons of effect sizes suggest that the differences in pattern were marginal, but there were significant differences in strength. Overall, poor educational achievement and low educational attainment were the two most prominent risk factors across all groups, also when prevalence was taken into account. In the majority population, the hypothetical reduction of collecting disability pension was on the scale of 20% if either of the two risk factors could be eliminated. Among child welfare alumni, however, the hypothetical reduction was even larger, nearly 30% on average. Prevention strategies targeting poor school performance and low educational attainment may thus substantially reduce the prevalence of disability pension among adults with a history of child welfare involvement.

#### 1. Introduction

In Sweden and other European Union countries, issues of social exclusion and the improvement of living conditions remain at the core of social welfare research and policy agenda (European Commission, 2010). Populations at risk for poor life course trajectories also continue to gain attention in child and family social work research and among providers of services to families and children in adverse life situations (Spratt & Devaney, 2009). Children with experiences of the child welfare system have been identified as one of the most vulnerable groups in Western societies for becoming socially excluded (Stein, 2006). While social exclusion continues to be a vaguely defined concept, most would probably agree that it draws attention to a dynamic and complex process that, partially or fully, excludes individuals or groups of individuals from the social, economic, political, or cultural systems of society (Whelan & Maître, 2005).

Child welfare alumni have been found to have several disadvantages compared to majority population peers (Gypen, Vanderfaeillie, De Maeyer, Belenger, & Van Holen, 2017). This is the case also in the Nordic countries (Kääriälä & Hiilamo, 2017), despite their extensive social policy investments to improve child well-being (Esping-

Andersen, 2004). Developmental outcomes for children with a history of child welfare interventions tend to be poor (compared to peers without such history) in all life areas that have been examined in longitudinal studies (Goemans, van Geel, van Beem, & Vedder, 2016), including poor school performance (e.g. Vinnerljung, Berlin, & Hjern, 2010), low educational attainment (e.g. Jackson & Cameron, 2011), criminality (e.g. Doyle, 2008), substance abuse (e.g. Christoffersen & Soothill, 2003), premature death (e.g. Gao, Brännström, & Almquist, 2017), suicidal behavior (e.g. Berlin, Vinnerljung, & Hjern, 2011), and mental health problems (e.g. Anctil, McCubbin, O'Brien, Pecora, & Anderson-Harumi, 2007). Poor outcomes also seem to cluster within these individuals (e.g. Brännström, Vinnerljung, Forsman, & Almquist,

Typically being granted to adults who for medical reasons are unable to work for the foreseeable future (Stattin, 2005), disability pension (DP) is in most European countries a clear marker of social exclusion as it is generally considered to be a permanent exit from the labor force (Helgertz & Vågerö, 2014). Prevalence of DP is high and has increased in the last decades (OECD, 2009). In Sweden – the focus of this study – the increase among young people is mainly due to more DP being granted for psychiatric conditions (Försäkringskassan, 2013). The

<sup>\*</sup> Corresponding author at: Department of Social Work, Stockholm University, SE-106 91, Sweden. E-mail address: lars.brannstrom@socarb.su.se (L. Brännström).

majority of young adult DP-recipients collect DP for reasons related to mental health problems (Jonsson, Alexanderson, Kjeldgård, & Mittendorfer-Rutz, 2014). Since adults with childhood experiences of the child welfare system have substantially elevated risks of serious mental health problems (e.g. Dahl et al., 2017), former child welfare clients have also been found to be overrepresented in DP-populations (e.g. Vinnerljung, Brännström, & Hjern, 2015; Zlotnick, Tam, & Soman, 2012). Childhood related risk factors have high predictive power for DP in adulthood (e.g. Gravseth et al., 2007, Gravseth et al., 2008; Bäckman & Nilsson, 2011). In a Swedish national cohort study of DP among men age 41–52, childhood factors explained 85% of the variance, and work characteristics only 15% (Johansson, Leijon, Falkestedt, Farah, & Hemmingsson, 2012).

Lessons from prevention science suggest that the knowledge gained from longitudinal studies of risk factors has affected not only our understanding of the onset of adverse outcomes, but has been shown to be helpful for policy and practice audiences interested in designing or selecting effective prevention and treatment strategies (Jenson & Fraser, 2016). Child welfare populations are characterized by confounding by indication, meaning that the selection into the child welfare system is related to some underlying and unobserved sorting process that in itself may have a crucial influence on the outcomes (Freemantle et al., 2013). Since prior research typically has addressed risk factors for DP in majority populations, identifying heterogeneity in the pattern and strength of risk factors across specific child welfare subgroups may be of particular interest: different responses to exposures may call for tailored strategies that better suit the problems and needs of children involved in the child welfare system.

Using longitudinal register data for > 500,000 Swedes born 1973-1978 (including around 18,000 former child welfare clients), Vinnerljung et al. (2015) found that Swedish child welfare alumni had 2-fold odds for being granted DP in early midlife compared to majority population peers net of other risk factors. Björkenstam, Hjern, and Vinnerljung (2016) elaborated these findings and report that the cumulative exposure to childhood risk factors/adverse childhood experiences (including experience of child welfare interventions) increased the odds of collecting DP in a graded manner. Our study is not concerned with showing yet again that adults with a childhood history of child welfare involvement have elevated risks of DP recipiency net of observed confounding. Instead, it addresses potential heterogeneity in responses to specific childhood risk factors for DP across child welfare subgroups. Based on the same data as Vinnerljung et al. (2015), this study extends prior research by asking whether the pattern and strength of childhood risk factors for having been granted DP is the same among adults that have been involved in the child welfare system during their formative years, as for their peers in the majority population. As there are sex differences in the prevalence of DP in majority and child welfare populations (Vinnerljung et al., 2015) we also examine whether the addressed risk factors differ between men and women.

To our knowledge, this is the first study that systematically assesses whether childhood related risk factors for adult DP recipiency are significantly different between subgroups of child welfare clients and majority population peers. Doing so, we overcome some of the shortcomings in prior research in the following ways. To avoid inherent problems related to comparisons of coefficients (e.g. odds ratios) based on multivariable binary logistic regression across groups, we use linear probability models (LPM) to calculate comparable estimates of the risk factors' average impact on the probability of receiving DP (Wooldridge, 2010). We also make use of a policy-relevant impact measure frequently used in epidemiology and public health - the population-attributable fraction (PAF) - when discussing the practical implications of the estimated effect of risk factors. While both LPM and PAF estimates reflect the strength of impact, the latter has a practical value for those interested in prevention since it estimates the proportion of outcome for a given population that theoretically would not have occurred if none of the individuals had been exposed to the risk factor.

#### 2. Data and methods

We conducted a population-based historical prospective cohort study using data from ten Swedish national registers (Table 1). These registers are based on the individually unique 10-digit personal identification number (PIN) that follows every citizen from birth (or immigration) to death. The PIN makes it possible to link different registers. 2008 was the last year of available data in our dataset. This means that our sample was virtually unaffected by the tightened eligibility requirements for DP launched in July 2008. Even though data are somewhat old, they are not outdated since statistics from after 2008 tentatively suggest that the number of DP-recipients in our sample's age-span and reasons for granting DP have not changed substantially (Försäkringskassan, 2013). This study was approved by the Regional Ethical Review Board in Stockholm (no. 2010/5:1).

#### 2.1. Population and outcome

The study population consisted of all persons born in Sweden between 1973 and 1978, who were living and residing in Sweden on December 30, 2008, at the time of follow-up (N = 531,283). We excluded foreign-born individuals due to high attrition in the variables related to parental background for this group. 5839 individuals (1.1%) were excluded for receiving DP before age 23 (which indicates learning disabilities or multi-handicaps, see Gravseth et al., 2007), and 562 (0.1%) were excluded for being absent in the Nation School Register (which indicates learning disabilities so severe that compulsory schooling took place in special education facilities; Vinnerljung et al., 2015). Additionally, a small group of 753 (0.1%) individuals who had no registered school grades at all in any subject were also excluded. The reasons for having no registered grades are heterogenic: either the individual had such a high rate of absconding that the teacher could not evaluate her/his school performance, or the school (usually residential schools) did not report the grades to the national data base. The analytical sample thus consisted of 524,129 individuals aged 30-35 years in 2008.

- The 18,064 former child welfare clients were categorized into five mutually exclusive groups. This classification has been used in several earlier national cohort studies and has shown good discriminatory traits (e.g. Vinnerljung, Franzén, & Danielsson, 2007, Vinnerljung et al., 2015; cf. Triseliotis, 1989). In-home care (n = 5035): individuals who received respite care at any time before age 18, but where never placed in out-of-home care (OHC; fosterfamily or residential care). Unfortunately, this is the only in-home intervention that can be identified in the Child Welfare Register (see Brännström, Vinnerljung, & Hjern, 2013; Brännström, Vinnerljung, & Hjern, 2015a for descriptions of Swedish respite care).
- Short OHC (n = 3655): individuals placed for the first time before age 13 and with < 2 years in placement before age 18.</li>
- Intermediate OHC (*n* = 952): placed for the first time before age 13 and with 2–5 years in placement.
- Long OHC (*n* = 2771): placed for the first time before age 13 and with > 5 years in placement.
- Teen placement (*n* = 5651): individuals placed at age 13 or older regardless of time in placement.

The outcome was operationalized as collecting DP in 2008 (age 30-35), but granted after the 23rd birthday.

#### 2.2. Childhood risk factors

We utilize a number of dichotomous (yes/no) variables as indicators of childhood adversity (Table 2). The selection of variables was guided by previous research on DP, determinants of adult health, and earlier child welfare studies (e.g. Björkenstam et al., 2016; Harkonmäki et al.,

# دريافت فورى ب متن كامل مقاله

### ISIArticles مرجع مقالات تخصصی ایران

- ✔ امكان دانلود نسخه تمام متن مقالات انگليسي
  - ✓ امكان دانلود نسخه ترجمه شده مقالات
    - ✓ پذیرش سفارش ترجمه تخصصی
- ✓ امکان جستجو در آرشیو جامعی از صدها موضوع و هزاران مقاله
  - ✓ امكان دانلود رايگان 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