Socio-economic Gradients and Disability during the Transition to Young Adulthood: A Longitudinal Survey and Register Study in Norway

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Authors' Contributions

RA and SH initiated the study and all authors contributed to the design. DSA analysed the data, interpreted the results and drafted the manuscript. All authors contributed to the interpretation of the study results and approved the final version of the manuscript submitted for publication.

Abstract

The study aimed to investigate trends and explanatory factors for socio-economic inequalities associated with disability during the transition to young adulthood. A sample of 2606 participants (56% females and 44% males) was prospectively followed from adolescence to young adulthood. Disability status, age, gender, mental health problems, scholastic competence and social acceptance were measured from the longitudinal survey Young in Norway, while socio-economic indicators such as participants' and their parents' levels of education, annual income, unemployment and welfare benefits were extracted from the National Population Register in Norway. Regression models were applied to estimate associations between disability and socio-economic outcomes. The findings show that disabled adolescents have a significantly greater risk of achieving lower levels of education, and are unemployed and over-represented in welfare benefits during the transition to young adulthood. Most of these associations between disability and socio-economic outcomes were explained by mental wellbeing and self-perceptions. The study suggests that interventions addressing mental wellbeing and social competence might reduce the development of socio-economic inequalities among young people with disability.

Keywords: disability; socio-economic status; socio-economic inequalities; social competence; mental health; self-perceptions

Introduction

Disability is regarded as a major determinant of quality of life. Adolescents living with disability may experience poorer quality of life compared with their peers in the general population (Payot & Barrington, 2011; Varni, Limbers, & Burwinkle, 2007). Disability may negatively influence school performance and social functioning and lead to emotional and behavioural problems, which may result in early social withdrawal and diminished socio-economic opportunities during the transition to adulthood (Michaud, Suris, & Viner, 2007). Such socio-economic inequalities over time are likely rooted in a person's life course. Prior research is mainly either cross-sectional or focused on individuals with severe functional and cognitive disabilities (e.g., cerebral palsy, spina bifida and other neurological disorders) (Greve, 2009; Ireys, Salkever, Kolodner, & Bijur, 1996; Law et al., 2014; Michaud et al., 2007). There are few longitudinal studies monitoring trends and underlying mechanisms that explain socio-economic inequalities among adolescents with some forms of disability attending mainstream education. Thus, this prospective cohort study aimed to investigate trends and underlying mechanisms of socio-economic inequalities among disabled adolescents during the transition to young adulthood. Such knowledge helps in designing and planning early interventions that can promote quality of life in adolescents with disability.

Disability and socio-economic inequalities

Although developed countries have implemented numerous programs that aim to promote the quality of life of individuals with disability, this group still has limited opportunity to complete higher education and find employment compared with those without disabilities (Greve, 2009). In Norway, for instance, about 64% of young people with physical disability (mainly cerebral palsy) do not finish high school, and they are three times less likely to

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complete a university education of any duration (Finnvold, 2013). The difference in the rate of accomplishing higher education is relatively small between young adults with some forms of disability or chronic health conditions and those without, i.e., 30% versus 38% for those with and without disabilities or chronic health conditions, respectively (Universell, 2014). However, the employment rate among individuals (15–66 years old) with some forms of physical or mental disability was 43% in 2013 compared with 74% in the general population (Bø & Håland, 2013). Furthermore, the majority of people with disability live near or in poverty in developed countries: Their average income is about 12% less than that for those without disabilities or chronic health conditions (OECD, 2006).

As to the underlying mechanisms explaining these socio-economic inequalities, studies have revealed parental socio-economic status (SES) as a possible moderator for the relationship between socio-economic outcomes and disability (Ireys et al., 1996; O'Connor & Spreen, 1988). Children with disability could have positive academic outcomes and a better employment opportunity when they have parents with a high SES, as measured by the level of education (Ireys et al., 1996; O'Connor & Spreen, 1988). Parents with an academic background may have active involvement in schooling and positive effects on the development of social skills. They may also positively enforce the quality of public service provisions including accessing social welfare arrangements, which ultimately play an important role in improving the quality of life of children with disability. Nonetheless, findings are inconsistent: a recent study in Norway found that children with physical disability have lower academic attainment (university degree) regardless of the levels of parental education (Finnvold, 2015).

In addition, young people with disabilities are at greater risk of experiencing more mental health problems than their non-disabled peers (Helseth, Abebe, & Andenæs, 2016; Honey, Emerson, & Llewellyn, 2011; Kariuki, Honey, Emerson, & Llewellyn, 2011). They

also struggle with issues of self-perceptions and social acceptance (Hagborg, 1996; Nowicki, 2003; Wolters, Knoors, Cillessen, & Verhoeven, 2011). Such poor mental wellbeing may result from unfavourable conditions (e.g., complications or poor functioning related to disability) and the psychological burden associated with being disabled (Prince et al., 2007). Particularly since adolescence is a heightened period of vulnerability for emotional and behavioural problems (Steinberg, 2005), disabled adolescents might even be at greater risk of experiencing these developmental challenges. Moreover, mental health problems are strongly related with socio-economic deprivation (Reiss, 2013). However, little is known about how the level of mental wellbeing explains associations between socio-economic inequalities and disability among young people.

The objectives of present study

Based on the above-mentioned background, the present study examines the relationship between disability during adolescence (i.e., difficulties related to reading, hearing and seeing and limited physical mobility) and SES during young adulthood in relation to employment, education, income and welfare benefits. We also investigated whether parental SES, the degree of social acceptance and perceived educational competence, and possible over-representation of mental health problems can explain relationships between SES and disability.

Method

Procedure and Participants

The current study used questionnaire and registry data. Questionnaire data were extracted from the Norwegian longitudinal study "Young in Norway", which was conducted at four

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time points: 1992 (T1), 1994 (T2), 1999 (T3) and 2005 (T4). The questionnaire data were linked to time-series data of the National Population Register (NPR) from Statistics Norway.

The initial sample at T1 was composed of 12,655 students in grades 7 to 12 (12 to 20 years of age) at 67 representative schools in Norway, with each grade being equally represented. Every school in the country was included in the register from which the schools were selected, and the sample was stratified according to geographical region and school size, which in Norway is closely related to the degree of urbanisation. Each school's sampling probability was proportional to the number of students at the school, thus providing an equal probability of selection for each student. Students with a severe lack of reading skills were excluded (1.5%), such as those with severe disability (e.g., Down's syndrome, severe brain damage or childhood autism) and recent immigrants. The response rate at T1 was 97% ($N = $ 12,287).

In 1994, three of the participating schools at T1 were not part of the follow-up study (T2; ages 14 to 22), and at another school, a burglary in the school's archives resulted in the loss of the project's identification records. In total, 9679 students at 63 schools were eligible to complete the T2 questionnaire. Since a considerable proportion of the students had completed their three-year track at the junior or senior high school that they were attending at T1, the subjects who were no longer at the same school at T2 received the questionnaire by mail. For this group, the response rate was 68% ($N = 3783$), whereas those at their original schools had a response rate of 92% ($N = 4187$). The overall response rate at T2 was 79%.

At T3, only students who completed the questionnaire in school at T2 ($N = 3844$) were followed up because of a comparatively lower response rate among those receiving the questionnaire by mail. As such, those who responded by mail at T2 ($N = 3783$) were not included in the follow-up at T3 and T4. Since the survey was originally planned as a two-wave study, informed consent was obtained again at T2 for follow-up at T3 or T4. Out of the

total number of consenting individuals at T2 ($N = 3507$, 91.2%), 2923 (83.8%) responded to the questionnaire that they received by mail at T3 (ages 19 to 28), representing an overall response rate of 68%.

In 2005 (T4), all persons who had consented to the follow-up at T2 were again invited to participate (ages 25 to 34). In total, 2890 of 3507 (82.4%) potential participants completed the questionnaire, resulting in an overall response rate of 67%. Furthermore, the participants at T4 were asked for their consent to link to the data to several registries, to which 2606 respondents (90%) agreed. These people (N=2606) represented the sample population for the current study. Detailed information about the sampling procedure and attrition of the "Young in Norway" study was presented elsewhere (Abebe, Lien, Torgersen, & von Soest, 2012; Strand & von Soest, 2008; Wichstrom, 2000).

Measures from the Questionnaire Data

Participants at T1 and T2 were asked to indicate a disease or an injury that had lasted for more than half a year and limited daily activities. Participants reported difficulties with speaking, reading and writing and having physical disability at T1, and they also indicated being dyslexic, and having impaired vision, hearing and movement disability at T2. The presence of at least one of these problems at T1 or T2 (i.e., adolescence period) was used to define the disability status.

Mental health problems—symptoms of depression and anxiety—were measured with a 12-item short version of the Hopkins Symptom Checklist (Derogatis, Lipman, Rickels, Uhlenhuth, & Covi, 1974). Using a response scale ranging from 1 to 4, participants were asked to restrict their ratings to the preceding week. Mean scores were calculated, with high scores indicating high levels of negative affectivity. The scale revealed a satisfactory internal consistency, with α value 0.89 at T4.

Scholastic competence and social acceptance were measured by the revised version of the Self-Perception Profile for Adolescents (SPPA) (Harter, 1988; Wichstrom, 1995). Both subscales included five items each, with the response options ranging from 1 = "corresponds very poorly" to 4 = "corresponds very well". High mean scores indicate a high level of perceived self-concept towards scholastic competence and social acceptance. Since the scholastic competence subscale was not assessed at T3 or T4, we used the measurements at T2. The internal consistency of the scholastic competence subscale was 0.70 at T2 and 0.82 at T4 for the social acceptance subscale.

Age and gender were recorded in all surveys and applied as control covariates. Male was coded as "0" and female as "1".

Measures from the NPR Data

The NPR provides time-series data about socio-demographic and economic information for all legal residents in Norway. In the current study, we included SES variables such as the level of education for respondents and their parents, annual net income, unemployment status and welfare benefits .The records of these time-series variables were selected from 1995 (the year of the T2 data collection) to 2007. The availability of records in the NPR also determined a period for a given variable.

The participants' highest level of education was coded as 0 = college and university and 1 = primary and secondary (i.e., one value for the whole period – from 1995 to 2007). Annual net income was measured in 1000 NOK from 1995 to 2007, i.e., income before tax including employment, capital and inheritance. Unemployment status was coded as 0 = employed and 1 = being unemployed in the last 12 months from 2001 to 2007. A dummy variable (0 and 1) was constructed to indicate whether participants had received welfare benefits (social, rehabilitation, medical or disability benefits) from 2001 to 2007. Moreover,

the duration (months) for receiving social benefits in the last 12 months was measured from 1995 to 2007.

The level of maternal and paternal education was used as an index to measure parental SES. The levels of education were coded into four categories: 1 = "mother and/or father with primary education"; 2 = "mother and/or father with secondary education"; 3 = "mother and/or father with lower university education"; and 4 = "mother and/or father with higher university education".

Statistical Analyses

We employed different regression models based on the expression and the forms of SES variables (outcomes). Logistic regression was employed to investigate associations between the respondent's level of education and disability. Since respondents had repeated measurements of unemployment, welfare benefits and income over time, longitudinal analysis methods were applied to control for dependence among the repeated responses of a subject. Accordingly, since income and the duration of social benefits were measured as continuous variables, random intercept (fixed effects) linear regression models were employed, while random intercept logistic regression models were used for the longitudinal binary outcomes – unemployment and recipients of welfare benefits.

A step-wise approach was employed in which covariates (age and gender) and explanatory variables (parental SES, mental health problems, scholastic competence and social acceptance) were added one by one to estimate how they moderated (explained) associations between SES indicators and disability. We first estimated an "empty" model (Model 1), which only determines the difference in SES outcomes between those with and without disability. We then added age and gender in Model 2, parental SES in Model 3, mental health problems in Model 4, and scholastic competence and social acceptance in

Model 5. Results from the logistic regression models are presented as average marginal effects (predicted probabilities with robust standard errors – β (se)). Marginal effects eases the interpretation of results since they report the averaged change in probability (P(y=1)) given the distribution of other independent variables for all observations. Changes in regression coefficients in linear models and marginal estimates in logistic models were considered as explanatory indicators for the association between SES indicators and disability across each model. For all analyses, a *p*-value under 0.05 was considered statistically significant. Statistical analysis was conducted using Stata SE/14 for Windows.

Results

In this study, 12.7% ($n = 331$; 53% females and 42% males) reported disability. Table 1 provides supplementary information on the prevalence of different forms of disability included. This shows that among individuals with disability in this study, about 50% have one kind of learning disability and about 50% have a physical disability. A descriptive summary of all variables and covariates among participants with ($N = 331$, 12.7%) and without ($N = 2275$, 87.3%) disability is displayed in Table 2. Individuals with disability had lower proportions of college and university education, but higher rates for unemployment and receiving welfare benefits than those without disability. They also had higher mean scores for mental health problems, and lower mean scores for scholastic competence and social acceptance. We further characterised individuals with disability who succeeded in accomplishing a higher education, found employment and were not receiving welfare benefits (data not shown in Table 1). This group of adolescents had mainly parents with middle SES, fewer mental health problems and greater self-perception profiles compared with those disabled adolescents who accomplished a lower level of education, were unemployed and over-represented in welfare benefits.

Results from regression models estimating associations between disability and SES indicators (outcomes) are presented in Tables 3–6. As described in the method section, each explanatory factor including covariates was first added to the regression models step by step. The differences in regression coefficients in linear models and marginal probabilities in logistic models between those with and without disability were summarised in Model 1; age and gender (covariates) were added in Model 2; parental SES was added in Model 3; mental health status was added in Model 4; scholastic competence and social acceptance were added in Model 5.

In Table 3, logistic regression models examine associations between disability and the level of education. Model 1 showed that adolescents with disability have significantly higher probability to accomplish lower levels of education (primary and secondary) compared with those without disability. This difference substantially reduced with the inclusion of explanatory variables (Models 3–5) and became non-significant after the inclusion of scholastic competence and social acceptance in Model 5.

Tables 4 and 5 presents results from the random intercept logistic regression models showing associations between disability and unemployment or welfare benefits over time, respectively. Model 1 revealed that adolescents with disability have significantly higher probability of being unemployed and receiving welfare benefits compared with those without disability over time. Such difference in the marginal probability of unemployment reduced with the inclusion of explanatory variables (Models 3–5), and the difference became non-significant in Model 5. As for the welfare benefits in Table 5, the inclusion of age, gender and parental SES did not reduce the marginal probabilities (Models 2-3). During the inclusion of mental health problems, scholastic competence and social acceptance (Models 4-5), this difference moderately reduced, but it remained statistically significant.

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Table 6 presents results from the random intercept linear regression models showing associations between disability and the duration of social benefits over time. Those with disability had a significantly longer duration of receiving social benefits over time (Model 1). The inclusion of age, gender, parental SES and mental health problems (Models 2-4) made a small contribution to explaining the difference in the duration of social benefits. The inclusion of scholastic competence and social acceptance in Model 5 markedly reduced the regression coefficient and the difference between those with and without disability became non-significant.

[Tables 3–6 about here]

In addition, we found a statistically non-significant difference for annual income between those with and without disability (β (se) = –6.17 (5.22), p>0.05), so that it was not necessary to fit additional random linear regression models.

Discussion

This study revealed that adolescents with disability experience marked socio-economic gradients during the transition to young adulthood: They have a lower rate of achieving college and university education, a higher rate of unemployment and are over-represented in receiving welfare benefits. These findings are consistent with prior research: disability is found to be strongly associated with socio-economic inequalities across the life span (Greve, 2009; Ireys et al., 1996; Lindsay, 2011; Queirós, Wehby, & Halpern, 2015). The current study documented these gradients in SES among adolescents with some forms of disability attending mainstream education. However, we did not find a difference in annual income between those with and without disabilities, suggesting financial support from the welfare service may buffer the loss of income associated with disability.

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A notable finding of the present study is that background variables (age, gender and parental SES), mental health problems, scholastic competence and social acceptance fully explained differences in the level of education and unemployment between young adults with and without disabilities. Although these explanatory variables partially explained differences in welfare benefits, associations between disability and being a recipient of welfare benefits remained statistically significant. In particular, we found that self-perceptions of scholastic competence and social acceptance were key explanatory factors for gradient relations between SES and disability. A disabled individual with good scholastic abilities and social acceptance may tend to have improved self-worth and social skills (Hagborg, 1996; Nowicki, 2003). Such adequate social competence coupled with better mental health and having parents with a high level of education are expected to enforce positively academic achievements and ability to initiate and sustain social interactions as well as increase employment opportunity (Ireys et al., 1996; Nowicki, 2003; O'Connor & Spreen, 1988; Reiss, 2013). Such interplay between these factors may ultimately reduce the emergence of socio-economic inequalities associated with disabilities in young people.

The main strengths of this study are its longitudinal nature and its use of detailed register data, which allowed us to examine associations between disability status during adolescence and various SES outcomes during young adulthood. However, the study also has some limitations. First, we did not apply precise and consistent definitions and measurements to assess disability, which limits characterisation of the disability status based on types, severity and domains of functioning such as cognition, mobility, self-care, life activities and participation (Michaud et al., 2007). Second, we only followed about 25% of the representative sample at T1. Even though most of the attrition was planned, and attrition analyses showed some significant differences between those who dropped out and those who completed the study. Specifically, the attrition at T2, T3 or T4 was significantly associated

with participants' characteristics and behaviours at T1, such as older age, male gender, higher perceived parental overprotectiveness, lower scores for perceived parental care, loneliness, poor grades, few hours spent on homework, conduct problems, and low parental socio-economic status (Abebe et al., 2012; Wichstrom, 2000). Most of these factors could influence associations between disability and SES, and indicate a source for selection bias, thus potentially impact the generalizability of findings. Third, although parental SES, mental health problems and evaluations of self-perception explained most of the significant differences in SES between those with and without disability, other potential explanations that determine the academic attainment and socio-economic opportunities of young people with disability should also be considered, e.g., school-level determinants such as school-level inclusivity and diversity (Humphrey, Wigelsworth, Barlow, & Squires, 2013).

Overall, adolescents with some forms of disability attending mainstream education have a greater vulnerability to socio-economic inequalities and are over-represented in social welfare benefits during the transition to young adulthood. The study findings provide clear implications for government policy and programs to address such gradients in SES associated with disability as well as to set interventions to improve quality of life of young people with disability. For instance, such interventions should target disabled adolescents with a low parental SES and aim to improve the mental wellbeing, particularly addressing self-perceived scholastic competence and social acceptance. This may reduce the development of socio-economic inequalities associated with disability over time. We also recommend that further research should be conducted on other underlying mechanisms and to evaluate the impact of interventions on quality of life of young people with disabilities.

Competing Interests

The authors declare that they have no competing interests.

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Tables

Table 1. Prevalence of different forms of disabilities reported at T1 and T2.

Forms of disabilities	N	%
T1		
Difficulty with speaking	32	1.29
Difficulty with reading and writing	148	5.94
Having physical disability	43	1.73
T2		
Being dyslectic	33	1.17
Having impaired vision	119	4.59
Having impaired hearing	17	0.66
Having movement disability	34	1.31
Having one of learning disabilities at T1/T2	175	7.06
Having one of physical disabilities at T1/T2	187	7.54
Having at least one type of disabilities at T1/T2	331	12.71

T= survey time point

Table 2. Descriptive summary of study participants ($N = 2606$).

	Disability		No disability	
	($N = 331$; 12.7%)		($N = 2275$; 87.3%)	
SES indicators – Outcomes				
Level of education, N (%)				
Primary and secondary	188	56.80	1017	44.76
College and University	143	43.20	1255	55.24
Annual net income in 1000 NOK (1995–2007), M (SD)	178.93	88.44	184.88	88.92
Being unemployed (2001–2007), N (%)	131	14.94	200	11.58
Recipients of welfare benefits (2001–2007), N (%)	75	22.66	281	12.36
Duration for social benefits in months (1995–2007), M (SD)	3.48	11.95	1.27	6.54
Covariates and explanatory variables				
Age at T4, M (SD)	28.50	1.86	28.50	1.99
Gender, N (%)				
Females	175	52.87	1282	56.40
Males	156	47.13	991	43.60
Parental education, N (%)				
Mother and/or father with primary education	29	8.98	172	7.59
Mother and/or father with secondary education	169	52.32	1094	48.28
Mother and/or father with lower university education	92	28.48	668	29.48

Mother and/or father with higher university education	33	10.22	332	14.65
Mental health problems at T4, M (SD)	1.57	0.52	1.46	0.45
Scholastic competence at T2, M (SD)	2.77	0.52	2.94	0.53
Social acceptance at T4, M (SD)	3.11	0.59	3.23	0.51

Note: SES = socio-economic status, M = mean, SD = standard deviation, T = time points of the survey, N = number.

Table 3. Logistic regression models showing associations between disability and low levels of education.

Independent variables	Low levels of education (primary and secondary school)				
	Model 1	Model 2	Model 3	Model 4	Model 5
	β (se)	β (se)	β (se)	β (se)	β (se)
Having disability	0.120 (0.029)***	0.110 (0.028)***	0.085 (0.028)**	0.069 (0.029)*	0.043(0.029)
Age at T4	-	-0.026 (0.005)***	-0.025 (0.004)***	-0.024 (0.004)***	-0.028 (0.005)***
Gender	-	-0.122 (0.018)***	-0.131 (0.018)***	-0.147 (0.018)***	-0.154 (0.018)***
Parental education	-	-	-0.167 (0.018)***	-0.165 (0.010)***	-0.138 (0.010)***
Mental health problems at T4	-	-	-	0.136 (0.019)***	0.096 (0.021)***
Scholastic competence at T2	-	-	-	-	-0.177 (0.017)***
Social acceptance at T4	-	-	-	-	-0.036 (0.018)

Notes: Statistically significance values showing differences between those who did not report disability (a reference group) and reported disability: *$p < 0.05$,

**$p < 0.01$, ***$p < 0.001$. β (se) = average marginal probabilities and robust standard error (in parenthesis). T = time points of the survey

Table 4. Random intercept logistic regression models showing associations between disability and unemployment.

| Independent variables | Being unemployed (2001-2007) | | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
	β (se)	β (se)	β (se)	β (se)	β (se)
Having disability	0.045 (0.013)**	0.043 (0.013)**	0.036 (0.012)**	0.027 (0.012)*	0.021 (0.012)
Age at T4	-	-0.006 (0.002)**	-0.006 (0.002)**	-0.006 (0.002)**	-0.005 (0.002)**
Gender	-	0.007 (0.007)	0.007 (0.007)	0.001 (0.007)	-0.002 (0.007)
Parental education	-	-	-0.018 (0.005)***	-0.018 (0.004)***	-0.013 (0.004)**
Mental health problems at T4	-	-	-	0.067 (0.007)***	0.054 (0.008)***
Scholastic competence at T2	-	-	-	-	-0.029 (0.007)***
Social acceptance at T4	-	-	-	-	-0.014 (0.007)

Notes: Statistically significance values showing differences between those who did not report disability (a reference group) and reported disability: *$p < 0.05$,

**$p < 0.01$, ***$p < 0.001$. β (se) = average marginal probabilities and robust standard error (in parenthesis). T = time points of the survey

Table 5. Random intercept logistic regression models showing associations between disability and welfare benefits.

	Being a receipt of welfare benefits (2001-2007)				
	Model 1	Model 2	Model 3	Model 4	Model 5
Independent variables	β (se)	β (se)	β (se)	β (se)	β (se)
Having disability	0.044 (0.011)***	0.044 (0.010)***	0.042 (0.009)***	0.034 (0.011)***	0.027 (0.008)**
Age at T4	-	-0.002 (0.001)	-0.001 (0.001)	-0.001 (0.001)	-0.001 (0.001)
Gender	-	0.005 (0.005)	0.004 (0.005)	0.005 (0.005)	0.004 (0.005)
Parental education	-	-	-0.025 (0.003)***	-0.023 (0.003)***	-0.018 (0.003)***
Mental health problems at					
T4	-	-	-	0.074 (0.005)***	0.062 (0.005)***
Scholastic competence at T2	-	-	-	-	-0.029 (0.005)***
Social acceptance at T4	-	-	-	-	-0.012 (0.005)*

Notes: Statistically significance values showing differences between those who did not report disability (a reference group) and reported disability: *p < 0.05, **p < 0.01, ***p < 0.001. β (se) = average marginal probabilities and robust standard error (in parenthesis). T = time points of the survey

Table 6. Random intercept linear regression models showing associations between disability and duration of social benefits.

| Independent variables | Duration for social benefits (in months) (1995-2007) | | | | |
| | Model 1 | Model 2 | Model 3 | Model 4 | Model 5 |
	β (se)	β (se)	β (se)	β (se)	β (se)
Having disability	0.745 (0.229)**	0.682 (0.228)**	0.714 (0.242)**	0.687 (0.243)**	0.371 (0.252)
Age at T4	-	-0.074 (0.036)*	-0.074 (0.037)*	-0.079 (0.037)*	-0.089 (0.037)*
Gender	-	-0.672 (0.197)**	-0.651 (0.202)**	-0.711 (0.203)***	-0.716 (0.209)**
Parental education	-	-	-0.248 (0.129)	-0.205 (0.129)	-0.270 (0.135)*
Mental health problems at T4	-	-	-	0.626 (0.157)***	0.355 (0.167)*
Scholastic competence at T2	-	-	-	-	-0.182 (0.190)
Social acceptance at T4	-	-	-	-	-0.712 (0.161)***

Notes: β = regression coefficient, SE = standard error, SES = socio-economic status. *** $p < 0.001$, ** $p < 0.01$, * $p < 0.05$. T = time points of the survey