Self-rated health among young Europeans not in employment, education or training—with a focus on the conventionally unemployed and the disengaged

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Abstract
NEET is an acronym for Not in Employment, Education or Training. For the year 2010, it is estimated that 12.5% of all young people aged 15–24 in the OECD countries could be categorised as NEETs. Within this group, various subgroups of NEET are identified. Our study, which was conducted using cross-sectional data collected through the European Social Survey, focuses on the category of people who are assumed to be most marginalised and inactive: “the disengaged.” Participants in the study were men and women aged 18–30, originating from 33 European countries. The results show that disengaged NEETs reported poorer health than both young people who were conventionally unemployed and those in employment or studying. It is also shown that “the disengaged” scored worse on other social and welfare variables, for example, trust and social activity. Being disengaged is discussed in relation to the gross domestic products of the different countries.

Keywords: NEET; conventionally unemployed; disengaged; GDP; gender

During the last few decades, European labour market performance has deteriorated, resulting in rising unemployment rates, with young people being particularly hard hit (Eurostat, 2013a). Furthermore, the number of young people who, in addition to being unemployed, are also disconnected from education or training is on the rise (OECD, 2006, 2012; UN, 2007). This category of young people is called NEET, which is an acronym for Not in Employment, Education or Training. For 2010, it is estimated that 12.5% of all young people aged 15–24, in

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the 26 OECD countries for which data are available, were neither in education nor in employment or training. In total, this represents around 17 million young people who are not making the traditional transition from childhood (school/education) to adulthood (education/employment) (OECD, 2012). However, NEET rates across the European countries vary considerably; in certain Scandinavian countries, such as Denmark and Norway, rates are lower than 10%, while NEET rates in Italy and Spain range between 15 and 20% (Eurostat, 2013b).

Moreover, it is not easy to define and measure NEET, and the number of NEETs varies substantially according to how the category is defined and measured (Bäckman & Franzen, 2007). NEET does not refer to a homogeneous group of young people with similar resources and living conditions, but consists of different subgroups, characterised by varying levels of labour market marginalisation and inactivity (Yates & Payne, 2007).

In a recent report by Eurofound (2012), five main subgroups of NEET are identified. The first category is called the unavailable for employment or education (in the following text called unavailable), which includes young people with family responsibilities and those who are sick or disabled. Another group, who might be described as voluntary NEETs, may be relatively active in the sense that they may travel or are engaged in art, music, etc. Opportunity seekers can be defined as a group of young people who are actively looking for work or training but are holding out for opportunities to apply their skills and status; these job seekers are probably relatively highly educated and have substantial resources. The conventionally unemployed are young people who are looking for a job and are normally registered at an employment office. Finally, the disengaged are young people who can be assumed to be relatively inactive and marginalised from the labour market; this category includes those who are not actively looking for jobs or education and are not constrained from doing so by other obligations or incapacities.

Studies show that labour market marginalisation and inactivity are related to a higher risk of exclusion and poor health status. For instance, the association between youth unemployment and mental health has been well established for a long time (McKee-Ryan, Song, Wanberg, & Kinicki, 2005; Morell, Taylor, & Kerr, 1998). The most commonly used theory aiming at explaining the well-being consequences of becoming unemployed has a functionalistic approach. In addition to the economic or the manifest function that employment fulfil this theoretical perspective emphasizes that it is the loss of central manifest functions (such as time structure, social identity, regular activity and social contacts) that employment usually provides, that is, the main explanation for why most of the studies show that unemployment deteriorates mental well-being (Jahoda, 1982; Warr, 1987).

Regarding NEETs, there is a need to know more about the associations between health and different subgroups of NEETs. According to Yates and Payne (2007), one cannot take for granted that NEETs in general experience social exclusion and poorer health compared with young people in employment, education, or training. There is reason to believe that there is a significant variation between the various categories of NEET depending on level of labour-market
marginalisation and inactivity, and therefore, it is also likely that health consequences vary according to the type of NEET subgroup (Eurofound, 2012; Thompson, 2011). Knowledge regarding perceived health status among different subgroups of NEETs is important for different reasons. For instance, with further knowledge regarding the different subgroups of NEETs, more directed public policy making and interventions are possible.

One can assume that there are widespread health problems among “the unavailable,” but some of these health problems are presumably not caused by being a NEET, but rather provide an explanation for why they have become a NEET in the first place. This is probably most significant for those young people who report that they are sick and/or disabled. The situation of being a “voluntary NEET” or an “opportunity seeker” is probably not experienced as problematic or stressful to the same extent as the other categories of NEET. “Voluntary NEETs” have chosen to follow alternative trajectories and are active in “non-formal” activities, and “opportunity seekers” often have a privileged background which enables them to hold out for good opportunities. However, “the conventionally unemployed” can be assumed to be a vulnerable group of young people, as they are involuntary unemployed and want to find a job. This is presumably even truer regarding “the disengaged.” These young unemployed people are marginalised on the labour market and might have given up their attempts to find a job. This means that there may be a high risk of social isolation, inactivity, identity loss and financial deprivation (Eurofound, 2012), which are all risk factors for experiencing poor health (Jahoda, 1982; Warr, 1987).

There is also reason to believe that the health consequences of being marginalised and inactive on the labour market vary according to gender. Research into the consequences of unemployment on mental well-being has shown that the consequences are relatively equal for women and men in contexts where employment plays a similarly large role in women’s and men’s lives (Strandh, Hammarström, Nilsson, Nordenmark, & Russel, 2013). On the other hand, in contexts that are characterised by a strong male-breadwinner ideology—meaning that there is a strong belief that men should mainly be engaged in the labour market and be the main breadwinner, and that women should have the main responsibility for the household—the negative consequences of unemployment are more prominent among men (e.g. Artazcoz, Benach, Borell, & Cortés, 2004). A possible explanation for these results is that the individual loses more of his/her identity when becoming unemployed, if employment is the norm. It is also likely that the financial consequences are worse when the unemployed person used to be the main breadwinner (Nordenmark, 1999a; Strandh et al., 2013).

When looking at the role of employment for women and men across Europe, significant differences can be seen. The employment rates among women are in general highest in the Nordic countries and lowest in southern parts of Europe, with the exception of Portugal (Eurostat, 2013c). Furthermore, comparative studies have shown that central, southern and eastern European women and men are more likely to express a more
traditional gender ideology than those living in the Nordic countries, meaning that they are more inclined to support the idea that women should bear the main responsibility for the household while men should be the main breadwinners (Nordenmark, 2004a, 2004b; Tavora, 2012; Telpt, 2008). This means that a large majority of individuals in Europe live in contexts with a relatively traditional gender ideology. Against this background, especially inactive and marginalised young men might experience lower levels of well-being compared with inactive and marginalised women.

Finally, it is also possible that the health consequences of being marginalised and inactive on the labour market vary according to the economic and labour market situation in a country. Some unemployment studies argue that it is easier to adapt in a context where many other people are in the same situation compared with one where most people are employed (Payne, 1987), while other studies (e.g. Nordenmark, 1999a) show that it seems to be even harder to adapt to the unemployment situation if one lives in a context where a large proportion of others are also marginalised on the labour market. If the theory of relative social inequalities (Wilkinson & Picket, 2007) is valid for youth unemployment, it would be a worse situation for those who are unemployed where many others are employed and have good economy as the relative deprivation and social status differences are high in those societies. However, the significance of unemployment and economic deprivation is also depending on the resources in the society in general as a rich society have more general benefits compared with a poor society (Marmot, 2004). Against this background it is of interest to investigate whether the level of well-being differs between different groups of NEETs, depending on whether they live in a context characterised by a relatively bad economic situation, or a relatively good one.

In sum, limited research has been conducted on health differences in relation to belonging to different subgroups of NEETs across Europe, and it is assumed that a higher degree of marginalisation will increase the risk of ill health. Therefore, this study focuses on self-rated health among the young men and women who are assumed to be most marginalised and inactive, that is, “the disengaged,” in relation to those who are conventionally unemployed and those who are in education and/or employment, and live in different economic contexts across Europe.

AIM AND RESEARCH QUESTIONS

The main aim is to analyse young men and women who are conventionally unemployed (unemployed looking for a job) and disengaged (unemployed and not actively looking for a job or education), and associations with self-rated health in different European contexts. This is done by analysing the following research questions:

1. What is the association between activity status (employment/education, conventionally unemployed, disengaged) and self-rated health, and are there any gender differences?
2. Are there any differences in self-rated health among “the conventionally
unemployed’’ and ‘‘the disengaged’’ who live in a context where there is a relatively low standard of living, compared with a relatively high standard of living?

DATA AND METHOD

This study was conducted using cross-sectional data collected through the European Social Survey (ESS). ESS is a biennial academically driven survey which started in 2002, and the latest data available are from 2010, with almost 30 European countries participating in each round (www.europeansocialsurvey.org). Each participating country has contributed with probability samples representative of their populations aged ≥15 years (www.europeansocialsurvey.org/index.php?option=com_content&view=article&id=80&Itemid=365). Sampled respondents have been interviewed face-to-face, using a questionnaire translated into the language of the respondent by an ESS translation team (www.europeansocialsurvey.org/index.php?option=com_content&task=view&id=66&Itemid=112).

Participants

The participants included in this study were young men and women aged 18–30, from 33 European countries, who had participated in any of the ESS data collection rounds during the years between 2002 and 2010. When focusing on young adults, a lower upper age limit would have been more justified, but due to the relatively small size of the sample in some countries, the upper age limit was set as high as 30 years.

Dependent variable

Self-reported health was measured using the question ‘‘How would you assess your health in general?’’ with the response alternatives ‘‘very good,’’ ‘‘good,’’ ‘‘fair,’’ ‘‘bad’’ and ‘‘very bad.’’ The variable was dichotomised and categorised as 0 = good (very good, good) and 1 = bad (fair, bad, very bad). The main reason for coding the response alternative ‘‘fair’’ as bad health was that relatively few respondents answered that they had bad or very bad health (1.9 and 0.5%, respectively).

Main independent variables

Activity status was derived from the question ‘‘Which of these descriptions best describes your situation (in the last 7 days)?,’’ with nine response alternatives: (1) ‘‘paid work (or away temporarily, employee, self-employed, working for your family business),’’ (2) ‘‘education, even if on vacation (not paid for by employer),’’ (3) ‘‘unemployed and actively looking for a job,’’ (4) ‘‘unemployed, wanting a job but not actively looking for a job,’’ (5) ‘‘permanently sick or disabled,’’ (6) ‘‘retired,’’ (7) ‘‘community or military service,’’ (8) ‘‘housework, looking after children, others’’ and (9) ‘‘other.’’ It should be noted that this is a rather simple way of measuring activity status and labour-market connection. One problem is that the question refers only to the previous 7 days, which means that the particular status can be relatively temporary and not long-lasting. However, on an aggregated level it can be seen as a rough measure of level of activity and labour-market connection.
The response alternatives “education, even if on vacation (not paid for by employer)” and “paid work (or away temporarily, employee, self-employed, working for your family business)” represented “employment/education,” meaning young people in employment, education or training. The response alternative “Unemployed and actively looking for a job” represented “the conventionally unemployed” (and to some extent “opportunity seekers”), and the response alternative “unemployed, wanting a job but not actively looking for a job” represented “the disengaged.” Those answering “Permanently sick or disabled” and “Housework, looking after children, others” were categorised as “the unavailable.” The response alternative “Other” represented “voluntary NEETs,” and alternatives six and seven were excluded. These categorisations are not unproblematic as there is a risk for an overlap between categories. For instance, young people who are in some kind of training can probably be found among both “the employed/students” and “the conventionally unemployed”; furthermore, the group referred to as “voluntary NEETs” probably consists of a mixture of subcategories. However, the category of most interest in this study, “the disengaged,” should be quite well captured with the measure used as the question is specific and not overlap with the other categories.

Gross domestic product (GDP) per capita indicates the economic standard of living in a country, and in this paper the term is used in combination with the variable “activity status” to analyse self-reported health among “the conventionally unemployed” and “the disengaged,” living in different economic contexts. Because GDP has no linear relationship with self-reported health (this relationship is much stronger when GDP is relatively low and levels out when GDP becomes higher), this variable is dichotomised (High = > 21,536 US Dollars and Low = < 21,537 US Dollars). The combined variable GDP/activity status has the following values: (1) high GDP/employed-students, (2) high GDP/conventionally unemployed, (3) high GDP/disengaged, (4) low GDP/employed-students, (5) low GDP/conventionally unemployed, (6) low GDP/disengaged.

**Control variables**

The relationship between activity status and self-reported health was controlled for factors that might explain some part of the relationship between activity status and self-reported health. On the basis of earlier research on factors of importance for the relationship between labour market marginalisation and health (Jahoda, 1982; Nordenmark, 1999b), the control variables capture social and economic dimensions, and some important background characteristics.

Social activity was represented by the question “Compared with other people of your age, how often would you say you take part in social activities?” The variable was dichotomised, with the response alternatives “much less than most” and “less than most” categorised as 1 (“less than most”) and the response alternatives “about the same,” “more than most” and “much more than most” as 0 (“more than most”).

Trust consisted of an index (Cronbach’s alpha 0.73) based on three questions in the questionnaire: “Generally speaking would you say that most people can be
trusted, or that you can’t be too careful in dealing with people?,” “Do you think that most people would try to take advantage of you if they got the chance, or would they try to be fair?” and “Would you say that most of the time people try to be helpful or that they are mostly looking out for themselves?” with response alternatives ranging from 0 (as the most negative answer) to 10 (as the most positive answer). The index variable ranged from 0 to 30 and was dichotomised at the lower quartile, with a cut-off point at 11. Individuals scoring 11 or less categorised as having “no trust in people” (1) and individuals scoring more than 11 categorised as having “trust in people” (0).

Household income was represented by the question “Which of the descriptions on this card comes closest to how you feel about your household’s income nowadays?” The variable was dichotomised, with the response alternatives “finding it very difficult on present income” and “finding it difficult on present income” categorised as 1 (“difficult to manage on present income”) and the response alternatives “living comfortably on present income” and “coping on present income” as 0 (“managing on present income”).

Father’s employment status is an indication of parents’ labour market and socioeconomic status. Father’s employment status was used because it is a better measure of labour market marginalisation among parents than the mother’s employment status in most European countries. Employment has not been, and is still not, the same strong norm among mothers as it is among fathers in most parts of Europe. Father’s employment status was represented by the question “When you were 14, did your father work as an employee, was he self-employed or was he not working?” with the response alternatives “employee,” “self-employed,” “not working” and “father was dead/absent when respondent was 14.” The variable was dichotomised, with the response alternatives “not working” and “father was dead/absent when respondent was 14” categorised as “not working” (1) and the response alternatives “employee” and “self-employed” categorised as “working” (0).

Domicile was derived from the question “Which phrase on this card best describes the area where you live?” The variable was dichotomised, with the response alternatives “a country village” and “a farm or home in the countryside” categorised as “rural” (1) and the response alternatives “a big city,” “the suburbs or the outskirts of a big city” and “a town or small city” as “urban” (0).

Belong to minority ethnic group was represented by the question “Do you belong to a minority ethnic group in [country]?” and categorised as 1 = “yes” and 0 = “no.” Age was derived from the year the respondent was born and categorised as 0 = “18–24 years” and 1 = “25–30 years.” Gender was categorised as 0 = “man” and 1 = “woman.”

**Statistical analysis**

The ESS data collection rounds from 2002 to 2010 were merged and analysed as a single sample with SPSS 20.0. The data were weighted to correct for different national sampling procedures and population sizes. When the weight is used, countries with larger populations contribute more to the sample size than countries with smaller populations (www.europeansocialsurvey.org/index.php?}
option=com_content&task=view&id=80 &Itemid=125). Prevalence of self-rated health, activity status and control variables were calculated and differences between men and women were compared with chi-square tests. Spearman’s correlation test was used to test for correlation between the independent variables. Logistic regression was used to test the association between self-rated health and activity status when adjusting for control variables. A p-value of <0.05 and a 95% confidence interval (CI) were seen as statistically significant.

RESULTS

Figure 1 illustrates the percentage of NEETs in different countries, as measured in this study.

The total percentage of NEETs in all countries included in this study was 20.4%, with a marked variation in the percentage of NEETs among the studied countries. The lowest rates (between 11.2 and 13.3) were found in the Nordic countries and in countries such as Slovakia, Slovenia, Austria and the Netherlands. The highest rates (between 27.1 and 56.1) were found among the southern European countries, with Turkey having the most extreme figure.

The number of young women and men aged 18–30 years in each category of NEET is shown in Table I. The percentage of NEETs was substantially higher among women than among men: about every fourth young women compared with about every seventh young man. This difference is mainly explained by the fact that the proportion of women who were “unavailable” was much higher than the proportion of “unavailable” young men. The second highest NEET category was “the conventionally unemployed.” The category of NEETs assumed to be most inactive and marginalised, “the disengaged,” consisted of 2.7% of the young people.

From now on this paper will focus on the categories of most interest in this study: “the conventionally unemployed” and, particularly, “the disengaged.” Table II shows how young people who were
conventionally unemployed and disengaged differed in relation to those who were employed/students, regarding self-rated health and some characteristics that might be of importance for self-rated health.

Table II shows that young people who were conventionally unemployed reported poorer health than those who were employed/students, and “the disengaged” reported poorer health than “the conventionally unemployed.” Women who were employed/students or conventionally unemployed reported a higher prevalence of ill health compared with men in the same groups, whereas there was no significant difference between men and women among “the disengaged.”

Table II. Distribution of variables among women and men in employment/education, active unemployment (conventionally unemployed) and non-active unemployment (disengaged) in Europe (18–30 years), percentage (n).

| Activity status                        | Total | Men | Women |
|----------------------------------------|-------|-----|-------|
| Employment/education                   | 78.4  | 85.3| 74.1  |
| NEET                                   | 20.4  | 14.7| 25.9  |
| Different NEET categories              |       |     |       |
| Unavailable                            | 8.4   | 1.6 | 14.9  |
| Voluntary NEET                         | 2.1   | 1.9 | 2.3   |
| Conventionally unemployed              | 7.2   | 8.3 | 6.1   |
| Disengaged                             | 2.7   | 2.9 | 2.6   |
| N                                      | 47,354| 23,073| 24,281|

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| Activity status                        | Total | Men | Women |
|----------------------------------------|-------|-----|-------|
| Employment/education                   |       |     |       |
| Conventionally unemployed              |       |     |       |
| Disengaged                             |       |     |       |

*p < 0.05.

*aChi-square tests between men and women within the groups of “employment/education,” “active unemployment” and “non-active unemployment” respectively.

*bChi-square test between “employment/education” and “conventionally unemployed” for all variables (Total).

*cChi-square test between “conventionally unemployed” and “disengaged” for all variables (Total).
The percentages of young people who were 18–24 years old varied between 55 and 67% in the different categories, and the highest percentage was found among disengaged men.

Table II also shows that “the conventionally unemployed” in general scored worse than “the employed/students,” and that “the disengaged” scored even worse also on other social and welfare variables. “The disengaged” had lower trust and were less socially active, had more often had a non-working father, lived in a rural area and belonged to a minority group, compared with “the conventionally unemployed.” The same could be said about “the conventionally unemployed” in relation to “the employed/students,” with the exception that they also had a worse financial situation compared with “the employed/students.”

Results regarding gender differences among the last six variables in Table II show that men reported trust to a lower degree than women in all three groups of young people, and that among “the employed/students” and “the disengaged,” woman tended to report lower levels of social activity compared with men. Among those who were in employment/education, women reported more difficulties in managing on their present income than men did; and among “the conventionally unemployed,” it was men who reported more such difficulties. The only significant gender differences that could be found regarding father’s employment status and size of population were found among young people in employment/education, showing that it was slightly more common that women had a non-working father and that men lived in a rural area. Significant differences between men and women regarding belonging to a minority ethnic group were only seen among “the conventionally unemployed”: 13.6% among men and 9.4% among women.

Table III shows the relationship between activity status and self-rated health when controlling for the other independent variables of relevance for self-rated health. The crude analysis in Table III shows that being employed/student was associated with a lower level of ill health compared with being conventionally unemployed. Being disengaged increased the risk of reporting ill health, but this was significant only among men. This association remained in the adjusted analysis; that is, being disengaged increased the risk of ill health in comparison with being conventionally employed among men only, while women reported a high degree of ill health regardless of employment status. There was no significant difference in self-rated health between “the conventionally unemployed” and “the employed/students” when other potential risk factors for ill health were taken into account.

Having low trust in people, being less socially active than most people, having difficulty managing on present income and having had an unemployed father at the age of 14 were significantly associated with ill health among both men and women. Young men living in a rural area had a significantly lower risk of ill health, but this was not the case for young women. Belonging to a minority ethnic group was associated with increased ill health among both men and women. For women, there was a significant relationship between being 25–30 years old, as compared with being 18–24 years old, and ill health in the adjusted model. For men, there was no significant association.
Table III. Associations between activity status and self-rated ill health, adjusted for potential confounders among young people in Europe aged 18–30 years.

| Activity status                  | Unadjusted | Women       | Adjusted | Men   | Women |
|----------------------------------|------------|-------------|----------|-------|-------|
|                                  | Total      | Men         |          |       |       |
| Employment/education             | 0.76       | 0.75        | 0.73     | 0.75  | 0.75  |
|                                  | (0.70–0.82)** | (0.67–0.84)** | (0.65–0.82)*** | (0.67–0.84)** | (0.65–0.82)*** |
| Conventionally unemployed        | Ref.       | Ref.        | Ref.     | 1.24  | 1.57  | 0.94  |
|                                  |            |             |          |       |       |
| Disengaged                       | 1.20       | 1.32        | 1.04     | 0.99  | 0.98  | 0.98  |
|                                  | (1.05–1.37)** | (1.09–1.59)** | (0.86–1.26) | (1.06–1.44)** | (1.27–1.94)*** |

Control variables

|                                  |          |            |          |       |       |
| No trust in people               | 1.76     | 1.61       | 1.91     | 1.59  | 1.43  | 1.78  |
|                                  | (1.68–1.84)** | (1.51–1.73)*** | (1.80–2.03)*** | (1.51–1.68)** | (1.32–1.55)** |

| Less socially active             | 1.61     | 1.68       | 1.51     | 1.48  | 1.50  | 1.47  |
|                                  | (1.53–1.68)** | (1.56–1.80)** | (1.42–1.61)*** | (1.40–1.57)** | (1.39–1.63)** |

| Difficult to manage on           | 2.33     | 2.37       | 2.56     | 1.92  | 1.93  | 1.92  |
| present income                   | (2.23–2.44)** | (2.21–2.54)** | (2.12–2.40)** | (1.81–2.03)** | (1.78–2.10)** |

| Father not working               | 1.57     | 1.41       | 1.65     | 1.24  | 1.05  | 1.44  |
|                                  | (1.47–1.67)** | (1.28–1.56)*** | (1.52–1.79)*** | (1.15–1.35)** | (0.94–1.19)** |

| Rural                            | 0.89     | 0.77       | 1.00     | 0.85  | 0.75  | 0.97  |
|                                  | (0.85–0.94)** | (0.71–0.83)*** | (0.94–1.06) | (0.80–0.91)** | (0.68–0.81)** |

| Minority ethnic group            | 1.54     | 1.38       | 1.64     | 1.28  | 1.18  | 1.43  |
|                                  | (1.43–1.65)** | (1.24–1.54)*** | (1.50–1.80)*** | (1.17–1.40)** | (1.04–1.33)** |

| Age 25–30 years                  | 1.18     | 1.17       | 1.20     | 1.08  | 1.04  | 1.14  |
|                                  | (1.13–1.24)** | (1.10–1.25)*** | (1.13–1.27)*** | (1.02–1.14)** | (0.96–1.12)** |

| Women                            | 1.41     |            |          |       |       |       |
|                                  | (1.35–1.48)*** |          |          |       |       |       |
|                                  |          |            |          |       |       |       |

R² (Nagelkerke)                   |          |            |          | 0.065 | 0.053 | 0.071 |
N (weighted)                      | 37,098   | 18,548     | 17,549   |       |       |       |

Results of logistic regression analysis with 95% CI. Exp(B) (confidence intervals).

***p < 0.001; **p < 0.01; *p < 0.05.

aAdjusted for trust, social activity, feelings about household income, father’s employment, domicile, belong to minority ethnic group, age and gender.

bAdjusted for trust, social activity, feelings about household income, father’s employment, domicile, belong to minority ethnic group, age.
between age group and perceived ill health when other potential risk factors for ill health were taken into account.

Already at this stage it can be noted that most of the countries on the left-hand side in Figure 1 are categorised as having a relatively high GDP, and most of the countries on the right-hand side have a relatively low GDP. Not surprisingly this implies a strong relationship between GDP and the percentage of NEETs in a country, which means that when we analysed the relationships between activity status and self-rated health in varying GDP contexts we also analysed this relationship in contexts with varying levels of NEETs.

Table IV presents differences between activity level and self-rated health in varying economic contexts when controlling for relevant independent variables. Model 1 presents the unadjusted results and Model 2 the adjusted results, when using “high GDP/employed-education” as the reference category. Models 3 and 4 present the same results with “high GDP/disengaged” as the reference category. The unadjusted results in Model 1 show that for all categories there was a higher risk of experiencing ill health in relation to “the employed/students” living in a context with a relatively good economic standard. Health was poorest among “the disengaged” living in a context with a relatively low economic standard: 2.47. Even the adjusted results in Model 2 show that the risk of experiencing poor health was somewhat higher among all categories in relation to “the employed/students” who lived in a country with a relatively high economic standard. The highest risk of experiencing ill health was found among “the disengaged” living in a context where there was a relatively low GDP, although the risk decreased to 1.74 when controlling for other factors of relevance for self-rated health.

The comparison between the health status of disengaged young people living in a context with poor economic conditions and disengaged young people living in a context with a good economic standard of living is presented in Models 3 and 4 (Table IV). Results from the unadjusted analysis show that “the disengaged” living in a context categorised as a low economic standard reported significantly poorer health (1.38) compared with “the disengaged” living in a context with good economic conditions. When controlling for other factors in Model 4, the tendency remained, although it was statistically insignificant (p = 0.051).

DISCUSSION

The descriptive statistics in this study show that the average share of NEETs in all countries included in this study is 20%, which is a figure well in line with the results from other studies (e.g. OECD, 2013). The lowest rates are found in the Nordic countries Sweden, Norway, Denmark and Finland and in countries such as Slovakia, Slovenia, Austria and the Netherlands, and the highest rates can be found among the southern European countries Turkey, Greece and Cyprus and among the eastern European countries Bulgaria, Latvia, Ukraine and Romania. Also this finding corresponds with OECD (2013). In general, this means that the lowest levels of NEET rates are in countries with a relatively high economic standard and a well-developed welfare policy, and that the highest rates can be found in
Table IV. Associations between GDP/activity status and self-rated ill health, adjusted for potential risk factors among young people aged 18–30 years.

| GDP/activity status                        | Model 1 Unadjusted | Model 2 Adjusted | Model 3 Unadjusted | Model 4 Adjusted |
|-------------------------------------------|--------------------|------------------|--------------------|------------------|
| High GDP/employed-education               | Ref.               | Ref.             | 0.56*** (0.47–0.66) | 0.75** (0.60–0.93) |
| High GDP/conventionally unemployed        | 1.58 (1.41–1.78)***| 1.29 (1.13–1.46)***| 0.89 (0.72–1.10)   | 0.96 (0.76–1.22)   |
| High GDP/disengaged                       | 1.78 (1.48–2.15)***| 1.34 (1.08–1.66)**| Ref.               | Ref.             |
| Low GDP/employed-education                | 1.86 (1.77–1.96)***| 1.46 (1.37–1.55)***| 1.04 (0.87–1.26)   | 1.09 (0.88–1.35)   |
| Low GDP/conventionally unemployed         | 2.07 (1.85–2.31)***| 1.25 (1.09–1.43)**| 1.16 (0.94–1.43)   | 0.93 (0.73–1.19)   |
| Low GDP/disengaged                        | 2.47 (2.12–2.86)***| 1.74 (1.47–2.07)***| 1.38 (1.10–1.74)   | 1.30 (1.00–1.70)   |
| Control variables                         |                    |                  |                    |                  |
| No trust in people                        | 1.48 (1.40–1.57)***| 1.48 (1.40–1.57)***|                    |                  |
| Less socially active                      | 1.49 (1.41–1.57)***| 1.49 (1.41–1.57)***|                    |                  |
| Difficult to manage on present income     | 1.77 (1.67–1.87)***| 1.77 (1.67–1.87)***|                    |                  |
| Father not working                        | 1.21 (1.11–1.31)***| 1.21 (1.11–1.31)***|                    |                  |
| Rural                                     | 0.86 (0.81–0.91)***| 0.86 (0.81–0.91)***|                    |                  |
| Minority ethnic group                     | 1.27 (1.17–1.39)***| 1.27 (1.17–1.39)***|                    |                  |
| Age 25–30 years                           | 1.10 (1.04–1.16)** | 1.10 (1.04–1.16)**|                    |                  |
| Women                                     | 1.38 (1.31–1.45)***| 1.38 (1.31–1.45)***|                    |                  |
| R² (Nagelkerke)                           | 0.025              | 0.071            | 0.025              | 0.071            |
| N (weighted)                              | 39,527             | 35,452           | 39,527             | 35,452           |

Results of logistic regression analysis with 95% CI. Exp(B) (confidence intervals).

***p < 0.001; **p < 0.01; *p < 0.05; (*)p < 0.1.
countries with a poorer economic situation and a less developed welfare policy. This phenomenon is also demonstrated in Figure 1. The exceptionally high figures in Turkey are also confirmed by the OECD study (2013), which shows that the NEET rates in Turkey have been relatively constant from year 2000 to 2010, ranging between 40 and 50%. Since traditional unemployment rates in Turkey during that period do not differ from other OECD countries (OECD, 2012), it is likely that the high frequency of NEETs in Turkey is explained by differences in how NEETs are defined, measured and categorised.

The percentage of NEET is substantially higher among women than among men. This difference is explained by the fact that the proportion of women who are “unavailable” (14.6%) is much higher than the proportion of “unavailable” young men (1.6%). This difference is probably explained by traditional differences between the sexes, women being “unavailable on the labour market” due to family responsibilities. The finding that the percentage of young people who are conventionally unemployed is somewhat higher for men (8.3%) than for women (6.1%) is well in line with other studies (Reine, Novo, & Hammarström, 2013; Wanberg, 2012) and similar proportions are found among “the disengaged,” that is, the NEETs who are assumed to be most inactive and marginalised: men (2.9%) and women (2.6%).

The study shows that unemployed young people report greater ill health than young people in employment or education, and also that “the disengaged” report greater ill health than “the conventionally unemployed.” A similar pattern is found regarding other welfare and health problems (trust, social activity, income, father’s employment status, place of residence and belonging to minority ethnic group). “The conventionally unemployed” and, particularly, “the disengaged” report significantly worse on these variables compared with those in employment or education. These associations are not surprising. Associations between perceived health and, for example, social capital have been shown in previous studies (Aslund, Starrin, & Nilsson, 2014; Lindström, Ali, & Rosvall, 2012). And further, as mentioned in the introduction, a great number of theories and studies show that labour market marginalisation, inactivity and social isolation are related to higher risks of exclusion and poor health status (Jahoda, 1982; Mc Kee-Ryan et al., 2005; Morell et al., 1998; Warr, 1987).

Being disengaged increases the odds on reporting ill health only among men. For women in general there is no significant relationship between activity status and perceived ill health when potential risk factors for poor health are taken into account. These results correspond with other studies (Paul & Moser, 2009) and support the idea that men in general suffer most from being inactive and marginalised on the labour market. A potential explanation for these results is that large parts of Europe are still characterised by a strong male-breadwinner ideology, which means that men lose more of their identity when they become marginalised and inactive, resulting in greater ill health. It is also likely that the financial consequences are worse when the main breadwinner is inactive on the labour market.

Results regarding different levels of activity status in varying GDP contexts
show that all categories have a higher risk of experiencing ill health in relation to employed/students living in a context with good economic conditions. Self-rated health is poorest among “the disengaged” living in a context with a relatively low economic standard (and a high general NEET rate). This result supports the notion that it can be even harder for individuals to adapt to a situation as marginalised on the labour market if the society in question is characterised by poor economic conditions and a high rate of people who are not in education or training. Similar results are found in other studies (Nordenmark, 1999b). Even if we only have information of GDP and not the income distribution in the different countries it is likely that poor societies are more deprived in relation to, for example, schooling, morbidity, social mobility and a wide range of social problems (Wilkinson & Picket, 2007), which negatively affect young unemployed people who have lower chances to change their situation in these societies compared with a rich society.

All in all, the results illustrate that the characteristics and possible health consequences of being a NEET are rather diverse, which means that it is not relevant to look at NEET as a homogenous phenomenon. This heterogeneity makes it hard to analyse the health consequences of being a NEET. Some subcategories of NEETs may be rather active and socially included in arenas other than the labour market, and therefore manage quite well. However, on the other side of the continuum there are subcategories, such as disengaged men, who seem to have relatively bad living conditions and poor health compared with conventionally unemployed men. There is also a substantial variation in the percentage of NEETs among the European countries and regions. The consequences of being inactive and marginalised on the labour market also seem to differ between regions and economic contexts. The results from this study indicate that self-rated health is poorest among “the disengaged” who are living in a country with relatively poor economic conditions and a high general NEET rate.

Another problem is the question of causality in this study. Since the study is based on cross-sectional data it is difficult to judge whether poorer health status is the result of a selection effect or a consequence of activity status. However, results from conventional unemployment studies suggest that both are probably involved to some extent, but that the effect of unemployment on health seems to be stronger than the selection effect (Nordenmark, 1999a; Paul & Moser, 2009). Furthermore, although confounders to self-related health and employment status are controlled for, there might be other factors of relevance that are not taken into account in the present study.

**CONCLUSIONS**

The study shows that unemployed young people report greater ill health than young people in employment or education, and also that “the disengaged” report greater ill health than “the conventionally unemployed.” Being disengaged increases the odds on reporting ill health only among men. It is also shown that all categories have a higher risk of experiencing ill health in relation to employed/students living in a context with good economic conditions. Self-rated
health is poorest among “the disengaged” living in a context with a relatively low economic standard (and a high general NEET rate).

Even if there is a need to improve and strengthen public policy making for all categories of NEETs it is of vital concern to emphasize interventions directed to conventionally unemployed young people and even more to the “disengaged.” It is also important to further understand the mechanisms between labour market marginalisation and ill-health in different societal economic contexts.

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