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Research Paper

# Motivation for work among non-working disabled people in Norway in a life course perspective<sup>☆</sup>



## *Motivation à travailler et avancée en âge des chômeurs handicapés en Norvège*

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### ABSTRACT

The aim of this study is to analyze attitudes towards work among non-working disabled people and to address their motivation in a life course perspective. The background of the study is low employment rates among disabled people. One hypothesis is that a generous welfare system has disincentive effects because replacement rates of social security are too generous. Although the existing evidence is conflicting, some studies of inflow into benefits suggest that the welfare system may have such effects on people in their 50's and 60's. However these studies tend to draw general conclusions. The current article is based on a 2007 Norwegian dataset on the living conditions of disabled people ( $n = 1652$ ). The findings suggest that age has a profound influence on motivation to work and is undoubtedly the most important predictor. Motivation to work among young disabled people tends to be strong but declines in later life. The substantial age effects are discussed in terms of the experience of exclusion and the availability of alternative social roles. The implication for interpretations of disincentive research is that caution must be exercised when suggesting general conclusions about disincentives based on research examining individuals who are in the final phase of a typical working career.

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## R É S U M É

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*Mots clés :*

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 Exclusion

L'objectif de cette étude est d'analyser les attitudes envers l'emploi de personnes handicapées sans emploi, en considérant leur motivation au regard de l'avancée dans leur cycle de vie. Cette étude prend place dans un contexte où le taux d'emploi des personnes handicapées est faible. Une des hypothèses avancées est qu'un système de protection sociale généreux a des effets dissuasifs parce que le taux de compensation est justement prodigue. Bien que les données existantes soient contradictoires, certaines études portant sur les nouveaux bénéficiaires de prestations sociales suggèrent que ce système a des effets dissuasifs surtout pour les quinquagénaires et les sexagénaires. Ces études tendent cependant à tirer des conclusions très générales. Le présent article est basé sur l'analyse d'un ensemble de données collectées en 2007 en Norvège sur les conditions de vie des personnes handicapées ( $n = 1652$ ). Les résultats montrent un effet important de l'âge sur la motivation à travailler et suggèrent que l'âge est l'indicateur le plus décisif. La motivation des jeunes chômeurs handicapés tend à être forte mais décline avec l'avancée en âge. Les effets significatifs de l'âge sont discutés en prêtant une attention particulière au vécu de l'exclusion et aux possibilités de tenir des rôles sociaux alternatifs. Les recherches s'intéressant aux effets dissuasifs doivent conserver une certaine prudence lorsqu'il s'agit d'avancer des interprétations fondées sur des études portant sur des personnes arrivées en fin de carrière professionnelle.

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## 1. Introduction

The employment situation for people with disabilities in the OECD countries is characterised by low labour market participation. Good economic conditions prior to the current economic recession, and also an increased emphasis on employment integration, did apparently not help disabled people into work. The employment rate of people with disabilities in Norway was 43% to 46% from 2000 to 2008 (Bø & Håland, 2011), but has since decreased to 41% (2012). This figure is similar to the OECD average in the late 2000s, which was slightly above 40% (OECD, 2010). In 2006, the OECD (2006) argued that the Norwegian situation was particularly challenging to understand because the country has low unemployment (2.6% in 2012), high general employment rates (15% above the OECD Europe average in 2008, OECD, 2009) and a seemingly promising set of labour market measures. Thus, the results regarding disabled people are far below expectations.

Disregarding a large number of evaluations of labour market measures, Hvinden (2003) distinguished two major directions in the Norwegian political and scientific discourses on disability employment: "the discourse of equal rights and opportunities" and "the discourse on societal costs". The two discourses suggest very different explanations of low employment rates, but tend to coexist without having much interaction or impact on one another. The discourse of equal rights and opportunities primarily addresses barriers to employment. This type of research often reflects the experiences of disabled people seeking employment (e.g., Vedeler, 2009; Anvik, 2006). The problem is conceived in terms of exclusion and a non-inclusive labour market. Disabled people wish to work but are excluded. On the other hand, the primary concern of the discourse of societal costs is the troubling proportion of people receiving benefits. The typical line of argument is that the generosity and relaxed eligibility criteria of social security cause living on benefits to be perceived as tempting compared to many less attractive jobs (replacement rates in Norway are generally 60% to 66% but occasionally higher, NOU (Norwegian Official Report) 2007, no. 4). The implicit assumption is that the motivation to work is basically economic and will be undermined by the social security system if earnings from

employment are not sufficiently above social security levels. This discourse is politically influential, not primarily regarding labour market policies, but the alternative, namely social security policies. A recent Norwegian official report on changes in incapacity benefits (NOU 2007, no. 4) provided a number of calculations in order to identify situations in which work pays little, thus producing what was conceived as an unwanted incentive structure.

The aim of this article is to critically address the discourse on “societal costs” by analysing the motivation to work among non-working disabled people in a life course perspective. This adds to the current knowledge and interpretation of earlier research because the incentive literature addresses inflow into benefits rather than motivation to work and devotes little attention to attitudes towards work among non-working disabled people. Furthermore, this literature tends to draw general conclusions from research results that are likely to be specific to certain stages in the life course.

### 1.1. Review of the research on disability, employment and the generous welfare state

The main body of research on disincentives to work does not analyse motivation for work. It addresses inflow into social security in relation to eligibility criteria and generosity, and assumes that this inflow is a result of a motivated response to the benefit system. Three existing research traditions can illuminate the disincentive hypothesis:

- international comparisons;
- studies of the support history of new recipients of incapacity/disability benefits;
- studies of inflow after changes in regulations of generosity or eligibility criteria.

International comparisons: Norway is viewed as a country with a fairly generous welfare system, high rates of people receiving incapacity benefits (approximately 10% working age people) and unexpectedly mediocre results regarding disability employment (OECD, 2006, 2010). It is thus tempting to blame the benefit system for the low disability employment rates. However, such an interpretation is not consistent with recent comparative studies. In a cross-national epidemiological study of five Western welfare states, Whitehead et al. (2009) analysed changes in disability employment in periods in which welfare policies had been introduced, modified or removed. The authors found no evidence of negative effects of more generous welfare policies on the employment of disabled people. In a study of 14 OECD countries, Blekesaune (2007) related disability employment to the OECD multi-item scales on: (a) the compensation of the social security system and (b) the policies promoting work/rehabilitation among people at risk of exclusion from the labour market. He found no significant effect of compensation on disability employment, but this result may be caused by the low number of cases (14 countries). The correlations actually showed an (insignificant) effect, but in the opposite direction of what was expected. In countries with high levels of compensation, people with disabilities tend to have higher rates of employment ( $r=0.27$ ). However, the evidence from these studies cannot be regarded as conclusive, in part because countries with more generous welfare systems also tend to have more extensive systems of labour market supports (OECD, 2010), thus nullifying the possible effects of disincentives. The findings of Blekesaune (2007) suggest that countries with more active policies on employment and rehabilitation have higher rates of employment among disabled people.

Research on the support history of new recipients of incapacity benefits does not directly address the relationship between incentives and inflow into permanent benefits, but analyses the background of new recipients. Research in Norway suggests that prior to obtaining incapacity benefits; new recipients had experienced a long history of temporary benefits and marginalisation in the labour market. In fact, 45% of new recipients in 2002 were receiving temporary benefits 10 years earlier, and 80% of new recipients under the age of 40 were supported by temporary benefits 5 years before they were granted the incapacity benefit (Fevang & Røed, 2006). This result, in addition to the finding that people on temporary supports tend to have the same level of health problems as people receiving incapacity benefits (Dahl, van der Wel, & Harsløf, 2010), suggests that new recipients originate from a pool of individuals with health issues who have spent years in a marginal position in the labour market. Consistent with this view, Halvorsen and Hvinden (2011: 16) argued that the main incentive for benefit seeking is to avoid a series of experiences of humiliation and a feeling of being a burden to colleagues.

The research on inflow into benefits after changes in regulations is inspired by US studies that have found substantial incentive effects (Autor & Duggan, 2003; Black, Daniel, & Sanders, 2002; Parsons, 1980). These studies concluded that increased availability of disability benefits was the main reason for the decline in the labour force participation among older men in the United States. However, the findings of these econometric studies are considered controversial and claimed to overrate the effects of disincentives (Bound, 1989, 1991; Haveman & Wolfe, 1984). In addition, Barr et al. (2010) argued that one cannot generalise findings from the US to countries with more extensive welfare systems. However, a recent Norwegian study (Brinch, 2009) that employed data from the national social security registers reported results consistent with the US findings. This study found fairly strong disincentive effects after a change in regulations in the late 1990s. Based on these findings, Brinch estimated that a 5% increase in benefits would cause a 5% increase in new people receiving benefits. Consistent with this result, a review of seven research papers on a new early retirement scheme that was introduced gradually, beginning in 1988, suggested that economic incentives were an important factor in the early retirement decisions in Norway (Hernæs, Røed, & Strøm, 2002). However, other studies have returned conflicting results. The five countries that were included in the comparative study of Whitehead et al. (2009) were also included in a systematic review of research on the disincentive effects of relaxed eligibility requirements and increased generosity of social security benefits (Barr et al., 2010), including both temporary and permanent incapacity benefits. Based on 16 econometric studies, the review found no firm evidence that eligibility criteria affected employment. However, it was concluded that generosity is likely to have an influence on labour market participation, but the evidence was insufficient to estimate the strength of the effect (Barr et al., 2010). The most “robust” study showed only a small but significant effect (Hesselius & Person, 2007). This study analysed the length of long-term sickness leave rather than incapacity benefits. Furthermore, one Norwegian study was included in the review (Bowitz, 1997); this study found no relationship between changes in replacement rates (level of benefits as a percentage of income) and the inflow into incapacity benefits.

## 1.2. Framing the research question

In conclusion, research directly addressing the “societal costs” discourse has returned conflicting results, but some (primarily) econometric studies suggest disincentive effects of generosity, sometimes even a strong effect. However, there is one worrying distinctive feature of the research supporting the disincentive hypothesis; it is about men in the later years of their working life. The Norwegian study by Brinch (2009) included only men aged 52–60, whereas people (both men and women) who ceased working “because of” the early retirement scheme were in their 60’s. One of the studies included in the Barr et al. (2010) review addressed women specifically and found no effects. Furthermore, all of the studies that were included in the Barr et al. (2010) review that reported disincentive effects used samples of people above the age of 45 (Harkness, 1993; Gruber, 2000; Campolieti, 2003; Maki, 1993). The main finding of the US studies was also related to labour force participation among older men.

However, there is reason to question whether conclusions from research on individuals (primarily men) in their 50’s and 60’s are applicable to other age groups. In a life course perspective (Elder, 1985), these people are in a phase of their life trajectory where one is approaching the transition out of employment. Kohli (1985) has suggested a model of an institutionalized life course, a standardized set of three life stages that people pass in an established order, in which the second, *the active phase*, is the most significant. This is when people are taking active part in the labour market. The other phases, the preparatory and the retiring phase, are related to this. The point is, however, that the phases are associated with different institutionalized expectations and norms concerning work, and this is likely to affect motivation and also the impact of incentives. A number of studies have suggested changes in attitudes towards work as the transition out of the active phase approaches. Based on the Eurobarometer in 1992 and 2003, Esser (2005) found that for both men and women, the preferred retirement age was 58. Furthermore, a study of people with spinal cord injuries suggests substantial changes in attitudes towards work over time (Leulfusrud, Reinhardt, Osterman, Ruoranan, & Marcel, not yet published). Participants were strongly motivated for work shortly after their accidents, and they viewed labour market participation as the main symbol of participation in society. Many of them returned to work. However, as time went by some experienced secondary health problems, and many

felt that they had fulfilled their societal obligations. When reaching later stages in the life course, acceptable alternative roles were available, and the receipt of benefits felt less like exclusion and more similar to early retirement. They were ready for the transition out of the active phase.

Thus, the study of motivation to work in a life course perspective will add to our current understanding and interpretation of disincentive research. The results from the disincentive may actually address the roads to early retirement rather than explanations for the low labour market participation among disabled people.

Our second “framing” point is that disincentive research tends to focus on people leaving employment or, more accurately, enrolling into incapacity benefits. However, attitudes towards employment versus benefits among disabled people who are out of work have not been addressed. In the intersection between the discourses of barriers versus disincentives to employment, the attitudes towards work among non-working disabled people are clearly of policy relevance. These attitudes can illuminate the extent to which non-employment are experienced in a choice versus barrier context.

### 1.3. Research aim

In accordance with the above framing, the aim of this study is to address the motivation to work among non-working people with disabilities and to scrutinise possible differences across the life span, that is, the extent to which age predicts motivation to work.

The study does not directly address the same issues that have been tested in econometric research on the disincentive hypothesis. We do not study benefit-related behaviour; rather, we examine the attitudes of non-working disabled people towards work in the form of either job-seeking behaviour or declared motivation to work. We will, however, argue that changes in such attitudes during the course of life also have a bearing on the interpretation of disincentive research, specifically the extent to which one can draw conclusions about disincentive effects in general based on studies of people in their 50's and 60's. If motivation to work varies throughout the life span, then conclusions regarding disincentives need to be age-specific.

A potential correlation between age and motivation can be affected by a number of confounding variables, which needs to be controlled for. This study introduces controls that are known to correlate with employment among disabled people, such as gender, level of education, type of impairment and degree of impairment (an overview for Norway is found in Tøssebro, 2012). Socioeconomic background and parental education are also earlier shown to have an impact on employment career (Ireys, Salkever, Kolodner, & Bijur, 1996; Vedeler & Mossige, 2010). Furthermore, the age at which the impairment was acquired is likely to affect how age and motivation to work is related, and is thus included as possible confounding variables.

In short, this study explores the relationship between age and motivation to work among non-working disabled people by controlling for a number of “confounding” variables.

## 2. Methods

### 2.1. Sample and participants

This study is based on data from the national survey of living conditions of disabled people in Norway, 2007 (LCD)<sup>1</sup>. Data were gathered by Statistics Norway in two phases:

- in order to identify a sample of disabled people, a brief screening questionnaire was administered (telephone interview) to a representative gross national sample of 10,920 people between 20 and 67 years old. A total of 7632 people (70%) responded to the questionnaire (Bjørnshol, 2008);

<sup>1</sup> The survey was commissioned by the Norwegian Directorate of Health (Sosial- og helsedirektoratet), NTNU Social Research AS, NOVA (Norwegian Social Research) and the National Centre for Documentation on Disability (now part of the Equality and Anti-discrimination Ombud). More information is available (in Norwegian only) in Bjørnshol (2008), Lagerstrøm (2009) and Molden et al. (2009).

- the people who fulfilled the stated criteria of disability were invited to participate in the full LCD survey (telephone or personal interview).

Disability is a contested concept, both regarding theoretical understanding (is it due to individual functional limitations or environmental barriers) and measurement in survey research. There also appears to be a gap between the theoretical and operational definitions (Altman, 2001). The existing operational definitions are typically either based on self-assessments, questions on functional difficulties (e.g. can you walk stairs) or administrative classifications (e.g. receiving disability-related benefits) (Grønvik, 2007). The *disability* definition used in the LCD is wide, intended to include people defined as disabled according to a number of existing disability operationalizations. The inclusion criteria included a global disability self-assessment, functional issues (activity difficulties), experiences of pain, concentration problems or mental health difficulties, and administrative classifications (reception of at least one of four disability-related benefits). People that responded affirmatively to one of the items from this set of questions were included (cf. Molden & Tøssebro, 2010 for the full definition). Twenty-six per cent fulfilled the disability criteria ( $n = 1984$ ), and 85% ( $n = 1652$ ) of those individuals agreed to participate in the full LCD survey. An attrition analysis (Bjørnshol, 2008) showed acceptable results but a slight underrepresentation of ethnic minorities, people under the age of 40, people from the capital area and people with only primary education.

For the purposes of this study, we selected a subsample based on the definition that is in regular use in the Norwegian Labour Force Survey Disability Supplements (e.g., Bø & Håland, 2012). This definition is based on self-assessment and is consistent with definitions employed in many European (EU) surveys (The European Labour Force Survey Disability Supplement 2002, The European Social Survey, The European Community Household Panel and EU-SILC) (Molden & Tøssebro, 2010). The definition is based on self-assessment. The first question is as follows: “Do you have any long-standing illness or disability?” Those who answer “yes” to this question are then asked “does this limit your activities?” with the following response options: “no”, “yes, slightly”, “yes, to some extent” and “yes, strongly”. People who report that their activities are limited “to some extent” or “strongly” are classified as disabled. This definition reduced the sample from 1652 people to 1042 people (16% disability prevalence).

## 2.2. Subsample of non-working disabled people

The aim of this study was to address motivation for work among non-working disabled people. Thus, individuals who were working (45%,  $n = 441$ , employees or self-employed) were excluded. Furthermore, some groups of non-working people were not asked the questions pertaining to job-seeking or motivation to work. This exclusion applies to the following response options on a question on the main activity/source of subsistence: *student* ( $n = 33$ ), *occupied at a day care centre* ( $n = 1$ ), *homemaker* ( $n = 26$ ), *military service* ( $n = 0$ ) and people who did not answer the question ( $n = 5$ ). Thus, the net sample of non-working disabled people was 536. Some of these people were regarded as part of the labour force (unemployed,  $n = 44$ ) and others as outside of the labour market (early retirement or incapacity benefits,  $n = 492$ ). Descriptors regarding gender, age, educational level and type of impairment for both the sample of self-assessed disabled people ( $n = 1042$ ) and the subsample ( $n = 536$ ) are listed in Table 1.

## 2.3. Measurements

*Dependent variables:* the structure of the questionnaire implied that people were asked about either: declared motivation to work, and job-seeking behaviour.

The responses were reclassified into two dependent dummy variables on motivation to work based on the set of questions on declared motivation to work. These questions were asked people with social security benefits who had not applied for a job during the past 2 years ( $n = 461$ ). The first question was “Do you think it is possible for you to have a job instead of or in combination with your social security benefits?” People who answered “yes” to this question were classified as believing that work is possible (first dependent dummy variable). The participants who found work possible were then

**Table 1**

Characteristics of the sample with self-assessed disability and the subsample of non-working disabled people in percent.

	People with disabilities (n = 1042)	Non-working subsample (n = 536)
Sex		
Women	40.6	38.8
Men	59.4	61.2
Age		
20–29	7.1	2.2
30–39	14.8	11.0
40–49	23.1	20.7
50–59	32.1	31.2
60–67	22.9	34.9
Education		
Elementary	28.3	36.0
Secondary	47.5	47.6
Higher education	22.4	15.1
Type of impairment		
Sensory impairment	10.0	10.8
Shortness of breath	5.6	5.6
Chronic pain	22.8	15.7
Mobility difficulties	34.5	38.1
Mental health problems	9.6	10.4
Head injuries	7.1	6.5
Cognitive difficulties	9.6	12.1
Other	0.9	0.7

asked the following question: “Do you want a job?” Thus, the second dependent dummy variable comprised people who believed that work was possible and who wanted to work. These questions also tend to be asked in Disability Supplements to Labour Force Surveys in Norway (Bø & Håland, 2012).

People with social security benefits who had applied for a job during the past 2 years ( $n = 31$ ) and people who classified themselves as unemployed ( $n = 44$ ) were not asked the questions on motivation to work. It was rather inferred from their job-seeking behaviour whether they believed it was possible to work, and if they wanted a job. It was assumed that people who were actively seeking work, found it possible to work and that they wanted a job. However, some unemployed people had not sought employment. They were classified according to their reasons for not doing so. People that considered work impossible were classified accordingly ( $n = 8$ ). All other reasons implied that people were motivated to work but encountered practical problems (such as transportation). They were seen as believing work was possible and that they wanted a job ( $n = 32$ ). A total of 69.2% of the non-working subsample did not believe that work was possible. Of the 30.8% who believed it was possible, 80.5% wanted to work.

*Independent variables:* the independent variables were gender, education, socioeconomic background, type of impairment, severity of impairment, age at which the disability was acquired and current age.

*Education:* the highest level of accomplished education was classified as follows: (a) elementary (elementary school and lower secondary school), (b) secondary (completion of upper secondary school), and (c) higher education (higher than upper secondary school, typically a bachelor's, master's or PhD degree).

*Socioeconomic background* was measured by the level of education completed by the parents of the participants and was classified in the same manner as the subjects' own education. To reduce the number of missing cases, the measure concerns only one of each set of parents: the parent with the highest level of education.

Type of impairment was based on a set of 14 questions regarding specific difficulties or impairments. The participants could respond affirmatively to more than one item. On average, the subjects

responded affirmatively to two items, which led to a total of 197 combinations. These combinations were recoded into eight types of impairment based on a procedure described by [Molden, Wendelborg and Tøssebro \(2009; 83\)](#), and these types were introduced into the statistical analysis as a set of dummy variables.

Severity of impairment was based on the subjects' self-assessment of severity of activity limitations in two categories: (a) to some extent and (b) severe.

Age at which impairment was acquired: the subjects could respond with a precise age or in five-year intervals. Responses that were given in age intervals were reclassified as middle categories. Congenital impairments were coded as onset at the age of 0.

#### 2.4. Analyses

The PASW Statistics 18.0 for Mac was used for the statistical analyses. The statistical significance was set at  $\alpha = 0.05$ . Logistic regression with a block enter method was used to analyse the variation in the dependent variables and the extent to which age or life stage could explain the motivation to work. The regression was conducted in steps, with age introduced in the final step. [Table 3](#) reports the change in -2LL for each step (measuring the extent to which the variables introduced into the model in a specific step add to the explained variance of the dependent variable). The table reports the odds ratios for attitudes towards work for the final step only (all independent variables are included in the model). The odds ratios for other steps are presented in the text when relevant. In [Table 3](#), age is a continuous variable.

Prior to the logistic regressions, correlation analyses with Kendal's tau were performed to reveal possible multicollinearity between the predictor variables. None of the variables violated the assumptions of overly high correlation at 0.9 ([Pallant, 2005; Ringdal, 2007](#)). The highest correlation was between the age at which impairment was acquired and age, 0.373.

### 3. Results

The research problem that is reported in this article concerns attitudes towards work among non-working disabled people throughout the life span. However, because employment rates vary with age, we also show the distribution of motivation to work, including the figures for employed disabled people in the totals. This distribution is shown in [Table 2](#) in 10-year age intervals; however, because of the few cases in the 20–29 age group, ages from 20 to 39 are treated as one group.

Excluding students, homemakers and people who did not answer the question regarding their main activity/source of subsistence, 45.1% of the sample was employed, 38.0% found it impossible to work, 13.6% wanted to work and 3.3% found it possible but did not want to work. The variation across the age span showed a decrease in the employment rate from 63.6% among the younger group to 20.4% among those aged 60 and above. Although there was a gradual decrease in employment as people aged, the most substantial decrease occurred at the age of 50–59. Furthermore, there was an increase in the rate of people who believed that work was impossible as they aged, and the reverse was true for people who were motivated to work.

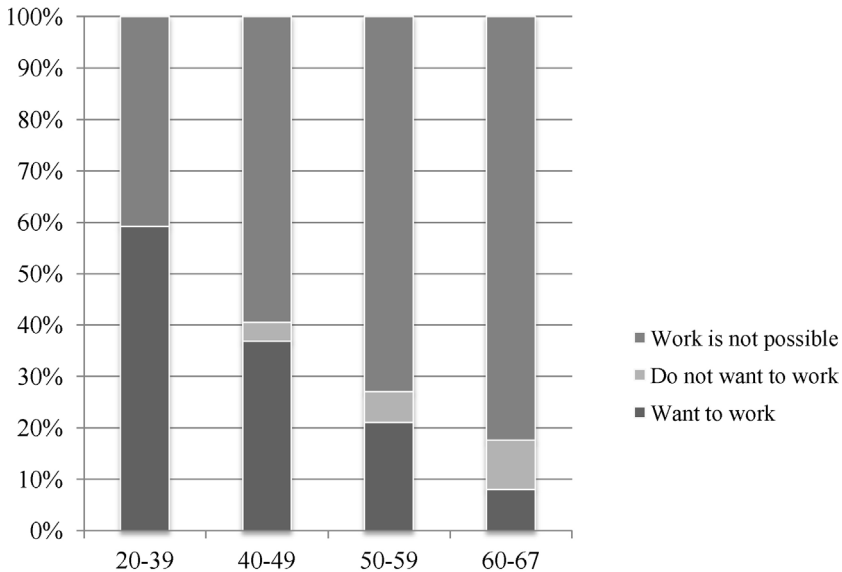
In the non-working subsample (excluding employed people), a total of 24.8% individuals believed that they could work and wanted to work. Only 6.0% believed that they could work but did not want

**Table 2**  
Employment and attitudes towards work among non-working disabled people by age group in percent ( $n = 968$ ).

	20–39	40–49	50–59	60–67	Total
Employed	63.6	51.1	47.8	20.4	45.1
Work is not possible	14.9	29.1	38.1	65.5	38
Work is possible but do not want to work	0	1.8	3.1	7.7	3.3
Work is possible and desired	21.5	18.1	10.9	6.4	13.6
<i>n</i>	195	227	320	235	977

$\chi^2 (9) 172.7, P < 0.001, \text{Cramer's } V = 0.243.$





**Fig. 1.** Attitudes towards work among non-working disabled people by age group. Percent ( $n = 536$ ),  $\chi^2 (6) 86,8$ ,  $P < 0.001$ , Cramer's  $V = 0.285$ .

to, whereas 69.2% did not believe that work was possible. The variation across the life span is shown on Fig. 1. The figure shows a substantial decrease in motivation to work with age, primarily because fewer people believed that it was possible to work with increasing age but also because an increasing proportion did not want to work even when it was considered possible. However, this attitude was rare in all age groups.

The age variation may be related to sample characteristics other than age, such as the type and degree of impairment, the age of onset of disability, education and social background. Table 3 presents logistic regression analyses of the two dependent dummy variables:

- people believing that work was possible;
- people believing that work was possible and wanting to work.

With respect to the likelihood of people believing that work was possible, the changes in -2LL suggests that the education of parents, the age of onset of impairment and age contribute significantly to the model at the step they were introduced. With greater levels of parental education, earlier onset and younger age, work was more likely to be viewed as possible. Gender, one's own education, and the type and degree of impairment did not significantly contribute to this likelihood. However, in the full model, the education of parents and the age of onset had insignificant effects, whereas the type and degree of impairment were significant. The likelihood of believing that work was possible was approximately 60% (OR 0.58) among people with a severe impairment compared to those who reported some extent of impairment. Furthermore, people with sensory difficulties believed that work was possible to a much greater extent (OR 2.68) compared to the reference group of people with mobility difficulties. However, age was clearly the most important predictor of the belief that work was possible. For each year added to the age, the odds ratio for believing that work was possible decreased by 7%.

The two right-hand columns in Table 3 show results pertaining to whether the subjects wished to work. As expected from the results shown on Fig. 1, the pattern was similar to that of the perception of work as possible, but certain nuances were present. The changes in -2LL show that when introduced in the analyses, the education of parents, type of impairment, age of onset and current age

**Table 3**

Logistic regression of considerations concerning whether work is perceived as possible (possible = 1, not possible = 0) and whether work is desired (want to work = 1, do not want to work = 0).

	Work is possible (n = 517)		Want to work (n = 517)	
	OR (Sig.)	Change in -2LL (Sig.)	OR (Sig.)	Change in -2LL (Sig.)
Sex (step 1)		0.20 (ns)		0.58 (ns)
Men	1.42 (ns)		1.15 (ns)	
Education (elementary = ref.) (step 2)		2.79 (ns)		2.27(ns)
Secondary	1.41 (ns)		1.36 (ns)	
Higher education	0.79 (ns)		0.70 (ns)	
Parents' education (elem. = ref.) (step 3)	7.39 (.025)		14.36 (0.001)	
Secondary	1.24 (ns)		1.27 (ns)	
Higher education	1.26 (ns)		1.59 (ns)	
Impairment (mobility dif. = ref.) (step 4)	10.78 (ns)		14.49 (0.043)	
Sensory disability	2.68 (0.003)		2.95 (0.004)	
Shortness of breath	0.80 (ns)		0.35 (ns)	
Chronic pain	0.94 (ns)		0.87 (ns)	
Mental health problems	1.00 (ns)		1.05 (ns)	
Head injuries	0.71 (ns)		0.92 (ns)	
Cognitive difficulties	0.78 (ns)		0.70 (ns)	
Severity of impairment (step 5)		2.56 (ns)		0.46 (ns)
Severe	0.58 (0.012)		0.64 (ns)	
Age when acquired impairment (step 6)	0.99 (ns)	17.01 (0.000)	0.99 (ns)	29.94 (0.000)
Age (step 7)	0.93 (0.000)	42.01 (0.000)	0.91 (0.000)	55.50 (0.000)
-2LL (Total change)		636.28 (82.73)		577.52 (117.59)
Hosmer-Lemeshow		0.13		0.2
R <sup>2</sup> = Cox & Snell		0.15		0.2
R <sup>2</sup> = Nagelkerke		0.21		0.3

OR: odd ratio; Sig.: significant; ns: not significant.

contributed significantly to the model. In the full model, however, only the type of impairment and age had significant effects. People with sensory difficulties tended to be more motivated to work (OR 2.95) compared to people with mobility difficulties. Furthermore, for each year of increased age, the odds ratio for wanting to work was reduced by 9%, which is a substantial effect.

To present the effects of the life course more clearly, Table 4 presents results for the full models (step 7) only for age, with age recoded in the age intervals used on Fig. 1. The results for other variables are not affected by this recoding of age into life stages and are thus not reported. Age 40–49 is the reference category. The table shows that the odds ratio of wanting to work was 2.61 times higher for those younger than 40 years and only 14% (OR 0.14) for those 60 years or older.

**Table 4**

Logistic regression (only step 7) by age intervals.

	Work is possible		Want to work	
	OR	Sig.	OR	Sig.
20–39	2.44	0.008	2.61	0.005
40–49 ref.	1		1	
50–59	0.55	0.035	0.47	0.014
60–67	0.29	0	0.14	0

OR: odd ratio; Sig.: significant; ns: not significant.

#### 4. Discussion

This study analysed life course variation in the motivation to work among non-working disabled people. The results demonstrate such variation. Younger disabled people are clearly more motivated to work and are also more likely to believe that work is possible for them. Among the variables that were analysed here, age is evidently the most important predictor of the measured attitudes towards work.

Although the current approach differs from the econometric studies of disincentive effects of the social security system, the results have a bearing on the interpretation of the often conflicting findings from this research tradition. The majority of studies of inflow into benefits that have found incentive effects have examined people in the last stages of a typical working life span (Hernæs et al., 2002; Brinch, 2009; Harkness, 1993; Gruber, 2000; Campolieti, 2003; Maki, 1993). For these age groups, this report has shown that motivation to work is declining. Thus, the results of the current study suggest that one should be cautious about making general conclusions regarding incentive effects based on findings from people in their 50's and 60's. The incentive effects are unlikely to be similar in age groups for which the motivation to work is stronger.

The association between age and attitudes towards work found in this study was not unexpected and may even be considered common sense. The institutionalized normative expectations concerning work vary with life stage. These expectations are much stronger during transitions to adulthood and the active phase than during transition into the retiring phase (Kohli, 2007). Thus, for young adults and middle-aged people, employment is a vital expectation and a major aspect of societal integration. At this life stage, lack of employment is likely to be experienced as exclusion and the loss of the latent functions of employment, as described in research of unemployment dating back to the often-cited Marienthal studies of Jahoda, Lazarsfeldt and Zeiser (1933/1997). In this perspective, employment is not just about money, but also related to identity, social status and participation in society for people in or in transition into the active phase. This is likely to modify and even neutralize monetary incentives.

In the transition into the retirement phase, both expectations and the availability of alternative social roles change. Expectations concerning labour marked participation declines and alternative valued roles, such as early retirement because of health issues, are more available. This is likely to curb the feelings of exclusion, loss of social status and societal participation (Wadel, 1973). When the importance of non-monetary benefits from work declines considerations concerning “how much do I loose” from leaving work is likely to be less influenced by other than economic concerns. Thus, in this phase of the life course, economic incentives and disincentives are likely to have a much greater impact. Such reasoning is consistent with the findings of the present study, and suggests that findings concerning disincentives for people in their 50's and 60's should not be generalized to the whole working age span.

The findings that are reported here suggest several general reflections. One such reflection concerns the relationship between unemployment and incapacity benefits. A number of studies have suggested that there is some type of substitution between unemployment and incapacity benefits and that the official unemployment rates in Norway are artificially low and concealed by the high proportion of incapacity benefits (Bratsberg, Fevang, & Røed, 2010; Rege, Telle, & Votruba, 2005). This is among others the conclusion of reports on inflow to incapacity benefits after workforce cuts and business closures (Bratsberg et al., 2010). If disabled people on benefits, who are involuntarily out of employment, are added to unemployment figures in Norway, then the 2011 unemployment rate increases from 2.8% to 4.7% (calculation based on data provided in Bø & Håland, 2011). This rate is still low compared to the rates in other OECD countries (OECD, 2009) but is less outstanding than the official figures. This hidden unemployment is also consistent with the previously mentioned “discourse on equal rights and opportunities”, which explains the low disability employment rates as an effect of non-inclusive labour market.

Another reflection concerns the different patterns with respect to predictors of motivation for employment compared to predictors of employment among disabled people. Molden et al. (2009) have shown that employment among disabled people is affected by a number of variables, and in statistical terms, the most important are (in descending order) education, age, type of impairment, severity of impairment and age of onset of impairment. The effect of higher education is particularly

strong (OR 4.61). However, as shown in Table 3, higher education does not affect the motivation to work among non-working disabled people. In fact, none of the other variables that explain employment, except age, affect motivation. Hence, the factors that explain employment among disabled people diverge sharply from the factors that explain motivation.

## 5. Conclusion

The findings reported here suggests that research supporting the thesis of disincentive effects of a generous welfare state, conducted mainly on men in their 50' and 60', cannot be generalised to young adults and middle-aged people. It is likely that the significance of economic incentives on motivation to work will vary across the life course, being more prominent when people are approaching the transition to retirement. Thus, the results from research seen to support the disincentive hypothesis, should be interpreted to be about roads to early retirement rather than explanations of the low labour market participation among disabled people.

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