Unemployment in a Segmented Labour Market?

A Study of Youth Unemployment in Norway

TRINE STAVIK

TORILD HAMMER

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Applications to be made to:
NOVA – Norwegian Social Research
Munthesgt. 29, Postboks 3223 Elisenberg, 0208 Oslo

Phone: (+47) 22 54 12 00
Fax: (+47) 22 54 12 01
E-mail: nova@isaf.no
Internet: http://www.isaf.no/nova

Preface

This report is based on Trine Stavik's MA-thesis at the University of Oslo in 1999. The authors have worked together with the manuscript and translated it into English.

The report is based on Norwegian data of unemployed youth and is part of a comparative research project involving ten European countries. The project has been funded by The Nordic Council of Ministers and the European Commission. The Norwegian Research Council has provided national fundings. Those who are interested in more information and recent publications from the project can look at the projects' home page:

http://www.isaf.no/nova/fou/Hammer/Unemployment.htm

We also want to thank The Directorate of Labour in Norway who draw the sample of registered unemployed youth and carried out the data collection. Without their support and assistance, we could not have participated in this European project.

Oslo, 4.4.2000 *Trine Stavik & Torild Hammer*

Contents

1 Introduction

Youth have a higher unemployment rate than adults, but the unemployment spells are shorter than in other age-groups. In Norway there is little evidence that youth who become unemployed are excluded from the labour market in the long term, but a short period of unemployment in the transition from school to work is not unusual. If total unemployment among youth is «democratically» distributed, implying that there are no groups which are especially vulnerable to unemployment, then we might regard youth unemployment as a relatively unproblematic phenomenon. Furthermore, if unemployment itself does not have long-term consequences, we could probably assume that youth unemployment is not really a problem either for the young people themselves or for society. However, research seems to document that it is not a coincidence who becomes unemployed. There is a lot of evidence that unemployment is a problem related to social class (Ellingsæter 1995:114), and that unemployment also has consequences for some groups in the long term.

The main objective of this report is to study different explanations of recurrent unemployment spells among youths. According to some labour market theories, youth with limited formal competence, who are newcomers in labour market, may experience recurrent spells of unemployment between dead-end jobs in the secondary labour market. These so-called segmentation theories are, however, only one of different perspectives. We will present some different perspectives on why unemployment among youth in general is characterised by more frequent but shorter unemployment spells compared to the unemployment experience in other age-groups in the Norwegian labour market.

One reason is probably that youth is a group given high priority on different labour market schemes, and this may partly explain the low proportion of registered long-term unemployed youth. It is also a fact that in the labour market statistics, young people are not registered as unemployed when they participate in labour market training schemes. This implies that the duration of the unemployment spells is registered as zero if previous participants in labour market training schemes are unemployed again after the scheme was finished.

It is also important to differentiate between voluntary and involuntary unemployment. It can be assumed that young people have a need to try different kinds of jobs and different kinds of work before they find jobs where they can use their abilities and interests. According to job search theory, the search period will be more effective if they are unemployed. Another type of voluntary unemployment among youth is for instance explained by the fact that some young people do not want permanent work or a more permanent integration in the labour market. Whether this can be seen from the labour market statistics is another issue.

The empirical analysis in this report is based on data from a comparative research project of youth unemployment in the Nordic countries and in Europe. The main aim of the study is to analyse different processes that lead to integration in the labour market or lead to a continuation of unemployment in representative samples of young unemployed people. The Norwegian sample consisted of two thousand Norwegian young people (18–24 years old) with more than three months continuous unemployment in the first half year of 1995. They were all searching for full-time employment, and they were interviewed 6-12 months later, i.e. autumn 1995/spring 1996.

1.1 The Main Research Questions

The empirical analysis in this report aims to elucidate the following main research questions: To what degree may individual factors (gender, age, social background, place of residence, educational level, health etc.) influence how many times the young people in the sample had been unemployed? To what degree may characteristics of their last job (sector, wage, contract, possibility for on-the-job training etc.) contribute to explain who has been unemployed frequently? Are recurrent unemployment spells among young people in certain groups an explanation of the high turnover in the secondary labour market?[1] Is there a relationship between characteristics of the last job and the number of unemployment spells when we take different individual factors into account? How does total previous unemployment influence the risk for later unemployment? Are recurrent unemployment spells less important than duration of unemployment in predicting later unemployment?

[1] The term «secondary labour market» will be explained and discussed in the next chapter.

1.2 Disposition of the Report

In Chapter 2 we present research about youth unemployment and relevant theories to answer the different questions posed by the research. In Chapter 3 we describe the data, methods and statistical measurements. Chapters 4–7 give the empirical analyses of the report. In Chapters 4–6, the number of unemployment spells is the dependent variable in the analysis. In Chapter 4 we look at the relationship between how many times the young people in the sample had been unemployed, and individual factors such as gender, age, education, social background, family situation and individual problems. These factors are also included in the analyses in the next chapters. In Chapter 5 we look at what kind of job the young people had, and we investigate the relationship between characteristics of the last job and the number of unemployment spells. In Chapter 6 we use multivariate analysis and investigate the relationship between the number of unemployment spells and both individual and structural factors. The main results are discussed related to other relevant research. In Chapter 7 we analyse what kind of factors might explain which young people are unemployed at the time of the interview. We look at the influence of both structural and individual factors on the probability of being unemployed at the time of the interview. Does previous unemployment give a higher risk of later unemployment? In Chapter 7 we introduce two measurements of previous unemployment experience as independent variables in the analysis to investigate the influence of previous unemployment experience: total experience of unemployment (in months) and total spells of unemployment. In Chapter 8 we discuss the main results of the report.

2 Background and Theory

2.1 Introduction

Young people's life experience and behaviour have changed considerably during the last decades. These changes influence their relationship to family and friends, their experience of the educational system and the labour market, leisure activities, and of course young people's possibilities to establish themselves on their own. A lot of these changes are clearly the result of structural changes in the labour market (Furlong and Cartmel 1997). The social organisation of different trajectories has been substituted by more individual variation. The transitions from school to working life and transition periods between occupational activity and periods outside the labour force are more reversible and less determined. The social norms of the age of different transitions are also less important (Ellingsæter 1995, Haaland 1991). In Esping-Andersen's (1993, 1995) terminology, we can talk about a transition from a fordistic to a post-fordistic life course, where the former fordistic life course was standardised and predictable. Risk and individualisation (Beck 1997, Giddens 1991) are terms which are frequently used in the literature of young people's conditions and behaviour in the post-industrial society.

Individualisation means that traditionally important social categories such as class, ethnicity and gender are less important or more fragmented, and the discussion about increased individualisation as a kind of explanation «is located firmly within aspects of late modernity or post-modernity» (Pollock 1997:56).

Furlong and Cartmel (1997:2) however, claim that:

> «Life in late modernity revolves around an epistemological fallacy: Although social structures, such as class, continue to shape life chances, these structures tend to become increasingly obscure as collectivist traditions weaken and individualist values intensify.»

As a consequence of these changes the world can be perceived as being characterised by a lot of risks which individuals have to handle on their own «even though chains of human interdependence remain intact» (Furlong and Cartmel 1997:2). In a systematic critique of class analyses, Pakulski and Waters (1996:667) claim that «'class industry' […] manu-

factures class where it no longer exists as a meaningful social entity» – «the best of these analyses are becoming irrelevant; the worst forms are misleading» (Pakulski and Waters 1996:684). Wright (1996) argues however, that even if society is becoming more complex, this does not mean that social class no longer has any importance for the development of inequality, identity etc., but – «class primacy is not an essential component of class analysis» (Wright 1996:694).

In spite of the massive critique against class analysis and the fruitfulness of the class concept, it has been claimed that class analysis is still necessary to analyse inequality in the post-industrial society. Research has shown a surprising stability and continuity in class-related inequality, in spite of the educational explosion and general increase of skills in the labour market in the post-war period (see for instance Blossfeld and Shavit 1993, Erikson and Johnsson 1996, Erikson and Goldthorpe 1992, Hansen 1995a, 1996, 1997).

2.2 Research about Youth and Unemployment

Youth unemployment as a phenomenon is one example of how social class or social background is still of great importance. Studies have shown that young people from lower social classes, especially those with little or no education, have a very vulnerable position in the labour market (Hammer 1997). These tendencies become stronger in periods of economic depression (NOU 1994:3). Ellingsæter (1995) claims that unemployment is primarily a class problem. Education in particular seems to protect against unemployment, and increasing the number of places in education is one important strategy to reduce youth unemployment. However, it is also a solution to the employment problems among youth which may increase social inequality, and put more pressure on young people to get more and more education (Steinsvik 1991).

«Diploma inflation» (Bourdieu 1984:143), may also be a «problem». Such inflation implies that the value of education decreases when more and more young people attend higher education. Cultural and social capital (Bourdieu 1984) may therefore be more important than before in the competition for the most attractive jobs. The losers in this devaluation process of academic qualifications are those who enter the labour market without such qualifications (Bourdieu 1984). Studies in Norway have shown continuous social inequality in recruitment to tertiary education.

Hansen (1995a) concludes that even in Norway we find great and continuous inequality in recruitment to universities. The inequality is even greater if one also considers that students from different social classes systematically choose different fields of education (Hansen 1995a).

2.2.1 Causes and Consequences of Unemployment

> «What kind of unemployment there is – is of tremendous importance for what kind of processes and what kind of remedies can be used to reduce the unemployment» (Johansen 1982:29).

Johansen stresses the importance of knowledge about different causes of unemployment. Many studies of unemployment have looked at how unemployment has consequences for welfare (Carle 1997). Because unemployment has consequences for many areas in life, the research literature is to a large degree inter-disciplinary. The studies involve sociology, psychology, and economics, but also other disciplines such as medicine, pedagogy and history. This is an advantage, but it also implies that the research literature is not easily available. The same concept can be used with different meanings, or different concepts can be used for the same phenomenon. Different disciplines operate with different explanations and often disagree about what kind of factors may best explain unemployment (Steinsvik 1991). Discussions focus on what is important to study etc. In a review of the Norwegian unemployment research in the 1970s to the 1990s Måløy (1994) concludes that there has been a change in the understanding of the unemployment problem during this period: In the 1970s and the 1980s researchers were occupied with different *causes* of unemployment. The economic explanations were dominant, and the remedies that were suggested were in accordance with the Keynesian understanding of unemployment – demand for labour had to be stimulated, primarily through increased public demand.

At the end of the 1980s and the beginning of the 1990s research was to a higher degree directed towards the *consequences* of unemployment. The remedies that were suggested reflected this change in focus, and in the 1990s the remedies have been more concentrated upon improving unemployed people's situation in the labour market, especially through increased qualifications (Måløy 1994). In the sociological tradition, focus has been directed towards individual consequences of unemployment and

conditions for job search, more than processes that initially could explain job loss (Colbjørnsen 1986).

In addition to a change of focus from causes to consequences, there has also been a change in the research which has been described as a change from a description of the poor conditions of unemployed people to a focus upon their active coping with unemployment (Colbjørnsen, Dahl and Hansen 1992, Colbjørnsen 1994, Halvorsen 1994). The focus on problems related to unemployment has had a point of departure that «evil creates evil». When unemployment is considered something that is only negative, and when this perspective has been so dominant, this is according to Halvorsen (1994) because unemployment research to a high degree has been influenced by the classical studies from the 1930s. In Norway, Kaul and Kvande's study from 1986 is often cited as an example of a study which analyses how people cope with unemployment. According to Kaul and Kvande (1991), unemployment research has primarily focused on psychological reactions, which implies using psychological theories of crises. The coping perspective implies that the consequences of unemployment are analysed as dependent on the total life situation, in other words a focus on the context of unemployment. Kaul and Kvande (1991) argue for the importance of looking at the unemployed person's behavioural patterns, and they introduce the concepts of coping and adjustment. They also stress the necessity to study unemployed people as a differentiated group to contradict stereotypes. Also Lunde and Borgeraas (1987:120-121) underline the importance of conducting separate analyses for different subgroups: «The average unemployed, who is the focus on many studies, does not exist and knowledge of such an abstract person is therefore of no value».

There are different macro-level explanations of unemployment, and we can differentiate between frictional, cyclical (keynesian), structural, classical and seasonal unemployment, in addition to demographically conditioned unemployment (see for instance Halvorsen 1994:77). Steinsvik (1991) also includes political explanations, which stress the importance of political decisions in explaining unemployment. Political decisions can contribute both to reduce and increase unemployment. These concerns will be important in all politics, not only labour market policy and economic policy but also educational policy, social policy etc. Policy may influence both the demand and the availability of jobs, which implies that it will always be possible to influence the unemployment rate by political changes (Steinsvik 1991).

According to Esping-Andersen (1999:154), unemployment in the Scandinavian countries is characterised by a relatively «democratic» distribution: It is more evenly distributed regarding age and gender than in other European countries. This does not mean that youth unemployment is a marginal phenomenon in Scandinavia: In Norway, the unemployment rate among 16 to 24 year olds as a percentage of the labour force was higher than in other age groups during the period from 1972 to 1992 (NOU 1994:3). In the 1980s and 1990s this has been a dominant phenomenon in all the Nordic countries (Julkunen 1997). At the beginning of the 1990s, Italy, Spain and Portugal were the only countries in Europe with a higher youth unemployment rate than Norway (Halvorsen 1994). The differences between countries could partly be explained by differences in minimum wage arrangements, apprenticeship systems, educational participation, the degree of de-regulation of the labour market and general benefit support. Demographic differences were also important (NOU 1994:3).

From a macro-level perspective it is important to differentiate between economic and structural explanations of why youth unemployment is so much higher than adult unemployment in many countries. The economically determined explanation claims that youth unemployment is more or less due to a decrease in the demand for labour. It is argued that youth unemployment has been given too much attention. When activity in the economy increases, youth unemployment will decrease. In this perspective youth unemployment is not very different from unemployment in other age groups, and the principle of seniority, which is last in first out, explains the high proportion of unemployed youth (Raffe 1986).

On the other hand, the structural explanation claims that increasing demand with regard to competence and qualifications in the labour force implies that some young people are especially vulnerable to unemployment (Raffe 1986). This is also the most used explanation of why adult unskilled workers have a higher risk for unemployment than skilled workers. Another structural explanation of youth unemployment claims that youth is used as a kind of «reserve army» which coincides with the employer's need for more flexible workers (Haaland 1991, Furlong and Cartmel 1997), i.e. hired when needed, on temporary contracts. The structural explanation argues that even if unemployment among older workers decreases, youth unemployment will still be at a high level. To conclude we can say that structural explanations focus on the changes in the composition of the

demand for labour, while economic explanations look at the importance of the level of the demand (Raffe 1986).

Youth unemployment is a complex phenomenon that can only be reduced to a small degree by simple remedies such as increased places in labour market training schemes or an increase of the number of places in tertiary education. The Colbjørnsen-group (NOU 1994:3) focused on the following «causes» of youth unemployment: wage and income conditions laws and rules in the labour market, the relationship between education and the labour market, labour market policy, transitions between different life phases, demography, competition between different groups in the labour market, structural changes in the economy, the value of leisure and alternative income through social assistance, unemployment benefits, work in the black economy and/or support from the family, etc.

Without knowledge about the causes of unemployment there is a great danger that the remedies will be ineffective (Johansen 1982). Paulson (1994:42) claims that remedies regarding unemployment often focus on the wrong level: They regard unemployment as a personal problem and not as a structural problem of society: «In this way education is an activity which should be directed towards change of individuals. As a solution to the unemployment problem it is usually ineffective from the point of departure of the society. The solution does not imply that the number of jobs increases so that the level of unemployment decreases. It is however, possible that it makes the unemployment more evenly distributed». Paulson concludes that unemployment must be mainly regarded as a structural problem in society, and that the solutions therefore have to be sought in society.

2.2.2 The Duration of Unemployment

> «Statistics have documented that the increased unemployment in the EU-countries is not caused by an increase in the inflow to unemployment, but to a decrease in the outflow. This implies that the high level of unemployment in the EU-countries primarily can be related to decreased probability of finding work if one has been unemployed in the first place, and to a lesser degree an increased risk of job loss. This means an increase in the average duration of unemployment, and that long-term unemployment increase» (Halvorsen 1994:85)

Halvorsen's point is important and is often neglected in the media and in politicians' approach to unemployment. Traditionally unemployment is meas-

ured as the size of the stock of the unemployed, that is those who can be defined as unemployed at one point in time. As pointed out by Brunstad and Colbjørnsen (1981:83), the proportion of the labour force which is unemployed says nothing about the welfare consequences of unemployment: «What is important in a welfare perspective is primarily what kind of flows are behind the stock of unemployment». Halvorsen (1994) stresses, as quoted above, one consequence of changes in these kind of unemployment flows.

Regarding youth, all available statistics are clear (Try 1992): In general, youth are unemployed for shorter spells than people in other age groups. However, the explanations for this phenomenon are complex. It may mean that unemployed youth will re-enter the labour market more quickly after a period of unemployment. But it may also mean shorter spells of unemployment, because youth have priority to enter labour market training schemes. Or it may mean that they solve their unemployment problem by entering further education or other activities outside the labour force such as military service, unpaid work in the home or travel to other countries (NOU 1994:3). It is also possible that youth have shorter unemployment spells because they are not entitled to unemployment benefits. Some do not register as unemployed, because they are not entitled to unemployment benefits, i.e. they do not have the same economic incentive to register that older workers have (Try 1992).

The Directorate of Labour set the time a person has been registered as unemployed as zero after completing a training scheme. A person who has been unemployed and enters a training scheme and becomes unemployed after completing the scheme, will be registered as unemployed for two periods and not as continously unemployed. In other words, the Directorate of Labour underestimates the amount of unstable attachment to the labour market (Halvorsen 1994). Recurrent unemployment spells (Opdal, Schøne and Torp 1997) can also reflect negative consequences of the training schemes for young unemployed people, and may explain why youth have so many recurrent unemployment spells compared to people in other age groups. Opdal et.al. (1997) point out that participants in training schemes may be socialised into this system and choose to continue on a new scheme instead of applying for ordinary jobs. Korpi (1994) found that the probability for unemployed persons to enter an ordinary job decreases with the number of training schemes they have previously attended. Hammer (1993) found that young people who did not enter training schemes had a higher probability of getting back to an ordinary job compared to those

participating in training schemes. According to Hammer (1993), these negative effects on the probability of re-entering employment are mainly caused by repeated participation in different training schemes. This may explain why in the statistics youth are characterised by frequent and short unemployment spells. From another perspective, a positive effect of the training schemes may be that they prevent long-term unemployment.

2.2.3 Long-term Unemployment

Labour market policy and research on unemployment in most countries have focused on long-term unemployment. What are the causes and consequences of long-term unemployment for the individual ? In a review of the literature Colbjørnsen et.al. (1992:145) conclude that the group of unemployed is not homogenous and the answer therefore must be that «it depends». It depends on age, gender, place of residence, education, available social networks, social support, self-esteem, previous experience, alternative activities etc. These are factors which influence the length of the unemployment period, and how the individual copes with unemployment. In general, high age and a low educational level increase the probability of long-term unemployment (Colbjørnsen and Larsen 1995). In Norway, long-term unemployment among youth increased in the age group 16–24 in the period 1977 to 1992. However, the proportion of long-term unemployed teenagers decreased after 1989, while the proportion of long-term unemployment increased in all other age groups up to 1992 (NOU 1994:3). Because of many training schemes and an educational policy giving priority to the youngest in the labour force, the proportion of long-term unemployed and the total unemployment rate have decreased sharply during the 1990s (a short description of the Norwegian labour market and development of unemployment is given in «The Norwegian context», page 116).

2.2.4 Recurrent Unemployment

It has been assumed that short-term unemployment contrary to long-term unemployment is not really a big problem, neither for the unemployed or society (Brunstad and Colbjørnsen 1981). However, the last 10 years the phenomenon of recurrent unemployment has received increasing attention. Some labour market researchers have interpreted recurrent unemployment as frictional unemployment, which means that this kind of turn-over will exist in all labour markets and therefore does not need any special

attention. Frictional unemployment means that it will always take some time before those who are searching for a job get a job, and especially before those who are searching for a job get a job that matches their qualifications.

Recurrent unemployment is especially interesting with regard to youth. As previously discussed, youth unemployment in Norway is characterised by shorter but a higher number of unemployment spells compared with other age groups (NOU 1994, Try 1992). The so-called cyclical explanations of youth unemployment, meaning that youth unemployment is mainly caused by cyclical fluctuations in the economy, conclude as previously discussed that worries about the level of youth unemployment are strongly exaggerated (Raffe 1986). Other explanations of high youth unemployment are the more individually orientated *search theories* (Try 1992, Halvorsen 1994). The argument is that especially newcomers in the labour market need a certain time to find a job they like, where they can use their abilities and interests and which match their education. In this perspective, job searching is assumed to be more effective when the person is not working. A period of high turn-over and short spells of unemployment are therefore not necessarily regarded as negative, but on the contrary as a prerequiste for good adjustment to working life in the long term (Brunstad and Colbjørnsen 1981, Halvorsen 1994). A short period of unemployment when searching for a job may therefore be positive, both for those searching for work and for society (Try 1992). «Search unemployment» may also be more usual among youth than other age groups, because unemployment as job searching strategy is so risky that it is only relevant for those without family responsibilities (Colbjørnsen 1986).

Those with many short unemployment spells may however, have a longer total unemployment experience, than many long-term unemployed. It is therefore reasonable to question the argument that youth unemployment is unproblematic as long as the unemployment periods have a short duration (OECD 1985). Studies (OECD 1985) show that some of those who experience short-term unemployment may also be vulnerable for long-term unemployment in the future. Andress (1989) has discussed whether long-term unemployment and recurrent unemployment spells may be two different phenomena. Long-term unemployment may be best explained by individual factors such as health, social problems, education, qualifications etc., while recurrent unemployment may be best explained by more structural factors such as state dependence and «segmentation indicators» (Andress 1989: 275).

2.2.5 State Dependence versus Heterogeneity

The simple picture of long-term unemployment as problematic and short-term unemployment as no problem at all is too simple. Research indicates that risk of future unemployment is closely related to previous unemployment experience, independent of duration of previous unemployment spells. This subject is central in research of long-term unemployment (Colbjørnsen et.al. 1992, Heckman and Borjas 1980, Pedersen and Westergård-Nielsen 1993), and recurrent unemployment (Andress 1989, Steiner 1989, Korpi 1994), and in studies of youth unemployment (Lynch 1989, Hammer 1992, 1997). In the literature, there are two main types of explanations of why a person becomes long-term unemployed (Colbjørnsen et.al. 1992:10): One is state dependence which implies that the duration of previous unemployment is closely related to future unemployment. The other is heterogeneity/selection, which means that over a period of time the group of unemployed will consist of persons with special personal attributes. State dependence may be caused by changes in preferences, skills and other personal attributes as a consequence of unemployment, which may influence risk of future unemployment and job probabilities (eg. self-esteem, knowledge, motivation). There are three types of state dependence which have been dominating in research (Colbjørnsen et.al. 1992:11):

- Occurrence dependence: the number of previous unemployment spells will influence the probability of later unemployment. For instance, it is possible that job history of the unemployed may influence hiring and dismissal decisions.
- Duration dependence: the probability of continuous unemployment depends on the duration of the present unemployment spell. (This relationship may be positive, negative or constant, dependent on whether the exit increases, decreases or is constant when the duration of the state increases.)
- Lagged duration dependence: the probability of unemployment is related to the duration of previous spells of unemployment.

On the other hand, the hypotheses of heterogeneity or selection explain long-term unemployment by the fact that labour markets «problem groups »will consist of an increasing proportion of the long-term unemployed, the longer the duration of the unemployment period. In other words, this explanation neglects negative consequences of unemployment such as for instance

decreasing resources or decreasing qualifications (Colbjørnsen et.al. 1992). This kind of selection may be related to factors such as age, gender, place of residence, education, health etc.

Duration dependence, in the same way as occurrence dependence, may be caused by heterogeneity, where some individuals will be permanently sorted out and have to carry the burden of unemployment while others will be permanently in work (Pedersen and Westergård-Nielsen 1993).

According to Pedersen and Westergård-Nielsen (1993:78), the welfare consequences of occurrence dependence are clearer than for duration dependence. The consequences of many unemployment spells will be negative, and may among other things result in less investment in human capital, especially training. Pedersen and Westergård-Nielsen (1993) suggest that it may be relevant to introduce special schemes for those who enter a second unemployment period.

As we have previously discussed, recurrent unemployment among youth may be caused by different factors. We may ask the following questions: Are recurrent unemployment spells among youth caused by:

- the fact that young people are newcomers in the labour market, and have a need to try different kinds of jobs to reach an optimal position in the labour market in the long term? In other words what we would call job-search unemployment.
- voluntary unemployment, which implies that many young people in periods of their youth not necessarily want a permanent job?
- so-called «lock-in-effects» as a result of labour market training schemes?
- high turn-over, caused by among other things, temporary jobs and dead-end jobs in the «secondary» labour market?
- the fact that unemployment breeds unemployment, i.e. what we have discussed here as «state dependence».

This report will mainly focus on the last two points, and we will use the rest of the chapter to present the theoretical basis for such a perspektive behind these explanations. We have chosen to investigate these two explanations in particular, because we have the best data for these research questions. This does not mean that we think that the other explanations are less relevant.

2.3 Segregation and Segmentation of the Labour Market

2.3.1 Introduction

We can differentiate between three important types of segregation or segmentation in the labour market. The research literature has discussed age segregation, gender segregation and a differentiation between «good and bad» jobs. Age segregation is for instance discussed by Larsen and Eriksen who differentiate between youth jobs and adult jobs. Larsen and Eriksen (1994:68) define youth jobs as jobs where youth are valued as the most productive, and jobs where youth have an equal productivity to adults. «Most productive» refers to those who carry out the job in the most productive way according to the evaluation of the employer. Adult jobs are jobs where adults are evaluated as the most productive. Even if the labour market can be categorised by a high degree of age structuring, it may still be unreasonable to talk about a special youth labour market, especially since young people and adults in many sectors compete to get the same jobs (Furlong 1990).

With regard to the gender segregation of the labour market, the discussion is more directed towards how this may be explained, and not whether gender segregation exists or not. The increase of jobs in health and service in the public sector in Scandinavia has definitely resulted in a strong gender segregated labour market, where women are concentrated in the public sector while men work in the private sector (Esping-Andersen 1993, 1996). Several studies indicate that the Norwegian labour market is especially strongly gender segregated (Hansen, 1995b). Norwegian and international studies of wage differences between males and females indicate among other things that the differences are more a result of males and females working in different sectors and having different jobs, than that the same jobs imply different wages for men and women. This is an important reason why a strong gender segregation is seen as a problem (Hansen 1995 b). We will continue by presenting theories that very simply differentiate between good and bad jobs.

2.3.2 Theories about Segmented Labour Markets

During the 1970s, the focus within sociology and economics was on the *structure* of the labour market, and new concepts and theories were developed to explain inequalities in salaries, job security and career (Colbjørnsen 1986). Much research on youth unemployment has also focused on structural factors: Youth with low or no education above compulsory education, in times of economic depression will have problems in entering the labour market. The same young people may also have a high risk of lo sing their jobs once again. What kind of processes or social mechanisms are behind this? The most usual explanation is probably that the principle of seniority is used, those who were hired latest also lose their job first when there are rationalisations and cuts in the labour stock in the firms etc. (Rasmussen 1993, Rødseth 1994, NOU 1994:3). It is also possible that youth with low formal competence more often find jobs in special sectors, which can be characterised by high turn-over because of insecure jobs and temporary contracts, bad working conditions and few possibilities for on-the-job training.

Our point of departure is a very influential and much discussed theory about the labour market – «The dual labor market theory». This theory has been an important inspiration for research and discussion about labour market policy (Colbjørnsen 1981), and is primarily associated with the American economists Peter B. Doeringer and Michael J. Piore, who launched this theory at the end of the 1960s.

Is it possible to identify parts of the labour market where youth are especially vulnerable to unemployment, and especially vulnerable to recurrent spells of unemployment?

Our hypothesis is that recurrent unemployment among youth may partly be explained by the labour market structure. Teenagers who search for full time jobs are very often unskilled (Rødseth, 1994), and the jobs these young people will be offered are to a high degree characterised by insecurity, less possibilities for training, low possibilities for advancement and low wages. These are elements that, according to sociological and economical labour market research, are associated with the so-called segmentation theories. This structural approach within economics developed as a reaction towards the existing theoretical approach in economics, especially the human-capital theory and in sociology the status attainment models, where

focus was primarily on the relationship between the market capacity of the individual, their skills and intelligence (Colbjørnsen 1986). Doeringer and Piore (1971) launched the idea of primary and secondary labour markets, Beck et.al. (1978) used the consepts *core* and *periphery* industrial sectors, Thurow (1975) differentiated between *wage competition* and *job competition*, and Sørensen and Kalleberg (1981) differentiated between *open* versus *closed* employee relationship (Colbjørnsen 1986). Colbjørnsen (1986) has summarised what is common for these different concepts, in the following way:

- Inequality is partly created by structural forces and cannot be reduced to effects related to individual qualities of the employees.
- The labour market is characterised by heterogeneity, which implies that different processes generate inequality in different segments of the labour market.

The political implications of these types of analyses imply that if the aim is to improve the labour market position of specific groups, it is not enough to improve the resources of the individual by for instance increased education or training. In addition, it is necessary to use political remedies in order to increase the availability of good and safe jobs. Further, it is not clear whether the effect of such remedies will be the same in different parts of the labour market: To ensure women and ethnic minorities access to attractive jobs, by for instance wage subsidies, can be ineffective in segments where hiring decisions are not especially sensitive to wage differences between groups (Colbjørnsen 1986).

At the end of the 1970s and the beginning of the 1980s the dual economy or dual labour market theory was the most influential theory in sociological labour market research. The term *dual economy* was adopted by Averitt (1968) and Galbraith (1973) in order to describe the partition of the industrial sector in the US. Dual labour market theory was used to describe the division of labour market into two segments with very little opportunities for mobility between them. During the 1980s it became more usual to integrate these different perspectives, because the segmentation of the labour market was assumed to be strongly related to the division of the industrial structure (Colbjørnsen 1986:56).

2.3.3. «The Dual Labor Market Theory»

Here we present some of the main points from Doeringer and Piore's book *Internal labor markets and manpower analysis* (1971) which are relevant for the analysis of recurrent unemployment spells among youth. Doeringer and Piore's theory is often characterised as structural. This does not mean that the theory disregards individual action. In many ways they combine both properties of structure and actor, for instance when the theory treats job stability as an endogen variable. The segment in which the worker is employed contributes to the development of workers' preferences regarding future working career. A common trait for the segmentation theories is that the employees' stability is regarded as an endogen variable, and this has been stressed as «one of the main theoretical contributions from the dual economy tradition» (Cain 1976, ref. in Colbjørnsen 1986:58).

The central concept in the book *Internal labor markets and manpower analysis* (1971) is the «internal labour market», which includes firms where allocation of the labour force is managed by administrative rules and procedures. External labour markets differ from internal labour markets by the fact that allocation and decisions about training are directly controlled by economic factors. A certain mobility exists between internal and external labour markets: «certain job classifications [...] constitute *ports of entry and exit* to and from the internal labor market» (Doeringer and Piore 1971:2). Most jobs in the internal labour market are filled up by promotions or transitions of employees who already are integrated into the system, in other words by internal recruitment. This means that they are sheltered from direct competition from people outside the system, i.e. the external labour market. Internal labour markets exist in medium-sized and big firms which belong to the most stable and best organized segment in the economy. Here we also usually find the best educated and most skilled workers. The segment is called the primary labour market contrary to the secondary labour market which is described in the following way:

> «There are, however, a group of low-wage, and often marginal, enterprises and a set of casual, unstructured work opportunities where workers with employment disadvantages tend to find work. The labor market adjustment process for this low-wage employment and its effect upon the disadvantaged is poorly understood.» (Doeringer and Piore 1971:163)

According to Doeringer and Piore, jobs in the primary labour market are characterised by high wages, fringe benefits, good working conditions, high job stability, possibilities for promotion, a high degree of membership in trade unions, good possibilities for internal training and most important a low risk of unemployment. On the other hand, jobs in the secondary labour market are characterised by fewer possibilities for internal training, low wages, poor working conditions, high turn-over, low possibilities for advancement and a low degree of union membership. There are also different demands regarding stability in the primary and the secondary labour market, and this is assumed to be the most important factor which distributes the labour force between the two segments (Colbjørnsen 1981). The good jobs exist just because the firms need a core of stable workers (Colbjørnsen 1986).

What is really interesting about this theory is not primarily that the theory differentiates between good and bad jobs, but that the theory postulates an interaction between qualities of the jobs and individual attributes of the employees. When it comes to the theory's relevance for our research questions, it is important to underline that one central characteristic of the secondary labour market is a high turn-over, what Doeringer and Piore characterize as a type of frictional unemployment, but which differs from what we usually describe as frictional unemployment by the fact that it is not really lack of information about where the jobs are, which is important. Frequent job shifts are related to low work involvement, which among other things is due to insecure jobs and bad working conditions. This may further imply that the employees will be more tolerant to poor working conditions (Doeringer and Piore 1972:166). In other words, employees in secondary jobs «are trapped in a vicious circle» (Colbjørnsen 1986:185), because of low wages, poor working conditions, less possibilities for advancement and training, which in turn gives low work motivation and consequently low stability (Colbjørnsen 1981).

Doeringer and Piore (1972:201) indicate two alternative approaches which are relevant for policy: 1) it is possible to introduce schemes which increase the mobility between the secondary and the primary labour market or 2) introduce schemes which improve the quality of the jobs in the secondary labour market. If there is some kind of bridge between the different markets, Doeringer and Piore assume that the first remedy would be the most effective.

The dual labour market theory has been much criticised during the years. The criticism has mainly been directed towards the hypothesis of a dual labour market with little or no mobility between the segments, and a concentration of bad working conditions, low wage, insecure work contracts and less upward mobility in the so-called secondary labour market. Colbjørnsen (1981) studied to what degree the dual labour market theory could give a relevant picture of the Norwegian labour market structure on the basis of data from 1973/1974. Colbjørnsen (1981:161) concludes that there seem to be certain clustering mechanisms in the labour market, but they do not have such a character that they influence all the job characteristics at the same time. Colbjørnsen has however, later made the following statement of the relevance of the segmentation theories for the Norwegian labour market:

> «Even though the dual conceptualization of the labor market is not fruitful, and despite the fact that it was developed from case studies in urban ghettos in the US, the theory seems relevant for describing some labor market behavior even within a Norwegian context.» (Colbjørnsen 1986:168)

The potential of the theory for exploring unemployment, and especially recurrent unemployment spells, has as far as we know not been questioned in the same way. We will not concentrate on whether the Norwegian labour market is segmented or not, but we have described the theory as a point of departure for analyses of recurrent unemployment spells.We will study the relationship between what we have called segmentation indicators (Andress 1989) and how many times the young people in the study have been unemployed, and whether such indicators influence whether young people are unemployed or not at the time of the interview.

2.4 The Main Hypothesis

First of all, we want to explore the relationship between social background and education, and how these factors are related to recurrent spells of unemployment. Another interesting question is whether we find any gender differences. We know that the Norwegian labour market is strongly gender segregated. This may imply gender differences in young people's unemployment career. We also want to explore selection effects. Are some young people with «problems» sorted out into a career with recurrent spells of unemployment? In accordance with labour market theories discussed here,

we would expect that structural features of the labour market probably are more important than individual problems. In other words, we will look at different explanations of recurrent unemployment and analyse how different models fit the data.

We are also interested in how previous unemployment influences later unemployment. If so, what is most important? Do previous recurrent spells of unemployment increase the risk of later unemployment or is it really the duration of unemployment which is important? In the data, it is possible to differentiate between occurrence dependence and lagged duration dependence. We will analyse the influence of such state dependence while controlling for heterogeneity such as selection to unemployment regarding social background and individual problems.

3 Method

3.1 Description of the Method and Presentation of the Data

The data in the empirical analyses in this report were collected as part of a comparative research project about unemployment in Europe funded by the EUs fourth frame work programme, TSER, with additional funding from the different countries. The main aim of the study was to look at different processes which lead to integration in the labour market or continuous unemployment in representative samples of young unemployed people in Europe (see Carle and Julkunen (1997) for a presentation of the studies in the Nordic countries).

The Norwegian part of the project was carried out by the Norwegian research team. The data collection was carried out by the Directorate of Labour in Norway in accordance with demands from the Data Inspection Office. To be able to use the unemployment register as the basis for sampling, the Data Inspection Office in Norway demanded that the Directorate of Labour, which had concession to use the register, carried out the survey. The sample was drawn from registered unemployed youth with more than 3 months continuous unemployment during the first half year of 1995. A postal questionnaire was sent out with two reminders to a sample of 2000 young people in the age group 18 to 24 years old.

The survey was carried out in 1995 and 1996. The response rate after the postal survey was 40 %. We then wished, as in the other Nordic countries, to use telephone interviews with the non-respondents to increase the response rate. However, the Data Inspection Office would not allow this. Despite complaining to the Data Inspection Office Board, the decision remained the same. We then complained to the Ministry of Law. They overruled the decision by the Data Inspection Office and allowed the research group to carry out telephone interviews. However, some sensitive questions had to be omitted: 10 questions about mental health, delinquency and drug-use. The follow-up of telephone interviews was carried out by a private firm Norsk Gallup in the spring of 1997. 290 telephone interviews were carried out among non-respondents of the postal questionnaire, giving a total response rate of 55.5 % (N=1111).

3.1.1 Population

In total 97 934 young people in the age group 18-24 were registered as unemployed some time during the first half of 1995. Among these 19 % were long-term unemployed, i.e. for 6 months or more. The sample was drawn among those who during the period had been unemployed continuously for more than 3 months, and who had applied for full-time employment, in total 39 020 persons. In this population a representative sample of 2000 young people were drawn to participate in the survey.

3.1.2 The Sample

The sample appears to be representative for the population (39 020) regarding important characteristics which we can control for using registered data. Fifty-five per cent of the population and 56 % of the sample had been unemployed for less than six months, approximately 60 % men and 40 % women in both the population and the sample. The age distribution was about the same: 29.8 % of the population compared to 22.8 % of the sample were 20 years or younger. In other words, older youth were slightly overrepresented in the sample. The proportion in labour market training schemes was about the same in the population and the sample. In other words, the sample seems to be representative for the population.

3.1.3 Attrition in the Survey

Register data were coupled to those of the respondents who had given consent to do this (85 %) (N=944). We used register information about the total sample (N=2000) to look at possible skew attrition which could influence the possibility of generalising the results. Table 3.1 (below) gives the distribution of important variables and shows the differences between the sample and the respondents. There are quite small differences between the sample and the respondents, none of importance. The only weakness is that 22.9 % of the sample had compulsory school education only, or had not completed compulsory school compared to 16.1 % of the respondents, i.e. a difference of 7 %. This difference is statistically significant (Z=4.47). The difference is the result of a higher proportion in the sample that had completed compulsory school only. In other words, the difference is not due to drop-out from compulsory school. However, on the other hand, there was a higher proportion of respondents who had not completed vocational education than in the sample. The duration of unemployment was about the same among the respondents

and the sample, and the same proportion reported that they did not have any work experience or relevant education. The proportion that had received unemployment benefit, and the proportion who lacked work experience, were similar for the respondents and the sample. Place of residence was also very similar. In conclusion, attrition does not seem to be biased, when we use registered data to control our data. In spite of low response rate (55.5 %) we claim that the sample and the respondents are representative.

Table 3.1 Differences between the sample and respondents. %

	Sample (N= 2000)	Respondents (N=944)
Men	60,0	57,0
Women	40,0	43,0
Education		
Compulsory (9 years) or less	22,9	16,1
1–2 years of vocational or upper secondary education	65,8	70,4
3 years of vocational education or apprenticeship	9,2	10,3
University / higher education	2,0	3,0
Duration of last unemployment spell (weeks)		
< 12	1,4	1,4
13–25	54,4	55,7
26–52	35,1	36,0
53–80	7,3	5,2
81>	1,9	1,7
Short-term unemployed <25 weeks	55,8	57,1
Long-term unemployed	44,3	42,9
Received unemployment benefits	69,3	68,4
Laid off	2,0	2,0
Sector		
Technical	0,8	1,3
Health/care/nursing	3,1	4,3
Trade	9,6	8,3
Teaching	7,2	7,5
Other hum.	1,7	1,3
Administration	0,1	0,1
Office work	4,2	5,5
Fishing/farming/mining	3,5	3,6
Oil/gas	0,1	–
Transport/comm.	3,7	3,1
Construction	6,2	6,4
Industry	19,8	18,0
Service	12,6	12,0
Without work experience or relevant education	27,7	30,0

3.1.4 Measurements

The measurement of the different variables used in the analyses are explained in the text. A description of some of the most important variables are also given in the appendix. However, the two dependent variables need some further clarification. First we use the number of unemployment spells as a dependent variable. Then we look at whether the respondent was unemployed or not at the time of the interview. Regarding both variables, it is the respondents' own evaluation of their situation which is significant. In other words, if they report unemployment they are registered in the data as unemployed independent of if they are actually searching for a job or not, or registered as unemployed or not.

They were asked about the number of unemployment spells ever since they left school. This implies that the oldest age group will have a longer career in the labour market and consequently be at a higher risk of many unemployment spells. We therefore control for age in all analyses. In the same way, females may have a higher probability to withdraw from the labour market to stay home with small children and have a lower risk of unemployment spells, so we also control for gender. The same argument applies to education. The higher the educational level, and the shorter the time in the labour market, the lower the risk of unemployment spells. In chapter 4 we investigate the effect of education and this variable is controlled for in all multivariate analyses.

Another problem is that the number of unemployment spells are measured by a retrospective question, while several of the independent variables are measured at the time of the interview. These problems are discussed in details in chapter 4 and 5.

4 The Influence of Social Background, Family Situation and Individual Problems on the Risk of Recurrent Spells of Unemployment

4.1 Introduction

One important aim was to study the relationship between number of unemployment spells and individual factors. In this Chapter we give a mainly descriptive overview of different factors which may influence recurrent unemployment spells. We chose these factors on the basis of previous research on selection to and consequences of unemployment. The following factors are involved:

1 Background:

- age
- gender
- mother's and father's education
- place of residence
- parental divorce

2 Education and family situation:

- respondent's level and type of education
- drop-out from upper secondary education
- having children or not
- living alone or with a family

3 Individual problems:

- mental health
- delinquency
- alcohol use
- general/physical health
- work involvement

The variables in the first group are connected to background factors, that is factors that the young people themselves have little or any influence over.

Variables in the second group are related to different choices about central institutions such as education and family. Variables in the third group elucidate different kinds of individual problems. Work involvement is not necessarily a problem. However, a lot of research on youth culture has focused upon the risk of development of youth cultures where work is devaluated, and work involvement is a central subject in a lot of studies of unemployment. Therefore, we included questions about work involvement, or work motivation.

We used two dependent variables in the analysis: The number of unemployment spells (Chapter 4 to 6) and whether the young people were unemployed or not at the time of the interview (Chapter 7). For some factors there is a problem of the succession of time. The variables have a different time order. For instance, the number of unemployment spells were reported retrospectively at the time of the interview, while some of the measurements used here, for instance, education, family situation and individual problems, were measured at the time of the interview. This is a problem with cross-sectional data, and we will discuss these problems in the results.

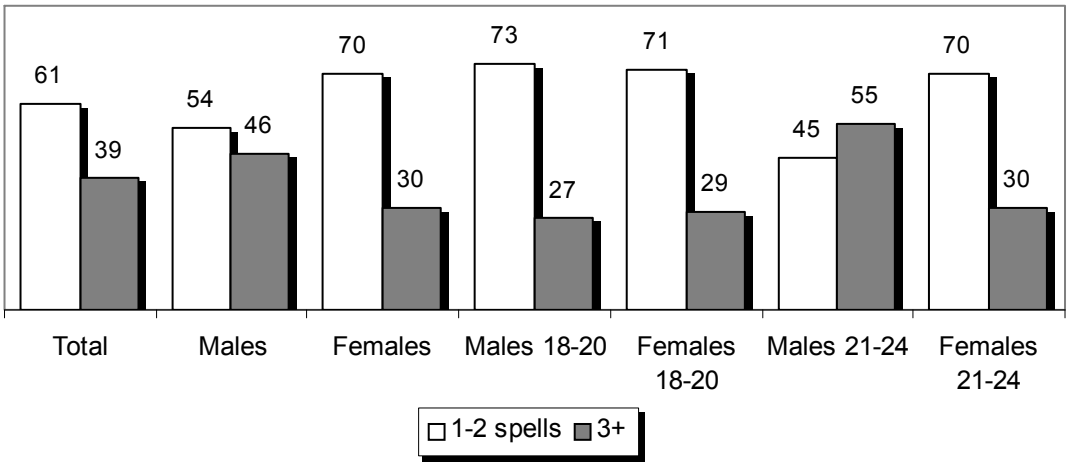
4.2 Recurrent Spells of Unemployment

At the time of the interviews about 98 000 young people in the age group 18–24 were registered as unemployed, and 19 % were long-term unemployed. Short-term unemployed are not included in the sample. As discussed previously, the sample was drawn from young unemployed people with more than 3 months continuous unemployment in the spring of 1995. It is therefore important to underline that the analyses are based on a selected sample, which is reflected in the total unemployment experience of the young people in the sample. However, information about the number of unemployment spells is not connected to duration. Information about the number of unemployment spells has been reported in the survey using retrospective questions, but it is not certain that the young people were registered as unemployed. They reported this themselves.

In this chapter and the next two chapters the material has been divided in two groups, dependent upon how many times the respondents reported that they had been unemployed. These two groups are compared in the analysis. We could have chosen to study the mean values of the dependent variables in the multivariate analysis, but in this way we avoided the problem of «outliers». The sample was therefore, divided into two groups, dependent

upon the value of the variable, number of unemployment spells: those who had been unemployed one or two times, and those who had been unemployed three times or more. There were 57.1 % men and 42.9 % women in the sample. We also studied different age groups, 18–20 year olds (30 %) and 21–24 year olds (70 %). Figure 4.1 shows the number of unemployment spells by gender and age.

Figure 4.1 Number of spells of unemployment by gender and age. %



Significance tests: Gender p<.001, 18–20*:* n.s. 21–24*: p<.001. Basis: Total N=1104. Males N=630. Females: N=474.* 18–20*: Males: N=202. Females: N=134.* 21–24*: Males: N=428. Females: N=337.*

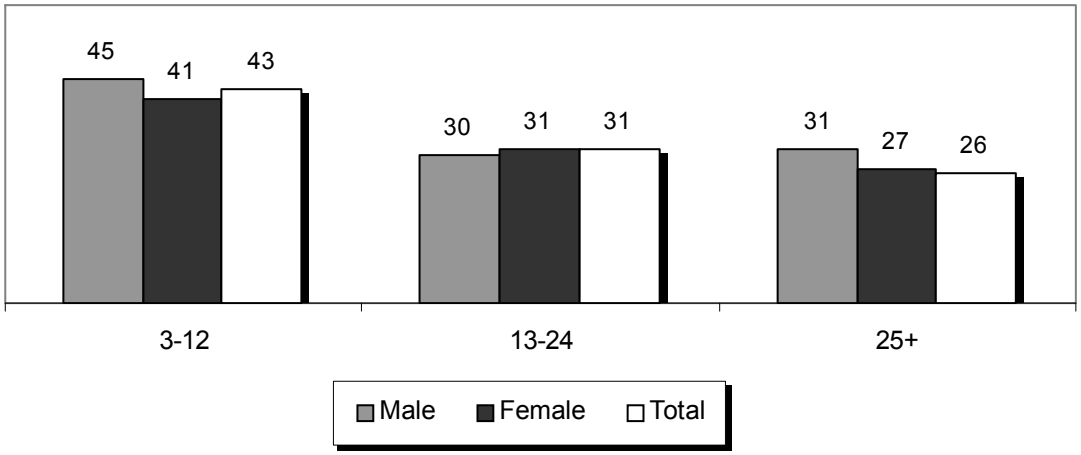
In total 61 % of the sample had been unemployed one or two times, and 39 % had been unemployed three times or more. There were clear differences between males and females regarding the number of unemployment spells (p<.001), but as shown in Figure 4.1 there were no gender differences for the 18 to 20 year olds. Males were in other words more vulnerable to recurrent unemployment spells. A probable explanation is that the unemployment rate is actually higher for males than females in the population. In the following section we will see if they are also more vulnerable for long-term unemployment.

4.3 Duration of Unemployment

Previous studies of youth unemployment in Norway have shown that there are no significant differences in the duration of unemployment for males and females, but in the older age groups females seem to have longer spells of unemployment (NOU 1994:3). However, our results (Figure 4.1) shows that males in the age group 21–24 reported more spells of unemployment than females. The questions is whether the males in our sample also have a

longer total unemployment experience. We will now look at the duration of unemployment using two kinds of measures: Total experience of unemployment after leaving school and the duration of the longest spell of unemployment. Figure 4.2 shows total unemployment experience for males and females.

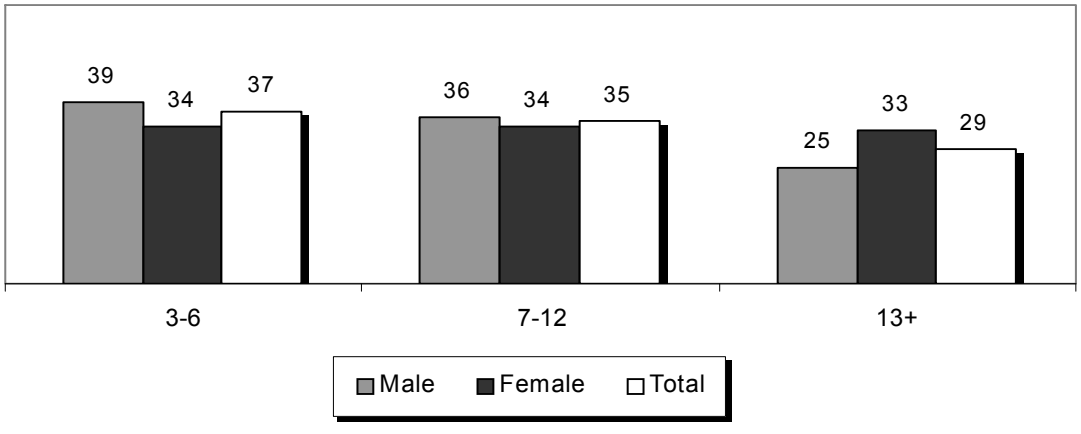
Figure 4.2 Total unemployment experience (months) by gender. %



Significance test: n.s. *Basis: Males: N=561. Females: N=423. Total: N=984.*

There were very small differences between males and females regarding total unemployment experience when age was controlled for. Analysis of variance showed that the average time of unemployment experience was about the same for both females and males: about 21 months. The average length of total unemployment was 16 months for 18–20 year olds, compared to 24 months for the oldest age group. When we looked at the duration of the longest unemployment spell, we found that females, in both age groups, had the longest continuous spell of unemployment.

Figure 4.3 Longest continuous spell of unemployment (months) by gender. %



Significance test: Gender: p<.05. Basis: Males N=610. Females: N=464. Total: N=1074.

More females than males reported that their longest unemployment spell was 13 months or more. Since we found clear differences in the number of spells of unemployment, but not in the total experience of unemployment, the results clearly imply that males have had more spells of unemployment, but the females have had longer spells of unemployment. Why this is so, is a question that will be answered in the following analysis.

We shall now look at the relationship between total unemployment experience, the length of the longest spell of unemployment and number of spells of unemployment.

*Table 4.1. Analysis of variance of length of **longest spell** (months) of unemployment by number of spells of unemployment*

MALES 18–20	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	144	9.9	8.3	.264
3 spells or more	54	8.5	4.6	
Total	198	9.48	7.5	
MALES 21–24	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	192	13.0	14.0	.404
3 spells or more	224	14.2	16.0	
Total	416	13.6	15.1	

FEMALES 18–20	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	94	11.5	10.8	.164
3 spells or more	39	8.7	9.2	
Total	133	10.7	10.4	
FEMALES 21–24	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	230	15.5	14.8	.123
3 spells or more	100	13.0	9.8	
Total	330	14.7	13.5	

As shown in the table, those with frequent unemployment spells do not have a higher probability of long-term unemployment. The results may indicate that those with a long duration of unemployment may be a different group on the labour market than those with many spells of unemployment. However, those with many spells have a longer total unemployment experience, as showed in the next table.

*Table 4.2. Analysis of variance of **total unemployment experience** (months) by number of spells of unemployment*

MALES 18–20	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	147	13.9	13.1	.003
3 spells or more	55	20.2	14.1	
Total	202	15.6	13.6	
MALES 21–24	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	194	17.8	17.1	.000
3 spells or more	234	29.4	26.0	
Total	428	24.1	23.1	

FEMALES 18–20	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	95	14.5	11.8	.031
3 spells or more	39	19.6	13.9	
Total	134	16.0	12.6	
FEMALES 21–24	**N**	**Mean**	**Std.dev.**	**F-prob.**
1–2 spells	235	20.2	14.7	.000
3 spells or more	102	29.3	21.3	
Total	337	23.0	17.5	

4.4 The Impact of Education

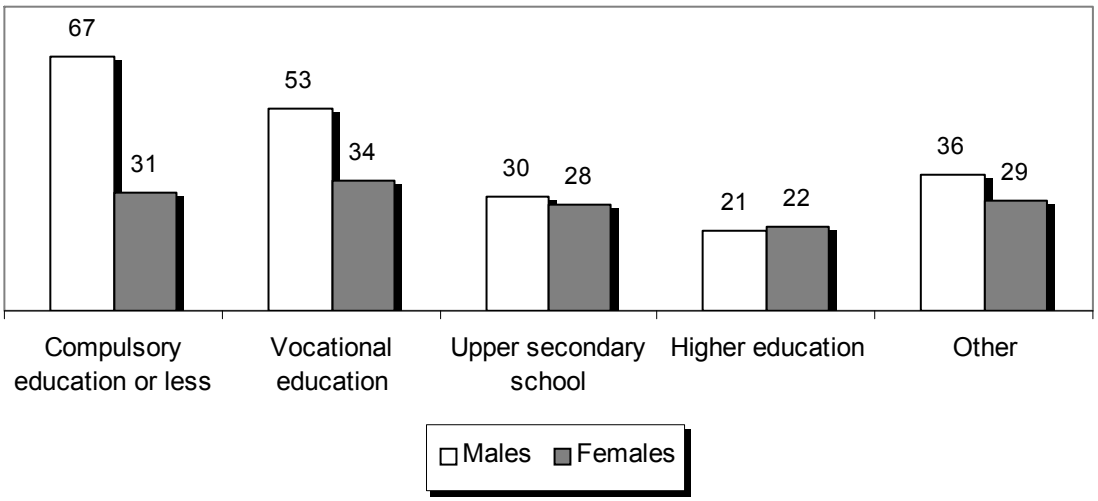
The problem of selection is a central subject in research on unemployment. Research still concludes that educational qualifications seem to be the best insurance against unemployment. But differences in educational *level* do not adequately explain why some groups are more vulnerable to unemployment than others. Both quantitatively and qualitatively the qualifications employers demand in today's labour market are clearly different from yesterday's. When work places in industry, which have been traditionally male dominated, are closed down and replaced with work places in private and public services, which have been female dominated, then it is reasonable that this is reflected in the group of unemployed. Unemployment statistics in Norway generally show that the proportion of unemployed males is higher than the proportion of unemployed females, and that there are more unemployed unskilled workers than skilled workers. However, structural changes in the labour market are only part of the explanation. Generally, more males than females work in the private sector, which is more vulnerable to cyclical fluctuation (Halvorsen 1994). Traditional gender roles and the gendered division of labour may give females more legitimate alternatives

in times with high unemployment. We will now look at what kind of education the respondents in the sample had, and investigate the relationship between education and the number of spells of unemployment.

4.4.1 Education

We have seen that 46 % of the men had been unemployed three times or more, but only 30 % of the women. In the light of the discussion above we can ask the following question: Is this gender difference due to differences in educational level or type of education? We find that there are no differences between males and females regarding educational level in our sample: The proportion who had completed compulsory school only was nearly identical. This was also the case for those with higher education. There is however a significant gender difference in the kind of upper secondary education. A much higher proportion of males than females have vocational education (46 % compared to 36 %), while the proportion with upper secondary education from the academic line is lower among males than females. In other words, type of secondary school education may partly explain the gender differences in recurrent unemployment spells. We also find a highly significant relationship between education and number of spells of unemployment ($p<.001$). 70 % of those who had been unemployed three times or more had completed compulsory school only or they had vocational education in upper secondary school. Figure 4.4 shows this for males and females.

Figure 4.4 Proportion unemployed 3 times or more by education. %



Significance tests: Males: p<.001. Females: n.s. Basis: Males: N=617. Compulsory: N=97. Vocational: N=283. Upper secondary: N=144. Higher education: N=48. Other: N=45. Females: Basis: Compulsory: N=78. Vocational: N=169. Upper secondary: N=138. Higher education: N=37. Other: N=51.

The figure shows that the gender differences are greatest for compulsory school and vocational education. For males the relationship between educational level and number of spells of unemployment is clear: The higher the level of education, the lower the number of unemployment spells. This tendency was not found for females.

The finding that education reduces the risk of unemployment is probably the result of two effects. The first effect is that education reduces the risk of unemployment. The second effect is that participation in higher education delays the time at which the individual enters the labour market. In the oldest age group (21 to 24 year olds) we find very clear gender differences. 81 % of the males with compulsory school only reported more than three unemployment spells, compared to 24 % of the females. Among those with vocational education from upper secondary school, 62 % of the males and 33 % of the females reported three spells of unemployment spells or more.

How can we explain these findings? One explanation may be that females with compulsory school only or with vocational education have higher probability of leaving the labour force, and they will therefore not have the same risk for recurrent spells of unemployment spells in the same way as males with the same education. However, it is also possible that males with low education work in special segments of the labour market which are especially vulnerable to seasonal variations and cyclical fluctuations in the economy.

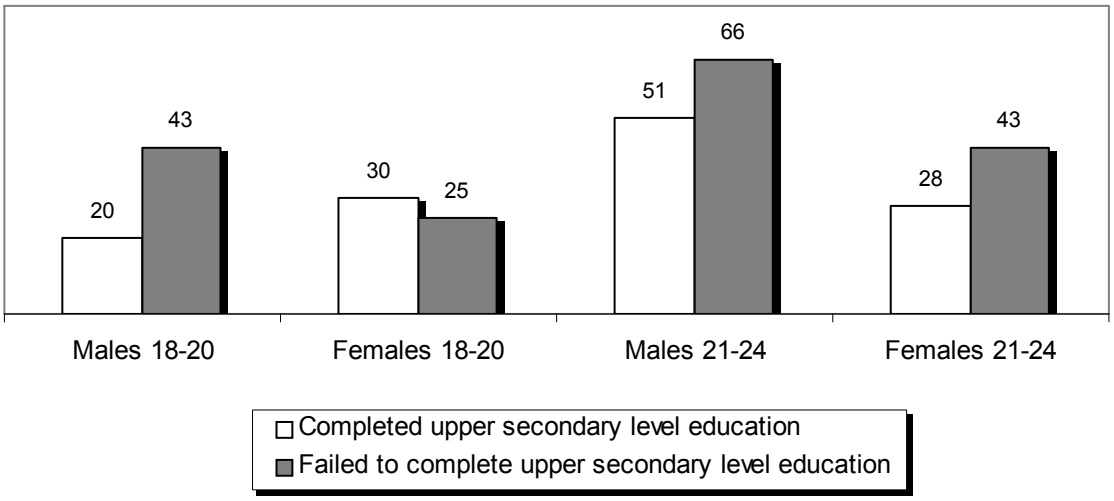
4.4.2 Drop-out from Upper Secondary Education

Previous research has shown that young people who drop out from school have an increased risk of later unemployment (NOU 1994: 3, Hammer 1992, Pedersen 1996). The explanations are probably complex: Most employers demand formal qualifications, and those who cannot document formal education will probably be the last in the queue when employers hire young people. However, it is also possible that young people who drop out of school have other personal characteristics which will imply problems for their working career.

In total more men (25 %) than women (19 %) reported that they had dropped out of upper secondary education ($p<.05$). There were also clear age differences: More 18 to 20 year olds (27 %) than 21 to 24 year olds (20 %) reported drop-out. The youngest age group was probably a rather selected group, especially the boys. By selection we mean that unemployment among young people below 20 years of age is rather low, because many of them are

still students and very few have entered the labour market. In other words, those who are unemployed in this age group may have other personal characteristics which may explain their unemployment. The relationship between school drop-out and the number of spells of unemployment is clear. Among those who had completed upper secondary school, 36 % had been unemployed three times or more, compared to 50 % in the group that reported drop-out (p<.01). Figure 4.5 shows the relationship between drop-out and number of spells of unemployment for gender and age.

Figure 4.5 Proportion unemployed 3 times or more by drop-out from upper secondary education. %



Significance tests: 18–20: Males: p<.01 (p=.001). Females: n.s. 21–24: Males: p<.05. Females: p<.05 Basis: 18–20: Completed upper secondary: Males: N=142. Females: N=102. Failed to complete upper secondary: Males: N=60. Females: N=32. 21–24: Completed upper secondary: Males: N=331. Females: N=281. Failed to complete upper secondary: Males: N=97. Females: N=56.

For males drop-out seems to be a factor which increased the risk of recurrent spells of unemployment, and this is also the case for the females in the oldest age group.

4.4.3 Summary

Both level and kind of education seem to be important regarding recurrent unemployment spells among young people. In particular males with vocational education seems to be a vulnerable group. However, this group is rather heterogeneous, and many of them have probably only one or two years vocational education. The gender differences in the number of unemployment spells are most pronounced for those aged 20-24 with

only compulsory school or vocational education. Drop-out from upper secondary school also seems to increase the risk of recurrent unemployment spells.

4.5 Social Background

We have looked at the influence of young people's education, and previous research in this field was confirmed – those with little or no formal education or vocational qualifications are vulnerable in the labour market. We shall now look at different characteristics of the unemployed youth in the sample and how these are related to the risk of recurrent spells of unemployment. The factors we shall focus on are parents' education, place of residence and whether the subjects have experienced parental divorce.

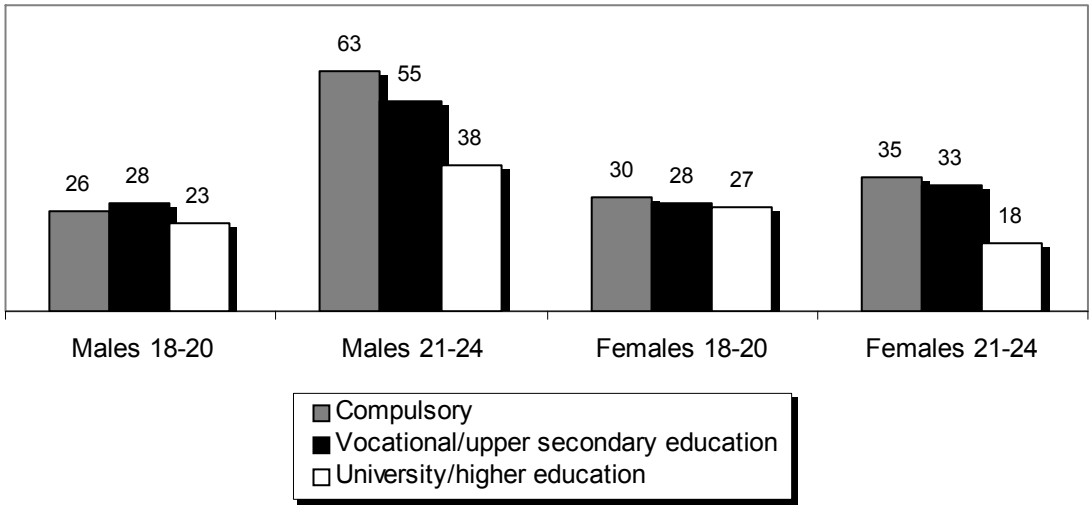
4.5.1 Parents' Education

It has been argued that unemployment is primarily a problem related to social class (Ellingsæter 1995). In empirical analyses of social class or social background, this is usually operationalised with reference to parents' occupation or educational level. In our study we had no information about parents' occupation, so we used information that the young people gave us regarding parents level of education. 43 % of the sample reported that their mother had compulsory education as the highest level of education, compared to 36 % of the fathers. Twenty-five per cent of the young people in the sample had a mother who had vocational education from upper secondary school, and 31 % had a father with this type of education. The results are in accordance with previous research which documents a strong selection to unemployment among youth according social background (Ellingsæter 1995, Hammer 1997). In other words, the risk of unemployment is not evenly distributed, at least not among those who are registered as unemployed. According to Halvorsen (1994) the high risk of unemployment for children of unskilled workers is mainly due to limited resources to finance and motivate children to attend higher education.

We found a clear relationship between the young peoples' educational level and number of spells of unemployment. If young peoples' choice of education is strongly influenced by their parents' education, should we also find the same tendency regarding information about parents education? In other words, is there a inverse relationship between the level of parental education and the number of spells of unemployment experienced by the young people? Our data support this hypothesis: The higher the level of

education of the father, the lower is the probability of having been recurrently unemployed (p<.01). If we control for gender, this relationship is particularly significant for young males. The tendency is the same for mothers' education, but not significant. Figure 4.6 shows the relationship between fathers' educational level and number of spells of unemployment taking gender and age into account.

Figure 4.6 Proportion unemployed 3 times or more by father's education. %



Significance tests: Males: 18–20: n.s. 21–24: p<.01. Females: 18–20: n.s. 21–24: n.s. (p=.144). Basis: Males: 18–20: Compulsory: N=61. Vocational/upper secondary: N=67. University/higher education: N=30. Males: 21–24: Compulsory: N=125. Vocational/upper secondary: N=143. University/higher education: N=53. Females: 18–20: Compulsory: N=46. Vocational/upper secondary: N=46. University/higher education: N=11. Females: 21–24: Compulsory: N=119. Vocational/upper secondary: N=115. University/higher education: N=38.

The figure shows that the higher the level of fathers' education, the lower the number of unemployment spells for both males and females. However, the relationship is only significant for males aged 21–24.

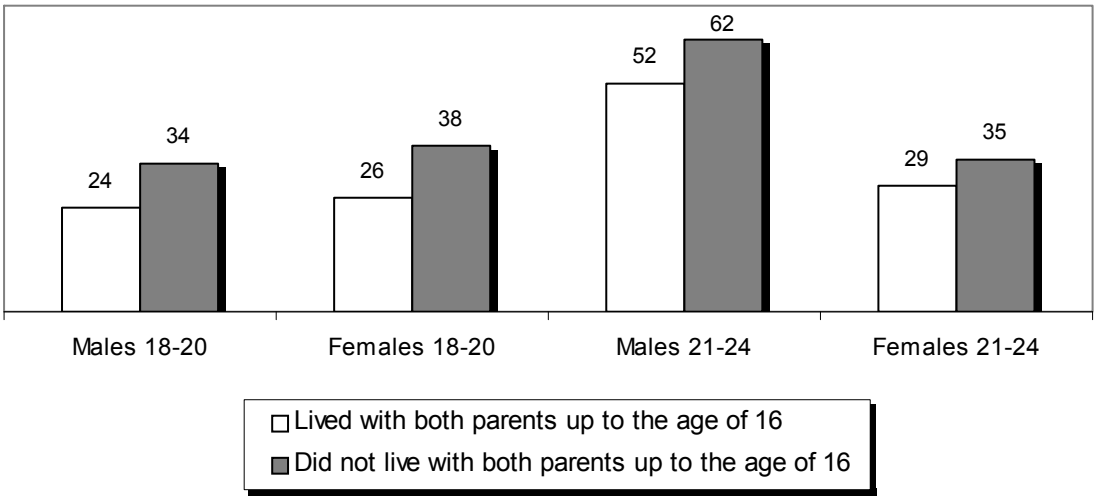
4.5.2 Parental Divorce

A lot of research has found that parental divorce increases the risk of unemployment among youth. In a longitudinal study Caspi, Moffitt, Wright and Silva (1998) found that family conflict and parental divorce were strong predictors of children's unemployment.

In total 74 % in our sample reported that they had grown up with both parents up to 16 years old. There are no gender differences between the age groups. Are these numbers high regarding the frequency of divorce? A recently published study of 11 000 young people in Oslo showed that 2 out of 3 lived with both parents (Bakken 1998).

We shall look at parental divorce and the relationship to number of unemployment spells. The relationship seems to be clear: The proportion that had been unemployed 3 times or more was clearly higher for those who had experienced parental divorce (46 % against 37 %). Figure 4.7 shows this relationship controlled for gender and age.

Figure 4.7 Proportion unemployed 3 times or more dependent on whether they lived with both parents most of the time or not, up to the age of 16. %



Significance tests: 18–20: Males. n.s. (p=.158). Females: n.s. (p=.175). 21–24: Males: n.s. (p=.075). Females: n.s. Basis: 18–20: No: Males: N=62. Females: N=34. Yes: Males: N=140. Females: N=100. 21–24: Basis: No: Males: N=101. Females: N=91. Yes: Males: N=327. Females: N=246.

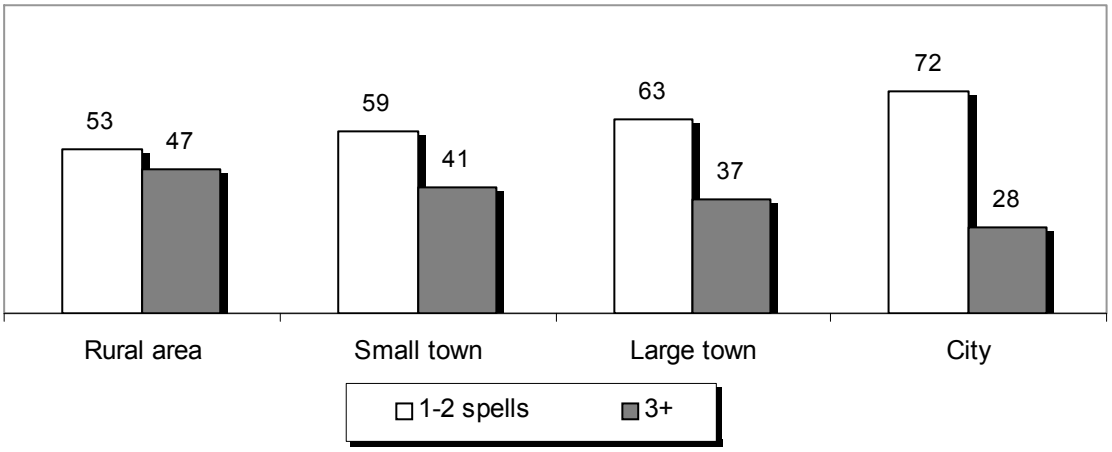
Figure 4.7 shows the higher risk of recurrent spells of unemployment among young people who had experienced parental divorce. Later, in the multivariate analyses, we will look at this result in a broader context.

4.5.3 Place of Residence

Only 17 % of the sample lived in a big city, i.e. a city with more than 150 000 inhabitants. The gender differences regarding place of residence are marginal. We would have expected a gender difference, because seasonal unemployment in the districts are most frequent for male-dominated occupations. Figure 4.8 shows the relationship between place of residence and number of unemployment spells.[2]

[2] Place of residence: rural area: maximum 2 000 inhabitants, small town: 2 000–10 000 inhabitants, large town: 10 000–150 000 inhabitants and city: 150 000 inhabitants or more.

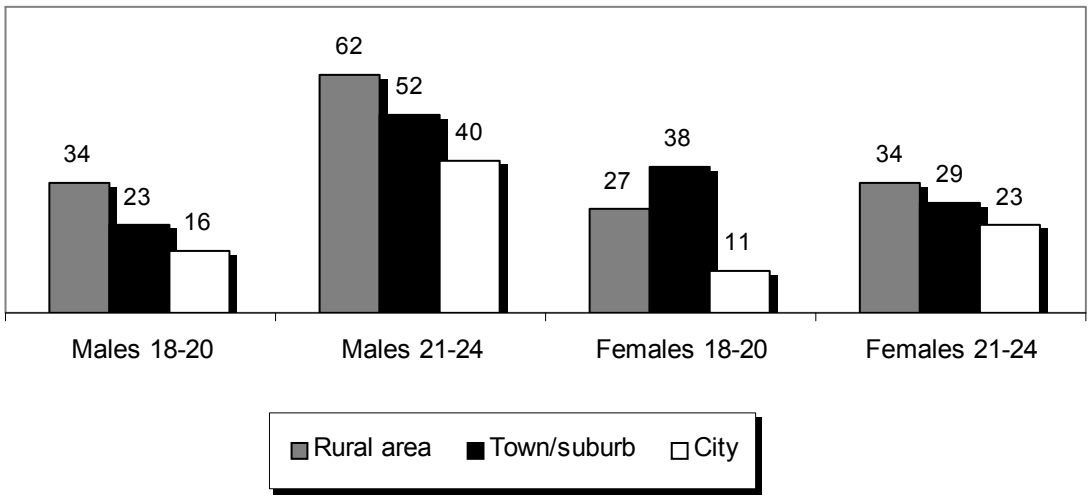
Figure 4.8 Spells of unemployment by place of residence. %



Significance test: p<.001. Basis: Rural area N=315. Small town: N=242. Large town: N=329. City: N=187.

As shown in Figure 4.8 the differences are significant. Among those living in more rural areas 47 % of the sample had experienced 3 spells of unemployment or more, compared to 28 % in the big cities. In the further analysis we put the rural areas and small towns in the same category. In figure 4.9 we also look at age and gender differences.

Figure 4.9 Proportion unemployed 3 times or more by place of residence. %



Significance tests: 18–20: Males n.s.(p=.086). Females: n.s. (p=.095). 21–24: Males: p<.01. Females: n.s. (p=.252). Basis: Males: 18–20: Rural: N=100. Town/suburb: N=70. City: N=31. 21–24: Rural: N=215. Town/suburb: N=121. City: N=80. Females: 18–20: Rural: N=70. Town/suburb: N=40. City: N=19. 21–24: Rural: N=170. Town/suburb: N=97. City: N=57.

Place of residence is evidently an important factor regarding how many times the young people had been unemployed. However, it is difficult to

interpret the results. As discussed previously, unemployment spells are measured by a retrospective question, while place of residence is reported at the time of the interview. The differences are still interesting because the results imply that despite frequent spells of unemployment young people in rural areas have not moved to the city to get a job. It is possible that lack of educational places and work which is vulnerable regarding cyclical fluctuations in the economy in the district may explain the differences. There are also significant differences in educational level and kind of education according to place of residence for both males and females. About 80 % of the males in more rural areas, had compulsory school or vocational education, compared to 40 % in the big cities.

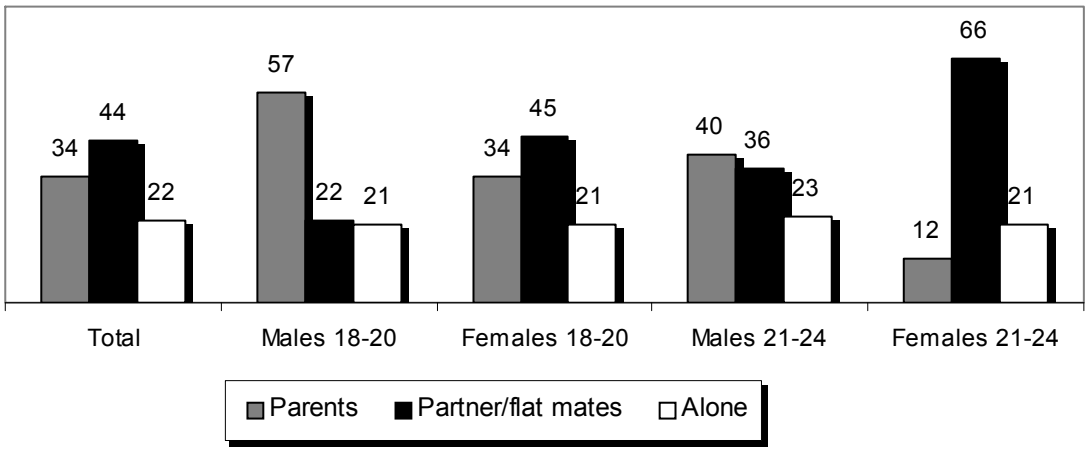
4.6 Family situation

Previous studies have shown that unemployment may represent a barrier to moving out from the parental home (Julkunen and Malmberg-Heimonen 1998). Research also indicates that young unemployed women have children earlier than employed women of same age (Hammer 1988, 1992).

4.6.1 Have they Left their Parents?

Hammer (1994) found that unemployed males had a higher tendency to live with their parents than those who were in employment or studying, but there was no such relationship among females. Other studies also indicate a differentiated effect of unemployment for males and females (Hammer 1994). Figure 4.10 shows the living situation for the sample.

Figure 4.10 Proportion living with parents, partner/flat mates or alone by gender. %



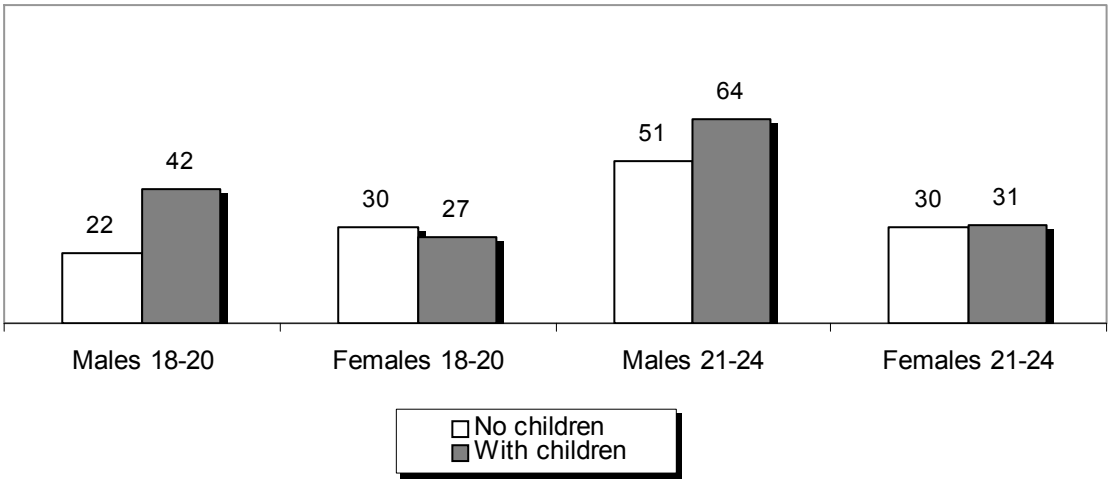
Significance tests: 18–20: p<.001. 21–24: p<.001. Basis: 18–20: Males*: N=192.* Females*: N=130. 21–24:* Males*: N=410.* Females*: N=330.*

More than 20 % of the sample reported that they lived alone. There are important gender differences in both age groups. The proportion of females that had moved away from home and established themselves with a partner or lived with friends, was about twice as high as among males ($p<.01$). In the further analysis we compared those who lived alone with the rest. We assume that those who lived alone for both practical and economical reasons would have a low probability for leaving the labour force for education or caring for children etc. We then looked at the relationship between living alone and number of spells of unemployment. The differences between the groups were small for males, but there are significant differences for females: A higher proportion (40 %) of those who lived alone had been unemployed 3 times or more, compared to those who lived with someone (27 %). The only significant difference between the groups was for females in the oldest age group: 27 % of the women who did not live alone reported that they had been unemployed 3 times or more, compared to 43 % of those who lived alone ($p<.05$). In other words, there was a clear tendency that females who lived alone had a higher probability of many spells of unemployment. As previously discussed, this could be explained by the fact that those who lived with a partner would have a higher probability of leaving the labour force and therefore do not have the same risk of recurrent spells of unemployment.

4.6.2 Children

About one out of three in the sample reported that they have children. A higher proportion females (50 %) than males (26 %) had children ($p<.01$). The question is whether females with children have had fewer unemployment spells than females without children. In the total sample, the proportion of those who had been unemployed three times or more was greater for those with than without children. Figure 4.11 shows the distribution for males and females.

Figure 4.11 Proportion unemployed 3 times or more by children for males and females in both age groups. %



Significance tests: 18–20: Males: p<.01. Females: n.s. 21–24 : Males: p<.05. Females: n.s. Basis: 18–20: No children: Males: N=150. Females: N=93. Children: Males: N=52. Females: N=41. 21–24: No children: Males: N=317. Females: N=142. Children: Males: N=111. Females: N=195.

As we can see the pattern is different for males and females. Males with children have experienced more unemployment spells. Number of spells of unemployment is treated as a dependent variable, but the causality is unsure. Maybe men with responsibility for children have to take whatever job that they can get, even if the job is temporary. We do not find such a tendency for females.

4.6.3 Summary

We found that the higher the educational level of the respondent's father, the lower was the risk for recurrent spells of unemployment. The risk for three or more spells of unemployment was higher among those whose parents were divorced. There was a strong relationship between place of residence and number of spells of unemployment: risk of recurrent unemployment was highest for those in rural areas. The females who lived alone had experienced more spells of unemployment than those who lived with partner or parents. A higher proportion of females than males had children and the relationship to number of spells of unemployment was different for males and females. The proportion with 3 spells of unemployment or more was highest for males with children.

4.7 Individual Problems

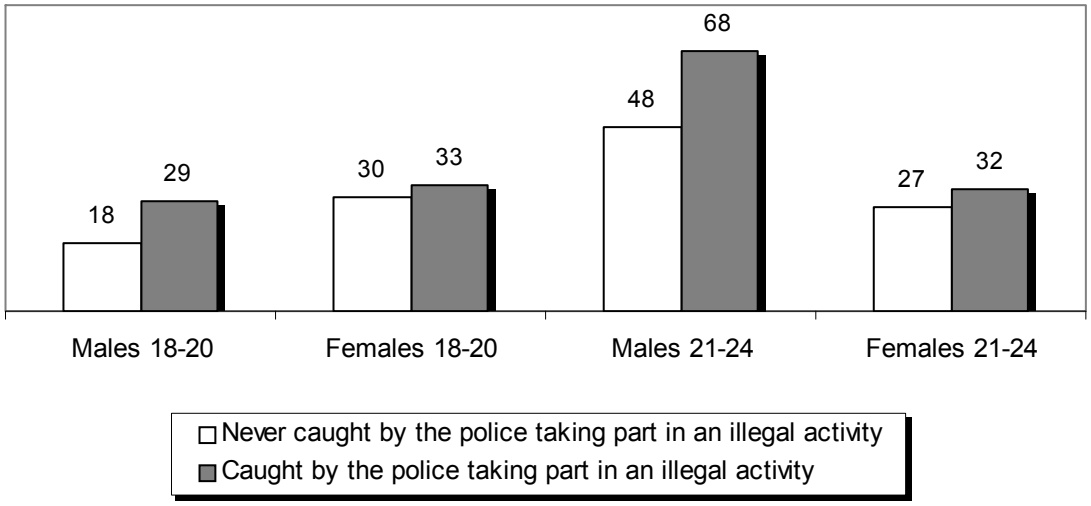
In the following section we will look at the relationship between individual social problems and health problems, and how these are related to risk of recurrent spells of unemployment. We use 5 different indicators: physical and mental health, alcohol consumption, delinquency and work involvement. In studies of state dependence, unobserved heterogeneity with regard to these kinds of factors is a potential source of bias.

4.7.1 Delinquency

Previous research has found that unemployed youth are over-represented among those who are registered for delinquency, but there is no clear documentation of the relationship between unemployment and delinquency in general (Halvorsen 1994). In our sample 28 % reported that they «had been caught by the police taking part in an illegal activity". However, we have to be careful when interpreting the results. We have no information whether this was a one time incident, what kind of incident and seriousness, or how old they were when the situation occurred. The advantage with such a general question is still that it reduces the risk of under-reporting, which is clearly a problem with self-reported delinquency. However, according to Pape (1997), accordance between different sources of reported serious delinquency is relative high.

A higher proportion of males (40 %) than females (12 %) reported that they had been caught for some kind of illegal activity. There were differences between the age groups: 35 % of the 18–20 year olds, compared to 25 % of the 21–24 year olds. In total 47 % of the younger males had been caught by the police compared to 36 % of the older males. We will now look at the relationship between the delinquency and number of spells of unemployment. Because we do not know how old the young people were when they were caught by the police, the time order of the variables is very unsure, however, we still treat the number of spells of unemployment as the dependent variable. In total 49 % of those who had been caught by the police reported that they had been unemployed 3 times or more, compared to 34 % of those with 1–2 spells of unemployment. In Figure 4.12 we take into account age and gender differences.

Figure 4.12 Proportion unemployed 3 times or more by whether they had been caught by the police for taking part in an illegal activity or not. %



Significans tests: 18–20: Males: n.s. (p=.123). Females: n.s. 21–24: Males: p<.01. Females: n.s. Basis: 18–20: Never caught by the police: Males: N=77. Females: N=80. Caught by the police: Males: N=69. Females: N=15. 21–24: Basis: Never caught by the police: Males: N=199. Females: N=226. Caught by the police: Males: N=114. Females: N=25.

According to Figure 4.12, those who had been caught by the police had a higher probability of recurrent spells of unemployment, but this difference was only significant for the oldest males.

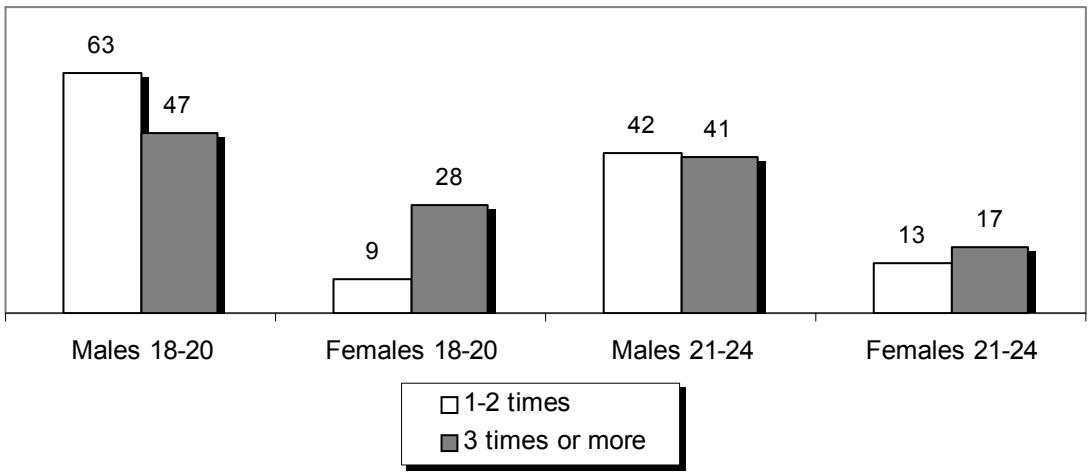
4.7.2 Alcohol

There were two questions about alcohol in the questionnaire. The first question was about frequency of alcohol use during the last 12 months. The second questions was more problem orientated, and the respondents were asked how many times during the last 12 months they had consumed so much alcohol that they felt intoxicated. The response alternatives ranged from «every day or every other day» to «have never been drunk / have not been intoxicated during the last year». On this basis the sample was divided into 2 groups in the further analysis: those who had been intoxicated 2–3 times a month or more often (33 %), and those who had been intoxicated once a month or less often (67 %).

A much higher proportion of males (47 %) than females (14 %) reported that they had felt intoxicated 2–3 times a month or more, and a higher proportion of males than females reported a high frequency of drinking. The gender differences in alcohol consumption are significant. There were also clear age differences. The youngest age group clearly

drank more. There were only marginal differences in alcohol consumption related to recurrent unemployment spells. However, in the oldest age group there was a significant difference: 26 % of those who had been unemployed 1–2 times reported that they had been intoxicated 2–3 times a month or more often, compared to 34 % of those with more frequent unemployment spells. In figure 4.13 age and gender were controlled for.

Figure 4.13 Proportion intoxicated 2–3 times a month during the last 12 months by number of times unemployed. %



Significance tests: 18–20: Males: n.s. *(p=.092). Females: p<.05. 21–24: Males:* n.s. *Females:* n.s *Basis: 18–20:* 1–2 times*: Males: N=109. Females: N=65.* 3+*: Males: N=34. Females: N=29. 21–24:* 1–2 times*: Males: N=143. Females: N=182.* 3+*: Males: N=172. Females: N=69.*

In both age groups the females reported fewer episodes of intoxication than the males.

4.7.3 Mental Health

A lot of studies have shown that unemployed people report poorer mental health than those who are employed. But research indicates that unemployment can be both a cause and a consequence of poor mental health (Halvorsen 1998). As argued by Mastekaasa (1996), there is probably a selection regarding mental health both in entrance and exit from unemployment. Those with health problems will probably have a higher risk of losing their jobs, and lower probability of re-employment. Previous research of young unemployed people in Norway has shown that poor mental health among the unemployed is partly caused by selection effects, and partly an increase of mental health symptoms as a consequence of unemployment

(Hammer 1993). Halvorsen (1998:239) concludes in a study of long-term unemployed that «the main impact of unemployment on psychological distress seems to be indirect, namely via financial hardship». Comparative analysis from our project has also given evidence of a strong relationship between financial problems and poor mental health (Hammer 1999).

Mental health was measured using 10 questions about anxiety and depression from Hopkins symptoms checklist (HSCL), (Derogatis et al 1974). We used the mean score of 10 questions (range from 1 = no symptoms to 4 = many symptoms), (Cronbach alpha=0.88). Because the questions about anxiety and depression are based on whether they had experienced any symptoms during the last 14 days, we have used variance analysis to study the mean difference in the mean of the index for those with 1–2 unemployment spells and those with 3 unemployment spells or more. In other words mental health was treated as the dependent variable. Because we have cross-sectional data, we cannot draw any conclusions about the relationship between unemployment experience and variation in mental health over time for the young people in the sample.

The females reported more mental health problems than the males. This difference is the same in both age groups, and there was a clear relationship between mental health and number of unemployment spells: Those with many unemployment spells reported more symptoms.

4.7.4 Physical Health

There have been few studies of physical health and unemployment among youth. Hammarström (1996) found that in Sweden unemployed females reported more physical and psychological problems than males. Analysis based on the Norwegian survey of level of living, showed however that a representative sample of long-term unemployed did not appear to be different regarding health than the rest of the working population (Halvorsen 1994). The unemployed youth in our sample answered the following questions: «What do you think of your present/general health?» About 80 % evaluated their own health as good or very good. The questions here is whether there is a relationship between self-reported health and number of spells of unemployment. We face the same problem that we faced with the question on delinquency. We have no information about the respondents' health before they were unemployed. We found no significant relationship between the number of unemployment spells and the females' evaluation of

their general health. However, those with many unemployment spells to a lesser degree evaluate their own health as good. But this difference was only significant for males in the oldest age group.

4.7.5 Work Involvement

A central subject in research of youth unemployment is the question of whether unemployment is voluntary or not. Some people argue that unemployed youth are rational when they use and misuse the social right to welfare and benefits provided by the welfare state (Murray 1990, 1994). Central in today's discussion is whether young people today have a different orientation to work than young people in previous generations.

We measured work involvement by «the work involvement scale» (Warr et al 1979) based on six questions. We used the mean score of six questions (1 = totally agree, 5 = totally disagree) Cronbach's alpha =0.82. The females in the sample reported lower work involvement, i.e. scored higher on the index than males ($p<.01$), but this was only so among the females in the oldest age group. It is possible that the gender difference is due to the fact that about 60 % of the females in the oldest age group have children. Women with children report significantly lower work involvement than those without children ($p<.01$). We do not find the same tendency among males. When we look at the relationship between recurrent spells of unemployment and work involvement, we again face the problems of handling cross-sectional data. We can say nothing about the time order of the variables.

We found no significant relationship between recurrent spells of unemployment and work involvement. This implies that those who have had more frequent spells of unemployment did not report lower work involvement. If we look at the duration of the longest unemployment spell, we find a different picture. The longer the unemployment spell, the lower the work involvement reported by the young people in our sample. This relationship is stronger for females than for males.

4.7.6 Summary

Previous research has found that the factors we have called 'individual problems' (delinquency, alcohol use, mental health, physical health and work involvement) can be important in studies of unemployment. We found relatively strong gender differences regarding 4 out of 5 factors. The

males had been caught by the police, they drank more frequently and they had been intoxicated more frequently than the females in the sample. On the other hand the women reported more problems regarding mental health and lower work involvement than the young men. Most important, such individual problems were clearly related to number of spells of unemployment, especially for the males. However, physical health and work involvement had no effects.

5 Recurrent Unemployment in a Segmented Labour Market?

5.1 Introduction

As we have previously discussed in Chapter 2, one important research question in this report is the hypothesis that recurrent unemployment among youths partly may be explained by the fact that youth with low formal competence meet barriers regarding positions in the primary labour market. The point of departure is Doeringer and Piore's (1971) «dual labor market theory». However, we will also include other theoretical and empirical contributions from more recent labour market research which are relevant for these kinds of research questions. We will discuss the results, and give comments on Doeringer and Piore's labour market theory, but we will also include neofordistic (Atkinson 1987) and postfordistic (Esping-Andersen 1993, 1996) positions and theories about changing labour markets. Different hypotheses will be operationalised, mainly by five different variables which describe the young people's position in the labour market: occupational sector, wage, internal training, temporary contracts and sector.

Before we describe the different operationalisations of the theory, it is necessary to give some comments regarding the limitations of the data. The main problem is the fact that the survey is not specially designed to elucidate this kind of research question. The problem is especially connected to the time ordering of the variables, which of course, will often be a problem regarding cross-sectional data. For instance, information about occupational sector, wage and internal training gives a description of the young people's last job, while the number of unemployment spells, which is the dependent variable, is measured retrospectively.

In this study we have unfortunately no information about the young people's first job. What we therefore do, is to predict the probability for recurrent unemployment spells previously, using information about characteristics of their last job. This implies a model where the point of departure is that information about the last job will in fact have the same characteristics as the young people's first job. In other words, the model we use implies that there are so called lock-in effects in the labour market, or put in other words: The model we use implies that the labour market for these

young people is characterised by a segmentation where they are locked into the secondary labour market. The general hypothesis regarding the segmentation theories is that there exists very little mobility between the primary and the secondary labour market, but a lot of mobility exists within each segment (Colbjørnsen 1986).

According to the theory, those who start their career in the secondary labour market will be locked into this segment, and their career can therefore be predicted from the segment where they start their work career (Colbjørnsen 1986). When we assume that characteristics of their last job will also be an appropriate description of the first job, we create a model based on specific theoretical assumptions. If characteristics of the latest job are a good predictor of the number of previous unemployment spells, it is natural to assume that the young people's working career may be characterised by dead-end jobs interspersed with recurrent unemployment spells in the secondary labour market. However, such a theoretical assumption is only based on theory. Obviously, we can not rule out the possibility that they can start their career in the primary labour market, and partly because of many unemployment spells end up in a job in the secondary segment.

5.2 Operationalisation

5.2.1 Occupational Sector

Doeringer and Piore (1971) stress that there are several reasons why jobs in the secondary labour market are characterised by little stability. Some sectors have high turnover (for instance the hotel- and restaurant sectors), in spite of the fact that the number of available jobs will be the same over time. In other sectors (for instance building and construction) the jobs are not meant to be permanent, because they will be strongly influenced by both the season of the year and cyclical fluctuations. We know that this situation is also the same today. The risk of unemployment is strongly connected to occupational sector. This is due to great variation between the sectors regarding the proportion of unskilled labour, and the fact that the proportion of temporarily employed will be greater in some occupational sectors than in others (Torp 1998).

Doeringer and Piore differentiate mainly between seasonal unemployment and unemployment as a result of cyclical fluctuations, but as we have already mentioned, technological or structural unemployment is also

relevant regarding youth unemployment. Among other factors, problems regarding structural adjustment will among other factors be characterised as a mis-match between the job seekers' education and experience on the one hand and the employers' need for specific jobs on the other hand (Halvorsen 1994). The mis-match is regarded as an important cause of increasing youth unemployment in many West European countries during the last 20 years. Other researchers claim that youth unemployment is primarily a result of cyclical fluctuations in the economy (Raffe 1986). The Norwegian labour market is strongly gender segregated both regarding occupational sector and the level of the position (Hansen 1995b). It is therefore important to find out in what occupational sectors the youths in our sample have their work experience, when we want to look at the risk for recurrent unemployment spells. In a study of recurrent unemployment among youth in Norway, Hammer (1997) found that especially young men in building and construction, and young women in sales and retail were very vulnerable to recurrent unemployment spells. To be organised in trade unions reduced the probability of later unemployment spells. According to Doeringer and Piore's theory, a low degree of unionisation is also one important characteristic of the secondary labour market. This varies across different occupational sectors. However, we do not have such information from our respondents. The other four variables which are included in the hypothesis are wage, sector, temporary contract and internal training. These kinds of factors are also in many ways related to occupational sector.

The young people were asked two questions about occupational sector and what kind of work they did in their present or last job. In one question they were asked to describe their work as carefully as possible. In the other question they were asked to give information about the kind of production in the work-place. This information was used in a coding of occupational sector (4 digits) using ILOs code «ISCO 88». After going through the different frequencies we put the coded occupational sectors into different categories. The choice of different occupational sector was done on the basis on previous research of which occupational sectors seemed to be especially relevant as vulnerable to recurrent unemployment spells (Hammer 1997).

5.2.2 Private or Public Sector

In Norway, part-time and temporary contracts are widely used both in private and public sector (Rasmussen 1998). Atkinson (1987) differentiated between 3 strategies used by employers to increase flexibility: numeric, functional and distancing. Numeric flexibility is the firm's ability to adjust the number of employees, or number of working hours, in accordance with changes in demand. Regarding the phenomenon of recurrent spells of unemployment, short-term contracts are of special interest. According to Torp (1998) there could be both institutional factors and factors connected to the market that may explain the use of short-term contracts, implying that this phenomenon may be differently motivated in private and public sectors. Torp suggests that the high proportion of temporary contract in public sectors may be explained by insecure budgets, but in the private sector such contracts may be primarily due to seasonal variation. Studies of the public sector in Norway still show that temporary contracts and short-term contracts are widely used for people with low qualifications (Moland 1994). This may imply that also in the public sector, different strategies are used regarding employees with different qualifications (Rasmussen 1998). However, a special trend in the Nordic countries is that the use of temporary contracts is more dominant in the public than in the private sector (Nätti 1993), and this is also the case in Norway (Torp 1998). It has been assumed that employers in the private sector will be more free to decide which kind of contract should be used, in other words, to use numeric flexibility compared to the public sector.

Some elements in Esping-Andersen's (1993) hypothesis about the development of a service proletariat are interesting in connection with Doeringer and Piore's theory. Esping-Andersen (1993) claims that it is important whether the increase in service jobs will be in the public or the private sector. In countries where the increase takes place in the private sector, studies show that unskilled workers are vulnerable for lock-in effects in dead-end traps (Esping-Andersen 1993, 1996). The growth of new service jobs in the public sector in Scandinavia has resulted in a strongly gender segregated labour market, where women are concentrated in the public sector and men in the private sector (Esping-Andersen 1996).

We have reason to believe that among our respondents we will find a higher proportion of young women than men who have worked in the public sector. Nor can we disregard the fact that both wages and the

possibilities for internal training may be different in the private and the public sector. Because the public sector is less vulnerable to seasonal unemployment and cyclical fluctuations in the labour market, and there are a strong gender segregation in the labour market, employment in different sectors may be one of the reasons why young men in the sample clearly have more unemployment spells than the women. It is also possible that the sector as such is not important, but is important in interaction with other factors.

5.2.3 Training

According to Doeringer and Piore (1971), lack of on-the-job training is an important characteristic of the secondary labour market. Research on youth unemployment has also focused upon the importance of in-firm training, especially for groups with low education. Lynch (1989), in a study of the probability of re-employment among unemployed youth, found that internal training in the last job gave an increased probability of re-entering employment one year later. In the same way, Hammer (1997), in a study of youth unemployment, found a tendency that work in an internal labour market implied reduced risk of unemployment for the next two years. Countries with a dual educational system, based on apprenticeship, have low unemployment among youth (Esping-Andersen 1993, NOU: 1994:3, OECD 1998). On the other hand, a study by Blossfeldt et al. (1993) of intra generational mobility in Germany, shows that most of those who start their career in unskilled jobs seem to remain in unskilled jobs also later in their work career. Germany is a country where the educational system is based on apprenticeship training. This study also give documentation of a high horizontal mobility, but very little vertical mobility among unskilled workers.

5.2.4. Temporary Contracts

In Doeringer and Piore's (1971:167) terminology, increased use of temporary contracts may be regarded as a transference of employees in the primary labour market to the secondary labour market:

> «Although the interconnections between primary and secondary labor markets are seen as either weak or non-existent on the supply side, primary employers, through devices like subcontracting and temporary employment, can convert primary employment into secondary

> employment. The central goal of public policy is to overcome the barriers which confine the disadvantaged to this market».

Nätti (1993) also regards part-time work and temporary work as a strategy used by the firms to gain numeric flexibility. In the model of «the flexible firm», a central element is that the firms will try to provide functional and numeric flexibility from different types of employees, and that these processes create different segments of the labour market (Atkinson 1987). There has been a general assumption that there has been an increase of temporary contracts. However, in the OECD area there has not been a *general* increase in the proportion of temporary contracts, but teenagers are over-represented among people with temporary contracts in all OECD countries and the proportion with such contracts among youth has increased in most OECD countries. In general, unemployed youth more often than people in other age groups find new jobs which are temporary jobs (OECD 1996). In a study of atypical work in the Nordic countries Nätti (1993) concludes that part-time work seems to be a gender specific phenomenon, whereas temporary employment is age specific. In Norway, 12 % of all employees are temporarily employed, which is a higher proportion than in most other European countries, and 39 % of those with temporary contracts are under 25 years old (Torp 1998). It may be assumed that young people with temporary contracts may be particularly vulnerable to recurrent unemployment.

5.2.5 Wage

According to the dual labour market theory, the secondary labour market is especially characterised by low wages. In a longitudinal study of recurrent unemployment among unemployed men in West Germany, Andress (1989) found that wage in the last job was one of the most important factors which could predict recurrent future unemployment spells. According to Esping-Andersen's hypothesis (1993) about the development of a service proletariat, service jobs in the private sector are characterised by low wages. With Doeringer and Piore's theory (1971) as a point of departure we may expect that those with many unemployment spells have had jobs in segments with low wages, because employers will regard stability in previous work experience as important in their recruitment of new employees. The theory also postulates a relationship between frequent jobs shifts and work involvement which may be reflected in different levels of wages.

5.2.6 Research Questions

We use Doeringer and Piore's theory as a point of departure. Most important, the theory explains frequent job shifts interspersed with spells of unemployment located to the secondary labour market. The factors discussed here will be used in the operationalisation of the hypothesis. We expect that those who have had three or more unemployment spells to have

- had their last job in occupational sectors characterised by seasonal unemployment or sectors especially vulnerable to cyclical fluctuations, and that their last job was an unskilled job
- had their last job in the private sector
- not received internal training in their last job
- had a temporary contract in their last job
- received a relatively low hourly wage in their last job

We have seen that the dual labour market theory not only focuses on structural conditions of the labour market. Another important element is the interaction between the structure of the labour market and individual behaviour. We have previously discussed that some studies of recurrent unemployment indicate that this is due to structural factors, while long-term unemployment may be best explained by the individual characteristics of the unemployed group (Andress 1989, Hammer 1997). In this way the segmentation theories may be a fruitful point of departure to understand the relationship between the structure and the actor.

In the previous chapter we studied the relationship between number of unemployment spells and some background factors. We will now look at the relationship between the number of unemployment spells and the factors we have discussed here. Firstly, we will look at the bi-variant relationship between these variables and the dependent variable, i.e. number of unemployment spells. As in the previous chapter we compare those who had been unemployed 1 or 2 times with those who had been unemployed 3 times or more. Then in the next chapter (Chapter 6) we also use multivariate logistic regression to look at which factors are the strongest predictors of the probability of recurrent unemployment spells.

In other words, we analyse and try to explain recurrent unemployment spells by using Doeringer and Piore's «dual labor market theory». Secondly, we also want to look at results which may contribute to the present research in this area, which seems to indicate that long-term unemployment is best explained by individual factors, while recurrent unemployment spells could be better explained by structural characteristics of the labour market.

5.3 Job Characteristics and Number of Unemployment Spells

We will now look at the relationship between number of unemployment spells and the factors we have discussed previously: occupational sector, internal training, temporary contracts, wage and private or public sector.

5.3.1 Occupational Sector

Previous studies of recurrent spells of unemployment among youth have shown that work in certain occupations increased the risk of recurrent unemployment spells. Figure 5.1 shows the occupational sector where the young people had their last job.

Figure 5.1 Sector by gender. %

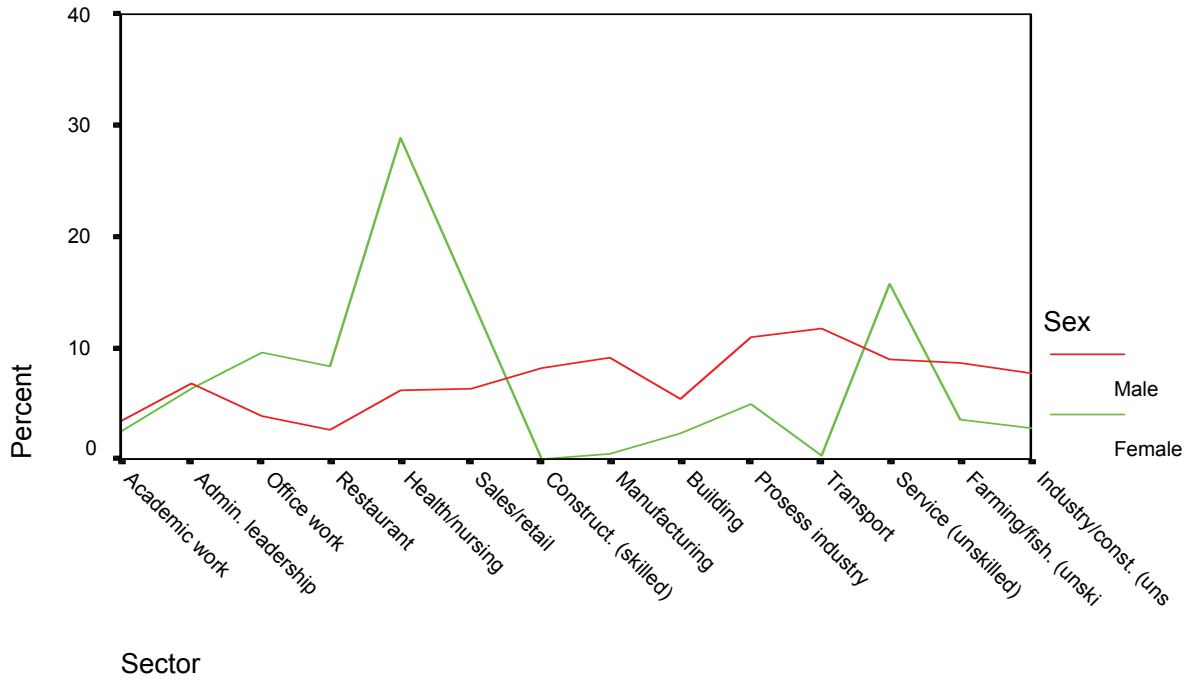


Table 5.1 shows the distribution of number of unemployment spells by occupational sector and gender.

Table 5.1 Times unemployed by sector and gender. %

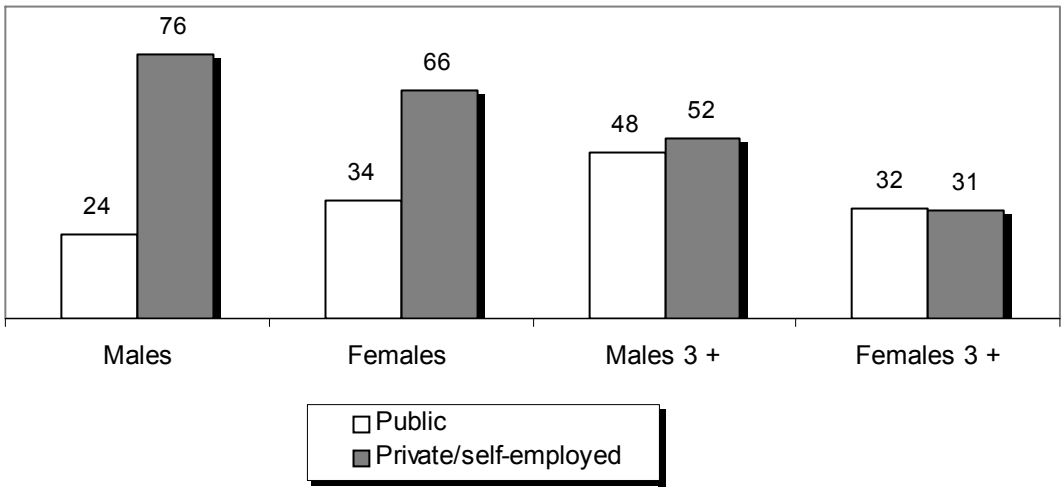
Sector	Males	Females	Males	Males	N	Females	Females	N
			1–2 times	3 times or more		1–2 times	3 times or more	
Academic work	4	3	82	18	17	80	20	10
Admin. leadership	7	6	50	50	34	64	36	25
Office work	4	10	68	32	19	71	29	38
Restaurant	3	8	58	42	12	76	24	33
Health/care/nursing	6	29	71	29	31	77	23	115
Sales/retail	6	15	66	34	32	60	40	58
Construction – skilled	8	–	51	49	41	–	–	–
Manufacturing	9	1	63	37	46	50	50	2
Building	5	2	44	56	27	67	33	9
Process industry	11	5	42	58	55	70	30	20
Transport	12	–	41	59	59	–	100	1
Service – unskilled	9	16	40	60	45	59	41	63
Farming/fishing – unskilled	9	4	28	72	43	64	36	14
Industry/construction – unskilled	8	3	28	72	39	63	36	11
N	501	399	244	256		274	125	

Even though the Norwegian labour market is strongly gender segregated (Hansen 1995b), this does not necessarily mean that the distribution among the unemployed follows such segregation. But Figure 5.1 shows that this is the case here. As expected, the young men in the sample were distributed on more occupational sectors than young women. Most of the young men have worked in male-dominated occupations, while half of the young women work in the service sector such as retail sales and unskilled service work and in health-care and nursing. Table 5.1 shows that the pattern is as expected regarding the young men in the sample. The proportion who had been unemployed 3 times or more is much higher in the lowest level of the occupational classification. For young women the proportion who had been unemployed 3 times or more was highest in sales/retail and unskilled service jobs.

5.3.2 Private/Public Sector

As previously discussed there is reason to believe that more young people would have work experience from the private than from the public sector. Figure 5.2 shows the relationship between sector and gender, and the distribution of number of unemployment spells by sector and gender.

Figure 5.2 Last job in public or private sector by gender. Proportion unemployed 3 times or more by gender and sector in last job. %



Significance tests: Gender: p<.01. Times unemployed: n.s. *Basis: Males: N=510. Females: N=397.* Public*: Males: N=121. Females: N=135.* Private*: Males: N=388. Females: N=262.*

We can see that more young people had their last job in the private than in the public sector and more young men than young woman worked in the private sector (p<.01). However, the sector of their last job cannot alone explain why young men had more unemployment spells than young women. Further, in multivariate analysis we will look at the influence of occupational sector when other factors which may be of importance in predicting recurrent unemployment spells are controlled for.

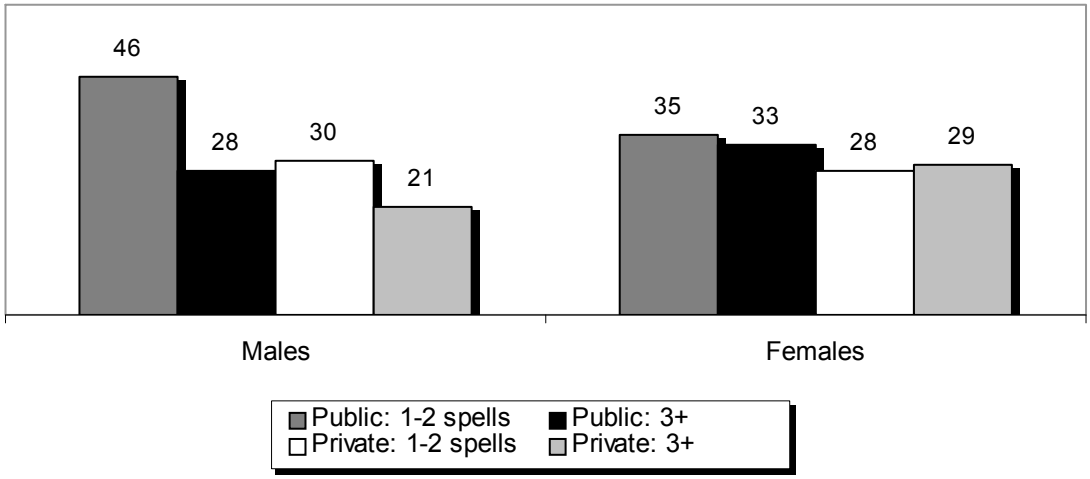
5.3.3 Training

In total 30 % reported that they had received some kind of vocational training, courses or further education in their last job. Gender and age were not related to whether they had received training or not. The proportion who reported that they had received vocational training in their last job was however, higher in the public (36 %) than in the private (27 %) sector. Further analysis showed that this relationship was only significant for

young men (p<.05), and that the differences were higher for the youngest age group (18–20 years old).

Regarding the relationship between number of unemployment spells and whether the respondents had received internal training in their last job or not, we ask the following question: is the probability of recurrent unemployment spells related to whether the respondents had received internal training in their last job? We found that this was the case. Those who had received training had clearly fewer unemployment spells. When sector and age were controlled for, we found that this relationship was clear for young men working both in public and private sector, but the relationship was not significant for young women.

Figure 5.3 Proportion who received formal training in their last job by sector and number of times unemployed. %



Significance tests: Males: Public sector: p<.05. Private sector: p<.05. Females: Public sector: n.s. *Private sector:* n.s. *Basis:* Males*: Public: 1–2 times: N=63. Public: 3 +: N=57. Private: 1–2 times: N=186. Private: 3 +: N=199.*

Females*: Public: 1–2 times: N=92. Public: 3 +: N=43. Private: 1–2 times: N=179. Private: 3*

The figure clearly shows that on-the-job training were related to number of unemployment spells. This relationship can be explained in many ways. It is possible that those who experienced recurrent unemployment spells were working in the occupational sectors as unskilled employees where there is no need for further training or education to do the job properly. The proportion who did not receive any form of on-the-job training or any courses were clearly higher among unskilled workers in building and

construction or the primary sector or within transport. They were mainly young men working in the private sector.

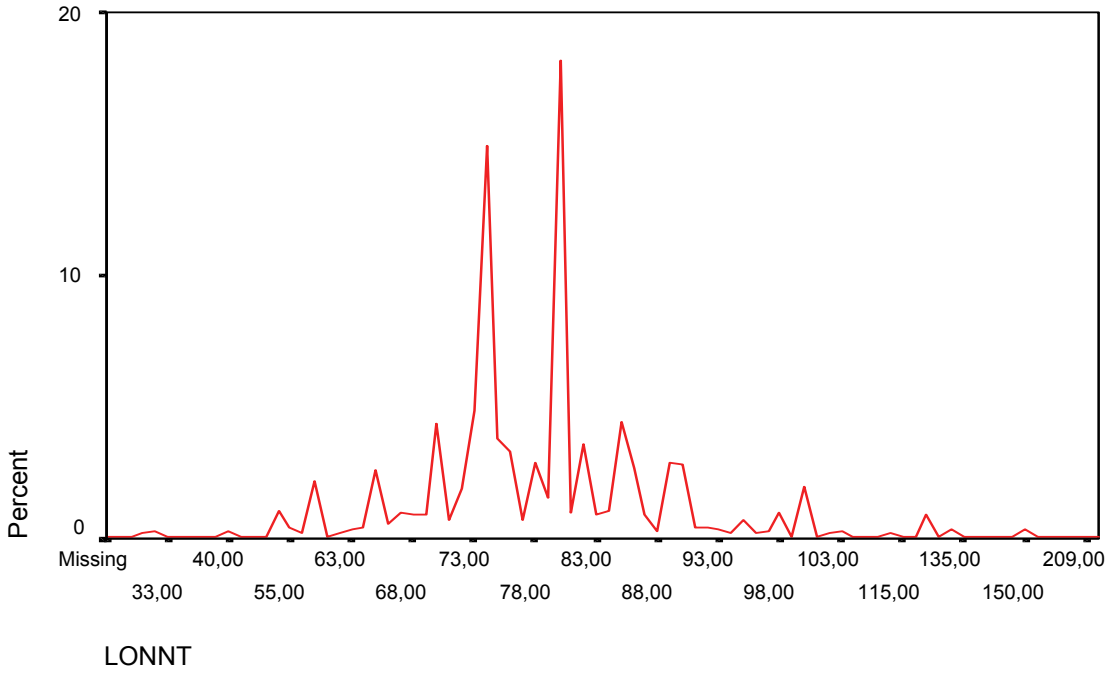
5.3.4 Temporary Contracts

In total 32 % of the sample reported that they had left a job because they only had a temporary contract. More in the oldest than in the youngest age group reported this as the reason why they left their last job. The proportion was the same for young men and young women, implying that the frequency of temporary contracts cannot in it self explain the gender differences in number of unemployment spells. The proportion who reported temporary contracts as the reason why they left a job was clearly much higher among those who worked in the public sector compared to the private sector (43 % in the public sector and 28 % in the private sector). This is in line with previous research which shows that temporary contracts are more frequent in the public than in the private sector (Nätti 1993, Torp 1998), and that the public sector uses temporary contracts for many young people with low qualifications (Moland 1994). Those who had left a job because they had a temporary contract also had less experience with internal training, courses or education in their last job. The question is whether temporary contracts are a possible explanation why some of the young people were unemployed for many spells, even if this does not explain the gender differences. We found that the proportion with three or more unemployment spells was clearly higher among those who reported that they had to leave a job because of temporary contracts ($p>.01$). This relationship was clearly stronger for males than for females. There were also differences between occupational sectors, and the proportion with temporary contracts was clearly higher among unskilled employees in building and construction, sales and retail and work in restaurants.

5.3.5 Wage

An important point in Doeringer and Piore's theory (1971) is that wages are lower in the secondary labour market. We therefore, look at the relationship between number of unemployment spells and wage in the respondents last job. Figure 5.4 shows the wage distribution.

Figure 5.4 Hourly pay (kr).



Hourly wage in the last job varied enormously. The average was about 80 kroner. When we carried out separate analysis for males and females we found the same distribution, but the average wage was higher for males than females. This was also the case when age was controlled for. According to Doeringer and Piore's theory, we would expect statistical discrimination of those with 3 or more spells of unemployment, and that this group would have a much lower wage in their last job. This was however not the case here. Those who had been unemployed 3 times or more had an even higher wage than those with fewer unemployment spells ($p<.05$). Regarding the relationship between wage and sector, there were no significant differences.

5.3.6 Summary

We found that young males who had experienced several unemployment spells were concentrated in low skilled occupations in the lower level of the occupational classification. Females with many unemployment spells worked in sales, the retail trade and unskilled service jobs. We also found that temporary contracts were used most in the public sector independent of age, and that those who had been working in the public sector had received less training or courses in their job. This group had also experienced more unemployment spells than the others. For young males, those who had not

received any training in their last job, had a higher probability of recurrent unemployment spells. However, regarding wage we found quite different results than we had expected. The more unemployment spells the higher the hourly wage in their last job.

6 What Kind of Factors Influence the Number of Spells of Unemployment?

Up to now we have looked at the bivariate relationships between background factors, individual problems, characteristics of the respondents last job and number of spells of unemployment. We will now use multivariate analysis to look at the influence of each factor when other relevant factors are controlled for. In section 6.1 we look at the influence of social background and individual problems. In section 6.2 we include information about last job. In this way we look at the hypothesis discussed previously regarding the influence of labour market segmentation, when background factors and individual problems are controlled for. In 6.3 we discuss the main results of the study related to other relevant previous research.

6.1 The Influence of Social Background and Individual Problems

Stepwise logistic regression makes it possible to look at how the effects of these different kinds of factors change when we include new variables in the analysis. In this way it is possible to differentiate between factors that have a direct influence on the risk of number of unemployment spells from factors which influence the outcome indirectly. In Table 6.1 we look at which factors influence the number of unemployment spells among males.

Table 6.1 Logistic regression predicting number of spells of unemployment. 0=1–2 spells. 1=3 spells or more.

MALES: (N=583)	Model 1		Model 2		Model 3	
	B	OR	B	OR	B	OR
Telephone interview = 1	0.25 ns	1.28	0.22 ns	1.25	0.25 ns	1.29
Background						
Age (cont.)	–.42 ***	0.66	–.45 ***	0.63	–.45 ***	0.64
Father's education (cont.)	–.08 *	0.92	–.04 ns	0.96	–.04 ns	0.96
Lived with both parents up to the age of 16 = 1	–.53 *	0.59	–.24 *	0.79	–.20 *	0.81
City/suburb	0.40 ns	1.49	0.41 ns	1.51	0.42 ns	1.52
Rural area	0.67 **	1.97	0.54 *	1.72	0.61 *	1.83
Constant	1.47					
Education and family						
Compulsory school			1.55 ***	4.73	1.42 ***	4.16
Vocational education (1–3 years)/ apprenticeship			0.90 ***	2.47	0.82 ***	2.26
Drop-out from upper secondary education = 1			0.59 **	1.80	0.53 *	1.69
Children = 1			0.60 **	1.81	0.57 *	1.76
Live alone = 1			–.09 ns	0.91	–.09 ns	0.92
Constant			0.37			
Individual problems						
Neither good nor bad/poor health = 1					–.01 ns	0.99
Mental heath (index)					0.31 ns	1.37
Caught by the police taking part in an illegal activity = 1					0.51 *	1.66
Been drunk 2–3 times a month or more often the last year = 1					–.30 ns	0.74
Work involvement (index)					0.04 ns	1.00
Constant					– .15	

*Reference groups: Residence: City. Education: Upper secondary/higher education. Significance level: ***: p<.001. ** p<.01. *: p<.05.*

In all the models (model 1, model 2 and model 3) we first controlled for the data collection procedure by including a variable of whether they were interviewed by telephone or answered postal questionnaire. This is important because the observation time (the time between the sampling and the time of the interview) was longer for respondents who answered the telephone interview compared to those who answered the postal questionnaire. Another point is that those we interviewed by telephone were interviewed at a time when the unemployment rate was lower than when the postal survey was carried out. As shown in Table 6.1, this variable has no significant effect.

Model 1 includes background factors. We see that the young people in the older age groups have a higher risk of recurrent spells of unemployment

(p<.001).[3] We have previously shown in bivariat analysis that father's education was clearly related to number of unemployment spells, and we can see that when other variables are controlled for in Model 1, fathers education still has a significant effect. When the other variables in the model are controlled for, those who had grown up with both parents up to 16 years of age had a reduced risk for 3 unemployment spells or more (p<.05), while those who lived in rural areas had a higher risk of recurrent unemployment spells than the reference group in the big cities (p<.01).

In Model 2 we include factors regarding the respondents' own education and their family situation. We see that the factors in Model 1 do not change much. However the influence of father's education is clearly reduced when we control for the respondent's education. Drop-out from upper secondary education clearly increases the risk of recurrent unemployment spells. We can also see that the respondents' level of education was important. Those with only compulsory school had a much higher risk of recurrent unemployment spells than those with upper secondary or higher education, which is the reference group (OR = 4.73). Interestingly, the table shows that young males with children had a higher risk of recurrent unemployment spells, also when the other variables in Model 2 were controlled for. We also found this tendency in the bivariate analysis, in Chapter 4, but we would have expected that this relationship could be explained by the respondents' education, implying that when education was controlled for, that relationship would be non-significant: Those with the lowest level of education started to work earlier, and probably had children earlier and would therefore, also have a higher risk of recurrent unemployment spells. However, as shown in Model 2 this relationship was still significant when level of education was controlled for.

When we in Model 3 include individual problems which may predict recurrent spells of unemployment, we do not see many changes in the variables included in Model 1 or Model 2. However, we would have expected that physical and mental health problems were related to the risk of recurrent spells of unemployment. However, according to model 3 only participating in illegal activities increase the probability of many unemployment spells. Previous bivariate analysis (Chapter 4) showed strong relationships between recurrent spells of unemployment and individual

[3] Age is registered according to year of birth, i.e. the young respondents have the highest value on the variable.

problems. The results here indicate that such problems are mainly connected to social and family background and education. When these background variables are controlled for, the relationship between individual problems and spells of unemployment diminishes. Obviously, background variables and education are factors which characterise the young people's situation before they experienced unemployment, implying that the previous results from the bivariat analysis indicates that individual problems probably has nothing to do with the risk of unemployment. Such an interpretation is in line with the hypothesis that males with such problems are selected to unemployment. Here such problems seem to be linked to young people's background, family and education. In Table 6.2 we show the results of the same analysis for females in the sample.

Table 6.2 Logistic regression predicting number of spells of unemployment. 0=1–2 spell. 1=3 spells or more.

FEMALES (N=451)	Model 1		Model 2		Model 3	
	B	OR	B	OR	B	OR
Telephone interview = 1	0.33 ns	1.39	0.36 ns	1.43	0.48 p=.05	1.62
Background						
Age (cont.)	–.09 ns	0.91	–.11 ns	0.90	–.11 ns	0.90
Father's education (cont.)	–.05 ns	0.95	–.05 ns	0.95	–.07 ns	0.94
Lived with both parents up to the age of 16 = 1	–.48 *	0.62	–.45 ns	0.64	–.32 ns	0.73
Town/suburb	0.49 ns	1.63	0.55 ns	1.73	0.64 p=.05	1.90
Rural area	0.49 ns	1.63	0.61 *	1.84	0.68 *	1.98
Constant	–.49					
Education and family						
Compulsory school			0.08 ns	1.09	0.12 ns	1.13
Vocational education (1–3 years)/apprenticeship			0.13 ns	1.13	0.10 ns	1.11
Drop-out from vocational/ upper secondary = 1			0.21 ns	1.24	0.21 ns	1.23
Children = 1			–.15 ns	0.86	–.16 ns	0.85
Live alone = 1			0.66 **	1.93	0.68 **	1.98
Constant			–0.71			
Individual «problems»						
Neither good nor bad/poor health = 1					–.21 ns	0.81
Mental heath (index)					0.37 ns	1.45
Caught by the police taking part in an illegal activity = 1					–.28 ns	0.75
Been drunk 2–3 times a month or more often the last year = 1					0.75 *	2.13
Work involvement (index)					0.24 ns	1.27
Constant					–1.98	

*Reference groups: Residence: City. Education: Upper secondary/higher education. Significance level: ***: p<.001. ** p<.01. *: p<.05.*

Table 6.2 shows that the results are very different for young females compared to young males. In Model 1 the only significant effect is whether they had experienced parental divorce or not. Neither age, father's education, or place of residence had any effect at all, contrary to for the males. In Model 2 we see a weak effect of living in rural areas which implies a higher risk of recurrent unemployment spells compared to those living in the cities. For females, living alone also had a negative effect. It is possible that the number of unemployment spells have different meaning for young females than males, because females with children probably have a higher risk of leaving the labour force altogether, which also implies that they would have no risk of unemployment. In other words, the females working career is not comparable to males, because many females in this age group stay home with children and thereby leave the labour force. This is probably also the reason why age and education have no significant effect. If we look at Model 3, which includes individual problems, we find no effect of physical or mental health problems. The only significant effect is frequency of binge drinking.

6.2 The Influence of Occupational Sector and other Job Characteristics

We have seen in the previous chapter that our theoretical hypotheses were operationalised by occupational sector, temporary work contracts, internal training and wage. We now will look at the relationship between these variables and number of spells of unemployment, when factors like social background, family situation, education and individual problems are controlled for. We use step-wise logistic regression. The variables in Model 1 (Table 6.3) are background variables implying that their influence applies before unemployment occurs. In Model 2 we include the variables which are relevant for the hypothesis while, in Model 3 we also include indicators of individual problems.

The time order of the variables is clearly a problem in Model 2 and Model 3. As discussed previously we use unemployment spells throughout the respondents' total working career as the dependent variable, even though this variable is measured retrospectively. Measures regarding job characteristics are based on information about the respondents' last job. A presumption for this kind of model specification is therefore that the respondents' last job has the same characteristics as their previous jobs. In other words, we include a theoretical assumption for the model.

Table 6.3 Logistic regression predicting number of spells of unemployment. 0=1–2 spells. 1=3 spells or more.

(N=1034)	**Model 1**		**Model 2**		**Model 3**	
	B	OR	B	OR	B	OR
Telephone interview = 1	0.30 ns	1.34	0.24 ns	1.27	0.37 p=.05	1.45
Background, education and family						
Female = 1	–.37 *	0.69	–.26 ns	0.77	–.25 ns	0.78
Age (cont.)	–.31 ***	0.73	–.33 ***	0.72	–.33 ***	0.72
Father's education (cont.)	– .04 ns	0.96	–.03 ns	0.97	–.03 ns	0.97
Lived with both parents up to the age of 16 = 1	–.37 *	0.69	–.33 *	0.72	–.26 ns	0.77
Town/suburb	0.41 *	1.51	0.32 ns	1.38	0.31 ns	1.38
Rural area	0.55 **	1.73	0.42 *	1.53	0.46 *	1.59
Compulsory school	0.88 ***	2.41	0.78 ***	2.19	0.71 **	2.04
Vocational education (1–3 years)/apprenticeship	0.58 ***	1.77	0.46 **	1.58	0.42 *	1.54
Drop-out from vocational/upper secondary school = 1	0.47 **	1.60	0.54 **	1.73	0.47 *	1.60
Children = 1	0.59 **	1.81	0.57 **	1.76	0.57 *	1.76
Female*Children = 1	–1.05 ***	0.35	–1.04 **	0.35	–1.05 **	0.34
Live alone = 1	0.17 ns	1.19	0.26 ns	1.30	0.23 ns	1.26
Constant	0.16					
Job characteristics						
Private sector = 1			–.21 ns	0.81	–.19 ns	0.83
Not received formal training in most recent job = 1			0.25 ns	1.29	0.28 ns	1.33
Wage per hour (NKR.)			0.01 ns	1.01	0.01 ns	1.01
Temporary employment = 1			0.65 ***	1.93	0.71 ***	2.04
No working experience/missing = 1			0.12 ns	1.13	0.10 ns	1.11
Constant						
Occupational Sector						
Academic work			–.82 ns	0.44	–.93 ns	0.39
Admin. leadership			0.71 *	2.04	0.66 ns	1.93
Office work			0.35 ns	1.43	0.38 ns	1.47
Restaurant			0.33 ns	1.39	0.33 ns	1.39
Sales/retail			0.97 **	2.63	0.99 **	2.71
Construction			0.72 ns	2.05	0.61 ns	1.85
Manufacturing			– .15 ns	0.86	–.16 ns	0.85
Building			0.84 p=05	2.32	0.88 *	2.42
Process industry			0.94 **	2.58	0.92 *	2.51
Transport			0.90 *	2.47	0.95 *	2.58
Service – unskilled			0.85 **	2.34	0.82 **	2.28
Primary sector – unskilled			1.19 **	3.29	1.25 **	3.50
Industry – unskilled			1.28 **	3.60	1.28 **	3.61
Constant			–0.94			
Individual problems						
Neither good nor bad/poor health = 1					–.12 ns	0.89
Mental health (index)					0.47 **	1.60
Caught by the police taking part in an illegal activity = 1					0.48 *	1.63
Been drunk 2–3 times a month or more often the last year = 1					–.03 ns	0.97
Work involvement (index)					0.10 ns	1.10
Constant					–2.03	

*Reference groups: Residence: City. Education: Upper secondary/higher education. Sector: Health/Care/ Nursing. Significance level: ***: p<.001. ** p<.01. *: p<.05.*

Characteristics of the respondents' last job are clearly related to the number of unemployment spells. This implies that both their last job and their first job will have the same characteristics implying that these young people have been locked in to the secondary labour market. The same problems regarding the time order of the variables also concern individual problems which were mainly measured at the time of the interview. However, we have already found (see Tables 6.1 and 6.2) that these individual problems probably already occurred before they were unemployed the first time, because the effect of individual problems was clearly and strongly reduced when social background and education where controlled for.

If we first look at the background variables in Model 1, we see as we expected that females had a lower probability of recurrent spells of unemployment compared to males. This is especially so for females with children (the interaction effect). As discussed previously, the reason is probably that females with children have a high probability of leaving the labour force, and they therefore have a reduced risk of recurrent unemployment spells. Model 1 also shows that the youngest respondents, those who had not experienced parental divorce, and those with higher education had a lower risk of recurrent unemployment spells. As expected, drop-out from upper secondary school increased the probability of recurrent unemployment spells. Model 1 also shows that those who lived in rural areas had a higher probability of many spells of unemployment compared to those who lived in the cities.

In Model 2 we include variables of interest related to our hypothesis regarding structural characteristics of the labour market, by including information about occupational sector and job characteristics of the respondents' latest job. As we can see from Model 2, the impact of place of residence decreases when we include such information.

We can see from Model 2 that the other variables that we included in Model 1 still have the same effects even when job characteristics and occupational sector is controlled for. If we look at different job characteristics, the only variable with a significant impact is the effect of temporary contracts, which increased the probability of many unemployment spells. Neither sector, on-the-job training or work experience had any significant impact. However, when we look at the influence of occupational sector we found, in the same way as previous results presented in chapter 5, that occupational sector had a clear influence. Particularly those in unskilled

service jobs, the primary sector or in industry had a high risk of recurrent unemployment spells.

In Model 3 we also include variables describing individual problems and selection effects, and we see that poor mental health and participation in illegal activity had a clear effect. However, when such selection effects were controlled for, the influence of temporary employment and occupational sector remained significant. We have previously shown that the total duration of unemployment experience had an impact upon number of unemployment periods: The higher the number of unemployment spells, the longer the total duration of unemployment experience they have. We have therefore included information about total duration of unemployment in the model (not shown in the table). We found that this variable had a clear effect, but the effect of the other variables remained basically the same. The results imply that variables describing background, education, individual problems and job characteristics including information about occupational sector, remained significant.

6.3 Discussion of the Main Results Related to Previous Research

There are three empirical studies of recurrent spells of unemployment which are important when we discuss the results from our study. However, these studies are not directly comparable. One difference is that they study which factors can predict recurrent spells of unemployment later in the career, while we only have retrospective information about unemployment spells. We briefly present the research design and data for these three studies.

Andress (1989) studied possible explanations of recurrent unemployment spells among unemployed in West Germany. The problem of comparing our result with results from this study is especially that the data are much older – from 1977–1982 – and only 56 % of the sample was under 30 years old. The study does not give any information about gender differences because the study only includes males. The dependent variable is number of unemployment spells from 1977 to 1982. Another study by Steiner (1989) looked at different causes of recurrent unemployment in a cohort of previously unemployed males and females during a period of 3 years. The study was carried out in the town of Linz in Austria in 1983 and included unemployed people under 52 years old. The dependent variable in

the analysis was constructed using information about whether the person was unemployed or not at a particular time (3 years after) when 22 % of the cohort was registered as unemployed. Hammers (1997) analysis of recurrent unemployment was based on longitudinal data from a representative sample of 2000 Norwegian young people who were in work in 1987 and who were followed up in 1989 and then in 1993. The dependent variable in Hammers study was number of unemployment spells from 1987 to 1993. In the following section we discuss the main results from our analysis in the light of these studies and other relevant research.

6.3.1 Education

Increasing demands for qualifications in working life and an increasing proportion of young people with tertiary education imply that the employment situation for young people with low education is especially difficult, and that this group are especially vulnerable in times of economic depression (NOU 1994:3). According to Doeringer and Piore's theory (1971), education is important, not because level of education necessarily represents competence relevant for job performance or productivity, but because employers use education as a criteria to sort out job seekers who have a better capacity for learning, adjustment and self-discipline (Colbjørnsen 1981).

We have seen that 15 % of our sample had only completed compulsory education, while about 8 % had university education. The males had lower educational qualifications than females. As expected there was a clear relationship between level and type of education and the number of unemployment spells, but this tendency was not significant for the females.

According to Hammer (1992) previous studies have documented that vocational education protects against unemployment. These studies refer however to Germany and Denmark, two countries where the educational system is based on a dual educational system, of apprenticeship. In our sample, those who only had compulsory school or vocational education of 1 or 2 years were especially vulnerable to many spells of unemployment. Multivariate analysis showed that the effect of education on the risk of recurrent unemployment spells remained the same, also when job characteristics and occupational sector were controlled for.

Andress (1989) did not find any clear relationship between number of unemployment spells and education. This is probably because he looked at education and successive spells of unemployment, and partly because he

did not differentiate between different kinds of education. In the same way Hammer (1997) did not find that number of years of education had any influence on later unemployment spells. Multivariate analysis in Hammer's study (1997:27) showed that when social background, place of residence, characteristics of their last job and individual problems where controlled for, there was only one educational factor of importance: drop-out from previous schooling. Hammer has also previously shown that drop-out is a stronger predictor of unemployment among youth than level of education alone. Table 6.3 also shows that when the other variables in the model were controlled for, drop-out from upper secondary education increased the risk for recurrent unemployment spells in our sample.

Steiner (1989) concluded that recurrent unemployment were especially related to personal attributes, and education. However, he did not include information about occupational sector in his analysis. This may explain his conclusion that «other things equal, the risk of recurrent unemployment is highest for persons with completed apprenticeship training» (Steiner 1989:63).

6.3.2 Place of Residence and Seasonal Variation in Employment

Seasonal variation in demand for labour is usually regarded as one of the most important causes of recurrent unemployment (OECD 1985). We did not include direct questions about seasonal work in our study, so we had to use information about place of residence (urban or rural areas) and occupational sector as indicators of seasonal work. We saw (Table 6.3) that the effect of place of residence on number of unemployment spells was mainly indirect, and is explained via occupational sector in the model. However, we also found a direct effect which implies that people living in rural areas have a higher probability of recurrent unemployment spells than those living in cities. The effect of place of residence may imply seasonal variations in employment with work interspersed with unemployment spells. Such seasonal work may for instance be fishing and farming, but also other occupational sectors such as building and construction.

Other studies seem to indicate that seasonal variation is probably only one part of the explanation. Andress (1989) concludes that seasonal employment only had a small effect in his study of recurrent unemployment: Indicators of location in the secondary labour market were much more important such as low wages, low job stability, no internal training. Also

history dependence, implying the effect of previous unemployment, were more important predictors than both age and seasonal employment. Also Steiner (1989:63) concludes that spells of unemployment are not primarily caused by seasonal variations in supply or demand. Hammer (1997) found that geographic location was a strong predictor of later unemployment, also when other factors where controlled for. Youth in the South and North of Norway had a higher risk of recurrent unemployment spells in the period 1989 to 1993 than the reference group on the west coast. Hammer claims that this is probably so because the labour market in south and especially in the North of Norway is characterised by seasonal work with spells of unemployment. Young people in the South of Norway were still a vulnerable group when occupational sector in the latest job was controlled for (Hammer 1997).

According to Westergård-Nielsen (1993:22), Denmark has almost the world record in seasonal variation of unemployment. This is primarily caused by very poor protection of employees, in order to increase the flexibility of the labour market as much as possible: «Employers in Denmark may hire or dismiss workers on a couple of hours notice». Laws which protect workers against dismissal can only be found for certain groups of employees. The result is that Denmark compared to other countries has a very high number of short unemployment spells. According to Westergård-Nielsen, it is however, wrong to underestimate the problem of short-term unemployment. There is little reason to believe that this kind of short-term unemployment will be reduced even if there was a substantial decrease of cyclical unemployment. The situation in Denmark is therefore very special, with a high proportion of temporary unemployed, particularly young people (Sperling and Boje 1994:62).

6.3.3 Temporary Contracts

Boje and Nielsen (1993) claim that there seems to be a general agreement among labour market researchers that the fordistic or tayloristic organisation of production seems to be substituted by new concepts of production and new forms of organisation. A result of such new forms of organisation is increased flexibility in the labour market, and atypical forms of work become more usual. But some have argued that this «rhetoric about flexibility» is more a kind of fashion than a question of basic changes (Wood 1995:269). We have seen that Doeringer and Piore (1971) described how

employers could use strategies to convert primary employment into secondary employment by using temporary contracts.

Part-time and temporary contracts are among the most usual forms of atypical work (Nätti 1993). However, Boje and Nielsen (1993) argue that it is not adequate to talk about atypical work when such work involves more than 25 % of the male labour force and almost 50 % of the female labour force in the Scandinavian countries.

In our sample, 32 % per cent reported that they had left a job because the contract was temporary. There were just as many males as females and the proportion was highest among those who had their last job in the public sector. Multivariate analysis (Table 6.3) showed that when other factors in the model such as background, family and education where controlled for, the relative risk of having been unemployed 3 times or more was highest among those who reported that they had left a job because the contract was temporary.

Also Andress (1989:289) found that temporary contracts in the last job gave an increased risk of recurrent spells of unemployment during the following 5 years. As discussed previously, in our analysis there are problems regarding the time ordering of the variables, especially since we measured number of spells of unemployment retrospectively. We have therefore, to be careful when we interpret the results. One reason is that previous studies have shown that unemployed more frequently than others enter temporary contracts when they find a new job (Halvorsen 1994), and this seems to be especially so among unemployed youth (OECD 1996). In other words, we do not know if the temporary jobs «create» unemployment, or if the unemployed are selected to temporary jobs. It probably works both ways. Anyhow, the results are interesting considering that temporary contracts are often regarded as a way in to more permanent jobs for new entrants in the labour market. This is also probably the case for most young people, but the results here also indicate that temporary contracts are a very important factor when we study recurrent spells of unemployment among youth. The Norwegian survey of level of living among long-term unemployed also showed that coming to an end of a temporary job was one of the most important causes of unemployment (Halvorsen 1994). According to Torp (1998), the proportion of temporary contracts in Norway is highest in the hotel and restaurant sector, within transport, in teaching and care, while industry and public administration had the lowest proportion of temporary contracts.

6.3.4 Occupational Sector

Doeringer and Piore's sector model can be regarded as a rather simplistic scheme of social class, where the employees chances and risks over the life course will be conditioned by where in the labour market they start their working career. The main hypothesis is that there exists very little mobility between the different segments of the labour market, but a lot of mobility within each segment. Then obviously, the position of the first job will with a high probability determine their further working career. This implies that this theory is especially interesting regarding youths who are new entrants in the labour market. In our analysis here, we found that the males were distributed fairly evenly across different occupational sectors, while the females were concentrated in jobs such as care (29 %), sales and retail (15 %) and other unskilled service jobs (16 %). Since we know that the Norwegian labour market is strongly segregated according to gender (Hansen 1995b), this is not surprising.

Bivariate analysis (table 5.1) showed a clear relationship between occupational sector and number of unemployment spells for males. Those with many unemployment spells were concentrated in the lower level of the occupational classifications. For females, the proportion that had been unemployed 3 times or more was highest for those who in their last job worked with sales, retail and other unskilled service occupations. Those who worked in the health sector had a much lower risk of recurrent unemployment spells compared to young people in most of the other sectors. This is probably because the demand for employees in this sector has been permanently high, and health and care services are not very vulnerable to seasonal variations or cyclical fluctuations in the economy.

The results are in line with another study of the relationship between occupational sector and number of unemployment spells. In a study of recurrent unemployment among Norwegian youth Hammer (1997) found that those who had worked in the sector of care and health had significant less probability for recurrent unemployment spells than those who worked in other sectors of the economy, when a lot of other factors (including previous unemployment experience) were controlled for. Hammer (1997) found that the risk of recurrent spells of unemployment was highest for those who worked in sales, retails and building and construction.

6.3.5 Private or Public Sector?

In the operationalisation of the hypothesis we argued why it is interesting to study the relationship between number of spells of unemployment and sector in the economy. As far as we know this has not been done in other studies of recurrent unemployment. On the one hand, jobs in the public sector are usually regarded as more secure than in the private sector (Esping-Andersen 1993). On the other hand, we know that in the Nordic countries temporary contracts are more usual in the public than in the private sector (Nätti 1993). Norwegian studies (Moland 1994) show that the public sector often uses insecure jobs and short-term contracts for those with low qualifications. In Norway, youths have to a little extent participated in the increase of jobs in the public sector (NOU 1994:3). The «youth jobs» are to a higher degree than «adult jobs» found within small firms in the private sector (Larsen and Eriksen 1994:269). Our analyses showed, as expected, that more young people in our sample had their last job in the private (72 %) than in the public (28 %) sector, and this applies to more young men than women. Neither bivariate or multivariate analysis could find any systematic relationship between sector of the last job and number of spells of unemployment. This implies that whether the respondents had worked in the public or the private sector cannot explain the risk probability of recurrent unemployment spells, or the difference between males and females. However, the proportion that reported that they had left a job because they had a temporary contract, was clearly higher for those who had their last job in the public sector than in the private sector. The results are in accordance with Torp's study (1998), which shows that temporary contracts more often function as a trial period and a way of recruiting new employees in the private than and in the public sector. We also found that the probability of receiving on-the-job training was less for those with 3 unemployment spells or more. For males, this tendency was stronger in the public sector.

6.3.6 Wage

According to Doeringer and Piore, low wages is a central characteristic of jobs in the secondary labour market. We would thus expect that the young people in the sample who had experienced recurrent unemployment spells would work in the segment where they receive relatively low pay, which implies that we would expect a relationship between wage and number of unemployment spells: the lower the hourly wage, the higher the number of

unemployment spells. However, the analysis showed quite the opposite results: the higher the average hourly wage in the last job, the higher was the probability of recurrent unemployment spells.

Gallie and Vogler (1990) are among those who criticise the segmentation theories. They claim that the scheme is too simplistic when it differentiates between safe and well paid jobs in the primary segment versus insecure and poorly paid jobs in the secondary segment. They argue that one at least should differentiate between insecure and poorly paid jobs, safe but poorly paid jobs, insecure but well paid jobs and safe and well paid jobs. Jobs in health care and nursing are good examples of safe but relatively poorly paid jobs. Jobs vulnerable to seasonal variations and/or cyclical fluctuations in the economy such as construction and building, fishing etc. are on the other hand examples of jobs that may be insecure, but where the employees can expect relatively high wages when jobs are available.

In our sample we found that those who worked within the care and the health sector had a low risk of recurrent unemployment, while they also had the lowest average wage (NOK 71). Those whose last job were in unskilled work within industry, building/construction or transport had on the other hand a high risk of recurrent spells of unemployment, but they had a hourly wage clearly above the average (NOK 86).

6.3.7 Training

According to Doeringer and Piore (1971), the secondary labour market is also characterised by fewer possibilities for on-the-job training. In our sample, 30 % had received some form of on-the-job training in their last job. Gender or age were of none importance, but the proportion who received training was clearly highest among those whose last job was in the public sector. High turn-over with several job shifts and drop-out from previous schooling can reduce the possibilities of access to jobs which supply training for new entrants (NOU 1994:3). According to Doeringer and Piore, such tendencies may be explained by statistical discrimination from the employers of job seekers who they expect will have a lower stability in their working career. We also found using bivariate analysis that the proportion who had received training in their last job was clearly higher among those without many spells of unemployment. This relationship was especially strong for males in the public sector. Hammer (1997) also found

gender differences regarding access and the influence of internal training. Among young people in work in 1989, males who worked in the primary labour market had a reduced risk of recurrent spells of unemployment, but not females. «The primary labour market» was in this study operationalised by access to internal training. Hammer also found that among those in jobs in 1989 more males than females had access to internal training on the job. When we controlled for social background, occupational sector, job characteristics of the last job and individual problems (Table 6.3) we found no significant relationship between access to on-the-job training and number of spells of unemployment. This could be explained by the fact that access to internal training varies across occupational sectors, and this effect diminishes when sector is controlled for. The use of temporary contracts also varies across occupational sectors. It is therefore especially interesting that the relationship between leaving a job because it was temporary and number of unemployment spells remains significant also when the other variables in the model are controlled for.

6.4 Gender Differences

Hammer's (1997) study was based on a theoretical model where recurrent spells of unemployment was explained by individual, cultural and structural factors. Hammer concluded that the fit of the model was better for males than females. Here we will look at the gender differences regarding the importance of age, education, whether they lived alone or not and the influence of having children. First, however we can conclude that the males had clearly more unemployment spells than females. This may partly be explained by the fact that females had longer spells of unemployment than males, partly because females have a higher probability of leaving the labour force and staying at home with children. It is also possible that some females do not consider themselves unemployed even if they would take a job if it was available. In other words, it is possible that there is more hidden unemployment among females than males.

Separate analysis of males (Table 6.1) showed that background factors such as age, parental divorce, place of residence, having children or not, drop-out from upper secondary school, and most clearly educational level, had independent effect on number of unemployment spells. Analysis of females (Table 6.2) showed that only place of residence and whether they lived alone or not had a significant effect. Living situation was one of those factors that had no independent effects among men. It is especially

interesting that educational level was of no importance in predicting spells of unemployment for females. Further analysis showed that these results cannot be explained by different family situation. Age and education and whether they had dropped out of previous schooling had no effect on the probability of recurrent spells of unemployment for females. These results are hard to explain. The reason is probably that the measuring of recurrent spells of unemployment is less relevant for the female working career. Females leave the labour force in periods to take care of children. This implies that the difference between unemployment and joblessness becomes blurred, and consequently it is difficult to predict number of unemployment spells when what is unemployment and what is joblessness is difficult to differentiate.

In our sample, we found that the relationship between having children or not and number of unemployment spells was completely different for males and females. Separate analysis for males showed that when other variables in the model where controlled for, having children increased the relative risk of recurrent unemployment spells. For females we found the opposite tendency, since females with children had a reduced risk of recurrent unemployment spells when other background factors where controlled for (Table 6.3). The different results for males and females can probably be explained by the fact that young men with responsibility for supporting a family will accept jobs even if these jobs are low paid and based on temporary contracts.

For females it is reasonable to assume that those with children have not been part of the labour force as long as the males, and therefore have not been at risk for many unemployment spells.

6.5 Some Limitations and Problems in Interpreting the Results

In his study of recurrent unemployment Andress (1989:277) emphasises that

> «spell durations and event counts can be generated with most precision from a collection of event-histories, which is, however, a very expensive design. If these data are not available, event counts can also be measured by aggregate questions such as: 'How often were you unemployed during the last … years'? In this case some sort of time information must be collected, since the number of events is *ceteris paribus* a function of time elapsed since the onset of the process».

In our study we have not specified any time period regarding the questions of total duration of unemployment or number of unemployment spells. This problem could have been solved by using information about the young people's age when they were unemployed for the first time, combined with information about age at the time of the interview. If we had controlled for such a variable we would have compared those with the same number of years from their first experience with unemployment. Obviously, the older the young people in the sample are and the earlier they left school the longer time they would have been at risk for experience of unemployment, both total duration of unemployment and number of unemployment spells. However, we have controlled for both educational level and age in our multivariate analysis.

Another problem is the time order of the variables, which we have discussed previously. Our data are cross-sectional and the dependent variable in the analysis was constructed by retrospective questions of number of unemployment spells. It is also important to remember that this is not necessarily registered unemployment, we have to remember that we do not have information about what kind of job the young people entered at the beginning of their working career. The information we have used here about job characteristics relevant for the theories of the secondary labour market, has been based on job characteristics of their latest job. What we have done, is to make an assumption for the model, that the job characteristics of their latest job are in many ways similar to the first job. Such a assumption is not unrealistic for young people in this age group. It is possible that they have changed jobs many times, but this has probably

been a horizontal mobility between jobs at the same skill level and probably within the same occupational sector. The results also seem to indicate that such an assumption is reasonable. The relatively strong effects of characteristics of the last job and the relationship to their previous unemployment career may indicate continuity in both job characteristics and occupational sector.

The results contribute to underline some theoretical assumptions about labour market segmentation. Some young people are stuck in special segments, with a high turnover caused by temporary contracts, poor access to on-the-job training and jobs interspersed with unemployment spells. However, it is also possible that some of these young people actually entered the primary sector, but because of several unemployment spells they ended up in the secondary labour market. This is an alternative theoretical explanation of the results.

In the next chapter we look at the young people's situation at the time of the interview, whether they were still unemployed or if they had found work. We look at the impact of previous unemployment spells on the probability of continuous unemployment at the time of the interview, when other relevant factors which may predict young people's position in the labour market at the time of the interview are controlled for. We also look at the influence of the duration of their unemployment versus number of spells of unemployment, and the influence of these factors on young people's labour market position at the time of the interview.

7 Does Unemployment Breed Unemployment?

7.1 Introduction

We have previously described the research design. A representative sample of young people who were registered as unemployed were interviewed 6 to 12 months later. At the time of the interview they were in different positions in the labour market. Some were still unemployed, others had found jobs or had returned to education. In this chapter we look at how previous unemployment, both the duration of previous unemployment and the number of previous unemployment spells, influences the risk of unemployment at the time of the interview. Research has shown that the risk of unemployment is clearly related to the experience of previous unemployment, but there are different assumptions or conclusions of whether this fact is due to selection effects (heterogeneity) or state dependence. In a review of results from empirical studies of long-term unemployment, Colbjørnsen et. al. (1992:17) conclude that «there seems to be clear evidence that the hypothesis of state dependence is highly supported». However, Pedersen and Westergård-Nielsen (1993) have a different conclusion. In their review of empirical studies they claim that there is still no consensus regarding the interpretation of history dependence, and the main impression is that the question about duration dependence is still undecided:

> «On balance, the evidence seems tentatively to point to, first, the importance of distinguishing between different types of exit from unemployment, and secondly, to heterogeneity as an important factor in explaining time dependence in the escape rate from unemployment» (Pedersen and Westergård-Nielsen 1993:76-77)

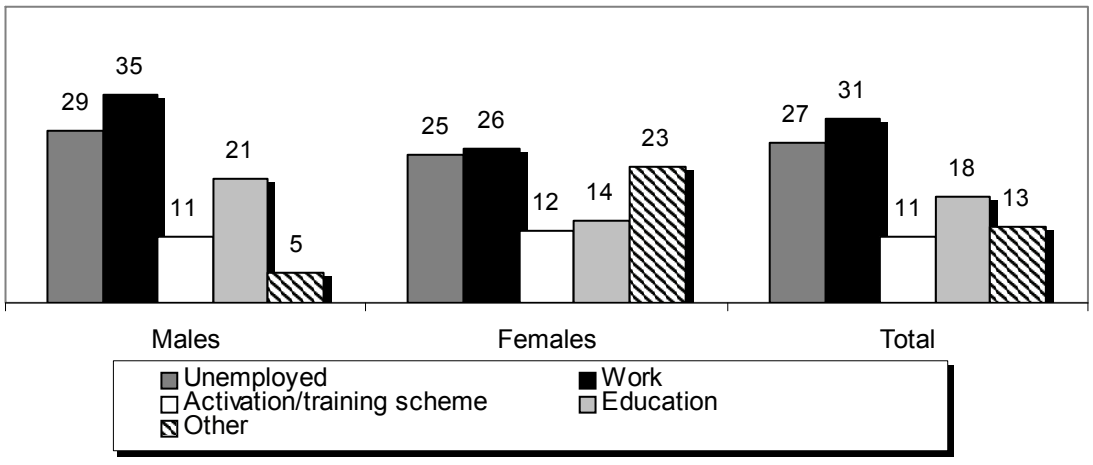
The point is that political implications of a situation where unemployment breeds unemployment is clearly different from a situation where specific attributes of the unemployed groups imply long or frequent unemployment spells (heterogeneity/selection). It is also important to increase the knowledge of how structural factors influence the risk of unemployment and also unemployment duration. The level of benefits has been a central subject (Colbjørnsen et al 1992, Pedersen and Westergård-Nielsen 1993, Hernæs and Strøm 1996).

The research questions in this chapter are concerned with the impact of previous unemployment on the risk of unemployment at the time of the interview among the young people in our sample. We also study the impact of individual factors such as social background and individual problems, and characteristics of the labour market using characteristics of their last job.

As discussed previously it is still an important question whether history dependency in unemployment is due to true state dependence or heterogeneity. Anyhow, we expect to find state dependence in unemployment in our sample, i.e. the longer the duration of previous unemployment and the higher the number of unemployment spells, the higher the probability of unemployment at the time of the interview. The question is to what degree such state dependence remains an important effect when we control for other factors such as social background, education, health etc. If the hypothesis of heterogeneity is correct, we would assume that the influence of previous unemployment would be strongly reduced when we control for such individual factors. However, if the hypothesis of state dependence is more correct, we would expect that history dependence in unemployment will remain a strong effect also when other important factors are controlled for. It is however, reasonable to believe that history dependence in unemployment may be explained both by «true» state dependence and by heterogeneity (Hammer 1997).

At the time of the interview the young people were in a range of different positions in the labour market. Figure 7.1 shows the main activity the previous week to the time of the interview.

Figure 7.1 Main labour market status at the time of the interview, total and by gender. %



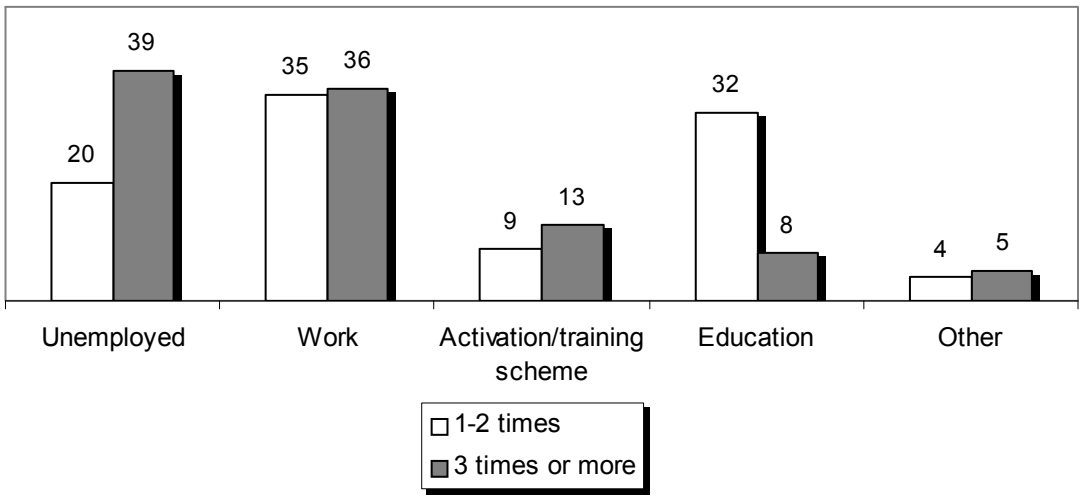
Significance test: Gender: p<.001. Basis: Males: N=628. Females: N=474. Total: N=1102.

At the time of the interview only 27 % were still unemployed. The gender difference is especially clear regarding the group «other», because more females in this age group tend to leave the labour force because of small children. We now look at the characteristics of those who were unemployed at the time of the interview compared to those who were in a job, activation, education or «other». In Section 7.2 we look at the relationship between main activity at the time of the interview and some measures of unemployment experience. In Section 7.3 and 7.4 we look at which factors predict unemployment at the time of the interview using multivariate analysis. We look at 4 different factors: social background, individual problems, characteristics of the respondents' last job and previous unemployment experience. In Section 7.5 we look at the influence of place of residence and thereby the geographical distribution of level of unemployment. However, first we will look at the relationship between the respondents main activity at the time of the interview and different measures of previous unemployment experience.

7.2 The Influence of Previous Unemployment

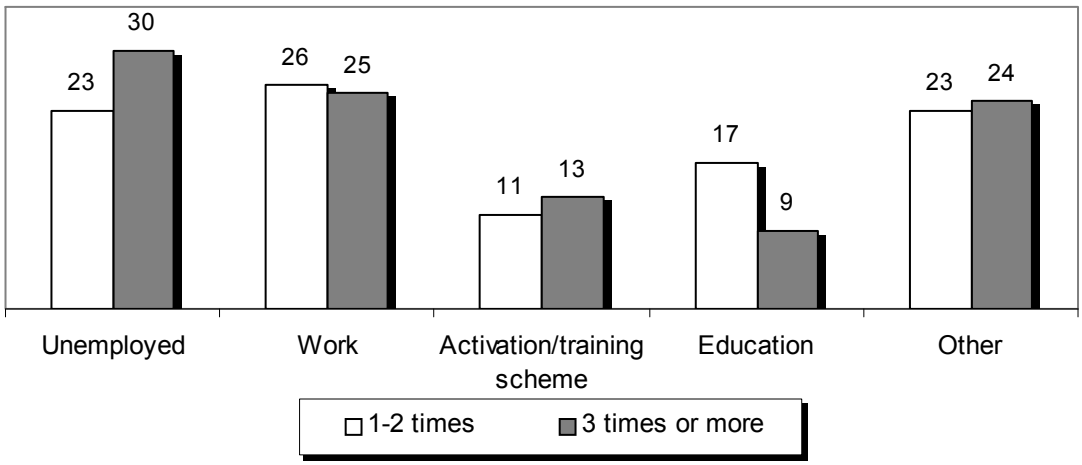
Figures 7.2–7.6 show the relationship between main activity and measures of unemployment experience for males and females.

Figure 7.2 Main labour market status at the time of the interview by spells of unemployment. Males. %



Significance test: p<.001. Basis: 1–2 times: N=338. 3 times or more: N=288.

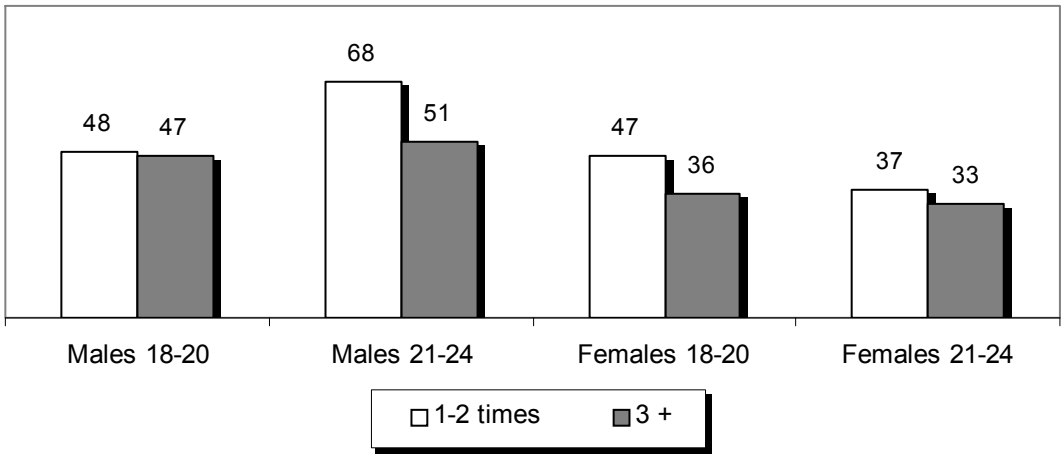
Figure 7.3 Main labour market status at the time of the interview by spells of unemployment. Females. %



Significance test: ns. (p=.145). Basis: 1–2 times: N=332. 3 times or more: N=142.

We found that the relationship between previous spells of unemployment and risk of unemployment at the time of the interview was clearly stronger for young males than females. However, number of unemployment spells had no impact on the probability of re-entering employment, but it seems to be clearly important regarding re-entering education. Since number of spells of unemployment have no influence upon whether the young people had found a job, a possible explanation is that we do not differentiate between type of job, i.e. permanent or temporary employment. It is possible that those who had experienced many unemployment spells to a higher degree got a new job with a temporary contract. It is also possible that the relationship would change if we controlled for age. Figure 7.4 shows the proportion in a permanent job at the time of the interview, when age, gender and the number of unemployment spells are controlled for.

Figure 7.4 Proportion in a permanent job at the time of the interview by age, gender and spells of unemployment. %



Significance tests: Males: 18–20: n.s. Males: 21–24: p<.05. Females: 18–20: n.s. Females: 21–24 n.s. Basis: Males: 18–20: 1–2 times: N=56. 3+: N=19. Males: 21–24: 1–2 times: N=77. 3+: N=100. Females: 18–20: 1–2 times: N= 30. 3+: N=14. 21–24: 1–2 times: N=84. 3+: N=33.

There is a clear tendency that the higher the number of unemployment spells the lower the probability of being in a permanent job. The results may be explained by statistical discrimination from employers of those with many unemployment spells. But it is also possible that those with many unemployment spells do not want a permanent job. We have discussed both these explanations in relation to the dual labour market theory.

Up to now we have looked at the influence of number of unemployment spells. As mentioned previously we found the same tendency between total unemployment experience and risk of unemployment at the time of the interview. Figures 7.5 and 7.6 show the labour market status at the time of the interview by total duration of unemployment for males and females separately.

Figure 7.5 Main labour market status at the time of the interview by time spent unemployed. Males. %

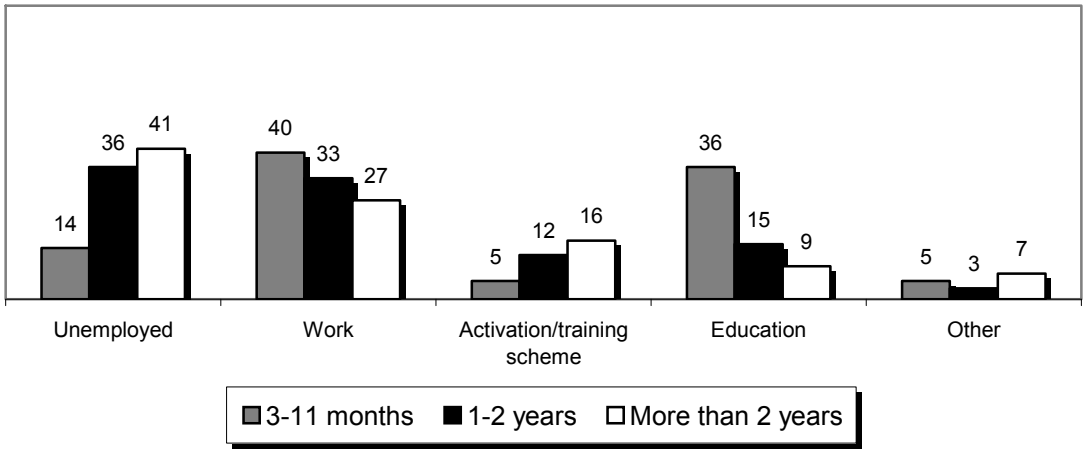
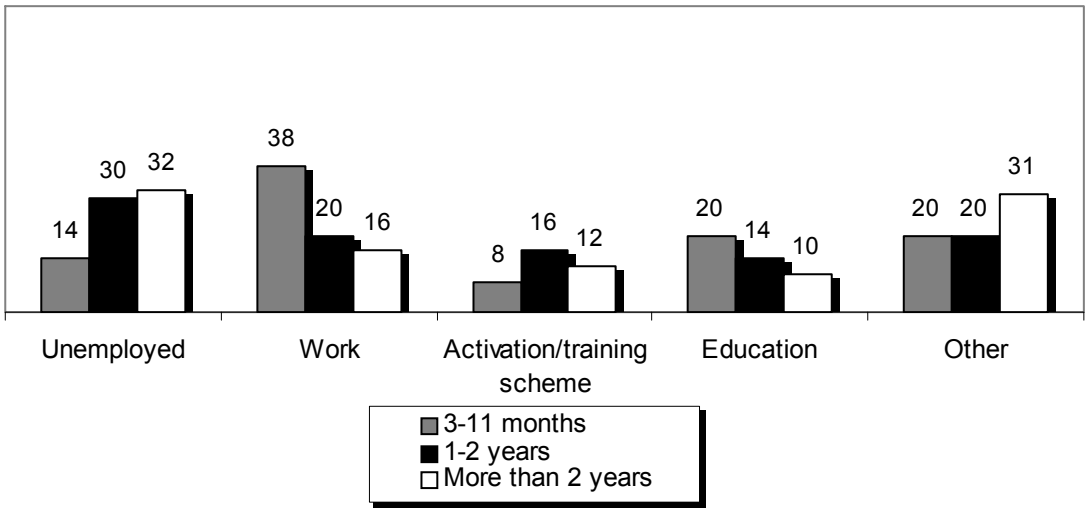


Figure 7.6 Main labour market status at the time of the interview by time spent unemployed. Females. %



According to Figure 7.5, for males, we see that those who had been unemployed for more than one year had a much higher risk of unemployment at the time of the interview. We find the same tendency for females (Figure 7.6). However, for females, we also see that among those with more than 2 years of unemployment experience, 31 % are in the «other» group. As previously discussed, this group are females who have left the labour force. Most of these women stay home with children. However, it is still interesting to see that females with long unemployment experience have a higher probability of withdrawing from the labour market.

The results provide evidence of a strong relationship between both previous spells of unemployment and total experience of previous unemployment and the risk of unemployment at the time of the interview. In other words, we found a strong history dependence of unemployment. We now look at which of these factors are most important when we want to predict the respondents position in the labour market at the time of the interview. The important questions are: Does the number of unemployment spells have an equal effect on the risk of further unemployment as total months of unemployment? Are these effects the same for males and females? Obviously, these questions are important. Most discussion of labour market policy, and most concern about the effect of unemployment, has been concentrated around long-term unemployment. However, here we look at the influence of number of unemployment spells as well as duration of total unemployment experience. Table 7.1 shows a logistic regression

predicting unemployment at the time of the interview by both number of unemployment spells and by total duration of unemployment experience.

Table 7.1 Logistic regression predicting unemployment at the time of the interview. 0=other. 1=unemployed

Total (N=1083)	B	OR
Times unemployed (cont.)	0.13 ***	1.13
Total unemployment experience (months)	0.02 ***	1.02
Males (N=613)		
Times unemployed (cont.)	0.15 **	1.16
Total unemployment experience (months)	0.02 **	1.02
Females (N=470)		
Times unemployed (cont.)	0.06 ns	1.06
Total unemployment experience (months)	0.02 *	1.02

We see that number of unemployment spells had an almost equal effect to total unemployment experience. As we can see number of unemployment spells is measured as number of times unemployed ever, while total unemployment experience is measured in duration in months. However, if we adjust for different kinds of measurement of these two independent variables, we find that the effect is about the same for the two variables (see appendix, Table 1, for range and distribution of the two variables). For males, number of unemployment spells and total unemployment experience were equally important regarding the risk of unemployment at the time of the interview. For females, number of unemployment spells had no effect at all, while total unemployment experience had the same effect upon risk of unemployment as for males. How can these gender differences be explained? We have previously shown in our bivariate analysis that number of unemployment spells is much higher among males than females. This could partly be explained by the fact that males have jobs in different occupational sectors than females. These sectors are probably more vulnerable to unemployment spells than the female-dominated part of the labour market. However, it is also possible that different background factors and individual problems may explain these differences. We shall now look at the influence of social background, individual problems, and characteristics of the respondents' work experience and position in the labour market on the risk of unemployment at the time of the interview.

Such multivariate analysis makes it possible to differentiate between the effects of previous unemployment spells and total unemployment experience on the risk of later unemployment when individual factors and structural factors which characterise their labour market position are controlled for.

7.3 The Influence of Social Background, Individual Problems and Characteristics of the Respondents' Last Job on Continuous Unemployment

We now look at the risk of unemployment at the time of the interview by both individual and structural factors. Individual factors include social background, education, work involvement, and also indicators of individual problems such as physical and mental health and alcohol consumption. In the next step in the analysis we look at structural factors regarding the labour market, factors which according to segmentation theory of the labour market may influence risk of later unemployment. As discussed in previous chapters, such structural factors have been operationalised by sector, possibilities for internal training, wage, fixed term versus temporary employment, and occupational sector using the ISCO coding. Table 7.2 shows a step-wise logistic regression of risk of unemployment at the time of the interview. To estimate the influence of individual factors versus structural factors we include only individual factors in Model 1. In Models 2 and 3 we also include characteristics of the respondents latest job. In model 4 we look at the influence of number of unemployment spells versus the effect of total unemployment experience when individual and structural factors are controlled for.

Table 7.2 Logistic regression predicting unemployment at the time of the interview. 0=other. 1=unemployed.

(N=1066)	**Model 1**		**Model 2**		**Model 3**		**Model 4**	
	B	OR	B	OR	B	OR	B	OR
Telephone interview = 1	–.80 ***	0.44	–.57 **	0.56	–.60 **	0.55	–.75 ***	0.47
Background and «problems»								
Female = 1	–.37 *	0.69	–.40 *	0.67	–.34 p=.06	0.71	–.28 ns	0.75
Age (cont.)	–.01 ns	1.01	–.00 ns	1.00	– .01 ns	0.99	0.05 ns	1.05
Father's education (cont.)	–.05 ns	0.95	–.05 ns	0.96	–.04 ns	0.96	–.04 ns	0.96
Lived with both parents up to the age of 16 =1	–.16 ns	0.85	–.10 ns	0.91	–.09 ns	0.91	–.04 ns	0.96
Compulsory school	0.67 **	1.97	0.71 **	2.20	0.67 **	1.95	0.45 p=.05	1.57
Vocational education (1–3 years) / apprenticeship	0.42 **	1.53	0.35 *	1.43	0.34 p=.06	1.40	0.23 ns	1.25
Neither good or bad/poor health =1	0.25 ns	1.28	0.24 ns	1.27	0.19 ns	1.22	0.17 ns	1.19
Mental health (index)	0.51 ***	1.67	0.62 ***	1.87	0.63 ***	1.88	0.56 ***	1.75
Drunk 2–3 times a month or more often the last year = 1	–.50 **	0.60	–.46 *	0.63	–.43 *	0.65	–.42 *	0.65
Work involvement (index)	0.15 ns	1.16	0.13 ns	1.14	0.15 ns	1.17	0.14 ns	1.16
Constant	–1.72							
Job characteristics								
Private sector = 1			0.30 ns	1.35	0.25 ns	1.29	0.29 ns	1.33
Not received formal training in most recent job = 1			0.06 ns	1.06	0.01 ns	1.01	–.02 ns	0.98
Wage per hour (kr.)			–.01 ns	0.99	–.01 ns	0.99	–.01 ns	0.99
Temporary employment = 1			1.45 ***	4.24	1.46 ***	4.31	1.39 ***	4.01
No working experience/missing = 1			0.94 **	2.57	1.13 ***	3.11	1.05 **	2.87
Constant			–2.15					
Occupational Sector								
Academic work					0.17 ns	1.19	0.24 ns	1.28
Admin. Leadership					–.12 ns	0.89	–.18 ns	0.83
Office work					–.02 ns	0.98	–.03 ns	0.97
Restaurant					–.13 ns	0.87	–.12 ns	0.89
Sales/retail					0.34 ns	1.40	0.28 ns	1.32
Construction – skilled					0.72 ns	1.65	0.48 ns	1.60
Manufacturing					0.89 ns	1.07	–.04 ns	0.96
Process industry					1.59 ns	1.50	0.42 ns	1.53
Transport					1.32 ns	1.60	0.15 ns	1.16
Service – unskilled					1.91 *	2.07	0.53 ns	1.69
Farming/fishing – unskilled					2.17 *	3.09	0.63 ns	1.88
Industry – unskilled					1.36 ns	1.89	0.20 ns	1.22
Constant					– 2.42			
Times unemployed (cont.)							0.10 *	1.11
Total unemployment experience (months)							0.01 **	1.01
Constant							– 2.87	

Reference groups: Education: Upper secondary/higher education. Sector: Health/Care
*Significance level: ***: p<.001. ** p<.01. *: p<.05.*

We find in Model 1 that females had a lower probability of unemployment. We also find that educational level, mental health problems and alcohol

consumption had a significant impact on the risk of unemployment. We see that whether the respondent was interviewed by telephone or not had a significant negative impact upon the risk of unemployment in all the different models. This is explained by the fact that the telephone interviews were carried out later than the postal survey, and the unemployment rate in Norway had decreased significantly during this time period.

In Model 2 we include information about job characteristics. As we can see, the effects of gender, education, mental health and alcohol consumption remain significant. Whether the respondents had a temporary or a fixed term contract in their last job also had a significant impact on the risk of further unemployment. Those with no work experience had an increased risk.

In Model 3 we include information about occupational sector. The effects of background and individual problems as well as job characteristics remain significant. However, only unskilled work in the service sector or the primary sector of the economy gave a higher risk of later unemployment.

In Model 4 we include information about number of spells of unemployment versus the influence of total unemployment experience. Interestingly, if we adjust for different measurement of the two variables (see appendix), we find that number of spells of previous unemployment actually had a stronger effect on the risk of later unemployment than the duration of total unemployment experience. Further, we can see that gender, educational level and occupational sector are no longer significant when we control for previous unemployment experience. This is probably, as documented in previous chapters, because gender, education and occupational sector were clearly related to number of unemployment spells. So in this analysis, when we control for number of spells of unemployment, gender, education and occupational sector of the respondents last job turns out not to be significant.

The fact that the number of previous unemployment spells seems to have a stronger impact on risk of later unemployment than total unemployment experience, should be investigated further. As shown in Table 7.1 there are clear gender differences regarding the impact of these variables. We therefore, ran the same analysis separately for males and females. As shown in Table 7.2, occupational sector was of no significance and was therefore not included in the model. However, another question is whether different rates of unemployment across the country explain the gender differences. It is possible that the stronger effect of previous unemployment spells among males than females, could be explained by males working in parts of the labour market

with high seasonal variation. An indication of such seasonal unemployment is for instance the high unemployment rate in the North and North West of the country. In the following analysis we therefore, include information about what part of the country the respondents lived in. Table 7.3 shows the step-wise logistic regression for the males.

Table 7.3 Logistic regression predicting unemployment at the time of the interview. 0=other. 1=unemployed.

MALES (N=514)	**Model 1**		**Model 2**		**Model 3**		**Model 4**	
	B	OR	B	OR	B	OR	B	OR
Telephone interview = 1	–.80 **	0.45	–.40 ns	0.67	–.38 ns	0.68	–.54 ns	0.58
Background and «problems»								
Age (cont.)	–.01 ns	1.01	–.01 ns	0.99	–.00 ns	0.99	0.06 ns	1.07
Father's education (cont.)	–.06 ns	0.94	–.06 ns	0.94	–.06 ns	0.94	–.06 ns	0.94
Lived with both parents up to the age of 16 = 1	–.02 ns	0.98	–.07 ns	0.93	–.06 ns	0.94	–.04 ns	0.96
Compulsory school	1.04 **	2.83	0.92 **	2.51	0.92 **	2.50	0.60 ns	1.83
Vocational education (1–3 years) / apprenticeship	0.60 *	1.82	0.40 ns	1.49	0.41 ns	1.51	0.26 ns	1.30
Drop-out from vocational / upper secondary school = 1	0.13 ns	1.13	0.20 ns	1.22	0.22 ns	0.25	0.13 ns	0.14
Neither good nor bad/poor health =1	0.24 ns	1.27	0.19 ns	1.21	0.21 ns	1.24	0.16 ns	1.18
Mental health (index)	0.50 *	1.64	0.74 **	2.10	0.71 **	2.04	0.65 *	1.93
Drunk 2–3 times a month or more the last year =1	–.42 ns	0.66	–.34 ns	0.71	–.33 ns	0.72	–.29 ns	0.75
Work involvement (index)	0.04 ns	1.04	–.01 ns	0.99	0.01 ns	1.01	0.03 ns	1.03
Constant	–1.79							
Job characteristics								
Private sector =1			0.32 ns	1.37	0.30 ns	1.34	0.31 ns	1.37
Not received any formal training in most recent job = 1			0.36 ns	1.44	0.38 ns	1.47	0.30 ns	1.35
Wage per hour (kr.)			–.02 *	0.98	–.02 *	0.98	–.02 *	0.98
Temporary employment =1			1.79 ***	5.97	1.81 ***	6.11	1.69 ***	5.47
No working experience/ missing =1			1.08 *	2.95	1.09 *	2.97	1.03 *	2.81
Constant			–1.54					
Part of the country								
West					0.26 ns	1.30	0.23 ns	1.26
East					0.39 ns	1.47	0.41 ns	1.50
North					0.22 ns	1.25	0.23 ns	1.27
Constant					–1.85			
Times unemployed (cont.)							0.13 *	1.14
Total unemployment experience (months)							0.01 p=.08	1.01
Constant							–2.45	

*Reference groups: Education: Upper secondary/higher education. Part of the country: North Western Norway. Significance level: ***: p<.001. ** p<.01. *: p<.05.*

As we can see from Table 7.3, the results for males are not very different from those shown in Table 7.2. Regarding individual problems and background only educational and mental health was clearly related to later unemployment, and both wage and temporary unemployment in the last job have an effect. The results also indicates that seasonal conditioned unemployment, here opera-

tionalised by part of the country, can not explain the gender differences regarding the influence of previous spells of unemployment.

Most interestingly, number of unemployment spells clearly had a much stronger impact on risk of later unemployment than total duration of unemployment. If we now look at the same analysis for females, we see totally different results.

Table 7.4 Logistic regression predicting unemployment at the time of the interview. 0=other. 1=unemployed.

FEMALES (N=403)	**Model 1**		**Model 2**		**Model 3**		**Model 4**	
	B	OR	B	OR	B	OR	B	OR
Telephone interview = 1	–.76 *	0.47	–.62 *	0.54	–.62 *	0.54	–.76 *	0.47
Background and «problems»								
Age (cont.)	–.01 ns	0.99	–.02 ns	0.98	–.01 ns	0.99	0.04 ns	1.04
Father's education (cont.)	–.09 ns	0.91	–.07 ns	0.94	–.07 ns	0.93	–.05 ns	0.94
Lived with both parents up to the age of 16 = 1	–.02 ns	0.98	0.07 ns	1.08	0.16 ns	1.16	0.24 ns	1.28
Compulsory school	0.28 ns	1.33	0.37 ns	1.45	0.39 ns	1.48	0.26 ns	1.30
Vocational education (1–3 years) / apprenticeship	0.14 ns	1.14	0.08 ns	1.09	0.08 ns	1.08	–.01 ns	0.99
Drop-out from vocational / upper secondary school = 1	0.71 *	2.04	0.62 p=.05	1.86	0.67 *	1.95	0.70 *	2.03
Neither good nor bad/poor health=1	0.60 *	1.82	0.67 *	1.95	0.69 *	1.99	0.73 *	2.09
Mental health (index)	0.24 ns	1.27	0.31 ns	1.36	0.29 ns	1.33	0.22 ns	1.24
Drunk 2–3 times a month or more the last year =1	–.77 ns	0.46	–.80 ns	0.45	–.81 ns	0.45	–.80 ns	0.44
Work involvement (index)	0.40 **	1.49	0.41 **	1.51	0.43 **	1.53	0.39 *	1.48
Constant	–2.07							
Job characteristics								
Private sector =1			0.42 ns	1.52	0.45 ns	1.57	0.48 ns	1.62
Not received any formal training in most recent job = 1			–.24 ns	0.79	–.16 ns	0.85	–.18 ns	0.84
Wage per hour (kr.)			–.00 ns	1.00	0.00 ns	1.00	–.00 ns	1.00
Temporary employment =1			1.20 ***	3.33	1.23 **	3.43	1.23 ***	3.42
No working experience/missing =1			0.78 ns	2.19	0.85 ns	2.34	0.83 ns	2.29
Constant			–2.89					
Part of the country								
West					1.05 **	2.85	1.06 **	2.89
East					0.32 ns	1.37	0.28 ns	1.33
North					0.21 ns	1.24	0.19 ns	1.21
Constant					–3.56			
Times unemployed (cont.)							0.01 ns	1.02
Total unemployment experience (months.)							0.02 *	1.02
Constant							–3.86	

*Reference groups: Education: Upper secondary/higher education. Part of the country: North Western Norway. Significance level: ***: p<.001. ** p<.01. *: p<.05.*

For females health had an independent effect, as among males. However, work involvement or work motivation also had a significant impact when all other variables where controlled for in the analysis. The risk of unem-

ployment increased significantly with lower levels of work motivation. We also notice that neither type of education, wage nor lack of work experience had any effect, as they had in the analysis for males. Place of residence, however, had an impact, implying higher risk of unemployment in the West of the country compared to in North Western Norway. Most important, the number of previous unemployment spells had no effect on risk of unemployment, while the duration of total unemployment had a clear effect. In conclusion the differences we found among males and females regarding the impact of previous unemployment spells versus total unemployment experience documented in Table 7.1 persist, even when we control for both social background, individual problems, and characteristics of the respondents last job.

7.5 Summary

When we analyse the probability of unemployment at the time of the interview, there is no problem regarding the time order of the variables. We found in bivariate analyses that many of the factors which were related to increased risk of recurrent spells of unemployment did not have a significant influence on the risk of later unemployment at the time of the interview (see Appendix Tables 2 and 3 for main results regarding bivariate analyses). The respondents' education, school drop-out, parental divorce and health were factors which increased the risk of both recurrent spells of unemployment and unemployment at the time of the interview. However, several other individual problems were related to recurrent unemployment spells but were not significant predictors of later unemployment.

Most interesting, we found effects of labour market position (Table 7.2) for males and females. As expected, characteristics of their latest job had an influence upon the probability of later unemployment. In this way, the results confirm previous findings regarding recurrent spells of unemployment. It is particularly those in unskilled occupations and those with temporary contracts who had a high risk of later unemployment. However, when we controlled for previous unemployment, there are no significant effects. The results may indicate that those with previous unemployment experience were recruited to occupations with a high risk of further unemployment. The findings are in line with previous research of unemployed youth in the Norwegian labour market (Hammer 1997).

We also find that previous unemployment increases the probability of later unemployment. Here there are interesting gender differences. We reported in Chapter 4 that males had a higher number of previous unemployment spells, while females had longer spells of unemployment than males. The analyses here show that recurrent spells of unemployment give a higher risk of later unemployment for males but not for females. We have argued that this may be explained by the fact that some females withdraw from the labour market, so the measurement of what is unemployment or voluntary joblessness become blurred. However, this argument should also apply to total duration of unemployment. Duration of previous unemployment had actually the same effect for males and females. The longer the duration of previous unemployment, the higher the risk of later unemployment, also when social background and position in the labour market were controlled for. It is therefore reasonable to conclude that recurrent spells of unemployment are mainly a problem for males and not for females.

8 Discussion and Conclusions

According to the dual labour market theory it is possible to identify different segments in the labour market. Most jobs in the internal labour market are filled by promotions or transition of employees who already are integrated in the system, in other words by internal recruitment. This means that they are sheltered from direct competition from people outside the system, i.e. the external labour market. Internal labour markets exist in medium sized and big firms which belong to the most stable and best organised segment in the economy. Here we also usually find the best educated and skilled workers. This segment is called the primary labour market contrary to the secondary labour market.

In the secondary labour market we find a group of low-wage, and often marginal enterprises and a set of causal, unstructured work opportunities where workers with employment disadvantages tend to find work (Doeringer and Piore 1971:163). Jobs in the primary labour market are, according to Doeringer and Piore, characterised by high wages, fringe benefits, good working conditions, high job stability, possibilities for promotion, a high degree of membership in trade unions, good possibilities for internal training and most important a low risk of unemployment. On the other hand, jobs in the secondary labour market are characterised by fewer possibilities for internal training, low wages, poor working conditions, high turn-over, few possibilities for advancement and a low degree of union membership. Most important, there are also different demands regarding stability in the primary and the secondary labour market. In other words, we expected that young people with recurrent periods of unemployment would be located in the secondary labour market. Our results showed that this assumption was correct, but primarily for males. We found that young males who had experienced recurrent spells of unemployment were concentrated in low skilled occupations in the lower level of the occupational classification: in building and construction, process industry and transport. They had temporary contracts and fewer possibilities for internal training and courses in the work place. The females with recurrent unemployment spells worked in sales, retail and unskilled service jobs. Recurrent unemployment periods were less frequent for males in the private sector. We found that temporary contracts were more commonly used in the public sector than the private sector, independent of age. However, both males and

females who had their last job in the public sector had received more training or courses in their jobs. Young males who had not received any training in their last job, had a higher probability of recurrent unemployment periods. This was not the case for females. Internal training had no significant influence on the risk of recurrent unemployment periods in the multivariate analysis. According to the theory, we would have expected that possibilities for internal training would have had an effect for both males and females. Separate analyses for males showed that when occupational sector was controlled for, the effect of internal training diminished. It is therefore reasonable to assume that the gender differences can be explained by the gender segregation of the labour market. Males work in different occupations than females. It is their location in the occupational sector which determines whether they receive training or not.

Regarding wages we found quite different results than we had expected. The more unemployment periods the higher the salary in their latest job. This is not in line with the theory. The multivariate analyses showed that regarding the different job characteristics, only temporary contract in their last job had a significant impact on recurrent unemployment periods, when we controlled for occupational sector.

In conclusion, it seems that the dual labour market theory seems to be a more fruitful approach when analysing males' labour market career compared to females. Separate analyses for males and females also showed that the different models seemed to predict recurrent spells of unemployment better for males than females. As discussed previously, recurrent spells of unemployment are primarily a problem for males and not for females.

In the introduction we discussed different explanations of recurrent unemployment spells among young people. We suggested that one explanation might be recurrent periods of participation in labour market training schemes. However, clearly more females than males participated in such schemes (Carle and Julkunen 1998) so this cannot explain the gender differences.

Another explanation we discussed for the cause of recurrent unemployment periods, was voluntary unemployment. Some young people have low work motivation for a more permanent job, or socialise in milieus where work is devaluated. However, in the bivariate analyses we found that work motivation or work involvement did not have a significant effect on risk of unemployment. It seems, that low work involvement primarily reflects

more individual problems also in other areas of life. We found that such individual problems (school drop-out, drug-use and alcohol consumption, poor health and delinquency) were primarily selection effects. When we controlled for social background using multivariate analyses, which appeared before spells of unemployment, the effect of such problems was significantly reduced. Some young people with such problems (predominately males) have a high risk of recurrent unemployment spells. This also concerns health problems. However health problems remained a significant factor both for males and females regarding the risk of unemployment at the time of the interview. The results indicate that recurrent unemployment spells are not predominantly the result of voluntary unemployment. More individual problems and health problems clearly predict recurrent unemployment spells.

Interestingly, educational level had a clear effect on both the risk of recurrent unemployment spells and unemployment at the time of the interview for males, but not for females. On the other hand, drop-out from upper secondary school had a clear effect for females, but not for males (Tables 7.3 and 7.4). Previous research has shown that school adjustment seems to be a more important predictor of youth unemployment than educational level in itself (Hammer 1997). When we compared educational qualifications for males and females, we found that the level of education was the same, but a higher proportion of males than females had vocational education. This group and those who only had completed compulsory education had a higher probability of recurrent unemployment spells. Females with very low education had a higher probability of withdrawal from the labour market, which is probably why we found no significant relationship between education and recurrent unemployment spells in this group.

Our theoretical assumption for the model was that the last job would have the same characteristics as the respondents' first job, implying that they are stuck in the secondary labour market. However, an alternative explanation could be that the young people actually entered the primary sector, but due to several unemployment spells they ended up in the secondary market. The results here support the first explanation. When we analysed the risk of unemployment at the time of the interview, where we have no problems in interpretation of the time order of the variables, we found the same effects regarding the job characteristics of their last job and risk of unemployment as in the analyses of recurrent unemployment spells.

In Chapter two we discussed the question of whether unemployment breeds unemployment, in the literature described as state dependence or history dependence of unemployment. One of the complications regarding the kind of simple picture of long-term unemployment as problematic and short-term unemployment as no problem at all, is research that shows that risk of future unemployment is closely related to previous unemployment experience. In the literature there are two main explanations of why a person becomes long-term unemployed (Colbjørnsen et.al. 1992:10): One is state dependence which implies that the frequency and the duration of previous unemployment is closely related to future unemployment. The other is heterogeneity/selection, i.e. that over time the group of unemployed will consist of persons with special personal attributes. State dependence may be caused by changes in preferences, skills and other personal attributes as a consequence of unemployment, which may partly influence future unemployment and job probabilities (e.g. self-esteem, knowledge, motivation).

There are different types of state dependence which have been dominating in research.

In our analyses we have differentiated between two kinds of state dependence: occurrence dependence and lagged duration dependence. Occurrence dependence means that the number of previous unemployment spells will influence the probability of continuous unemployment also in the present and future. For instance is it possible that job history or the work history of the unemployed may influence hiring and decisions of dismissal.

Lagged duration dependence is described by the fact that the probability of continuous unemployment is related to the total duration of previous periods of unemployment. One explanation could be disqualification as a result of previous unemployment. However, as previously discussed, it is difficult to separate the effect of true state dependence from unobserved heterogeneity.

When we analysed the risk of unemployment we looked at the influence of different state dependence such as lagged duration dependence (previous duration of unemployment) versus occurrence dependence (the number of previous spells of unemployment). Interestingly we found equal effects of lagged duration dependence for males and females. However occurrence dependence was present only for males and for females. The

results are in accordance with previous research in Norway, which also found that previous unemployment spells had a weaker effect for women than for men (Hammer 1997). The question is why this is the case. If the results could be explained by selection effects, it is hard to see why such effects should be different for males than for females. It is reasonable to assume that the different results are caused by the gender segregation of the labour market. Females work predominately in the public sector and males in the private sector. However, using bivariate analyses (fig. 5.2) we found that whether they worked in the private or the public sector was not related to the number of unemployment spells or the risk of unemployment at the time of interview. Furthermore, the multivariate analyses showed that it was type of occupation which was important. However, as showed in previous research and also documented in this report, occupation is also strongly segregated according to gender.

We have previously discussed whether those who experience recurrent unemployment spells belongs to a different group than those who experience long-term unemployment. Our results presented here seem to indicate that this may be partly so. When we looked at the longest spells of unemployment, females had longer duration of unemployment than males (Fig 4.3). On the other hand, males had experienced more unemployment spells. Further analyses showed that there was no relationship between risk of long-term unemployment and recurrent unemployment periods. Quite the contrary, both males and females with the longest duration of one unemployment spell had less probability of recurrent spells.

The multivariate analyses also indicate that males are more vulnerable to recurrent unemployment, probably because they work in occupations which are more vulnerable both for cyclical fluctuations in the economy and to seasonal variations. It is hard to argue that unemployed males have more personal problems than females, or that they are more motivated for voluntary unemployment than females. The results therefore indicate that it is structural features of the labour market that explain the different results for males and females.

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The Norwegian Context

Introduction

This chapter provides some information about the Norwegian education system and labour market, the unemployment benefit system, social secur ity system and labour market measures. Despite the fact that Norway, compared to other OECD countries, has experienced low unemployment rates during the last twenty years, the youth to adult unemployment ratio[4] has been among the highest in the OECD. In 1996 it was 3.4, exceeded only by Korea (3.8), Greece (3.8) and Italy (3.6). The Norwegian figure has been both of the same order and consistently among the highest in the OECD since the mid 1980s.[5] Where youth to adult unemployment ratios are high, this can be an indication that there are structural barriers to young peoples' labour market entry (OECD 1998b).

Economic Factors

From 1987 to 1993 total employment, according to labour force surveys (Statistics Norway), decreased by 122 000 persons (from 2 126 000 to 2 004 000), while those registered unemployed (i.e. Directorate of Labour) increased by 85 700 persons (from 32 400 to 118 100, i.e. from 1.5 to 5.5 % of the labour force of the previous year). From 1993 to 1996 total employment increased by 133 000 persons to 2 137 000. Registered unemployment decreased by 27 200 individuals to 90 900 in 1996 (4.1 % of the labour force) (Opdal, Schøne og Torp 1997:7). In Table 1, some demographic information for the year 1996 is given:

[4] Defined as the ratio of the unemployment rate among those aged 15–24 to the rate among those aged 25–54 (OECD 1998b).

[5] Norway's unemployment figures include full-time students who are looking for work. Some other countries' do not, and this inflates the youth to adult unemployment ratio relative to the OECD average (OECD 1998b).

Table 1. The Norwegian population. Distribution by age and gender. 1996.

	Thousands (%)
Total population	4 370
– under 15 years	854 (19.5)
– 15–64 years	2 822 (64.6)
– 65 years and over	690 (15.9)
Males – total	2 161
– under 15 years	438
– 15–64 years	1 434
– 65 years and over	288
Females – total	2 209
– under 15 years	416
– 15–64 years	1 387
– 65 years and over	406

Source: OECD (1997a:388).

Labour Force Participation

In the 1980s the trend from the previous decade continued with a strong increase in the labour force participation rate for women, combined with a marked reduction among males aged 55 and more (Sosialt utsyn 1998). From 1970 to the mid 80s the labour force participation among youth aged 16–19 varied between 40 and 45 %. It increased up to 53 % in 1987, but since then it has decreased again (Roalsø 1997). In Table 2, the labour force participation rate for different age groups in 1996 is shown:

Table 2. Labour force participation rate by age and gender. 1996. %

Age	Men	Women
16–24	62.0	57.3
25–54	92.1	81.7
55–64	73.2	59.2

Source: OECD (1999a, Annex, Table C).

Despite the fact that Norwegian women's labour force participation rate comes closer to men's rates than ever, there has been no change in occupational choice (Sosialt utsyn 1998). In fact, Scandinavian labour markets are often characterised by gender segregation (Esping-Andersen 1990), and research indicates that gender segregation is especially pronounced in Norway (Hansen 1995). In 1995, 44 % of female employees worked in the

public sector, compared to 20 % of male employees (Sosialt utsyn 1998). In Table 3 sector for males and females in 1995 is shown.

Table 3. Sector by gender. 1995. %

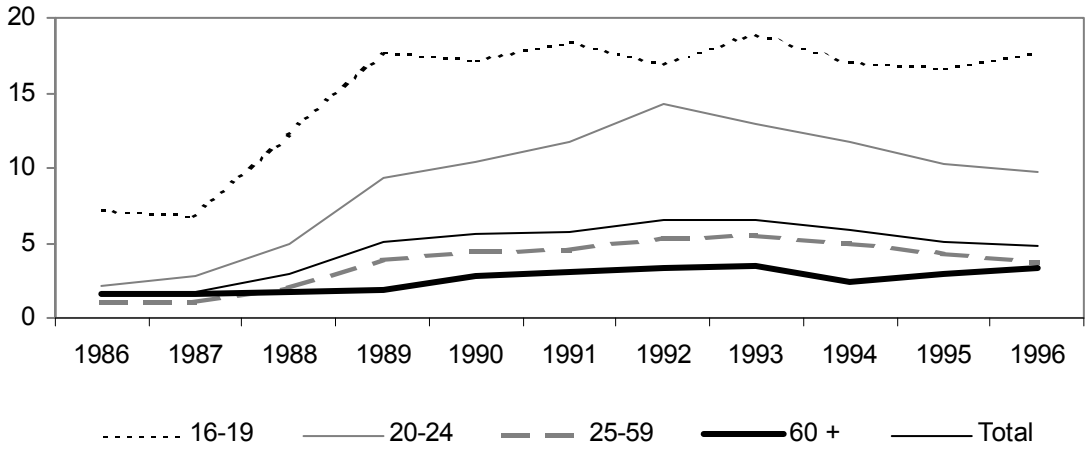
	Males	Females
Sector		
Agriculture, forestry and fishing	7	2.9
Industry	34.8	10.2
Services	58.1	86.8
Sector		
Agriculture, forestry and fishing	7.0	2.9
Mining and quarrying	1.6	0.6
Manufacturing	20.9	8.3
Electricity, gas and water	1.6	0.4
Construction	10.7	0.8
Wholesale and retail trade, restaurants and hotels	15.6	19.5
Transport, storage and communication	10.9	5.4
Financing, insurance, real estate, and business services	8.4	7.1
Community, social and personal services	22.9	54.6
Activities not adequately defined	0.3	0.1

Source: OECD (1997a:392–395).

Unemployment

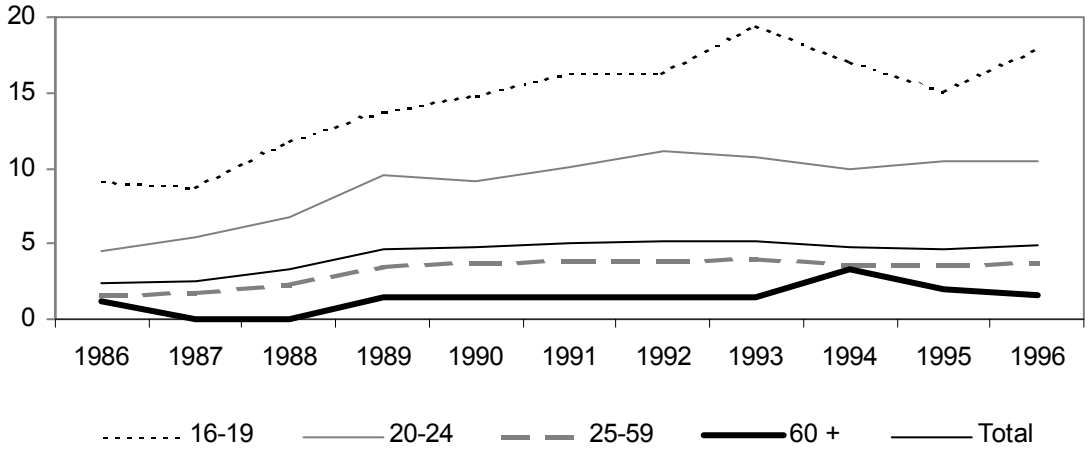
The last 25 years Norway has experienced an unemployment rate of 5 % or less. The only exceptions are the years 1990–1994. The figures below give a picture of the distribution for the last ten years by age and gender.

Figure 1. Unemployment rates by age. 1986–1996. Men. %



Source: OECD (1997a: 572–573).

Figure 2. Unemployment rates by age. 1986–1996. Women. %



Source: OECD (1997a: 572–573).

In 1996, 30 % of the unemployed had been unemployed for at least 6 months, and 14 % had been unemployed for 12 months or more. The corresponding proportions for men and women were 31.0/15.5 and 28.6/12.2 (OECD 1998a). We find the largest proportion of long-term unemployed in the oldest age groups. In 1995 the average duration was 18 weeks in the age group 16–19 and 25 weeks in the age group 20–24. Among those aged 55 and more the average was 49 weeks (Roalsø 1997). Among the unemployed aged 15–64, 15.4 % had been unemployed for 12 months or more in 1996, compared to 35 % in the age group 45–64 (OECD 1998a).

In the OECD countries, unemployment rates generally decrease as the level of educational attainment of workers increases. This appears to hold generally across countries with widely different distributions of educational attainment in their population and with labour markets subject to varying degrees of governmental regulation and rates of job creation (OECD 1996a). Table 4 shows youth unemployment rates by age and educational attainment in Norway in 1994.

Table 4. Youth unemployment rates by age and educational attainment. 1994. %

	20–24	**25–29**
Below upper secondary	16.0	16.0
Upper secondary education	11.5	6.7
Non university tertiary education	–	6.2
University level education	–	4.5
All levels of education	11.1	7.1

Source: OECD (1996a).

Part-time and Temporary Employment

Part-time and short-term contracts are widely used in Norway, both in the private and the public sector (Rasmussen 1998). However, a special feature in all the Nordic countries is that temporary employment is more often used in the public sector (Nätti 1993). About 13 % of Norwegian employees were temporarily employed in 1996 (Statistics Norway 1997b). In 1997, 8 % of male employees and 12 % of female employees in full-time jobs had temporary contracts.[6] Among part-time workers, the corresponding proportions were 30 % for men and 17 % for women (OECD 1999a:28, Table 1.9). In 1997, about 60 % of those working in temporary jobs wanted a permanent job. Temporary jobs are most common among youth – 36 % of the employed in the age group 16–24 had a temporary job in 1997, compared to 20 % among those aged 25–29, and 8 % in the older age groups (Statistics Norway 1997b). An important question is whether to use fixed-term/temporary contracts as a route for getting youth into the labour market, because this appears to be a useful route for some, but not for others. Trying to ensure that temporary employment involves a training dimension may be worthwhile pursuing (OECD 1998a). Table 5 shows the incidence and composition of part-time employment in 1996. Table 6 takes into account differences related to age and gender.

Table 5. Incidence and composition of part-time employment, 1996. %

Part-time employment as a proportion of employment: men	8.0
Part-time employment as a proportion of employment: women	37.3
Part-time employment as a proportion of total employment	21.4
Women's share of part-time employment	80.1

Source: OECD (1998a: 206.)

[6] Temporary jobs are here defined as those for which termination is said to be determined by objective conditions as such as reaching a certain date, completion of an assignment or return of another employee who was temporary replaced (OECD 1999a:28, Table 1.9).

Table 6. Proportions in the labour force in different types of employment by age and gender. Year average (1997). %

	All 16–74	All 16–19	All 20–24	Men 25–54	Women 25–54	Men 55–66	Women 55–66	All 67–74
All (N in 1000)	3 154	212	292	977	936	223	230	283
Employed[7]	69	38	67	89	80	68	54	7
Part-time[8]	13	68	33	6	42	10	52	63
Full-time[9]	73	32	66	94	57	89	47	37
Unemployed	2.95	7.55	6.16	2.87	2.78	1.35	0.87	–

Source: http://www.ssb.no/emner/06/01/aku/tab-1999-08-12-03.html (Statistics Norway)

The tables above confirm the impression given by, among others, Nätti (1993), who, from a study of part-time and temporary employment, i.e. atypical employment, concludes that part-time employment is a gender-specific phenomenon, while temporary employment to a larger degree is age-specific.

Minimum wage

Nearly all OECD countries have some form of minimum wage-setting arrangements in accordance with one or several of the relevant ILO conventions. Currently, 17 countries have a statutory or national minimum wage which cuts across almost all sectors of the economy (OECD 1998a). *Employment Outlook 1998* gives a review of different minimum wage arrangements in OECD countries. Norway is not included there, probably because minimum wages in Norway, set collectively or individually, are more differentiated according to workers' age, experience and qualifications compared to other countries. Thus it is meaningless to talk about one universal minimum wage. Table 7 shows the average wage by age and gender in 1997.

[7] Per cent of all.
[8] Per cent of all employed.
[9] Per cent of all employed.

Table 7. Average wage (wage/salary, fees, etc.) 1997. In NOK and EURO.

	Average (NOK)	Average (EURO)[10]
Men and women (all)	171 578	20 950
– less than 20 years	24 005	2 931
– 20–30	135 086	16 494
– 31–50	214 814	26 229
Men (all)	205 106	25 043
– less than 20 years	25 729	3 142
– 20–30	157 768	19 264
– 31–50	259 747	31 715
Women (all)	134 642	16 440
– less than 20 years	22 006	2 687
– 20–30	110 330	13 471
– 31–50	165 974	20 265

Source: http://www.ssb.no/emner/06/05/lonntreg/tab-1999-08-27-05.html (Statistics Norway).

The table is not broken down by sector or working time, and it does not take into account students' loans etc. What we do know from other sources, is that since early in the 1980s, the proportion in low wage positions[11] in all age groups has decreased. The only exception is the proportion for those aged 16–24. This applies especially for young women's wage conditions. Almost 80 % of young women were in the low wage category in 1995, compared to 60 % of young men (Roalsø 1997).

Norwegian Education System[12]

Schooling in Norway is traditionally free and public. At 6.8 % of GDP, direct public expenditure on educational institutions in Norway is the highest in the OECD. The 19 counties are responsible for upper secondary education, including the employment of teachers. Tripartite vocational training committees within each county bear major responsibilities for implementing vocational training on behalf of the county authorities. The 435 municipalities are responsible for primary and lower secondary education.

[10] 1 EURO = 8.19 NOK (12.11.1999).
[11] Hourly wage under 85 per cent of the average in the industry (Roalsø 1997).
[12] This section is based on OECD's review (OECD 1998b) of the Norwegian education system.

Table 8 shows educational level, i.e completed education, in the Norwegian population in 1996.

Table 8. The populations' educational level. 1. October 1996. %

Age	Elementary school	Upper secondary school	University/higher education
All	25.3	53.8	20.9
16–19	30.5	69.4	21.2
20–24	6.9	71.9	21.2
25–29	7.6	60.8	31.6

Source: http: //www.ssb.no/ukens_statistikk/utg/9750/2-1t.txt (Statistics Norway 1997c)

Norwegian children typically start school at the age of six[13] and complet ten years of compulsory education – 7 years in primary school and 3 years in lower secondary school. Around 97 % continue to upper secondary school. Educational participation rates in Norway are high by OECD standards. Table 9 compares the educational participation rates in Norway with the mean for the OECD countries.

Table 9. Educational participation rates for ages 15–24. 1995.

Age	15	16	17	18	19	20	21	22	23	24
Norway	100	95	90	83	49	43	41	38	34	27
OECD country mean	93	88	79	64	47	39	33	27	21	17

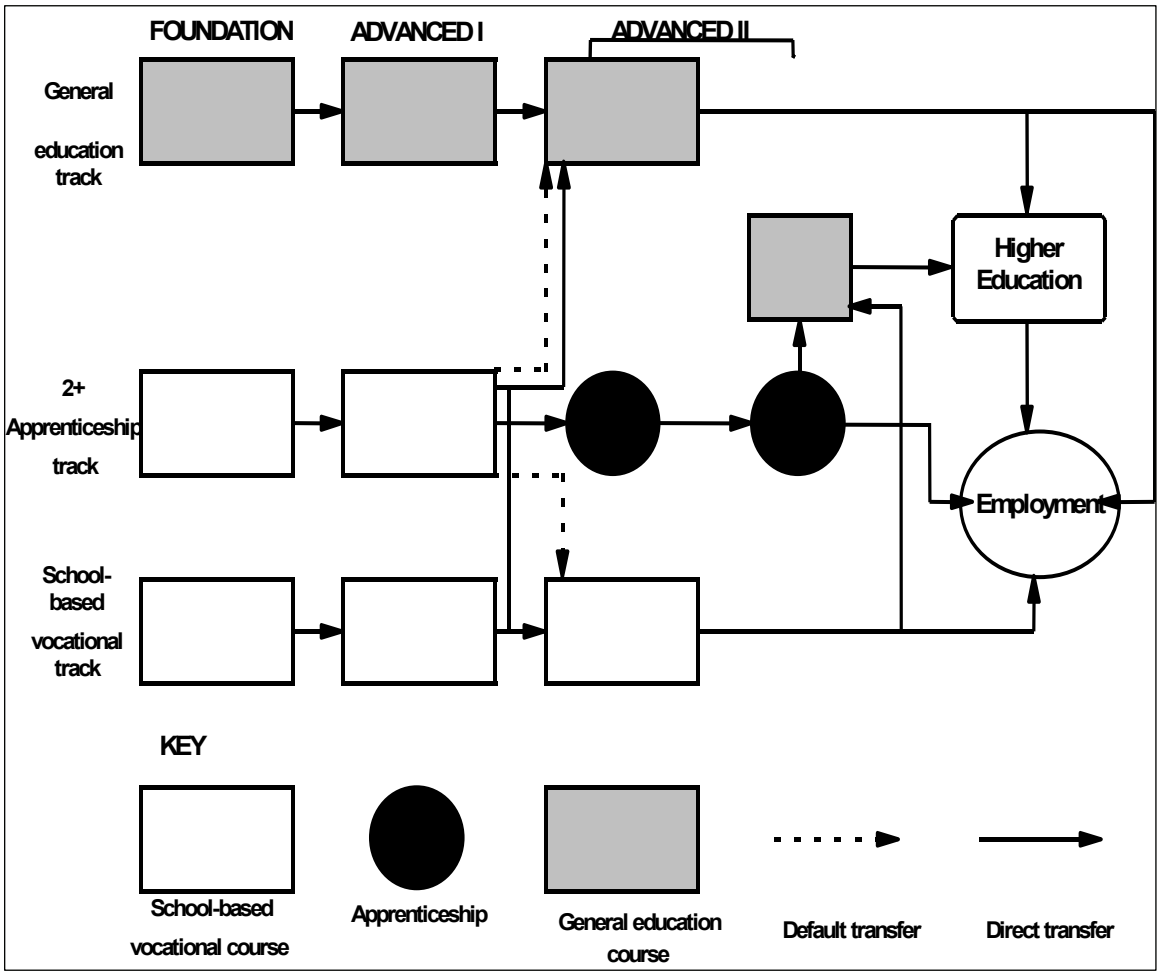
Note*: The participation rate is derived from the net enrolment in public and private institutions as measured by head counts.*

Source*: OECD (1998b).*

The Norwegian education system is commonly characterised as having two tracks that lead to working life: a general education track that leads to work through higher education; and a vocational track that leads to work through the 2+ apprentice system. However, it may be more accurately described as a three track system. Figure 3 gives a schematic representation of the principal links between the tracks, and Table 10 estimates their size.

[13] Before the Autumn 1997 the starting age was seven and the compulsory phase of schooling nine years.

Figure 3. Principal connections between and exit points from Norway's three principal tracks from initial education to working life.[14]



Source: OECD 1998b. Figure 1

Table 10. Estimated distribution of students across the general, school-based vocational and apprenticeship tracks by grade level. 1996. %

Track	Foundation	Advanced I	Advanced II
General education	48	51	63
School-based vocational	27	23	19
Apprenticeship	25	26	18
Total	100	100	100

Source*: OECD (1998b), Table 3.*

[14] The figure does not show the special pathways introduced in February 1998 or those trades in which an extra year of schooling is undertaken prior to commencing the apprenticeship (OECD 1998b, Figure 1).

About half of those who commence upper secondary education enter *the general education track*. This track has to exit points: Either they move directly into work, or they continue to university or non-university tertiary education. It is also possible to commence this track after the Advanced I level (se «default transfers» in Figure 3). Around 25 % of those who commence upper secondary education enter *the school-based vocational track*. This track has two branches. The first commences at the Foundation level, and consists of three years that lead to a vocational qualification (eg. health and social studies courses, mapping and surveying, graphics, design, forestry and agricultural courses), but not an apprenticeship. Around 75 % of those taking Advanced II vocational courses at school appear to be in this branch of the track. The second branch of the school-based vocational track is a «default» branch, entered from the Advanced level I by those from the apprenticeship track who cannot obtain an apprenticeship. This applies to perhaps 25 % of those taking a school-based Advanced II vocational route. *The 2+ apprenticeship track* is entered by around 25 % of those who commence upper secondary education, and accounts for a slightly more than one in six of those who leave upper secondary education.

Beginning with the cohort that commenced upper secondary school in 1994, Norway embarked upon an comprehensive reform of upper secondary education, called *Reform 94*. Reform 94 created a statutory right to three years of upper secondary education, leading either to a university entrance qualification or to a vocational qualification. The right has to be exercised within four years. Those entering upper secondary education are given the right to one of their first three choices of a Foundation course, but they are given no guarantee that they will be able to enter their preferred Advanced I, Advanced II or apprentice course. Those who drop out of the system, have up to a year to reinsert themselves without formally losing their entitlement to the opportunity to gain an upper secondary qualification.

The Protection System

Unemployment Benefits

There is a current debate about the links between generous welfare arrangements and the composition and level of unemployment. Benefit systems differ when it comes to *coverage* (e.g. the proportion of potentially unemployed people covered by unemployment benefits), *compensation level* (e.g.

the benefit in % of earlier wage), *duration* and the basic conditions for being entitled to benefits (Halvorsen 1994).

The unemployment benefit system in Norway is part of the main general insurance system, the National Insurance Scheme, which is financed through contributions from employees, employers, self-employed persons and the Government. Unemployment benefits may, under certain conditions, be given to unemployed job-seekers, laid-off persons, partially laid off-persons, partly employed job-seekers with reduced working time (40 % reduction) and to job-seekers who want to retain the benefit instead of programme grants during course participation or in trainee places (Ministry of Labour and Government administration 1998/1999).

The maximum length of the benefit period depends on previous income. Income from work amounting to NOK 85 000 (EURO 10 378[15]) gives a benefit period of three years, and less than this amount gives a benefit period of 1.5 years (Ministry of Labour and Government administration 1998/1999). As of 1 January 1997 the rules were substantially modified, and previous income from participation in labour market measures no longer qualify as base income for a new unemployment benefit period (Directorate of Labour 1997).

Job-seekers who have been registered for at least 3 out of the last 10 working days are entitled to benefits (Ministry of Labour and Government administration 1998/1999). In 1996, 49 000, or 43 %, of all recipients of unemployment benefits were partially unemployed or partially laid off (Directorate of Labour 1996). Daily cash benefits are based on earlier income from work, which means that young people with no work experience are not entitled to unemployment benefits. It is also a criteria that unemployed people have had income during the previous year from ordinary work amounting to a minimum of NOK 53 125 the last year, or NOK 42 500 on average over the last three years (Ministry of Labour and Government administration 1998/1999).

With a compensation level at about 60 %, it is obvious that young people without previous full-time employment financially have to rely on other sources than the state. One alternative is, of course, their own family. Another is basic social security. In 1998 Norway's expenditures on social assistance reached 3.7 billion NOK. 132 500 persons received some kind of

[15] 1 EURO = 8.19 NOK (12.11.1999).

social assistance during the year.[16] We find the highest proportion of recipients among those aged 20–24. About 10 % of this age group received some kind of social security in 1995 (Roalsø 1997).

One important factor when it comes to young peoples' living/economic conditions, is whether they live alone, live with a partner, or still live with their parents. Table 11 gives the trend during the period 1980–95 in the proportions in different age groups still living with their parents.

Table 11. Proportions in different age groups living with their parents.[17] 1980–1995. %

	1980	1983	1987	1991	1995
Men					
16–19	86	81	86	87	84
20–24	46	49	53	49	42
Women					
16–19	84	73	76	75	80
20–24	24	23	26	18	21

Source: Roalsø (1997).

The main difference between males and females is in the age group 20–24, where the proportion living with their parents is more than double for young males compared to young females. This pattern has been stable from 1980 to 1995, but also for those aged 16–19, the proportion living with their parents is highest among the males. This gendered pattern is probably partly explained by looking at differences in place of residence. In 1995, 51 % of young men in the age group 16–24 in densely populated areas (i.e. 100 000 inhabitants or more) lived with their parents, compared to 49 % of young women. However, in rural areas 68 % of the males, compared to 32 % of the females lived with their parents (Roalsø 1997).

Labour Market Policy

Active labour market policy in the Nordic countries has been closely related to the commitment to maintain a high level of employment and preferably full employment. «Active» labour market policy has mainly been used to refer to public programmes, which seek to qualify and (re)train participants

[16] Source: http://www.ssb.no/emner/03/04/30/soshjelpk/tab-1999-10-19-08.html.

[17] This proportion answered that they live with their parents when they were asked about how often they see/meet their parents (Roalsø 1997).

in order to make them able to find gainful employment. «Passive» labour market policy primarily consists of dispensing unemployment compensation (e.g. a daily allowance provided by social insurance schemes, or means-tested social assistance) (Drøpping, Hvinden and Vik 1999).

From 1987 to 1993 the participants in ordinary labour market measures increased by 50 500 (from 6800 to 57 300). In addition, there was an increase in the level of rehabilitation measures (3900 persons on an annual basis) and a considerable increase in the number of places in tertiary education. Because of the reduced unemployment rate, the number of places in ordinary labour market measures decreased by 20 300 to 37 000 during the years 1993–1996 (Opdal, Schøne og Torp 1997).

As mentioned earlier, the educational reform *Reform 94* gave youth under 20 a guaranteed right to education or training or a job (Drøpping, Hvinden and Vik 1999). Since 1994, the Labour Market Administration is responsible for providing an offer to those who do not wish to exercise their right to secondary education (Directorate of Labour 1995). When the unemployment rate was at its highest level in 1993, young unemployed were given priority for labour market measures. Table 12 shows the proportions among job-seekers in different age groups that participated in labour market programmes during the years 1993–1995.

Table 12. Proportion of job-seekers in different age groups who participated in labour market measures. %

Age	1993	1994	1995
16–19	61	59	51
20–24	39	42	37
25 and over	37	40	36

Source: Roalsø (1997).

Labour Market Measures

We can distinguish between two main types of labour marked measures: those which give the participants some kind of formal educational qualification, and those which mainly provide the participants with work experience. Qualification measures are some of the most important measures to combat unemployment, and in 1996 they accounted for 65 % of all labour market measures for ordinary job-seekers (Directorate of Labour 1996).

We can thus distinguish between two types of measures – *qualification* measures and *employment* measures. Employment measures can either be

work training in organised groups or employment in ordinary jobs. Table 13 shows the distribution of different types of measures in 1996, and Table 14 gives a description of the most important measures directed towards unemployed youth:

Table 13. Participants in ordinary labour market measures by type of measure. 1996. Annual average.

Type of measure	**N**	**%**
Public employment sector employment measures	6 687	18.1
Wage subsidies to employers	3 425	9.3
Qualification measures, of which	24 037	65.0
– labour market training/education	7 994	21.6
– Traineeships/Sponsorship	16 043	43.4
Temporary substitute places	2 800	7.6
Other measures for individuals	13	0.0
Total	36 960	100

Source: Norwegian Directorate of Labour (1996).

Table 14. Description of some important labour market measures for unemployed youth.

Type of measure	**Purpose**	**Target group**	**Duration**
Qualification measures			
– Labour market training/ education	Gives vocational training courses, which consist of class-room education. Also possible with general school courses at secondary or upper secondary level. The aim is to qualify unemployed to permanent employ-ment, to reduce mismatch between the labour markets' demands and the job seekers' competence, and also to motivate unemployed to further edu-cation. Thus, these measures have a two sided goal; to strengthen job seekers' skills and to meet the labour markets' demand for employees with special skills.	The scheme is directed towards unemployed and those in an insecure employment situation. The participants have to be older than 19, with the exception of people on rehabilitation.	Up to ten months.
– Sponsored traineeship	The aim of this measure is to improve the job seekers' possibilities to gain ordinary work or training, and it provides youth with working experience and training in public or private enterprises.	Young people choosing not to use their statutory right to upper secondary education, and newcomers on the labour market who lack sufficient competence and have special needs for organisation, training and follow-up.	Usually up to six months, but for persons with special needs up to ten months.
– Temporary Substitute Places	Give the unemployed work experi-ence in public and private enterprises, while employees are given leave to commence education that raises the skill level at the work place.	This measure is mainly intended for unem-ployed with relevant competence or working experience. Also used for long-term unem-ployed.	Up to ten months.
Employment measures			
– KAJA (Skills, work and job creation)	Give long-term unemployed meaningful and useful tasks, which help them to sustain their capacity for work, gain new knowledge and increase their possibilities to get ordinary employment. This is work training in organised groups.	Long-term unemployed who risk permanent exclusion from the labour market.	Up to ten months.

Source: Norwegian Directorate of Labour: Annual reports, *Ministry of Labour and Government administration (1998/1999). Halvorsen (1994).*

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Appendix

Table 1. Descriptive statistics on continous variables.

	Min.	Max.	Mean	s.d.
Times unemployed	1	20	2.62	1.96
Total unemployment experience	3	317	21.21	19.14
Age (in 1995)	18	24	21.6	1.73
Mental health	1	4	1.59	0.49
Work involvement	1	5	1.86	0.79
Hourly wage in last job (kr.)	15	210	79.20	15.90

Table 2 Summary table: dependent variable «times unemployed». %[18]

Independent variables	1–2 times	3 times	N
Men	**54**	**46**	630
Women	**70**	**30**	474
18–20 year olds	**72**	**28**	336
21–24 year olds	**56**	**44**	765
Education level: compulsory school	**49**	**51**	175
– vocational education (1–3 years)/apprenticeship	**54**	**46**	452
– upper secondary school/higher education	**73**	**27**	367
– other	**68**	**32**	96
Father's highest education level: compulsory school	57	43	352
– vocational education (1–3 years)/apprenticeship	62	39	304
– upper secondary school/higher education	66	34	201
– other	62	35	124
Did not live with both parents up to the age of 16	**55**	**45**	289
Lived with both parents up to the age of 16	**63**	**37**	815
Rural area	**53**	**47**	315
Town/suburb	**63**	**37**	329
City	**72**	**28**	187
Completed vocational/upper secondary school	**64**	**36**	859
Failed to complete vocational/upper secondary school	**50**	**50**	245
No children	62	38	702
Children	59	41	402
Girls with children (interaction)	**70**	**30**	239
Do not live alone	62	38	832
Live alone	58	43	233
Very good/good health	62	38	856
Neither good or bad/poor health	58	42	240
Not caught by the police taking part in an illegal activity	**67**	**34**	585
Caught by the police taking part in an illegal activity	**51**	**49**	223
Drunk once a month or less the last 12 months	63	37	541
Drunk 2–3 times a month or more the last 12 months	60	40	265
Work involvement (range 1–5)[19]	**1.87**	**1.84**	1094
Mental health (range 1–4)[20]	1.56	1.63	1104

[18] Bold figures indicates that the differences are significant ($p<.05$).
[19] Those with low work involvement have high scores on the index.
[20] Those with bad mental health have high scores on the index.