



Finding the right job

School-to-work transitions
of vocational students in
the Netherlands

Elisabeth Dumhs

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Op zoek naar de juiste baan. De transitie van school naar werk van Nederlandse mbo-studenten

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**Op zoek naar de juiste baan
De transitie van school naar werk van Nederlandse mbo-studenten**
(met een samenvatting in het Nederlands)

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1 Introduction

Each year, around 95.000 people graduate from school-based upper secondary vocational education¹ in the Netherlands. Each of these young graduates has to take important life decisions: do I stay in school and continue training for a higher level degree, or do I start working life? How do I find a good job, and, by the way, what is a good job? Do I take this job offer, perhaps from my internship employer, or do I search for other opportunities? The studies in this thesis are concerned with these questions and with the impact of resources available to the graduate in this crucial phase of their life.

Modern labour markets are characterized by large flows of jobs and workers and a rapid increase in non-standard employment relations. In the wake of the growing flexibilisation of the labour market, the character of school-to-work transitions has changed as well. The search for stable and suitable employment can be long, and often involves multiple changes between jobs, probably including periods of unemployment, as indicated by (relatively) high youth unemployment and a large share of non-standard and low quality employment among first or early jobs (Anxo, Bosch, & Rubery, 2010; Lewis & Heyes, 2017; Research Centre for Education and the Labour Market [ROA], 2017; Ryan, 2001). In addition, job-education mismatch is substantial. Estimates range between 25 to 30% for vertical, and 21 to 46% for horizontal mismatch. That mismatch and (initial) periods of unemployment are widespread has not diminished the importance of finding a high quality entry to the labour market. A bad start is still associated with negative consequences for the individual career (Somers, Cabus, Groot, & Maassen van den Brink, 2019; Verhaest & van der Velden, 2013; Wolbers, 2008a). Finding a stable job also provides the most optimal guarantee for social integration and building an independent, adult life (Plantenga, Remery, & Lodovici, 2013).

The School-to-Work transition: aspects studied in the literature

The school-to-work transition is regarded as one of the major life events. It is widely recognised, however, that the modern school-to-work transition should not be examined as an event, but rather as a period in the life of young adults. A common definition for the

¹ EU standards define upper secondary education as minimum qualification. Students under the age of 23 who leave school without minimum qualification are considered 'early school leavers' by EU standards. In the Netherlands, that minimum qualification refers to a level-2 VET degree (European Commission, 2013).

period, for example used by the OECD and EU, is ‘the time between the end of compulsory schooling and the attainment of full-time, stable employment’ (Ryan, 2001, p. 34; Mills & Präg, 2014). This definition includes the process of vocational orientation and/or career planning and development as well as workplace adjustment (Saks, 2018).

The school-to-work transition has been studied extensively over the last decades and by scholars from various disciplines covering different concerns and topics.

One concern, for example, is to isolate, define, compare and describe trajectories, that is typical sequences of episodes in the school-to-work transition. These trajectories illustrate the growing complexity of the school-to-work transition. Brzinsky-Fay (2007) showed that, on average, school leavers in Europe experienced between 3.5 to 5.8 different episodes in the first five years after school, changing between employment, unemployment, inactivity, apprenticeship, and further education.

Comparing trajectories over time and countries is one way to study the contribution of educational and labour market institutions to successful school-to-work transitions; another major topic in the literature (Hadjivassiliou, Tassinari, Eichhorst, & Wozny, 2016). The OECD monitors the development and improvement of national transition systems, which are defined as “the social institutions and processes through which a society provides its members to make the transition from the education system to the employment system” (van der Velden & Wolbers, 2008).

A third major theme is the contribution of education to transition success. This includes studies that look at the (dis)advantages of different educational pathways for employment prospects after graduation and career prospects later in life, the impact of early school leaving, the balance between skill supply and demand in the labour market (educational mismatch), and the choice to re-enter education for additional training and human capital accumulation or to avoid unemployment in economically difficult periods (Bilicic, Gries, & Pilichowski, 2012; Ryan, 2001).

A large body of literature deals with path dependence in the transition, the fourth major theme, covering the impact of outcomes in the initial transition on future outcomes: how large is the impact of a fragile start on the future career; are temporary jobs a stepping stone or a dead end; do graduates recover quickly from any scarring caused by initial unemployment at the start of working life (Plantenga et al., 2013; Ryan, 2001). The

evidence indicates that a fragile start can have long-term impact on the future career. For example, studies that examine differences between cohorts graduating in a recession and cohorts graduating during economically good times find that the unlucky cohorts are more likely to be unemployed, and are unemployed more often during their career, as well as working for lower wages (Schwandt & von Wachter, 2018; van den Berge & Brouwers, 2017; Cockx & Ghirelli, 2016). Lower and middle educated groups are more affected by the economic situation than higher educated, especially in the long-run.

Finally, the school-to-work transition is studied as an individual accomplishment by the behavioural sciences. Mastering a smooth school-to-work transition is a complex task for adolescents and their environment. First, it represents a personal developmental task: changing identity from dependent child & student to independent adult & worker. Second, choosing and planning a career, searching and finding employment with a specific company, and integrating into the world of work in general and a specific workplace in particular are challenging. Many studies show that the importance of success in all stages of the transition – from vocational orientation to workplace adjustment – should not be underestimated, as they define the course and success of the future career (Saks, 2018). The School2Work research project, of which this thesis is part, mainly falls into this strand of the school-to-work transition literature, with a particular strong focus on the job search behaviour of the graduate. Job search forms the bridge between education & career planning and workplace adaptation, but relatively little attention has been given to this stage in the school-to-work transition literature. Likewise, the empirical job search literature has paid relatively little attention to the new entrant and his particular situation as a job seeker.

The School2Work research project

The School2Work research project set out to study the school-to-work transition of young graduates of secondary vocational education and training (VET) in the Netherlands. At the time of the start of the project, the Netherlands were still affected by the economic crisis and – probably inspired by research on the negative effects of graduating in economically bad times – students were actively encouraged to stay in school for additional education if at all possible (the so-called School-Ex program; Meng, Verhagen, Korthals, & Huijgen, 2014).

There is a large body of literature on the school-to-work transition, but most of the research studying individual behavioural aspects is conducted among university graduates, probably because they are much more accessible to (university based) researchers. Studying the factors that determine success or constitute obstacles for the large group of vocational students by gathering extensive, longitudinal data from this particular population was a major contribution of the School2Work project to the literature.

The School2Work research project is multi-disciplinary in nature and consists of three parts, each focussing on different aspects of the school-to-work transition. Very generally speaking, part one² looks at the role of personal characteristics and social networks in career planning and job search, part two at resources and job search behaviour, and part three at career planning and organisational behaviour in the workplace. This thesis contains the studies that belong to part-project two; more detailed information on the School2Work project is presented in chapter 6.

Dutch vocational education and training (VET)

Secondary vocational education remains the main educational path in the Netherlands. At age 12, pupils in the Netherlands are pre-sorted into either the vocational education track (pre-VET) or the general (or pre-academic) education track based on ability tests and primary school teacher's recommendation. In total, the secondary vocational education system in the Netherlands provides education and training to more than 60% of the Dutch population.

After four years, at the age of 16, most pre-VET pupils enter secondary vocational education and are supposed to make an informed choice out of several hundred different highly specialised vocational training programs, registered with the Department of Education³. As secondary VET is not part of compulsory education, other entry pathways are possible, but almost 90% enter from pre-VET and the vast majority is under 18 when starting a secondary VET-program. The duration of the training programs varies between

² Baay, PE (2015) Making the School-To-Work Transition. A person in context approach. Thesis. Utrecht University.

³ The number of different secondary VET-programs varies by time, source and definition, but ranges from 168 training programs (mbo-opleidingen; MBO Raad, 2018) to more than 700 (vocational courses; Onstenk & Blokhuis, 2007) to 1.150 registered programs (crebo-opleidingen; MBO Raad, 2018).

1 and 4 years⁴, depending on the level of the training program, the organisation, and on the student's ability and educational level prior to entry. Usually, a lower level degree gives access to one or more higher-level degree programs. The so-called "stacking" (Dutch: stapelen) of degrees is common practice: roughly 50% of the graduates on each level choose to enter the labour market, but the other half will continue in a higher level (secondary or tertiary) vocational training (Statistics Netherlands, 2010). Approximately, 40% of the Dutch labour force have a VET-diploma of at least level-2, but no more than level-4⁵.

Dutch vocational education requires students to complete internship training, and, on average, students spend more than half of their school-based training program in the workplace (Onstenk & Blokhuis, 2007). Roughly 20% of all Dutch secondary VET-students follow a workplace-based training program (beroepsbegeleidende leerweg), but since these students are, in fact, employees, they face a different set of problems and challenges with respect to the school-to-work transition than school-based VET-students. Partly because of these differences, workplace-based trainees are not considered in the School2work research project and in this thesis.

The School2Work project followed one cohort of secondary VET-students for 3 years; from the start of the last curriculum year of their training program in September 2011 to October 2014, 2.5 years after their original graduation date. All studies in this thesis are based on this cross-sectional, longitudinal dataset. Following those students for a couple of years confirmed that, while the majority succeeds in obtaining stable employment, for a substantial group the school-to-work transition is less straightforward: students flow into and out of education, employment, and unemployment. Figure 1.1 shows the flows between those states among participants in both the first and second post-graduation wave of interviews, that is 0.5 and 1.5 years after graduation (December 2012 to December 2013).

⁴ It is common for students to take longer to complete a training program. In 2011, a study by eco showed that even among students with high pre-VET degrees at least 13% took more than 4 years to finish a level-4 degree (Petit, Neuvel, & van Esch, 2011).

⁵ Dutch VET level-2 to 4 corresponds to an ISCED level-3 education (Statistics Netherlands, 2018b).

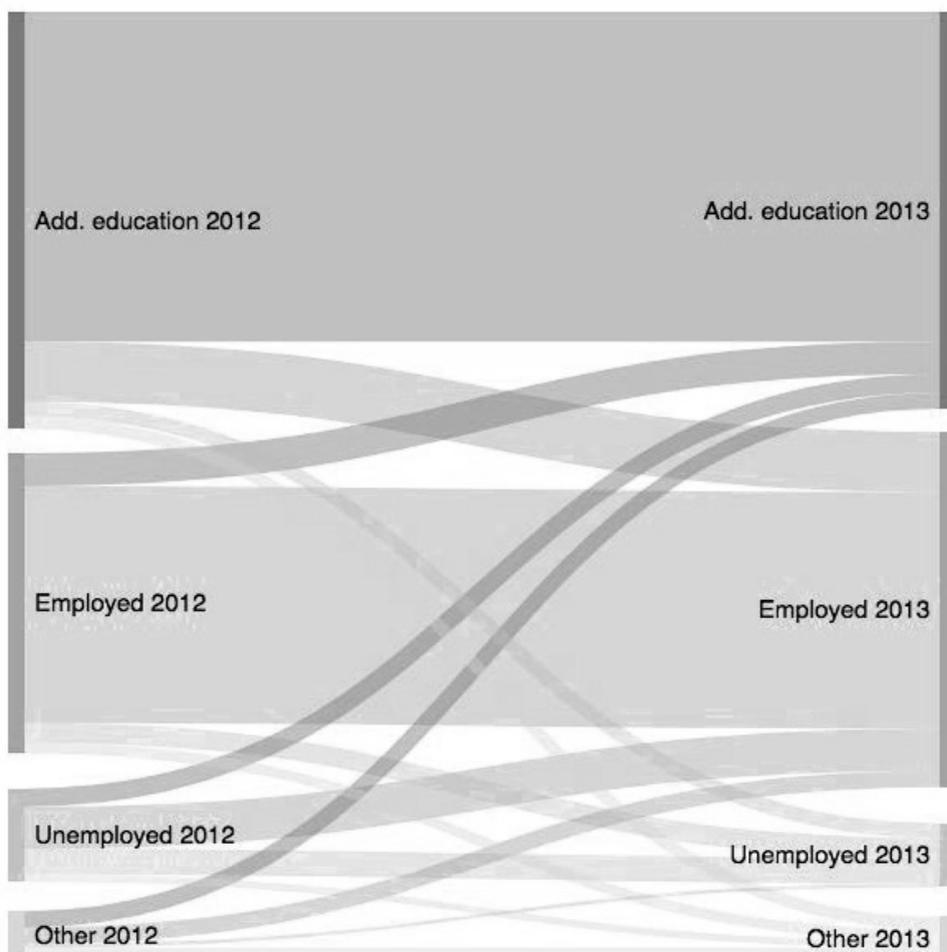


Figure 1.1 Flows between additional education/ employment/ unemployment/ inactivity between 0.5 and 1.5 years after graduation; Dec 2012 to Dec 2013

Finding the right job

The studies in this thesis focus on the search for the first post-education job (project 2 of the School2Work research project). The basic theme connecting these studies can be summarized in the following research questions: how do the availability and accessibility of information, guidance, and financial resources influence the transition? How do VET graduates perceive and use the available information, guidance, and financial resources, how are they and is their behaviour influenced by those resources? What information, for

example, do VET graduates have when taking the first steps on the labour market; that is: what are their wage expectations and are these expectations influenced by their own financial resources? Does information and career guidance impact the efficiency and effectiveness of the actual job search process and thus the quality of the job found? How do the graduates weight the costs of investing in the future (job search effort, additional education) against the benefits of finding a better job? In addition, we are interested in the differences between different groups of graduates, partly because of differences in (un)employment rate between, for example, native Dutch and non-native Dutch graduates (Dagevos, 2006). The difference in labour market position may be explained by differences in the availability and accessibility of resources while at the same time there may be differences in the way in which these resources are used.

The studies in this thesis use a job search theoretic framework to investigate the contribution of resources - career guidance, information, and money - on the school-to-work transition. Saks (2018) stresses the importance of job search in the school-to-work transition: "Job search is in many ways the most important stage of the School-to-work transition given that it has a direct effect on the amount and type of information that job seekers obtain about job openings, the number of job opportunities from which a job seeker may choose, and ultimately the type of job and organization in which the student job seeker will obtain employment."

Standard job search theory models the probability to enter employment as determined by three elements. First, the likelihood of receiving a job offer, second, the wage distribution of job offers and, third, the financial resources while searching. This theoretical framework applies to new entrants as well as the adult unemployed, even if there are important differences between those two types of job seekers. Saks (2018) explains, for example, that new entrants are more likely to rely on formal support systems, for example college placement services, since they have less experience and a smaller network than the adult unemployed. They have less access to financial support (credit constraints as well as unemployment benefits), but also fewer or no financial obligations than adult unemployed. Finally, partly resulting from fewer obligations, postponing job search by staying in school is a more realistic option for new entrants than for adult unemployed. This option is usually not considered in job search theory which focuses exclusively on re-employment and unemployment duration. We study the three

elements of the job search process keeping the differences between adult unemployed and the job seeking graduates in mind and incorporating them into the analysis.

Likelihood of receiving a job offer

The likelihood to receive a job offer is largely determined by labour market conditions, but can be influenced by individual search effort: given the state of the labour market, more search effort will result in more job offers. Starting job search early, well before graduation, has been shown to improve employment prospects after graduation. At the same time, research has found that students tend to 'devote less effort to job search than optimal' (van der Klaauw, van Vuuren, & Berkhout, 2005).

The first study included in this thesis investigates the impact an in-school mentor can have on the school-to-work transition by stimulating and supporting early job search activities. In Dutch secondary vocational education, each student is assigned a mentor. The mentor is relatively autonomous in determining when mentoring conversations take place and what is discussed. We hypothesize and test a model where mentoring can influence the school-to-work transition in three ways: improving the efficiency of job search by training job search skills (coaching), encouraging more job search by improving students' self-efficacy (coaxing), or stimulating higher levels of effort by more direct means, for example by monitoring progress and activities (controlling).

Wage distribution

The wage distribution is determined by the value of the personal characteristics, such as educational attainment, work experience, and skills/ ability, on the local labour market. In the job search process, the wage distribution is taken as given and the foundation of the job seekers search behaviour. However, job seekers cannot observe a wage distribution, so behaviour is based on the job seeker's *beliefs about and perceptions of* labour market conditions. Overestimating the true wage distribution leads to inefficient job search and increases unemployment duration (McCall, 1970).

The second study in this thesis investigates differences between students with a western family background and students with a non-western family background with respect to labour market expectations. Youth unemployment is particularly high among youth of non-western family background. While labour market discrimination plays an important role in the weak labour market position of non-western people, as several studies have

shown, other factors that could contribute to the disadvantage are less well researched. Labour market entrants have relatively little labour market experience, a major source of information for job seekers. Accurate information is a crucial element in efficient job search, as it determines the efficiency of job search. The more unrealistic a job seeker's demands, given actual chances on the labour market, the longer it will take to find what they are looking for. We explore whether differences in wage expectations contribute to different early labour market experience between western and non-western graduates.

Financial resources while searching

Current financial resources while searching are a major source of heterogeneity between job seekers. They determine the individual evaluation of current and possible future wage offers: the higher current resources, the less attractive and acceptable a particular job offer seems. Financial resources thus act as a subsidy to search for better quality re-employment. However, as reservation wages increase and/or the incentives to search for a job decrease, expected unemployment duration also increases.

The third study in this thesis investigates the contribution of financial resources to the school-to-work transition. Empirically, the effect of financial resources on unemployment duration has been confirmed repeatedly for the adult job seeker and the unemployment benefits they receive. We explore whether side job earnings and/or pocket money influence the students' behaviour in similar ways, taking into account that graduates have an additional option, which is less relevant for the adult unemployed: further education.

Resources matter

The studies in this thesis contribute to the understanding how resources affect the school-to-work transition not least by collecting information that is not usually available about mentoring, information/ expectations (reservation wages) and money from formal and informal sources. Following the VET-students during their last school year and first year after graduation, we find that their school-to-work transition is, perhaps not necessarily determined, but certainly shaped by their mentors, their expectations and their financial means. Mentors seem to be able to shape the job search behaviour of their students 'en passant', while focussing on other (important) issues, e.g. education. The initial wage expectations of students with non-western family-background, which are substantially higher than those of western students, do not seem to cause longer unemployment, as would be predicted by job search theory, because graduates seem to

adjust their expectations quickly. However, it is likely that the need to adjust expectations also shapes the way in which they experience the school-to-work transition. Finally, in the case of financial resources, it is the broader social context that determines how the available monetary support influences the transition. As this includes the decision to stay in school (or not), the implications for the prospects of the individual might not be negligible. Some of the results seem counterintuitive, as economic job search theory predicts a significant negative impact of higher reservation wages whereas more financial resources are supposed to lengthen search duration. Further research could provide additional insight into the stability of the relationships and the relevant circumstantial factors. A limitation of the studies in this thesis is that, while we use insights from different academic fields to enrich our understanding of the impact of resources on (job search) behaviour and outcome, verifying (or rather, as academic tradition would prefer, attempting to falsify our hypothesis about) the true mechanisms behind the effects found is left for future research.

2 Coaching, coaxing, controlling - the influence of in-school mentors on student's job search effort and job search success

2.1 Introduction

Schools are increasingly concerned with their students' careers after graduation. They acknowledge the school's responsibility for preparing their graduates for a successful school-to-work transition. An unsuccessful, 'fragile' start on the labour market is suspected to negatively determine the future career and long-term opportunities of the young workers (Plantenga et al., 2013). Presumably, the growing interest in a successful transition is also due to the increasing labour market flexibility, which makes early careers more volatile. In 2012, which is the year the students that participated in this study graduated, students from secondary vocational education that entered the Dutch labour market found a job after 1.5 months on average, but to a large extent these were fragile jobs: 18 months after graduation 17% of the graduates were unemployed, and the majority had flexible or part-time jobs or were overqualified for their job (ROA, 2014). For secondary VET-graduates, the initial labour market prospects have not changed much since 2012, initial unemployment is somewhat lower, but the share of flexible contracts, in particular on-call and temporary agency work, is increasing in spite of better economic circumstances (ROA, 2017).

This chapter investigates whether in-school mentoring, which is mainly concerned with educational choices and progress, can also work as an early form of job search assistance. Job search assistance programs are generally viewed as the most effective and cost-efficient form of active labour market policies (Card, Kluve, & Weber, 2010). In those programs, caseworkers train and coach clients in job search behaviour, monitor job search effort and provide relevant information for efficient job search. Educational institutions are in the position to provide similar services to their soon-to-be-graduates at an early stage, while they are still in training. Research on Dutch students has shown that a timely start of job search activities well before graduation increases their transition success (van der Klaauw, van Vuuren, & Berkhout, 2005).

This study contributes to the mentoring literature in a number of ways: first, we study mentoring for regular, high-school-aged students in Dutch secondary vocational education. The majority of the working population, 60% in the Netherlands, is composed

of graduates from these schools. However, the literature mainly looks at mentoring programs for college students (Crisp & Cruz, 2009; Renn, Steinbauer, Taylor, & Detwiler, 2014), at programs aimed at high-risk adolescents (Rodriguez-Planas, 2012), or at minority groups (Flores, Flores-Lagunes, Gonzalez, & Neumann, 2012).

Second, we study the impact of in-school mentoring on labour market behaviour and success. Most research focuses on the short-run, immediate effects of mentoring on the socio-psychological characteristics and attitudes of the mentees, such as for example motivation, confidence, career competencies, career identity and work commitment (Bimrose, Barnes, & Hughes, 2008; Meijers, 2008; Meijers, Kuijpers, & Gundy, 2013; Plant, 2012; Winters, Meijers, Kuijpers, & Baert, 2009), or on educational outcomes, such as choice of training and drop-out rates (Eby, Allen, Evans, Ng, & DuBois, 2008; Rodriguez-Planas, 2012; van der Steeg, van Elk, & Webbink, 2012).

Finally, this study contributes to the extensive research effort undertaken in recent years to discover 'what works' in mentoring (MBO Diensten, 2010). In general, mentoring program effect sizes based on average treatment effects are found to be small (Crisp & Cruz, 2009; Eby et al., 2008; Gershenfeld, 2014; Meijers, 2008; Meijers, Kuijpers, & Gundy, 2013). This underlines the importance of searching for the most effective elements of mentoring programs, since a mentoring program is actually a mix of treatments. The principle of providing guidance to students is virtually universally accepted, but there is no national in-school mentoring curriculum. Mentoring program design – how mentoring should be done – is one of the main points of interest (and discussion) for the practitioners.

In our research, we exploit differences in mentoring style of mentors within one schooling centre for vocational education. Following suggestions on important aspects of mentoring made in the literature, we take a closer look at differences in mentoring conversation scheduling (Bullock & Jamieson, 1998; Crisp & Cruz, 2009) as well as in mentoring conversation contents (Mittendorff, den Brok, & Beijaard, 2011). In doing this we also contribute to the empirical evidence of how mentoring - according to the students - actually looks like in a regular Dutch vocational training centre.

The rest of this chapter is structured as follows: section two discusses mentoring in Dutch VET schools and section three introduces the data and measurements used in this study. Section four describes the empirical strategy and addresses the selection and

measurement issues in evaluating mentoring. Section five presents the results of the structural equation model. The chapter closes with a discussion of the results and implications for the mentoring practice and future research.

2.2 Theory

In Dutch secondary vocational education, the formal mentoring consists of mentoring conversations, either one-on-one, in a group setting, or both, supported by a range of instruments, such as personal development plans and portfolios (Mittendorff et al., 2011). Each student is assigned a mentor, and we focus on two aspects in which mentoring conversations differ across mentor-mentee-couples: scheduling regularity and contents. The typical mentoring program in Dutch vocational education, according to Meijers (2008, p. 237), is “based on the premise that the participants will have reasonably frequent contact and sufficient interactive time together”. The length of time spent with a mentor was also identified as a crucial variation between mentoring relationships by Crisp & Cruz (2009). Different measures of time spent together have been suggested and used, such as different lengths of the mentoring relationships itself (Flores, Flores-Lagunes, Gonzalez, & Neumann, 2012) or the frequency of mentoring meetings (Meijers, 2008). For the current study, these options are not applicable since the duration of the mentoring relationship is fixed to the duration of the training and the frequency of meetings is highly correlated with student characteristics: students that have a higher likelihood of bad outcomes for any personal reason are supposed to meet with their mentor more frequently.

We follow a suggestion by Bullock & Jamieson (1998) who proposed that the way in which meetings are scheduled matters for mentoring effectiveness. They distinguished between a mentoring model in which mentees are entitled to a certain amount of meetings and a mentoring model in which meetings were scheduled according to need, but concluded that a mixed model seems to be optimal: “A good model seemed to be one where all students had entitlement to at least one individual interview with their tutor, but subsequent dialogues (...) were arranged according to individual need” (Bullock & Jamieson 1998, p. 70). We study whether any or all of the three possible ways to organise mentoring conversations are correlated with student's job search behaviour and success.

The second aspect studied is the contents of the conversations, as, according to Mittendorff and colleagues (2011, p. 516), the mentoring conversations between a teacher/ mentor and student are “largely defined by the topics discussed – the content”. Winters et al. (2009) described four broad themes mentoring conversations *should* cover, specifically for mentoring that takes place in intermediate vocational education in the Netherlands: study issues, student’s private life, profession (a general theme concerning education and practice), and career (prospects and abilities). Analysing mentoring conversations, they discovered that only three of these themes were discussed: study related issues took up 32% of the time, 14% was used to talk about the profession and the same amount of time was spent on career issues. Student’s private life was hardly ever discussed. The biggest part of the conversation (40% of the time), however, was spent on topics the researchers did not consider relevant in a mentoring context, mainly on administration. As an alternative, Mittendorff et al. (2011) clustered mentoring contents in Dutch mentoring conversations around three themes: personal issues, career issues, and planning & instruments, which includes the portfolio discussions and educational progress. Similar to Winters et al. (2009), they found that school issues dominated the conversations. The career, they found, was hardly ever discussed.

In line with Mittendorff et al. (2011) and Winters et al. (2009), we distinguish between a focus on study related issues (‘education’), career opportunities and prospects (‘career’), but also include activities related to job search skills, such as writing letters of application (‘job search assistance’ JSA) as additional content. The measures used are discussed in detail in the data section and in appendix 2A. We study whether a stronger focus on job search assistance and/or career related topics has a significant positive impact on job search effort and success.

Presuming that scheduling regularity and issues discussed are the key aspects of mentoring, the next question is how mentoring affects the school-to-work transition of the student. We propose three distinct mechanisms, or paths, similar to the roles caseworkers in job search assistance programs have with respect to the job search behaviour and success of their adult unemployed subjects (van den Berg, Kjaersgaard, & Rosholm, 2014).

First, a mentor can provide ‘incentives to search actively’ by monitoring the job search behaviour and sanctioning insufficient effort (controlling). The second mechanism is

training skills and providing necessary information in order to increase the students ability to perform job search successfully (coaching). For example, van den Berg et al. (2014) found that vacancy referral – helping to choose which jobs to apply to - was the main contribution of caseworkers to the job search process. By improving the quality or efficiency of job search effort, mentoring can have a direct impact on job search success without increasing effort measurably. Finally, training and information can also increase self-confidence or self-efficacy, the belief of being capable to successfully perform a certain task. Self-efficacy is one of the most important mechanisms investigated in the mentoring literature in general and with respect to job search and student's careers in particular (Liu, Huang, & Wang, 2014; Renn, Steinbauer, Taylor, & Detwiler, 2014; van der Steeg et al., 2012; Yanar, Budworth, & Latham, 2009). The mentor is expected to encourage or coax the mentee into showing (more of) a desired behaviour by increasing self-efficacy with respect to the relevant behaviour, be it searching for a job, studying for exams, planning career steps, or competing in sports.

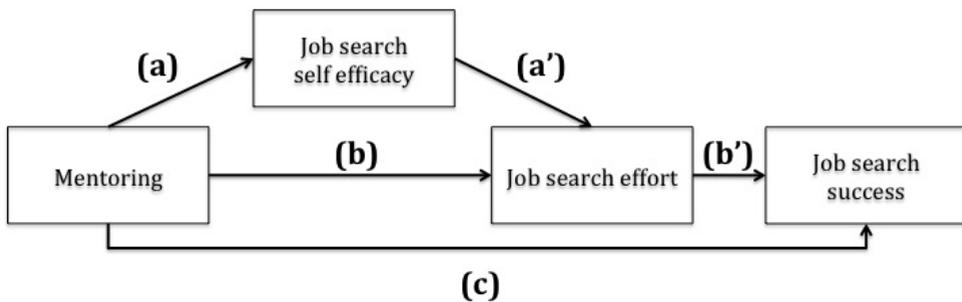


Figure 2.1 Theoretical model: impact of mentoring on job search effort (b), mediated by job search self-efficacy (a) and on job search success (c), mediated by job search effort.

The theoretical model we propose to study the impact of in-school mentoring on the school to work transition is illustrated by Figure 2.1. There is a direct effect of mentoring on job search success by improving job search skills (coaching, path (c)), as well as an indirect effect on success by increasing job search effort (path (b)*(b')). This increase in job search effort is achieved either directly (monitoring, controlling, path (b)) or indirectly by an impact on job search self-efficacy (coaching, path (a)*(a')). Figure 2.1 depicts these three paths in one graph. However, we empirically estimate two separate

partial mediation models: one, the effect of mentoring on job search success, partially mediated by job search effort; second, the effect of mentoring on job search effort, partially mediated by job search self-efficacy. We split the model for lucidity and for computational reasons⁶.

2.3 Data

The data used were collected for the multidisciplinary research-project School2Work, a longitudinal study to determine factors that aid or hinder students in their search for a first job and their early labour market career. The study was conducted among students from one schooling-centre for vocational training (ROC) in the Netherlands. This schooling-centre provides more than 300 different training programs covering all sectors except agriculture. In the school year 2011/12, all last-year students enrolled in school-based training programs were invited to participate in a series of five questionnaires over a period of three years, thus covering the last phase of training and the first years of work-life. In total, more than 2.000 students filled in at least one of the questionnaires. For the present study, the two in-school waves and the first after-school wave are used. Table 2.1 presents descriptive statistics, Table 2.2 pairwise correlations between the study variables.

All students in this training-centre are assigned to a mentoring group and a personal adult mentor, who is also a teacher. Mentors are responsible for providing guidance, but have a large amount of autonomy over the way in which they provide this guidance. The questionnaire was designed to gather information on the scheduling and the content of the mentoring sessions. Following Mittendorff et al. (2011) we focus on mentoring as perceived by the students.

⁶ The measurement scale of both outcome variables differs. Integrating both models into one would force us to use a less preferred procedure for estimating the impact of mentoring on job search effort (StataCorp, 2013).

Table 2.1 Descriptive statistics

			min	max
Individual mentoring sessions				
None	13%			
Only as needed	48%			
Regular and as needed	19%			
Regular only	21%			
Group mentoring sessions				
None	25%			
Sometimes	21%			
Each week	54%			
Mentoring conversation focus#				
On career, average (<i>sd</i>)	3.82	(1.36)	1	7
On education, average (<i>sd</i>)	4.77	(1.18)	1.2	7
On job search assistance, average (<i>sd</i>)	3.95	(1.16)	1	7
Job search self-efficacy				
At the start of the school year, average (<i>sd</i>)	4.70	(0.88)	1.25	7
At the end of the school year, average (<i>sd</i>)	4.76	(0.82)	2.25	6.88
Job search activities, mean (<i>sd</i>)	3.08	(2.23)	0	10
Job interviews				
No invitations	54%			
1 or 2 invitations	29%			
3 or more invitations	17%			
Male	38%			
Age, in years, mean (<i>sd</i>)	19.92	(2.06)	17	30
Non-Dutch family background	31%			
Level of Education				
Level-2	18%			
Level-3	27%			
Level-4	55%			
Field of Education				
Technology	14%			
Sports & Leisure	22%			
Business	14%			
Health & Education	46%			
Security	4%			
Work experience, in categories###, average	5.43		1	8
Plans to stay in school after graduation	52%			
<i>N</i> #	752			

Note. #Mentoring conversation focus is only available for students that had group mentoring sessions (N=566);
 ###Work experience in 8 categories from 1=none to 8=more than 5 years (treated as continuous in the analysis).

The same questions were posed to approximately 30 mentors from this schooling-centre. Their answers confirmed large differences in mentoring regularity and content, which

confirms the existence of different mentoring styles of mentor⁷. Appendix 2B discusses the relationship between student characteristics and mentoring received/ perceived and the possibility and implications of endogeneity.

Scheduling mentoring conversations

Following the hypothesis of Bullock & Jamieson (1998), students were asked to indicate whether they had one-on-one mentoring conversations with their mentor 1) never, 2) a fixed number of times a year, 3) a fixed number of times a year and additional meetings as needed, 4) only as needed⁸. Only a small group of students, 13%, reported no one-on-one mentoring conversations with their mentor ever, the largest group, 48%, had mentoring conversations only as needed. Of the remaining students, roughly half reported regular scheduled mentoring conversations only and regular scheduled meetings with the opportunity to additional meetings as needed, the latter being the style favoured by Bullock and Jamieson.

With respect to group mentoring, students were asked to indicate whether they had group mentoring sessions 1) never, 2) sometimes, 3) each week⁹. The majority of the students (54%) reported weekly sessions, 25% did not have group sessions, 21% said they were held less regularly. There is some correlation between the two types of mentoring (Table 2.2): no individual mentoring and no group mentoring are positively correlated, as are regular plus if needed individual mentoring and weekly group sessions. This indicates that individual and group mentoring are usually not viewed as substitutes, but rather as complementary to each other. We take that into account by estimating the impact of both types of mentoring jointly, as well as each individually.

Contents of the mentoring conversations

As Allen, Eby, O'Brien, & Lentz (2008) noted in a review on the mentoring literature, there exists no well-established, up-to-date measure of mentoring contents. This is especially

⁷ Mentors' and mentees' reports for both scheduling and contents differed substantially, which is something that is commonly observed in the mentoring literature (Allen, Eby, O'Brien, & Lentz, 2008). However, the interviews conducted with mentors also confirmed the extensive amount of variation in mentoring style between mentors, regardless of the individual student characteristics.

⁸ Dutch: "Heb je 1-op-1 gesprekken met jouw loopbaanbegeleider? 1: Nee, geen 1-op-1 gesprekken. 2: Ja, een vast aantal keer per jaar, namelijk ____ keer. 3: Ja, zeker ____ keer per jaar, en meer als het nodig is. 4: Ja, maar alleen als het nodig is." Most of the students that indicated (additional) meetings as needed reported that both, they themselves or their mentors, could indicate the need to meet.

⁹ "Heb je groepslessen loopbaanbegeleiding? 1: Nee, geen groepslessen, 2: Ja, maar onregelmatig, 3: Ja, regelmatig, ____ uur per week"

true with respect to in-school mentoring for high-school aged students of vocational education. For the purpose of this study, students were presented with 17 factual statements about mentoring topics and activities and asked to rate to which extent these topics and activities described what happened during mentoring conversations on a 7-point Likert scale (1=not at all to 7=very much). These statements were formulated following exploratory discussions with mentors about the contents of the mentoring sessions, intended to cover all possible topics of the mentoring sessions, and tested by means of a pilot survey among students and mentors. The statements are listed in appendix 2A (Table 2.8).

Factor analysis confirms that the perceived mentoring contents consists of three distinct topics: a focus on study related issues ('education'), career opportunities and prospects ('career'), and activities related to job search ('job search assistance' JSA). A description of the procedure and the results of the factor analysis, including a list of the statements and their factor-loadings, is included as appendix 2A. The education-topic covered the personal assistance aspect of mentoring: supervision of educational progress in the current training (courses and internships), help in organising internships, support with personal problems (in internships, school, or the private sphere). The career-topic covered possibilities for future work and education, including discovering the students' capabilities and interests (talking about possibilities for jobs, assistance in looking for a future job, talking about future education possibilities). The JSA-topics are mostly covered in group mentoring sessions: interview training; using social media in work life. In the analysis, we use factor-based scores as measures of mentoring contents¹⁰. For each of the three topics, observed item scores are averaged over the items belonging to the topic (factor). Like in the previous studies by Mittendorff et al. (2011) and Winters et al. (2009), we found 'education' to dominate the mentoring sessions, with a mean factor-based score of 4.77 (see Table 2.1). Items related to the career topic received the lowest mean scores (3.82). Job search assistance was rated 3.95 on average. As Table 2.2 shows, the scores on each individual topic are highly positively correlated. On the one hand, this indicates that there is an underlying higher order construct: mentoring. On the other

¹⁰ Factor-based scores are easier to interpret than factor scores. The correlation between the factor-based scores and the factor scores as determined by the factor analysis is higher than .95 for each factor, and almost .99 for the career aspect of mentoring.

hand, this indicates that mean item scores for a single topic are not comparable across students: one student's high score on career aspects might reflect the same *relative* importance placed on career aspects in the mentoring conversations as another student's low score, if the scores on the other two aspects are equally high and low, respectively. We use the three topic scores simultaneously, thus estimating the impact of a higher score on one topic, given comparable scores on the other topics.

Job search self-efficacy

Job search self-efficacy was measured with 11 items (Ellis & Taylor, 1983), both at the beginning of the last school year and shortly before graduation. Students were asked to rate their agreement with statements concerning their confidence in their ability to search for a job effectively, such as “I can convince an employer that I am the right person for the job” using a 7-point Likert-type scale. The mean item score is used to indicate job search self-efficacy¹¹, lower scores reflecting lower levels of job search self-efficacy. The mean score was 4.77 (SD 0.88) at the beginning and 4.79 (ds 0.85) at the end of the school-year.

Job search effort

Job search effort is measured by the number of different job search activities the student has engaged in the past three months. At the end of the school year, shortly before graduation students were asked to indicate which of 10 different job search activities they had engaged in during the last 3 months prior to the interview. Activities included preparatory job search, such as looking for information on job search and preparing a CV, and active job search, such as formally applying for a job. On average, students had employed 3.3 (SD 2.33) of the 10 proposed search activities. The number of different search activities employed, or the number of different job search methods, is a popular measure to indicate the amount of job search effort¹² exerted by the job seeker, even if job search involving only one or two methods can be very intensive and can represent

¹¹ Job search self-efficacy is thus treated as an observed variable, the measurement part is not included in the structural equation estimation model.

¹² More subjective measures, such as time spent on job search, have been used as proxies for job search effort as well, but would ideally require more elaborate means of data collection than self-report questionnaires (Krueger & Mueller, 2010).

Table 2.2 Pairwise correlations between study variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Individual mentoring sessions - none	1															
2 Individual mentoring sessions - only as needed		1														
3 Individual mentoring sessions - regular and as needed			1													
4 Individual mentoring sessions - regular only				1												
5 Group mentoring sessions - none	.221***	.007	-.140***	-.058	1											
6 Group mentoring sessions - sometimes	-.024	-.039	.012	.056		1										
7 Group mentoring sessions - each week	-.132**	.071	.049	-.045			1									
8 Mentoring focus - career	-.159***	.025	.161***	-.082				1								
9 Mentoring focus - education	-.041	.038	.044	-.062					1							
10 Mentoring focus - job search assistance	-.003	-.030	.026	.015	-.005	.080*				.134**	1					
11 Job serch self-efficacy - start of the school year	-.081*	.062	-.022	.011	-.054	.085*	-.023			.148***	.033	.111**	.587***	1		
12 Job serch self-efficacy - end of the school year	.074**	-.050	.033	-.032	-.013	-.049	.052	-.115***	-.011	-.029	-.066*	-.069*	-.202***	1		
13 Job search activities	-.089**	.017	-.020	.071*	-.047**	.014	.030**	.070*	.004	-.033	-.013	-.027	.105***		1	
14 Job interviews - none	.009	.045	-.021	-.043	.075**	.049**	-.105	.070*	.009	.083**	.105***	.125***	.143***			1
15 Job interviews - 1 or 2	.185***	-.049	-.111**	.014	.244***	.100**	-.293***	.076	-.140***	.129**	.059	.074*	.053	-.072**	-.023	.125***
16 Job interviews - 3 or more	-.006	.008	.037	-.040	.017	.046	-.052	-.052	.021	.037	.004	.025	.072*	.086**	-.082**	-.015
Male																
Age	.020	.030	-.065	.009	-.060	-.019	.067	.050	.044	.201***	.122***	.050	.113**	-.041	-.017	.076**
Non-Dutch Student	.078*	.045	-.117**	-.009	.005	-.056	.041	.194***	.038	.188***	.015	.017	.101**	-.128***	.091**	.061*
Education level-2	-.125***	.030	.074*	-.005	-.221***	-.011	.200***	.036	.034	.078	-.042	-.066	-.040	-.052	-.035	-.028
Education level-3	.051	-.062	.024	.011	.193***	.053	-.210***	-.182***	-.061	-.217***	.026	.046	-.042	.052	-.039	-.023
Education level-4	.159***	.026	-.128***	-.041	.363***	.002	-.315***	-.014	-.123**	.026	.013	.026	-.015	-.044	.031	.021
FOE - technology	-.090*	-.098**	.083*	.115**	.007	.062	-.057	.040	-.151***	.009	.018	-.056	-.026	-.021	-.065*	.107***
FOE - sports & leisure	.184***	-.068	-.120**	.046	-.020	.042	-.017	-.125**	-.196***	.072	.081*	.082*	.000	.035	-.091**	.063*
FOE - health & education	-.179***	.066	.136***	-.063	-.250***	-.078*	.280***	-.019	.283***	-.131**	-.105**	-.056	.015	-.039	.076**	-.146***
FOE - security	.040	.110**	-.082*	-.090*	.005	-.009	.003	.204***	.105*	.152***	.063	.067	.044	-.038	.044	-.003
Work to experience	.020	-.022	.045	-.032	-.016	.118**	-.082*	.012	-.017	-.011	.140***	.145***	.065*	-.022	-.024	.058
Plans to stay in school	.052	-.163***	.042	.117**	.033	-.109**	.061	-.033	.000	-.001	-.025	-.102**	-.230***	.013	-.061*	.057

Note. *** p<0.01, ** p<0.05, * p<0.1

more effort than job search involving more different methods (Holzer, 1988; Weber & Mahringer, 2008). Alternatively, a one-item measure of effort, such as the number of applications, is frequently used, but is not advised for the early stages of job search, since it disregards the complexity of the job search process and the importance of preparatory activities (Blau, 1994). Different methods or activities of job search, therefore, also reflects a qualitative aspect of job search behaviour that has been recently emphasised by various researchers (e.g. Manroop & Ricardson 2016; van Hooft, Wanberg, & van Hoyer, 2013; van Hoyer, 2018).

Job search success

Early job search success is measured by invitations to job interviews. Students were asked to report how often they had already received invitations to job interviews concerning jobs after graduation: never, once or twice, 3 to 6 times, more than six times, more than 10 times. As the number of students reporting more than 6 invitations to job interviews was very small (3.5%), the last three categories were combined into one category (3 or more interviews) for the analysis. Stata allows to perform path analysis using the appropriate ordered logit link function for a ordinal outcome variable.

Covariates

Job search self-efficacy, job search activities, and job search success are related to personal and training characteristics, Table 2.2 presents pairwise correlations between the study variables. In our analysis we control for characteristics that influence labour market prospects and behaviour, such as level and field of education, previous labour market experience, gender, ethnic family background, and age. In addition, we include an indicator that the student is planning to continue in education after graduation, since those students are significantly less likely to engage in job search activities (see Table 2.2).

2.4 Empirical Strategy

We analyse the impact of mentoring on job search effort and the impact of mentoring on early job search success separately. Figure 2.2 illustrates the empirical model used to estimate the effect of mentoring on job search effort, measured by the number of different job search activities the student has engaged in during the last three months. We model

the relationship between mentoring and job search effort to be partly mediated by job search self-efficacy.

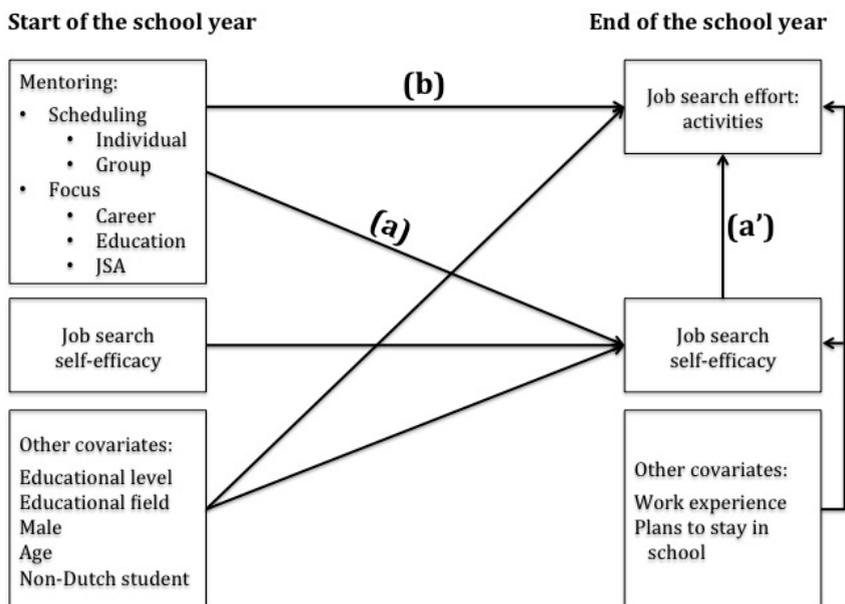


Figure 2.2 Empirical model (model 1: the effect of mentoring on job search activities (b) is partially mediated by job search self-efficacy (a))

The total effect of mentoring on job search effort is composed of the direct effect (controlling, path b) and the indirect effect (coaxing, path $a * a'$). Since self-efficacy, the conviction that a certain behaviour can be successfully engaged in, is increased by actually actively engaging in that behaviour, it is possible that the path labelled (a') runs in both directions. To check for reversed causality, we also estimated a non-recursive model allowing for a feedback loop from job search effort to job search self-efficacy. We did not find a significant effect of higher levels of search effort at the end of the school year on job search self-efficacy at the same point in time. The estimates for mentoring were virtually the same in the non-recursive model, as in the model reported in the text.

Figure 2.3 illustrates the empirical model used to estimate the effect of mentoring on job search success, measured by a categorical variable to indicate the number of invitations to job interviews the student has received. We model the relationship between mentoring

and job search success to be partly mediated by job search effort. The total effect of mentoring on job search success is composed of the direct effect (coaching, path c) and the indirect effect (controlling, path $b * b'$).

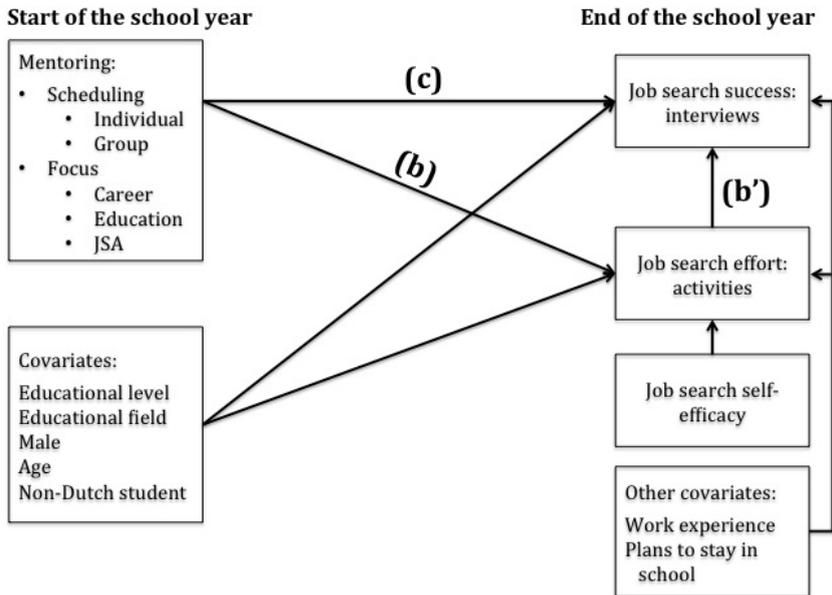


Figure 2.3 Empirical model (model 2: the effect of mentoring on job interviews (c) is partially mediated by job search activities (b))

As explained in the previous section, we study two aspects of mentoring - scheduling and contents. Each of the two models is estimated multiple times, using different measures of mentoring and, also, combinations of measures of mentoring. For scheduling, we look at individual and group mentoring. Information on mentoring focus is only available for students that reported being part of a mentoring group. In order to compare results the effect of individual scheduling is estimated twice: first, over the whole sample and, second, over the subsample of group mentored students. Table 2.3 lists the 2 x 6 empirical models.

Table 2.3 Model overview and fit statistic

	Sample (N)	Log likelihood	R2/chi2 overall	df	BIC	AIC
Model 1: Mentoring -> job search effort (mediated by job search self-efficacy)						
1.1 Mentoring scheduling: individual mentoring	Full (752)	-9970.40	0.423	35	20,173	20,011
1.2 Mentoring scheduling: group mentoring	Full (752)	-9800.74	0.421	33	19,820	19,667
1.3 Mentoring scheduling: individual & group mentoring	Full (752)	-10636.15	0.428	39	21,531	21,350
1.4 Mentoring scheduling: individual mentoring	Group mentored (566)	-7298.72	0.411	35	14,819	14,667
1.5 Mentoring focus	Group mentored (566)	-9108.53	0.408	35	18,439	18,287
1.6 Mentoring focus & scheduling: individual mentoring	Group mentored (566)	-9961.07	0.418	41	19,582	19,404
Model 2: Mentoring -> job search success (mediated by job search effort)						
2.1 Mentoring scheduling: individual mentoring	Full (752)	-2329.87	199.84***	33	4,878	4,726
2.2 Mentoring scheduling: group mentoring	Full (752)	-2333.36	192.19***	31	4,872	4,729
2.3 Mentoring scheduling: individual & group mentoring	Full (752)	-2328.15	207.49***	37	4,730	4,901
2.4 Mentoring scheduling: individual mentoring	Group mentored (566)	-1736.44	170.51***	33	3,682	3,539
2.5 Mentoring focus	Group mentored (566)	-1739.16	169.89***	33	3,688	3,544
2.6 Mentoring focus & scheduling: individual mentoring	Group mentored (566)	-1733.89	178.91***	39	3,715	3,546

Note. *** p<.01.

In the mediation analysis, we treat all variables as observed. The models are estimated using the quasimaximum likelihood estimation method with a linear¹³ (model 1) or ordered logit (model 2) link function and robust standard errors¹⁴. When analysing the effect of mentoring focus, we substitute factor-based scores for the measurement part of the model¹⁵. Using JSSE at the beginning of the school year as an additional determinant for JSSE at the end of the school year allows us to just-identify the model¹⁶. Since we do not include a measurement part in the model and the model is not overidentified, fit

¹³ The number of different search activities, the outcome in model 1 and the mediator in model 2, is not a continuous, but a count variable. Using a poisson regression instead of a linear model does not change the nature of the results: significance and sign of the effect remain the same. Tables 2.15 and 2.16 in Appendix 2C presents regression coefficients using a poisson distribution and the log link function for models 1.1 and 2.1 next to the results from the linear models.

¹⁴ While the ML estimation method formally assumes joint normality of exogenous variables, this assumption can be safely relaxed for observed variables, if not for latent constructs. Robust standard errors are calculated with the Huber/White/sandwich estimator (StataCorp, 2013).

¹⁵ The factor analysis of the three mentoring topics is presented in appendix 2A.

¹⁶ Equivalently, this could be interpreted as an instrumental variable approach, JSSE at the beginning of the school year being the instrument used to identify the parameters of the model. Using a two-stages-least-squares procedure for model 1 does not change the results. Model 2 involves a categorical outcome variable and cannot be estimated using 2SLS.

indicators usually associated with structural equation modelling, such as χ^2 , are not presented¹⁷; only model fit indicators similar to regular regression analysis (such as R² and AIC/ BIC). Correlation between observed variables, as well as between the error-terms of the endogenous, or outcome variables, are assumed in model 1, but not in model 2. Table 2.3 lists degrees of freedom for each model.

We analyse mentoring as it is reported to take place by students in regular Dutch vocational education and training. Appendix 2B deals with the resulting endogeneity issue and the question to what extent the observed relationship between mentoring and job search can be assessed as causal.

2.5 Results

We tested the relationship between mentoring and job search effort as partially mediated by job search self-efficacy, and the relationship between mentoring and job search success as partially mediated by job search effort¹⁸. Mentoring scheduling style is measured using categorical variables and mentoring focus comprises three continuous variables. This implies, that path (a), (b), and (c), each comprises multiple estimates. We estimate to what extent the different elements of mentoring contribute to each path.

Table 2.4 Effect of mentoring schedule on job search effort; SEM-coefficients

	Model 1.1			Model 1.2			Model 1.3		
	JSSE direct effect	Job search activities direct effect	indirect effect path (a)*'(a')	JSSE direct effect	Job search activities direct effect	indirect effect path (a)*'(a')	JSSE direct effect	Job search activities direct effect	indirect effect path (a)*'(a')
Individual mentoring (none = reference category)									
Wald test for joint significance (chi2)	2.93	6.32*					3.24	6.00	
As needed only	0.064 (0.075)	0.520** (0.244)	0.037 (0.044)				0.064 (0.075)	0.515** (0.244)	0.037 (0.044)
Regular and as needed	0.082 (0.085)	0.441 (0.284)	0.048 (0.052)				0.081 (0.089)	0.431 (0.286)	0.047 (0.052)
Regular only	-0.022 (0.084)	0.680** (0.283)	-0.013 (0.049)				-0.029 (0.085)	0.665** (0.287)	-0.017 (0.050)
Group mentoring (none = reference category)									
Wald test for joint significance (chi2)				0.79	4.13		4.4	0.52	
Sometimes				0.118 (0.075)	0.223 (0.256)	0.069 (0.048)	0.118 (0.076)	0.156 (0.258)	0.068 (0.048)
Each week				-0.019 (0.060)	0.081 (0.217)	-0.011 (0.036)	-0.024 (0.062)	0.012 (0.220)	-0.014 (0.036)
R-squared equation	0.368	0.136		0.369	0.130		0.372	0.137	

Note: JSSE = job search self-efficacy. Robust standard errors in parentheses; Controls: Gender, age, ethnicity, level of education, field of education, work experience; additional controls for JS activities: plans to stay in school after graduation, JSSE at the end of the school year; full results table in the appendix.

*** p<.01, ** p<.05, * p<.1

¹⁷ The χ^2 test statistic would also require full joint normality.

¹⁸ Stata 13, (g)sem command, with (quasi)maximum likelihood estimation and robust standard errors

Table 2.4 and Table 2.5 show the results for Model 1 as illustrated in Figure 2.2 for different (combinations of) measures of mentoring. Table 2.4 is concerned with scheduling of mentoring sessions, including measures of either only individual mentoring (Model 1.1), only group mentoring (Model 1.2), or both at the same time (Model 1.3). We find that having meetings with a mentor does not have any significant impact on the level of job search self-efficacy, as compared to no meetings with the mentor ever, this applies to individual as well as group meetings. Individual mentoring conversations are found to have a significant positive impact on job search effort, that is on the number of different job search activities the student has engaged in recently. Students that report mentoring conversation use 0.52 to 0.68 more methods; given an average of 3 methods this amounts to an 17-22% increase. We find the strongest effect for students that report regular mentoring only; having conversations as needed shows similar, only slightly smaller effects. Interestingly, we find that a combination of both methods of scheduling does not seem to work as well: we find no effect of mentoring on students' job search activities for the group that has regular plus additional meetings if necessary. Regular mentoring conversations amended with additional meetings was the style preferred by Bullock & Jamieson (1998), but this preference can, from our data and for this particular student outcome, not be supported.

Table 2.5 Effect of mentoring contents focus on job search effort; SEM-coefficients

	Model 1.4			Model 1.5			Model 1.6		
	JSSE direct effect	Job search activities direct effect	indirect effect path (a)*(a')	JSSE direct effect	Job search activities direct effect	indirect effect path (a)*(a')	JSSE direct effect	Job search activities direct effect	indirect effect path (a)*(a')
	path (a)	path (b)	(a)*(a')	path (a)	path (b)	(a)*(a')	path (a)	path (b)	(a)*(a')
Individual Mentoring (none = reference category)									
Wald test for joint significance (chi2)	4.17	8.44**					3.45	7.53*	
As needed only	0.113 (0.105)	0.834*** (0.312)	0.072 (0.068)				0.084 (0.106)	0.784** (0.313)	0.050 (0.063)
Regular and as needed	0.165 (0.117)	0.614* (0.355)	0.105 (0.077)				0.140 (0.119)	0.578 (0.360)	0.083 (0.072)
Regular only	0.022 (0.111)	0.865** (0.346)	0.014 (0.070)				-0.0003 (0.112)	0.822** (0.345)	-0.0002 (0.066)
Mentoring Focus									
Wald test for joint significance (chi2)				4.32	3.04		3.64	2.29	
Focus on Career				0.057* (0.032)	0.163* (0.094)	0.034 (0.023)	0.056* (0.032)	0.142 (0.094)	0.033 (0.022)
Focus on Education				-0.024 (0.038)	-0.056 (0.104)	-0.014 (0.024)	-0.028 (0.038)	-0.050 (0.104)	-0.017 (0.023)
Focus on job search assistance				0.0007 (0.034)	-0.058 (0.102)	0.0004 (0.021)	-0.003 (0.034)	-0.061 (0.102)	-0.002 (0.020)
R-squared equation	0.356	0.162		0.357	0.156		0.361	0.166	

Note: JSSE = job search self-efficacy. Robust standard errors in parentheses; Controls: Gender, age, ethnicity, level of education, field of education, work experience; additional controls for JS activities: plans to stay in school after graduation, JSSE at the end of the school year; full results table in the appendix.
 *** p<.01, ** p<.05, * p<.1

Table 2.5 presents the results for mentoring focus. Information about the importance of different topics during mentoring conversations is only available for students that reported to have mentoring group meetings (sometimes or each week), so the results have to be interpreted as applicable to group mentored students only. For the sub-sample of students that had group mentoring sessions, we re-estimate the impact of (additional) individual mentoring (Model 1.4), estimate the impact of mentoring focus on career, education, or job search (Model 1.5), and both individual schedule and focus at the same time (Model 1.6). We find, that the impact of individual mentoring seems to be larger for the sub-sample that does report group mentoring sessions, than for the complete sample: 0.83-0.86 instead of 0.52-0.68 or 27-28% increase (Model 1.4 compared to Model 1.1). With respect to mentoring conversation topics, higher scores on items belonging to career related issues have a small, weakly significant, positive effect on job search self-efficacy (model 1.5 and (when controlling for individual mentoring schedule) model 1.6). Apparently, mentors that spend relatively more time on career related topics increase job search activity via increasing self-efficacy of students. We compute the total effect of a higher focus on career related issues by combining the estimates: $b + a*a'$ (not included in the table). The total effect is between 0.06 (*SE* 0.032) to 0.18 (*SE* 0.096) and significant at the 5-10%-level.

Table 2.6 and Table 2.7 show the results for Model 2 as illustrated in Figure 2.3. Early job search success is measured by invitations to job interviews, an ordinal variable with the categories none, 1-2 interviews and 3 or more interviews. Table 2.6 and

Table 2.7 report the coefficients from an ordered logit estimation. It is likely that the parallel regression assumption is violated, however reducing the outcome variable to two categories (has been invited to at least one interview or not) produces similar, yet stronger, results.

Table 2.6 is concerned with scheduling of mentoring sessions: individual mentoring (Model 2.1), group mentoring (Model 2.2), or both at the same time (Model 2.3). We find that having group mentoring meetings does not have any significant direct or indirect impact on job search success, while individual mentoring seems to have both. The indirect effect via job search effort follows from the results already established in Model 1: individual mentoring meetings (regular or as needed only) have a significant positive effect on job search success via a positive impact on job search effort. In addition,

individual mentoring scheduled as needed seems to have a significant direct effect on job search success as well. Odds ratios, computed from the regression coefficients, can give an impression about the size of the effect. For example, the coefficient for path (c) in Model 2.1 for individual mentoring scheduled 'as needed' is 0.464 (Table 2.6), this corresponds to an odds ratio of 1.59. Those students are at least 1.59 times as likely to have had 1-2, or 3 or more invitations to job interviews than students that never meet their mentor¹⁹. Since they also employ significantly more job search activities, the individual mentoring meetings 'as needed' total effect²⁰ amounts to 2.21 times the chance for an invitation to at least one job interview.

Table 2.6 Effect of mentoring schedule on job search success; SEM-coefficients

	Model 2.1			Model 2.2			Model 2.3		
	JS activities direct effect path (b)	Job interviews direct effect path (c)	indirect effect path (b)*(b')	JS activities direct effect path (b)	Job interviews direct effect path (c)	indirect effect path (b)*(b')	JS activities direct effect path (b)	Job interviews direct effect path (c)	indirect effect path (b)*(b')
Individual mentoring (none = reference category)									
Wald test for joint significance (chi2)	6.41*	3.44					6.09	3.91	
As needed only	0.526** (0.244)	0.464* (0.256)	0.086** (0.042)				0.521** (0.244)	0.508* (0.260)	0.081** (0.040)
Regular and as needed	0.453 (0.284)	0.324 (0.303)	0.074 (0.047)				0.443 (0.286)	0.390 (0.309)	0.078* (0.045)
Regular only	0.683** (0.282)	0.388 (0.284)	0.112** (0.049)				0.667** (0.286)	0.440 (0.290)	0.104** (0.047)
Group mentoring (none = reference category)									
Wald test for joint significance (chi2)				0.92	2.11		0.63	2.62	
Sometimes				0.237 (0.254)	-0.008 (0.223)	0.040 (0.043)	0.168 (0.256)	-0.053 (0.225)	0.027 (0.042)
Each week				0.081 (0.217)	-0.238 (0.205)	0.014 (0.036)	0.011 (0.219)	-0.292 (0.212)	0.002 (0.036)
Wald test for joint significance of all variables (chi2)	140.98***	60.72***		135.59***	59.62***		143.1***	63.57***	

Note. JS = job search. Robust standard errors in parentheses; Controls: Gender, age, ethnicity, level of education, field of education, work experience; additional controls for JS activities: plans to stay in school after graduation, JSSE at the end of the school year; full results table in the appendix.

*** p<.01, ** p<.05, * p<.1

Table 2.7 presents the results for mentoring focus. For the sub-sample of students that had group mentoring sessions, we re-estimate the impact of individual mentoring (Model 2.4), estimate the impact of mentoring focus on career, education, or job search (Model 2.5), and both individual schedule and focus at the same time (Model 2.6). As in Model 1, we find, that the direct impact of individual mentoring on job search success seems to be larger for the sub-sample that does report group mentoring sessions, than for the complete sample: 0.72-0.76 instead of 0.46 (Model 2.4 compared to Model 2.1).

¹⁹ The coefficient is larger in Models 2.3, 2.4 and 2.6, larger coefficients correspond to higher odds ratios compared to no mentoring.

²⁰ The total effect = path(c) + path(b)*path(b').

With respect to mentoring conversation topics, focusing on the career seems to have a direct and indirect impact on job search success (Model 2.5) but the results are not robust. When controlling for individual mentoring (Model 2.6), the impact of focussing on the career is no longer significantly different from zero at the 10%-level.

Table 2.7 Effect of mentoring contents focus on job search success; SEM-coefficients

	Model 2.4			Model 2.5			Model 2.6		
	JS activities	Job interviews		JS activities	Job interviews		JS activities	Job interviews	
	direct effect	direct effect	indirect effect path (b)*(b')	direct effect	direct effect	indirect effect path (b)*(b')	direct effect	direct effect	indirect effect path (b)*(b')
	path (b)	path (c)	(b)*(b')	path (b)	path (c)	(b)*(b')	path (b)	path (c)	(b)*(b')
Individual Mentoring (none = reference category)									
Wald test for joint significance (chi2)	8.32**	3.96					7.42*	3.27	
As needed only	0.829*** (0.313)	0.756* (0.388)	0.101** (0.048)				0.778** (0.315)	0.700* (0.394)	0.083* (0.043)
Regular and as needed	0.606* (0.356)	0.631 (0.427)	0.074 (0.047)				0.567 (0.362)	0.595 (0.434)	0.067 (0.042)
Regular only	0.861** (0.347)	0.719* (0.411)	0.105** (0.052)				0.817** (0.347)	0.670 (0.416)	0.089* (0.047)
Mentoring Focus									
Wald test for joint significance (chi2)				2.95	3.57		2.18	2.77	
Focus on Career				0.158* (0.093)	0.172* (0.093)	0.0195 (0.012)	0.137 (0.093)	0.153 (0.094)	0.016 (0.012)
Focus on Education				-0.054 (0.104)	-0.049 (0.101)	-0.007 (0.013)	-0.047 (0.104)	-0.043 (0.102)	-0.005 (0.012)
Focus on job search assistance				-0.059 (0.102)	-0.084 (0.097)	-0.007 (0.013)	-0.061 (0.102)	-0.088 (0.097)	-0.007 (0.0119)
Wald test for joint significance of all variables (chi2)	131.72***	43.01***		134.99***	*	43.84**	139.56***	47.15**	*

Note. JS = job search. Robust standard errors in parentheses; Controls: Gender, age, ethnicity, level of education, field of education, work experience; additional controls for JS activities; plans to stay in school after graduation, JSSE at the end of the school year; full results table in the appendix.
*** p<.01, ** p<.05, * p<.1

2.6 Conclusion

We study the impact of in-school mentoring on the students' school-to-work transition by analysing the relationship between mentoring conversations, students' early engagement in job search and early job search success. We hypothesize and test a model where mentoring can influence job search success directly, by improving the efficiency of job search (coaching), or indirectly, by increasing the amount of job search effort. In turn, mentors can influence the amount of job search effort either directly by monitoring progress and activities (controlling), or indirectly, by improving students' self-confidence (coaxing).

We realise that controlling, coaxing and coaching students' job search activities is not the first and foremost task of a mentor in a VET program. Mentors may argue, and rightfully so, that completing education successfully is the most important path to a successful school-to-work transition. However, mentoring is called 'career orientation counselling'

in Dutch VET-schools, stressing the importance of the school-to-work transition and the role mentors *could* play in the early career. Our results indicate that, individual mentoring conversations seem to play a role in increasing early job search effort and success already, and that a particular focus on job search assistance is not necessary.

Testing this relationships with two separate structural equation models of partial mediation, we find that group mentoring conversations are not associated with job search effort and success, neither directly nor indirectly. Individual mentoring conversations with a clear schedule - either regular or only as needed - are found to be significantly correlated with higher search effort: students with regular mentoring sessions reported using 22% more different activities to search for a job during the last three months prior to the interview than students that never had individual mentoring conversations. Individual mentoring meetings also have a significant positive effect on job search success, indirectly (via the positive impact on job search effort) and directly.

We find some evidence that more attention on career and future related topics might have an indirect positive impact on job search effort by increasing job search self-efficacy, the path we labelled 'coaxing'. Interestingly, the extent to which mentors focussed on issues directly related to job search, such as crafting a CV and preparing for an interview, had no significant impact on job search self-efficacy or effort at all. In short, the most important mechanism by which mentors impact students job search process is by monitoring and controlling students' (search) activities.

Appendix 2A Mentoring conversations focus (Factor Analysis)

The mentoring focus statements were formulated following exploratory discussions with mentors about the contents of the mentoring sessions, intended to cover all possible topics of the mentoring sessions, and tested by means of a pilot survey among students and mentors. A list of the statements, including their factor-loadings, can be found in Table 2.8.

Factor analysis was employed to confirm that mentoring consists of distinct dimensions with respect to contents discussed at the meetings. Following Costello and Osborne (2005), we employed principal axis factor extraction, given the non-normal distribution of the data, and used oblique method of rotation to allow for correlation between the factors. Indeed, there is significant correlation between the extracted factors, which supports the notion of a common underlying concept: mentoring. However, correlations are not so high as to contradict the existence of distinct dimensions. Correlations range from .547 to .647; the variance inflation factors indicate no problems with multicollinearity for the regression analysis.

Retaining three factors presents a clean factor structure, with no single item cross loading on more than one factor, and no factor with fewer than five items. One statement was dismissed from the analysis because it did not reach the threshold (0.3), but all other items have factor loadings higher than 0.39. One factor represents the education oriented focus of in-school mentoring, including some aspects of personal assistance: supervising educational progress in the current training (courses and internships), helping to organise internships, solving and supporting with problems in internships and of a personal nature. A second factor represents the career oriented focus of mentoring, including personal development aspects: the topics covered concern possibilities for future work and education, discovering the students' capabilities and interests, assistance in looking for a future job, talking about future education possibilities. The last factor consists of practical job search assistance aspects of mentoring, most of them apply to group mentoring sessions: how to apply for a job; using social media in work life; etc. It also includes the link from present to future: how the current training relates to work life and how to optimise the current training to ones needs (choosing the right courses). Reliability of the three aspects' scales as well as the combined mentoring scale is satisfactory: Cronbach's Alpha ranges from .77 for factor one (study) to .90 for the full

mentoring scale. Testing the complete measurement part results in an SRMR of 0.062, which is considered a good fit (Hu & Bentler, 1999) but falls slightly short of other commonly used Cutoff criteria for fit indexes (RMSEA: 0.086, TLI: 0.86, CFI: 0.88) which could partly be due to the limited sample size (N=566).

Table 2.8 Mentoring conversation topics - statements and factor loadings

	Educati on	Career	JSA
1. My mentor assists with study related issues (keeping deadlines, assignments).	0.521		
2. My mentor helps finding an internship placement.	0.637		
3. My mentor helps with problems at the internship workplace.	0.871		
4. During mentoring group sessions we talk about things that happened at the internship.	0.523		
5. My mentor helps with problems in the private sphere (family, money, psychological problems).	0.479		
6. My mentor and me talk about occupations and work.		-0.755	
7. My mentor assists with finding a job after graduation.		-0.410	
8. My mentor and me talk about additional training in further education.		-0.835	
9. My mentor helps me figuring out what I am good at doing.		-0.691	
10. My mentor helps me figuring out what I want to do professionally.		-0.869	
11. My mentor provides hands-on assistance with job search (correcting cover letters, preparing for interviews).			0.397
12. During mentoring group sessions we talk about using social media for professional aims.			0.577
13. During mentoring group sessions we get job search training (writing letters, practicing interviews).			0.744
14. During mentoring group sessions we talk about job search and our chances on the labour market.			0.848
15. During mentoring group sessions there is time to complete school assignments.			(0.293) #
16. During mentoring group sessions we talk about possible future careers for people in our vocation.			0.575
17. During mentoring group sessions we talk about the training (subjects and which classes to choose).			0.478
1. Mijn loopbaanbegeleider helpt mij om mijn studiezaken op orde te houden (opdrachten, deadlines, taken).			
2. Mijn loopbaanbegeleider helpt mij om een stageplek te regelen.			
3. Mijn loopbaanbegeleider helpt mij bij problemen op mijn stagebedrijf.			
4. In de les loopbaanbegeleiding praten wij over alles wat er op de stage is gebeurd.			
5. Mijn loopbaanbegeleider helpt mij bij persoonlijke problemen (familie, geld, faalangst).			
6. Mijn loopbaanbegeleider praat met mij over mogelijke beroepen en werk.			
7. Mijn loopbaanbegeleider helpt mij bij het vinden van een baan voor na deze opleiding.			
8. Mijn loopbaanbegeleider praat met mij over mogelijke vervolgopleidingen.			
9. Mijn loopbaanbegeleider helpt mij uit te zoeken waar ik goed in ben.			
10. Mijn loopbaanbegeleider helpt mij uit te zoeken wat ik later wil doen.			
11. Mijn loopbaanbegeleider geeft praktische steun bij het solliciteren (kijkt mijn brieven na, bereidt gesprekken voor).			
12. In de les loopbaanbegeleiding praten wij over hoe je sociale media ook voor je werk kunt gebruiken.			
13. In de les loopbaanbegeleiding oefenen wij solliciteren (schrijven brieven of spelen van sollicitatiegesprekken).			
14. In de les loopbaanbegeleiding praten wij over solliciteren, een baan zoeken en kansen op de arbeidsmarkt.			
15. In de les loopbaanbegeleiding heb ik tijd om andere opdrachten voor school te maken.			
16. In de les loopbaanbegeleiding praten wij over wat je met deze opleiding kunt qua werk.			
17. In de les loopbaanbegeleiding praten wij over de inhoud van de opleiding (de vakken en welke vakken ik het beste kan kiezen).			

Note. JSA = Job search assistance.

#This item was dismissed from the analysis because it did not reach the threshold factor loading of 0.3.

Appendix 2B Determinants of mentoring

To investigate in how far student characteristics determine the observed mentoring we estimate multivariate MNL models for the determinants of mentoring style and OLS regressions for mentoring focus. Results are presented in Table 2.9 and Table 2.10. As expected, we find large, significant effects of level and field of training on mentoring style. For example, students in technical studies are 16-40% more likely to receive ad-hoc mentoring than students from other fields. A small difference in group mentoring between male and female students could also be caused by differences between different training courses. There is no significant effect of ethnicity and age on scheduling, but older and non-Dutch students are a significantly more likely to report more focus on job search assistance. Differences in mentoring between age-groups and SES-groups are probably caused by differences in group composition which differs with regions (SES) or training course (age).

To check for any differences in mentoring style received by students with different labour market prospects, we include various proxies for ability: a dummy variable indicating that the student is active on the labour market at the time of the interview (side-job), a scale measuring motivation (composed of four items measured on a 7-point Likert scale and relating to the motivation of the student to continue in education and start working after graduation). Finally we use a self-report measure for socio-economic status of the family to control for family background. We find little effect of ability proxies on individual mentoring scheduling; students that might have better labour market prospects (high SES, active on the labour market) are equally likely to report no meetings, with some indication that their mentoring might be less intense. We control for work experience in the path analysis to account for these differences.

There is some effect of motivation and SES on group mentoring: students from higher SES families report occasional sessions more frequently and fixed scheduled sessions less frequently. Students with higher scores on motivation report regular groups sessions more frequently and no sessions less frequently. Since group sessions cannot be scheduled according to an individual student's motivation, age, or SES, we conclude that the impact of motivation on scheduling regularity is caused either by measurement error (motivated students are more likely to recognise a regular schedule or interpret a

schedule as regular) or by reversed causality (regular mentoring increases motivation). However, the effect size is very small²¹.

Table 2.9 Determinants of mentoring scheduling, marginal effects

	Individual mentoring scheduling				Group mentoring scheduling		
	None	Only as needed	Regular & as needed	Regular only	None	Sometimes	Each week
Male	0.0382 (0.0334)	-0.0724 (0.0525)	-0.0057 (0.0407)	0.0400 (0.0419)	-0.0132 (0.0397)	0.0989** (0.0437)	-0.0858* (0.0482)
Non-Dutch Student	0.0003 (0.0304)	0.0079 (0.0462)	-0.0441 (0.0339)	0.0358 (0.0390)	0.0050 (0.0372)	0.0004 (0.0384)	-0.0054 (0.0414)
Age	0.0048 (0.0065)	0.0097 (0.0099)	-0.0024 (0.0076)	-0.0121 (0.0087)	0.0064 (0.0080)	0.0081 (0.0079)	-0.0146* (0.0087)
Level of Education (reference = level-2)							
Level-3	-0.120*** (0.0407)	-0.051 (0.0607)	0.101** (0.0415)	0.071 (0.0469)	-0.101** (0.0432)	0.059 (0.0462)	0.042 (0.0533)
Level-4	-0.042 (0.0430)	-0.108* (0.0565)	0.101*** (0.0369)	0.049 (0.0410)	0.099** (0.0454)	0.078* (0.0421)	-0.177*** (0.0505)
Field of Education (reference = technology)							
Sports & Leisure	-0.112** (0.0476)	-0.213*** (0.0682)	0.188*** (0.0431)	0.137** (0.0541)	-0.291*** (0.0687)	0.086 (0.0543)	0.205*** (0.0657)
Business	0.108 (0.0675)	-0.176** (0.0789)	-0.005 (0.0363)	0.073 (0.0617)	-0.310*** (0.0758)	0.027 (0.0612)	0.282*** (0.0755)
Health & Education	-0.124** (0.0496)	-0.102 (0.0710)	0.189*** (0.0414)	0.037 (0.0516)	-0.455*** (0.0657)	0.019 (0.0536)	0.436*** (0.0650)
Security	0.019 (0.0904)	0.138 (0.102)	-0.023 (0.0437)	-0.134*** (0.0471)	-0.149 (0.115)	-0.033 (0.0770)	0.183* (0.103)
Work experience (side job)	0.0232 (0.0250)	0.0858** (0.0388)	-0.0740** (0.0311)	-0.0350 (0.0322)	0.0050 (0.0309)	0.0038 (0.0320)	-0.009 (0.0354)
Motivation	-0.0036 (0.0031)	0.0005 (0.0050)	0.0016 (0.0040)	0.0015 (0.0043)	-0.0085** (0.0038)	-0.0019 (0.0041)	0.0104** (0.0045)
Socio-economic status (family)	-0.00195 (0.00806)	-0.0276** (0.0124)	-0.0133 (0.00924)	0.0428*** (0.0110)	0.0119 (0.0103)	0.0179* (0.0106)	-0.0298*** (0.0114)
JSSE (start of the school year)	-0.0058 (0.0140)	-0.0289 (0.0223)	0.0310* (0.0179)	0.0037 (0.0185)	-0.0172 (0.0178)	0.0355* (0.0188)	-0.0183 (0.0203)

Note. JSSE = job search self-efficacy. Robust standard errors in parentheses
 *** $p < .01$, ** $p < .05$, * $p < .1$

²¹ Motivation is measured on a scale from 1-7 for 4 items, so students can score anywhere from 4 to 28 points. One point increase in motivation would make it 1.4% more likely that the student reports regular group meetings

Table 2.10 Determinants of mentoring focus, marginal effects

	Mentoring focus		
	None	Only as needed	Regular & as needed
Male	0.169 (0.111)	-0.097 (0.110)	0.124 (0.101)
Non-Dutch Student	-0.063 (0.100)	-0.013 (0.099)	0.254*** (0.090)
Age	-0.020 (0.021)	-0.009 (0.021)	0.041** (0.019)
Level of Education (reference = level-2)			
Level-3	-0.139 (0.127)	0.137 (0.125)	-0.116 (0.115)
Level-4	-0.345*** (0.124)	0.164 (0.123)	-0.201* (0.113)
Field of Education (reference = technology)			
Sports & Leisure	0.204 (0.178)	0.119 (0.176)	-0.147 (0.162)
Business	-0.288 (0.195)	-0.023 (0.193)	0.088 (0.177)
Health & Education	0.0913 (0.184)	0.750*** (0.178)	-0.376** (0.166)
Security	0.453* (0.258)	0.602** (0.253)	-0.273 (0.234)
Work experience (side job)	-0.088 (0.083)	0.067 (0.081)	0.057 (0.075)
Motivation	0.021* (0.011)	0.031*** (0.011)	-0.029*** (0.010)
Socio-economic status (family)	0.058** (0.026)	-0.029 (0.026)	-0.0145 (0.024)
JSSE (start of the school year)	0.139*** (0.047)	-0.081* (0.047)	0.004 (0.043)

Note. JSSE = Job search self-efficacy. Robust standard errors in parentheses
 *** $p < .01$, ** $p < .05$, * $p < .1$

Work experience is not correlated with differences in focus on the three mentoring topics. Motivation correlates positively with a focus on education and negatively with a focus on job search assistance. This means that we are likely to overestimate the impact of a focus on education on the behaviour and outcome of the students due to a selection of motivated students into this form of mentoring. However, we find that a focus on education does not significantly affect behaviour or outcome, regardless of this probable self-selection. There is some impact of SES on reported focus on career, which we need to take into account when interpreting this aspect of mentoring.

Appendix 2C Technical Appendix

For both analyses, we estimate a system of equations as represented by Equation 2.1 (following the presentation in Bollen (1989)):

Equation 2.1

$$Y_1 = M'\gamma_1 + \delta Z + X'\varphi_1 + \xi_1$$

$$Y_2 = \beta Y_1 + M'\gamma_2 + X'\varphi_2 + \xi_2$$

Y_2 refers to the outcome; Y_1 refers to the proposed mediator, X is a vector of covariates including personal & training characteristics as well as labour market experience and plans for staying in school after graduation. M refers to different the measures of mentoring and Z to an exogenous variable of influence on the mediator only: in model 1, job search self-efficacy at the beginning of the school-year is included as an exogenous variable to explain the level of job search self-efficacy at the end of the school year. In model 2, job search self-efficacy at the end of the school year remains an exogenous variable to explain the level of job search effort at the end of the school year, but is not included as an exogenous variable to explain the job search success other than via job search effort. The coefficients γ_2 estimate path c, the direct effect of mentoring on the outcome variable. Coefficients γ_1 (path a) and β (path b) combined estimate the indirect effect of mentoring on the outcome via the mediator.

We estimate a path analysis, using structural equation modelling to analyse the variance-covariance structure of the observed data and estimate the path coefficients. Equivalently, this system of equations can be interpreted as an instrumental variable approach, Z being the instrument necessary to identify the parameters of the model. Using a two-stages-least-squares procedure for Model 1 does not change the results in any way, output tables are available from the authors upon request. Model 2 involves a categorical outcome variable and cannot be estimated using 2SLS. Tables 2.11 to 2.14 present full regression results, including the control variables.

Table 2.11 Effect of mentoring schedule on job search effort; full results

	Model 1.1			Model 1.2			Model 1.3		
	JSSE	Job search activities		JSSE	Job search activities		JSSE	Job search activities	
	direct effect path (a)	direct effect path (b)	indirect effect path (a)*(a')	direct effect	direct effect	indirect effect	direct effect	direct effect	indirect effect
Individual mentoring (none = reference category)									
Wald test for joint significance (chi2)	2.93	6.32*					3.24	6.00	
As needed only	0.064 (0.075)	0.520** (0.244)	0.037 (0.044)				0.064 (0.075)	0.515** (0.244)	0.037 (0.044)
Regular and as needed	0.082 (0.088)	0.441 (0.284)	0.048 (0.052)				0.081 (0.089)	0.431 (0.286)	0.047 (0.052)
Regular only	-0.022 (0.084)	0.680** (0.283)	-0.013 (0.049)				-0.029 (0.085)	0.665** (0.287)	-0.017 (0.050)
Group mentoring (none = reference category)									
Wald test for joint significance (chi2)				0.79	4.13		4.4	0.52	
Sometimes				0.118 (0.075)	0.223 (0.256)	0.069 (0.048)	0.118 (0.076)	0.156 (0.258)	0.068 (0.048)
Each week				-0.019 (0.060)	0.081 (0.217)	-0.011 (0.036)	-0.024 (0.062)	0.012 (0.220)	-0.014 (0.036)
Job search self-efficacy									
Start of the school-year	0.536*** (0.032)		0.313*** (0.095)	0.533*** (0.032)		0.313*** (0.095)	0.532*** (0.032)		0.308*** (0.095)
End of the school-year		0.584*** (0.174)			0.588*** (0.176)			0.578*** (0.175)	
Male	0.061 (0.066)	0.431** (0.210)	0.036 (0.040)	0.044 (0.066)	0.399* (0.214)	0.026 (0.040)	0.049 (0.066)	0.418** (0.212)	0.028 (0.039)
Non-Dutch family background	-0.039 (0.059)	0.506*** (0.194)	-0.023 (0.035)	-0.039 (0.058)	0.513*** (0.193)	-0.023 (0.035)	-0.039 (0.058)	0.505*** (0.194)	-0.023 (0.035)
Age	0.002 (0.013)	0.025 (0.039)	0.001 (0.008)	0.002 (0.013)	0.022 (0.038)	0.001 (0.008)	0.002 (0.013)	0.025 (0.039)	0.001 (0.008)
Level of Education (level-4 = reference category)									
Wald test for joint significance (chi2)	1.83	7.99**		1.62	7.21**		1.81	8.06**	
Level-2	0.048 (0.075)	0.648*** (0.246)	0.028 (0.044)	0.055 (0.073)	0.623** (0.251)	0.032 (0.044)	0.057 (0.074)	0.653*** (0.251)	0.033 (0.044)
Level-3	-0.056 (0.061)	-0.015 (0.184)	-0.033 (0.036)	-0.045 (0.061)	-0.003 (0.189)	-0.026 (0.036)	-0.049 (0.061)	-0.015 (0.188)	-0.028 (0.036)
Field of Education (Health & Education = reference category)									
Wald test for joint significance (chi2)	7.84*	4.62		8.32*	4.38		8.00*	4.03	
Technology	-0.047 (0.095)	-0.604** (0.305)	-0.027 (0.057)	-0.058 (0.098)	-0.625* (0.325)	-0.034 (0.059)	-0.050 (0.098)	-0.591* (0.324)	-0.029 (0.058)
Sports & Leisure	-0.117* (0.064)	-0.272 (0.206)	-0.069 (0.044)	-0.137** (0.065)	-0.248 (0.208)	-0.081 (0.046)	-0.128** (0.065)	-0.277 (0.209)	-0.074 (0.045)
Business	0.114 (0.084)	-0.227 (0.274)	0.067 (0.053)	0.084 (0.082)	-0.313 (0.277)	0.05 (0.051)	0.104 (0.084)	-0.235 (0.275)	0.060 (0.052)
Security	0.009 (0.149)	-0.459 (0.445)	0.005 (0.087)	0.015 (0.152)	-0.498 (0.443)	0.009 (0.089)	0.013 (0.152)	-0.447 (0.445)	0.008 (0.087)
Plans to stay in school after graduation	-0.139*** (0.052)	-0.947*** (0.164)	-0.081** (0.038)	-0.136*** (0.052)	-0.938*** (0.165)	-0.080** (0.038)	-0.127** (0.052)	-0.932*** (0.167)	-0.073** (0.036)
Work experience	0.026** (0.013)	0.077* (0.040)	0.015* (0.009)	0.024* (0.013)	0.069* (0.041)	0.014 (0.009)	0.023* (0.013)	0.074* (0.041)	0.013 (0.008)
R-squared, equation	0.368	0.136		0.369	0.1299		0.3719	0.137	

Note. JSSE = Job search self-efficacy; robust standard errors in parentheses.

*** p<.01, ** p<.05, * p<.1

Table 2.12 Effect of mentoring contents focus on job search effort; full results

	Model 1.4			Model 1.5			Model 1.6		
	J SSE direct effect	Job search activities direct effect	indirect effect	J SSE direct effect	Job search activities direct effect	indirect effect	J SSE direct effect	Job search activities direct effect	indirect effect
Individual Mentoring (none = reference category)									
Wald test for joint significance (chi2)	4.17	8.44**					3.45	7.53*	
As needed only	0.113 (0.105)	0.834*** (0.312)	0.072 (0.068)				0.084 (0.106)	0.784** (0.313)	0.050 (0.063)
Regular and as needed	0.165 (0.117)	0.614* (0.355)	0.105 (0.077)				0.140 (0.119)	0.578 (0.360)	0.083 (0.072)
Regular only	0.022 (0.111)	0.865** (0.346)	0.014 (0.070)				-0.0003 (0.112)	0.822** (0.345)	-0.0002 (0.066)
Mentoring Focus									
Wald test for joint significance (chi2)				4.32	3.04		3.64	2.29	
Focus on Career				0.057* (0.032)	0.163* (0.094)	0.034 (0.023)	0.056* (0.032)	0.142 (0.094)	0.033 (0.022)
Focus on Education				-0.024 (0.038)	-0.056 (0.104)	-0.014 (0.024)	-0.028 (0.038)	-0.050 (0.104)	-0.017 (0.023)
Focus on job search assistance				0.0007 (0.034)	-0.058 (0.102)	0.0004 (0.021)	-0.003 (0.034)	-0.061 (0.102)	-0.002 (0.020)
Job search self-efficacy									
Start of the school-year	0.512*** (0.038)		0.325*** (0.103)	0.501*** (0.038)		0.302*** (0.103)	0.501*** (0.038)		0.296*** (0.104)
End of the school-year		0.634*** (0.196)			0.604*** (0.202)			0.591*** (0.202)	
Male	0.059 (0.079)	0.507** (0.237)	0.037 (0.052)	0.034 (0.078)	0.446* (0.239)	0.020 (0.048)	0.039 (0.078)	0.475** (0.237)	0.023 (0.047)
Non-Dutch family background	-0.012 (0.070)	0.583*** (0.221)	-0.008 (0.045)	-0.018 (0.070)	0.565** (0.220)	-0.011 (0.043)	-0.016 (0.070)	0.591*** (0.223)	-0.010 (0.042)
Age	-0.001 (0.015)	-0.017 (0.042)	-0.001 (0.010)	-0.001 (0.015)	-0.019 (0.042)	-0.001 (0.009)	-0.001 (0.015)	-0.015 (0.043)	-0.001 (0.009)
Level of Education (level-4 = reference category)									
Wald test for joint significance (chi2)	2.51	3.47		2.07	2.19		2.37	2.74	
Level-2	0.049 (0.091)	0.491* (0.286)	0.031 (0.058)	-0.002 (0.087)	0.394 (0.296)	-0.001 (0.053)	0.016 (0.091)	0.437 (0.297)	0.009 (0.054)
Level-3	-0.082 (0.068)	-0.006 (0.202)	-0.052 (0.045)	-0.092 (0.068)	-0.011 (0.207)	-0.056 (0.044)	-0.094 (0.068)	-0.024 (0.205)	-0.055 (0.043)
Field of Education (Health & Education = reference category)									
Wald test for joint significance (chi2)	8.04*	3.55		8.69*	4.48		9.18*	3.41	
Technology	-0.061 (0.142)	-0.685 (0.445)	-0.039 (0.091)	-0.077 (0.141)	-0.711 (0.463)	-0.046 (0.087)	-0.065 (0.140)	-0.673 (0.459)	-0.038 (0.085)
Sports & Leisure	-0.135* (0.076)	-0.196 (0.230)	-0.086 (0.057)	-0.160** (0.080)	-0.252 (0.248)	-0.097 (0.061)	-0.152* (0.080)	-0.224 (0.248)	-0.090 (0.060)
Business	0.146 (0.097)	-0.313 (0.313)	0.092 (0.0682)	0.126 (0.102)	-0.401 (0.337)	0.076 (0.068)	0.154 (0.106)	-0.258 (0.331)	0.091 (0.070)
Security	-0.019 (0.182)	-0.650 (0.500)	-0.012 (0.116)	-0.068 (0.187)	-0.828* (0.502)	-0.041 (0.114)	-0.054 (0.187)	-0.710 (0.507)	-0.032 (0.112)
Plans to stay in school after graduation	-0.147** (0.060)	0.957*** (0.188)	-0.093* (0.048)	-0.153** (0.061)	0.958*** (0.185)	-0.093* (0.047)	-0.146** (0.060)	0.960*** (0.187)	-0.087* (0.046)
Work experience	0.035** (0.016)	0.060 (0.047)	0.022* (0.012)	0.035** (0.016)	0.056 (0.047)	0.021* (0.011)	0.035** (0.016)	0.062 (0.047)	0.021* (0.011)
R-squared, equation	0.356	0.162		0.357	0.156		0.361	0.166	

Note. JSSE = Job search self-efficacy; robust standard errors in parentheses.

*** p<.01, ** p<.05, * p<.1

Table 2.13 Effect of mentoring schedule on job search success; full results

	Model 2.1			Model 2.2			Model 2.3		
	JS activities	Job interviews		JS activities	Job interviews		JS activities	Job interviews	
	direct effect	direct effect	indirect effect path (b)*(b')	direct effect	direct effect	indirect effect path (b)*(b')	direct effect	direct effect	indirect effect path (b)*(b')
	path (b)	path (c)	(b)*(b')	path (b)	path (c)	(b)*(b')	path (b)	path (c)	(b)*(b')
Individual mentoring (none = reference category)									
Wald test for joint significance (chi2)	6.41*	3.44					6.09	3.91	
As needed only	0.526** (0.244)	0.464* (0.256)	0.086** (0.042)				0.521** (0.244)	0.508* (0.260)	0.081** (0.040)
Regular and as needed	0.453 (0.284)	0.324 (0.303)	0.074 (0.047)				0.443 (0.286)	0.390 (0.309)	0.078* (0.045)
Regular only	0.683** (0.282)	0.388 (0.284)	0.112** (0.049)				0.667** (0.286)	0.440 (0.290)	0.104** (0.047)
Group mentoring (none = reference category)									
Wald test for joint significance (chi2)				0.920	2.11		0.63	2.62	
Sometimes				0.237 (0.254)	-0.008 (0.223)	0.040 (0.043)	0.168 (0.256)	-0.053 (0.225)	0.027 (0.042)
Each week				0.0807 (0.217)	-0.238 (0.205)	0.014 (0.036)	0.011 (0.219)	-0.292 (0.212)	0.002 (0.036)
Job search self-efficacy	0.519*** (0.100)			0.515*** (0.100)			0.512*** (0.100)		
End of the school-year		0.163*** (0.032)			0.169*** (0.032)			0.163*** (0.032)	
Job search activities									
Male	0.435** (0.210)	0.338* (0.201)		0.402* (0.214)	0.286 (0.201)		0.421** (0.212)	0.311 (0.202)	
Non-Dutch family background	0.515*** (0.193)	0.295* (0.178)		0.523*** (0.193)	0.295 (0.180)		0.514*** (0.194)	0.293 (0.179)	
Age	0.025 (0.039)	-0.093** (0.042)		0.021 (0.038)	-0.098** (0.042)		0.025 (0.039)	-0.097** (0.042)	
Level of Education (level-4 = reference category)									
Wald test for joint significance (chi2)	8.07**	2.66		7.31**	2.58		8.16**	2.89	
Level-2	0.648*** (0.246)	0.280 (0.208)		0.624** (0.251)	0.308 (0.210)		0.655*** (0.251)	0.327 (0.213)	
Level-3	-0.023 (0.183)	-0.084 (0.189)		-0.011 (0.188)	-0.013 (0.193)		-0.023 (0.187)	-0.026 (0.192)	
Field of Education (Health & Education = reference category)									
Wald test for joint significance (chi2)	4.6	2.34		4.32	2.36		4	1.7	
Technology	-0.602** (0.304)	0.134 (0.273)		-0.624* (0.324)	0.003 (0.282)		-0.589* (0.324)	0.020 (0.283)	
Sports & Leisure	-0.274 (0.206)	0.252 (0.207)		-0.252 (0.208)	0.201 (0.205)		-0.281 (0.209)	0.197 (0.207)	
Business	-0.211 (0.269)	-0.069 (0.274)		-0.298 (0.273)	-0.181 (0.265)		-0.220 (0.270)	-0.099 (0.274)	
Security	-0.443 (0.440)	-0.101 (0.369)		-0.480 (0.439)	-0.155 (0.381)		-0.430 (0.440)	-0.153 (0.374)	
Plans to stay in education	-0.958*** (0.163)			-0.950*** (0.164)			-0.943*** (0.166)		
Work experience	0.081** (0.040)	0.057 (0.037)		0.074* (0.041)	0.052 (0.037)		0.078* (0.041)	0.056 (0.037)	
Wald test for joint significance of all variables (chi2)	140.98***	60.72***		135.59***	59.62***		143.1***	63.57***	

Note. JS = job search; robust standard errors in parentheses.

***p<.01, **p<.05, *p<.1

Table 2.14 Effect of mentoring contents focus on; full results

	Model 2.4			Model 2.5			Model 2.6		
	JS activities	Job interviews		JS activities	Job interviews		JS activities	Job interviews	
	direct effect	direct effect	indirect effect path (b)*(b')	direct effect	direct effect	indirect effect path (b)*(b')	direct effect	direct effect	indirect effect path (b)*(b')
	path (b)	path (c)		path (b)	path (c)		path (b)	path (c)	
Individual Mentoring (none = reference category)									
Wald test for joint significance (chi2)	8.32**	3.960					7.42*	3.27	
As needed only	0.829*** (0.313)	0.756* (0.388)	0.101** (0.048)				0.778** (0.315)	0.700* (0.394)	0.083* (0.043)
Regular and as needed	0.606* (0.356)	0.631 (0.427)	0.074 (0.047)				0.567 (0.362)	0.595 (0.434)	0.067 (0.042)
Regular only	0.861** (0.347)	0.719* (0.411)	0.105** (0.052)				0.817** (0.347)	0.670 (0.416)	0.089* (0.047)
Mentoring Focus									
Wald test for joint significance (chi2)				2.95	3.57		2.18	2.77	
Focus on Career				0.158* (0.093)	0.172* (0.093)	0.019 (0.012)	0.137 (0.093)	0.153 (0.094)	0.016 (0.012)
Focus on Education				-0.054 (0.104)	-0.049 (0.101)	-0.007 (0.013)	-0.047 (0.104)	-0.043 (0.102)	-0.005 (0.012)
Focus on job search assistance				-0.059 (0.102)	-0.084 (0.097)	-0.007 (0.013)	-0.061 (0.102)	-0.088 (0.097)	-0.007 (0.012)
Job search self-efficacy	0.662*** (0.107)			0.643*** (0.110)			0.639*** (0.111)		
End of the school-year job search activities		0.122*** (0.037)			0.123*** (0.038)			0.116*** (0.038)	
Male	0.507** (0.237)	0.378* (0.227)		0.448* (0.238)	0.320 (0.228)		0.477** (0.236)	0.355 (0.230)	
Non-Dutch family background	0.578*** (0.219)	0.268 (0.202)		0.559** (0.219)	0.259 (0.203)		0.582*** (0.222)	0.282 (0.202)	
Age	-0.017 (0.042)	-0.073 (0.045)		-0.018 (0.042)	-0.070 (0.045)		-0.014 (0.042)	-0.068 (0.045)	
Level of Education (level=4 = reference category)									
Wald test for joint significance (chi2)	3.4	3.95		2.18	2.77		2.68	3.46	
Level-2	0.491* (0.286)	0.327 (0.236)		0.398 (0.295)	0.245 (0.239)		0.440 (0.297)	0.288 (0.241)	
Level-3	-0.002 (0.201)	-0.164 (0.210)		-0.004 (0.204)	-0.168 (0.211)		-0.015 (0.203)	-0.178 (0.211)	
Field of Education (Health & Education = reference category)									
Wald test for joint significance (chi2)	3.67	1.64		4.64	1.89		3.5	1.15	
Technology	-0.687 (0.445)	0.168 (0.386)		-0.712 (0.463)	0.143 (0.392)		-0.676 (0.459)	0.172 (0.396)	
Sports & Leisure	-0.194 (0.230)	0.203 (0.232)		-0.248 (0.247)	0.161 (0.243)		-0.219 (0.248)	0.182 (0.245)	
Business	-0.322 (0.307)	-0.173 (0.301)		-0.412 (0.330)	-0.245 (0.306)		-0.273 (0.323)	-0.119 (0.317)	
Security	-0.657 (0.494)	0.083 (0.419)		-0.833* (0.497)	-0.068 (0.439)		-0.718 (0.502)	0.029 (0.434)	
Plans to stay in education	-0.952*** (0.184)			-0.951*** (0.181)			-0.951*** (0.184)		
Work experience	0.058 (0.046)	0.045 (0.042)		0.054 (0.047)	0.040 (0.043)		0.058 (0.046)	0.045 (0.043)	
Wald test for joint significance of all variables (chi2)	131.72***	43.01***		134.99***	43.84***		139.56***	47.15***	

Note. JS = Job search; robust standard errors in parentheses
*** p<.01, ** p<.05, * p<.1

Table 2.15 Model 1.1, comparison

	Linear model		Poisson model	
	JSSE path (a)	JS activities path (b)	JSSE path (a)	JS activities path (b)
Individual mentoring (none = reference category)				
Wald test for joint significance (chi2)	2.93	6.32*	2.93	5.91
As needed only	0.064 (0.075)	0.520** (0.244)	0.064 (0.075)	0.185** (0.089)
Regular and as needed	0.082 (0.088)	0.441 (0.284)	0.082 (0.088)	0.168 (0.103)
Regular only	-0.022 (0.084)	0.680** (0.283)	-0.022 (0.084)	0.238** (0.100)
Job search self-efficacy				
Start of the school-year	0.536*** (0.032)		0.536*** (0.032)	
End of the school-year		0.584*** (0.174)		0.170*** (0.0321)
Male	0.061 (0.066)	0.431** (0.210)	0.061 (0.066)	0.146** (0.0675)
Non-Dutch family background	-0.039 (0.059)	0.506*** (0.194)	-0.039 (0.059)	0.167*** (0.060)
Age	0.002 (0.013)	0.025 (0.039)	0.002 (0.013)	0.00713 (0.012)
Level of Education (level-4 = reference category)				
Wald test for joint significance (chi2)	1.83	7.99**	1.83	9.34***
Level-2	0.048 (0.075)	0.648*** (0.246)	0.048 (0.075)	0.202*** (0.073)
Level-3	-0.056 (0.061)	-0.015 (0.184)	-0.056 (0.061)	-0.0152 (0.061)
Field of Education (Health & Education= reference category)				
Wald test for joint significance (chi2)	7.84*	4.62	7.84*	4.49
Technology	-0.047 (0.095)	-0.604** (0.305)	-0.047 (0.095)	-0.198** (0.100)
Sports & Leisure	-0.117* (0.064)	-0.272 (0.206)	-0.117* (0.064)	-0.0918 (0.0698)
Business	0.114 (0.084)	-0.227 (0.274)	0.114 (0.084)	-0.0695 (0.0901)
Security	0.009 (0.149)	-0.459 (0.445)	0.009 (0.149)	-0.148 (0.129)
Plans to stay in school after graduation	-0.139*** (0.052)	-0.947*** (0.164)	-0.139*** (0.052)	-0.319*** (0.0532)
Work experience	0.026** (0.013)	0.077* (0.040)	0.026** (0.013)	0.0262** (0.0133)
R-squared, equation; Wald test for joint significance of all variables (chi2)	0.368	0.136	365.54***	148.1***

Note. JSSE = Job search self-efficacy; JS = Job search; robust standard errors in parentheses.

*** p<.01, ** p<.05, * p<.1

Job search activities, the outcome variable in model 1 and the mediator in model 2, is not a continuous variable as it contains the number of different search methods used. Using a poisson regression instead of a linear model does not change the nature of the results, as significance and sign of the effects is not affected, with the exception of the joint significance, which changes slightly on some occasions). Tables 2.15 and 2.16

compare the results for model 1.1 and model 2.1 with the results obtained using generalized structural equation models with a poisson distribution and log-linkfunction where job search activities is the dependent variable.

Table 2.16 Model 2.1, comparison

	Linear model		Poisson model	
	JS activities direct effect path (b)	Job interviews direct effect path (c)	JS activities direct effect path (b)	Job interviews direct effect path (c)
Individual mentoring (none = reference category)				
Wald test for joint significance (chi2)	6.41*	3.44	5.91	3.44
As needed only	0.526** (0.244)	0.464* (0.256)	0.185** (0.0888)	0.464* (0.256)
Regular and as needed	0.453 (0.284)	0.324 (0.303)	0.168 (0.103)	0.324 (0.303)
Regular only	0.683** (0.282)	0.388 (0.284)	0.238** (0.100)	0.388 (0.284)
Job search self-efficacy	0.519*** (0.100)		0.170*** (0.0321)	
Job search activities		0.163*** (0.032)		0.163*** (0.032)
Male	0.435** (0.210)	0.338* (0.201)	0.146** (0.0675)	0.338* (0.201)
Non-Dutch family background	0.515*** (0.193)	0.295* (0.178)		0.295* (0.178)
Age	0.025 (0.039)	-0.093** (0.042)	0.00713 (0.0116)	-0.093** (0.042)
Level of Education (level-4 = reference category)				
Wald test for joint significance (chi2)	8.07**	2.66	9.34***	2.66
Level-2	0.648*** (0.246)	0.280 (0.208)	0.202*** (0.0727)	0.280 (0.208)
Level-3	-0.023 (0.183)	-0.084 (0.189)	-0.0152 (0.0606)	-0.084 (0.189)
Field of Education (Health & Education = reference category)				
Wald test for joint significance (chi2)	4.6	2.34	4.49	2.34
Technology	-0.602** (0.304)	0.134 (0.273)	-0.198** (0.100)	0.134 (0.273)
Sports & Leisure	-0.274 (0.206)	0.252 (0.207)	-0.0918 (0.0698)	0.252 (0.207)
Business	-0.211 (0.269)	-0.069 (0.274)	-0.0695 (0.0901)	-0.069 (0.274)
Security	-0.443 (0.440)	-0.101 (0.369)	-0.148 (0.129)	-0.101 (0.369)
Plans to stay in education	-0.958*** (0.163)		-0.319*** (0.0532)	
Work experience	0.081** (0.040)	0.057 (0.037)	0.0262** (0.0133)	0.057 (0.037)
Wald test for joint significance of all variables (chi2)	140.98***	60.72***	148.1***	60.72***

Note. JS = Job search; robust standard errors in parentheses.

*** p<.01, ** p<.05, * p<.1

3 The ethnic reservation wage gap among Dutch vocational students: the importance of expectations for early labour market experience

3.1 Introduction

In most European countries, non-natives and in particular non-natives of non-western²² origin have a weaker position on the labour market with higher unemployment rates, longer unemployment durations, lower wages, and higher levels of inactivity. These difficulties are not restricted to the immigrants themselves, but also hold for the second generation as reflected in the youth unemployment rates: in 2012, the unemployment rate among all youth aged 15 to 24 in the Netherlands was 11.7%. However, among youth with a non-western family background unemployment was twice as high (24.5%), while only 9.5% of the native Dutch youth was unemployed (Statistics Netherlands, 2016).

A number of reasons for this weaker starting position have been identified, most notably the overall weaker starting position of non-western workers on the labour market (Gupta & Kromann, 2013) and discrimination against non-western workers by employers (Klooster, Koçak, & Day, 2016; Lang & Lehmann, 2012). Still, those explanations cannot fully explain the different labour market outcomes. Recent research investigates supply side behaviour as possible explanation: differences in labour market behaviour and especially job search behaviour of non-western workers compared to western workers could contribute to their weaker labour market position (Baert, Heiland, & Korenman, 2014; Constant, Krause, Rinne, & Zimmermann, 2010, 2017). For example, Constant and colleagues (2010, 2017) found that reservation wages of non-native Germans were higher than those of native Germans and that those wage demands were probably partly responsible for the higher unemployment rate for non-western workers.

Although reservation wages play an important role in the theory of labour supply and job search, the empirical evidence on reservation wages is relatively limited since data on reservation wages are not readily available. The available evidence mostly concentrates

²² If both parents were born in western countries the student is considered a western student. This includes the native Dutch students. If at least one parent was born in Turkey, Africa, Latin America or Asia (excluding Indonesia and Japan) the student is considered of non-western origin (classification by Statistics Netherlands, 2019).

on adult workers and young workers already integrated in the labour market (Lynch, 1983; Parsons, 1991). The handful of studies that looked into reservation wages of students concern students from tertiary education (van Ophem, Hartog, & Berkhout, 2011; Wiswall & Zafar, 2015). This study adds to the literature by presenting evidence from a cohort of secondary vocational students close to labour market entry.

The large majority of non-western youth in the Netherlands has no more than secondary education (93% in 2011), and non-western students account for 24% of the VET-population. In the big cities, this share is even a lot larger (Statistics Netherlands, 2018a). In line with the observations of Constant and colleagues (2010, 2017) among unemployed adults in Germany, we find that non-western students in the Netherlands set systematically higher reservation wages than Dutch students, a difference that cannot be explained by differences in characteristics.

Reservation wages are determined by individual preferences and opportunity costs of leisure, but in order to be efficient reservation wages need to be based on realistic expectations about the prevailing general labour market conditions. Recent literature studies the accuracy of reservation wages with respect to labour market conditions by comparing reservation wages to actual or predicted wages (Brown & Taylor, 2011; van Ophem et al., 2011) or by manipulating information (Wiswall & Zafar, 2015). The only study so far comparing reservation wages of students to their starting wages, van Ophem et al. (2011), finds little difference between actual wages and reservation wages, concluding that Dutch students are well informed about their labour market prospects. However, that study relies on data for both reservation and starting wages taken from a single survey, asking respondents to recall the lowest wage offer they would have accepted from their current employer. In contrast, we use longitudinal data comparing reservation wages stated shortly before graduation to actual wages six months later. Among those employed, the starting wage/ reservation wage ratio is significantly lower for non-western students.

Contrary to job search theory, we do not find that high reservation wages translate into an high risk of unemployment six months after the end of the school year. While the high reservation wages thus do not seem to *cause* adverse labour market outcomes of non-western students, the combination of higher expectations and lower realisation can be problematic as such: young non-western adults are more likely to be disappointed by

their first labour market experience than western students, since their first experience is less likely to meet or even exceed expectations. This subjective disappointment on top of the existing objective difficulties could make their labour market position as a group even more vulnerable.

3.2 Reservation wages: determinants and effect

Reservation wages, the lowest wage for which a person is willing to work, play an important role in the theory of labour supply and job search. As the 'stopping rule', they are the main theoretical mechanism linking search behaviour to unemployment. Theoretically, reservation wages are based on two elements: on the one hand the job seeker's personal position, the value they place on the current jobless status quo, and, on the other hand, the job seeker's labour market position, the added value they can achieve from finding a job. The current status quo is usually summarized by non-labour income. The second element is the expected future income from finding acceptable employment.

Equation 3.1 is a standard reservation wage equation and illustrates these two elements: the optimal reservation wage (w^r) is a function of the current utility (b for benefits) and the expected value of finding employment, composed of the likelihood of receiving a job offer (α) and the expected discounted value of this job offer given the wage offer distribution and the reservation wage. This reservation wage equation results from a dynamic optimization process maximising total lifetime income and has been developed and extensively described in the 1970ies and 1980ies (Kiefer & Neumann, 1979; Lippman & McCall, 1976; McCall, 1970; Mortensen, 1986). With slight variations and extensions, this equation has been the starting point of most empirical work from Lancaster & Chesher (1983) to today, for example van Ophem et al. (2011).

Equation 3.1

$$w^r = b + \frac{\alpha(s)}{\rho} * P(w > w^r) * E(w - w^r | w > w^r)$$

Early empirical studies on the determinants of reservation wages mainly focused on non-labour income (b for benefits; e.g. Lancaster & Chesher, 1983; Lynch, 1983), since the second part of the equation - the wage distribution and job offer arrival rate (α) - is

assumed to be given and, most importantly, known to the job seeker²³. Accurate information about the labour market thus forms the basis on which efficient job search behaviour is modelled. Overestimating the true wage distribution leads to inefficiently high reservation wages and increases unemployment duration (McCall, 1970). However, job seekers cannot observe a wage distribution. The reservation wage is set according to the job seeker's *beliefs about and perceptions of* labour market conditions, formed by labour market information provided by others and/ or gathered through own experience.

Human capital indicators, such as experience and schooling, affect reservation wages in the same ways as wages, suggesting that job seekers indeed consider some 'wage distribution' (Prasad, 2003). Personal characteristics unrelated to human capital, such as gender and ethnicity, should not have an impact on reservation wage levels - unless they affect current utility. For example, Arrazola & de Hevia (2016) found that Spanish women have higher reservation wages than Spanish men, but only among married people and people with caring responsibilities. The higher female reservation wage in Spain is therefore the result of the women's larger share in household and caring duties, thus increasing the value of their non-employed time.

Studies in Germany and Britain have found that ethnicity affects reservation wage setting (Brown & Taylor, 2011; Constant et al. 2010, 2017; Constant, Kahanec, Rinne, & Zimmermann, 2011). Unlike the Spanish women's higher value of staying at home, there is no ready theoretical explanation why non-natives or minority groups evaluate either their current, unemployed, status quo or the labour market conditions differently than natives or majority groups. Constant and colleagues (2010, 2017) investigated different reference points for reservation wage setting and ethnic identity as possible mechanisms; differences in labour market attachment and different methods of information gathering are other possible explanations (Brown & Taylor, 2011; McCall, 1970).

In the same vein, it is possible that non-western students in Dutch vocational education overestimate the value of their secondary VET diploma on the Dutch labour market. While a level-2 degree (the so-called 'starting qualification') is considered the lowest

²³ The arrival rate is usually viewed to be dependent on job search activity (s) but in a deterministic way. This fact links the two behavioural aspects of job search - search effort and reservation wage - together, but for the purpose of this study the important point is that the job seeker is supposed to know his job offer arrival rate for each level of search effort.

possible degree that allows a young person to enter the Dutch labour market, any degree might be considered a high level of accomplishment in a social network that uses a country as a reference point where literacy rates are low, such as Morocco²⁴, or where schooling levels are considerably lower, such as Turkey²⁵.

Correctly judging one's own labour market position and prospects is not trivial, even for experienced adult workers (Addison, Centeno, & Portugal, 2009; Prasad, 2003). Young labour market entrants could be particularly prone to unrealistic perceptions and expectations. In addition, non-western vocational students are less likely to gather work experience in a side job while studying than Dutch students, and they are less likely to have started job search prior to graduation (Wolbers, 2008b). By providing accurate information or encouraging early job search activities, for example as part of career guidance programs, schools might be able to improve school-to-work transitions in general, and for non-western students in particular (Bimrose, Barnes, & Hughes, 2008; Hughes, Bosley, Bowes, & Bysshe, 2002; Wiswall & Zafar, 2015).

3.3 Empirical Strategy

The relationship between ethnic family background, reservation wages and unemployment for Dutch VET-students is investigated in three parts: first we look at reservation wages shortly before graduation and at the ethnic reservation wage gap. Second, we analyse the ethnic differences in unemployment shortly after graduation and investigate the role of reservation wages in unemployment risk. Third, we compare reservation wages to starting wages six months later and look at the ethnic differences in experience-expectation relation.

First, we estimate a log-linear reservation wage equation to establish the impact of ethnic family background on reservation wages at the end of the last school year (superscript e indicates measurement at the end of the school year).

²⁴ According to the UNESCO Institute for Statistics, in 2011 18.5% of the Moroccan young adults (15-24 years) and 32.9% of the population aged 15 or older were illiterate (UNESCO Institute for Statistics, 2016a). The UNESCO has no data available for educational attainment and schooling attendance in Morocco.

²⁵ According to the UNESCO, 32% of the Turkish adult population (older than 24 years) has finished an education on ISCED level 3 (VET level 2 in the Dutch system) or higher, as compared to 67% of the Dutch population (UNESCO Institute for Statistics, 2016b).

Equation 3.2 Reservation wages

$$\ln(w_i^{re}) = \beta_0 + X_i' \beta_1 + HC_i^{e'} \beta_2 + \epsilon$$

Reservation wages should be mainly determined by the (perceived) wage offer distribution, so all factors expected to influence market wages should affect reservation wages in the same direction. Those factors include time invariant demographic characteristics X (such as gender, age and ethnicity), as well as human capital indicators at the time of reservation wage setting HC^e (field and level of education)²⁶.

Second, we analyse the correlation between ethnic family background and unemployment six months after graduation (superscript $e+6$ indicates the time of measurement).

Equation 3.3 Probability of employment

$$Y_i^{e+6} = \beta_0 + X_i' \beta_1 + HC_i^{e'} \beta_2 + \epsilon$$

Y^{e+6} is a dummy variable indicating employment status six months after the end of the school year, taking the value 1 if the graduate is employed, zero otherwise, so a standard probit model is estimated. HC^e , measures of human capital, comprise level and field of training and work experience relevant to the field of training.

Theoretically, high reservation wages are expected to increase the likelihood of unemployment. Therefore, to investigate whether unrealistic wage demands are (partly) responsible for the high unemployment rate of non-western students, we re-estimate the probability to be unemployed while including reservation wages six months earlier as explanatory variable:

Equation 3.4 Probability of employment, given reservation wages

$$Y_i^{e+6} = \beta_0 + X_i' \beta_1 + HC_i^{e'} \beta_2 + \beta_3 \ln(w_i^{re}) + \beta_4 \ln(w_i^{re}) \times D_{nw} + \epsilon$$

An interaction term between ethnic background (D_{nw} equal to 1 if the student is from a non-western family background) and reservation wages accounts for different effects of wage demands for western or non-western students.

²⁶ As indicated, non-labour income (b) is an important theoretical determinant of reservation wages. We do not include financial resources of the students in the analysis, since we miss information on financial resources for more than half the students. Empirical work has repeatedly found no significant effect of unemployment benefits on reservation wages (Lynch, 1983; Addison et al., 2009). For the subsample for which we do have information on non-labour income, we only find a small effect of parental transfers on the level of reservation wages (+0.014%, $p < 0.05$).

Third, we compare reservation wages to starting wages six months later. We describe ethnic differences in starting wages 6 months after graduation (time $e+6$) with a log-linear OLS wage regression (Equation 3.5), using the same controls as Equation 3.2.

Equation 3.5 Starting wages

$$\ln(w_i^{e+6}) = \beta_0 + X_i' \beta_1 + HC_i^{e'} \beta_2 + \epsilon$$

Starting wages are then compared to reservation wages six months earlier:

Equation 3.6 Expectation-experience gap

$$\ln\left(\frac{w_i^{e+6}}{w_i^{re}}\right) = \beta_0 + X_i' \beta_1 + HC_i^{e'} \beta_2 + \epsilon$$

Rather than remaining unemployed while searching for unrealistic high wages, the graduate can adjust reservation wages downward during job search. In that case, we will observe a low starting wage/ reservation wage ratio, as the accepted starting wage will lie closer to, or even below the original reservation wage. A significant coefficient for non-western ethnic background in Equation 3.6 reflects a significant difference in the relationship between expectation (w^{re}) and experience (w^{e+6}) for the two groups. A negative coefficient indicates that the experience compares less favourable to the graduate's expectations six months earlier. If the coefficient for non-western ethnic background in Equation 6 is zero, both ethnic groups set equally accurate (or inaccurate) reservation wages. High reservation wages are not unrealistically high by definition, but could reflect aspects of the job seeker unobserved by the researcher, such as high ability, motivation, or preferences. Differences in reservation wages are then offset by similar differences in starting wages.

Two additional analyses are presented in the appendix to this chapter and serve as a robustness-check. A full Blinder-Oaxaca wage gap decomposition complementing the log linear reservation wage equation is included in Appendix 3A. A path analysis to check for an indirect effect of ethnic background mediated by changes in the reservation wage is included in Appendix 3B.

3.4 Data

This study uses a dataset on graduates of vocational education and training (VET) in the Netherlands, which was collected as part of the multidisciplinary research project

School2Work. One cohort of VET-students from a large school for vocational education (ROC) in the centre of the Netherlands was approached to participate in this longitudinal study. Over a period of three years (2011-2014), these students were invited repeatedly to complete questionnaires on, among others, their labour market expectations, employment status, job search activity, and transition progress. The first interviews were conducted in school in a classroom setting while participants were still enrolled in training. The follow-up interviews were conducted online. For more information on the School2Work project and the data collection procedure, see chapter 6.

The School2Work panel consists of more than 2.000 students. Shortly before the end of the final school year, about half the students stated that they were preparing to leave full-time education after finishing the current training. Those students were asked to imagine being offered a job that fit their training and suited their preferences well, and to state their preferred working hours and wage demands for such a job. Not all students were prepared or able to answer these questions, reservation wages are therefore available for 558 students. Six months later, in December 2012, the students were approached again and while more than 700 participated in the follow-up survey, the majority (60%) was still enrolled in full-time education. In addition, some respondents are not included in the analysis because they were self-employed or had left education before May 2012. Of the 273 graduates on the labour market in December 2012, 83% were employed and 185 employed graduates reported wages. Former reservation wages are known for 130 of the employed and 189 of all graduates on the labour market.

Table 3.1 presents descriptive statistics for the largest sample, that is all students that reported reservation wages in May 2012. While the school offered training in roughly 300 different occupations covering divers vocational fields, the largest group of students studied health and education related occupations, such as assistant nurse or kindergarten teacher. More than half the students were female. At the end of the school year 2011/12, which was their expected graduation date, these students were 21 years old on average. Native Dutch students accounted for more than two thirds of the sample; the majority of the non-Dutch students were second-generation immigrants. Among the non-Dutch students, 82% are considered of non-western origin, mainly second-generation immigrants from Moroccan (41%) and Turkish (21%) family backgrounds. The western non-Dutch students originate mainly from EU countries (53%) and the culturally

'western' part of Asia (Indonesia, 41%). For the purpose of this study the Dutch and the western non-Dutch students are considered as one group.

Table 3.1 Sample Descriptives

Gender	
Male	41%
Female	59%
Age	
18 years or younger	15%
19 years	20%
20 years	22%
21-22 years	26%
23 or older	17%
Ethnicity	
Western family background (including Dutch)	74%
Non-Western family background	26%
Level of Education	
Level-2	16%
Level-3	25%
Level-4	59%
Field of Education	
Technical Studies	16%
Leisure	21%
Business	12%
Health & Education	45%
Security	6%
<i>N</i> (largest sample)	558

Reservation wages (w^r) in May 2012

Reservation wages were elicited in line with the European Community Household Survey (Addison et al., 2009). Students were asked what monthly take-home salary they would absolutely have to be offered in order to accept an imagined suitable job, assuming working hours would be exactly as preferred²⁷. The mean of preferred working hours was 33 hours a week, with 2% of the students stating that they would prefer to work not more than 12 hours a week and 73% looking for a full-time job (32 hours or more). Non-

²⁷ "Hoeveel wil je in ieder geval netto per maand verdienen in deze baan van [insert hours preferred by the respondent] uur? Wat is de ondergrens, het absolute laagste salaris dat je moet aangeboden krijgen om deze baan te nemen?"

western students differ from western students in their preferences and expectations: they state lower preferred working hours and higher hourly reservation wages. Some of the difference in preferred working hours might be due to the higher share of female students among the non-western students in the S2W sample. Female students on average preferred to work slightly fewer hours than male students, which reflects typical Dutch gender differences in working patterns. On average, non-western students have higher hourly wage demands than western students, the mean reservation wage is 1.40 euros higher, the median lies 1.1 euros higher. Figure 3.1 displays the reservation wage distribution (the natural logarithm) by ethnic family background.

Table 3.2 Preferred working hours and hourly reservation wages before graduation

	All	Ethnic family background	
		Western	Non-western
Preferred working hours			
Preferred hours, mean (<i>sd</i>)	33.4 (7.99)	34.3 (7.58)	30.7 (8.55)
Preferred hours, categories			
Not more than 12 hours	2%	1%	5%
13-31 hours	25%	22%	34%
32 hours or more	73%	77%	61%
Reservation wage (w^{re})			
w^{re} per hour, median (<i>Mad</i>)	€ 7.8 (2.35)	€ 7.5 (2.56)	€ 8.6 (2.56)
w^{re} per hour, mean (<i>sd</i>)	€ 8.0 (2.80)	€ 7.6 (2.58)	€ 9.0 (3.17)
Number of observations (largest sample)	558	412	146

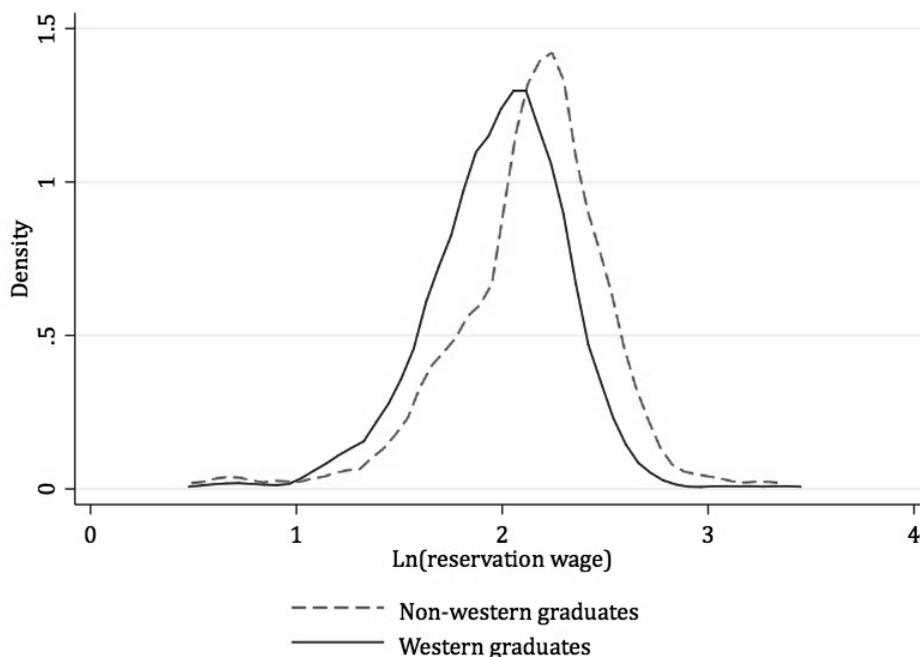


Figure 3.1 Reservation wage distribution by ethnic family background

Employment and wages in December 2012

Among the graduates no longer in education, 82% were employed in December 2012, but unemployment was three times higher among non-western graduates than among western graduates (see Table 3.3 for details). The median realised net hourly wage in December 2012, six months after the end of the school year, was 8.3 euros (*Mad* 1.94). Figure 3.2 shows the distribution of realised starting wages (the natural logarithm), indicating that there is some difference in wages between western and non-western non-Dutch students. While the median wage is almost the same and actually 10 eurocents higher for non-western graduates, the wage distribution of non-western graduates is wider, indicating more variation in wages among non-western graduates compared to western graduates.

Table 3.3 Employment and wages in December 2012

	All	Ethnic family background		w^{re} available
		Western	Non-western	
Labour market status (in Dec 2012)				
Unemployed	18%	12%	38%	16%
Employed	82%	88%	62%	84%
Job characteristics (in Dec 2012)				
Working hours per week, mean	27.1	28.2	22.0	27.3
(<i>sd</i>)	(13.15)	(12.97)	(12.99)	(13.33)
Wage per hour (w^{e+6})#, median	€ 8.3	€ 8.2	€ 8.3	€ 8.5
(<i>Mad</i>)	(1.94)	(1.87)	(3.36)	(1.76)
<i>N</i> , labour market status known	273	208	65	192
<i>N</i> , wage (w^{e+6})# known	185	154	31	130

Note. # w^{e+6} = starting wages. w^{re} = reservation wages.

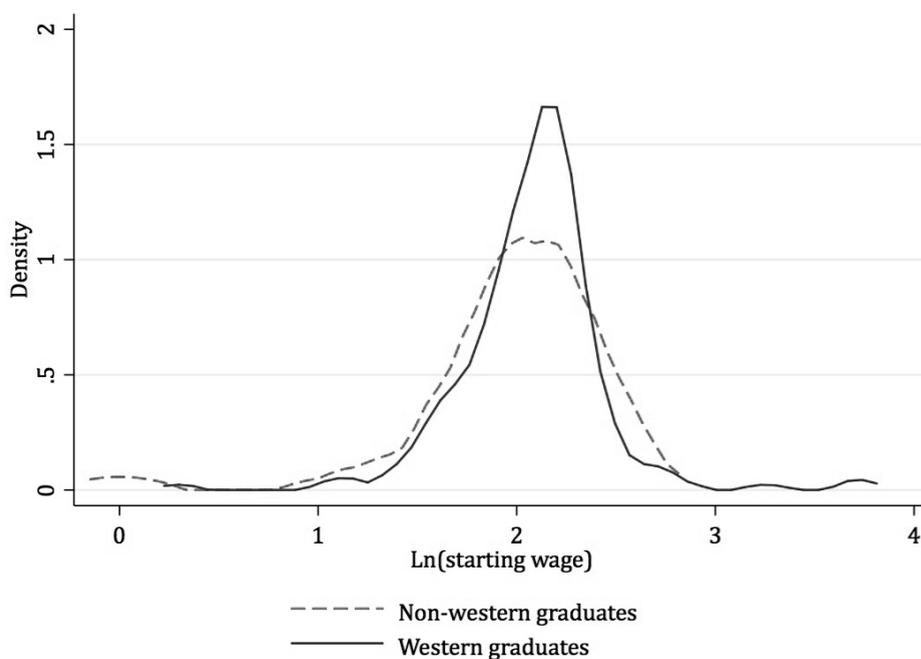


Figure 3.2 Starting wage distribution

A theoretical implication of (too) high reservation wages is increased unemployment duration. Figure 3.3 compares the reservation wage distribution for students that were

employed six months later (solid line) to the reservation wage distribution of students that were unemployed (dashed line). From this comparison it seems that the wage demands of those that remained unemployed were, indeed, higher on average than the wage demands of those that found employment: the dashed line lies clearly to the right of the solid line. However, as unemployment and high reservation wages are both strongly correlated with ethnic family background, we cannot infer a causal link from this simple comparison.

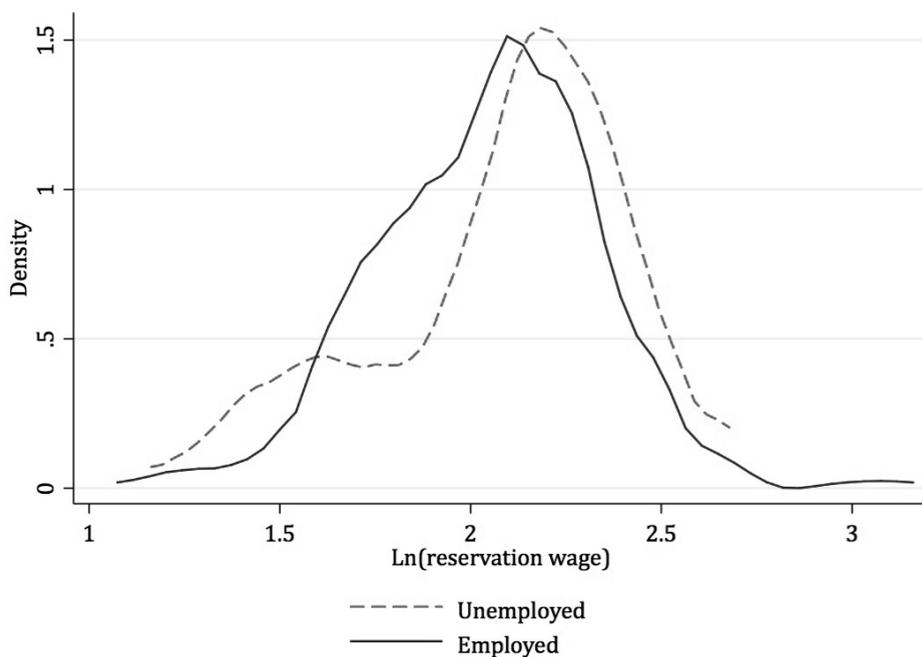


Figure 3.3 Reservation wages before graduation by employment status after graduation

How realistic or optimistic reservation wages are can only be determined by comparing them to market wages. Figure 3.4 compares the starting wage and reservation wage distributions among employed graduates. The two distributions resemble each other closely, which means that, as a group, students predicted their own starting wages fairly accurately. The reservation wage distribution has a wider left tail, indicating that the realised wages are on average higher than reservation wages which is consistent with the

definition of reservation wages as lowest acceptable wage. Mean ratio between wages and reservation wages is 1.1 (*SD* 0.39), the average ratio is lower for non-western students (*M* 1.00, *SD* 0.36) than for western students (*M* 1.13, *SD* 0.40).

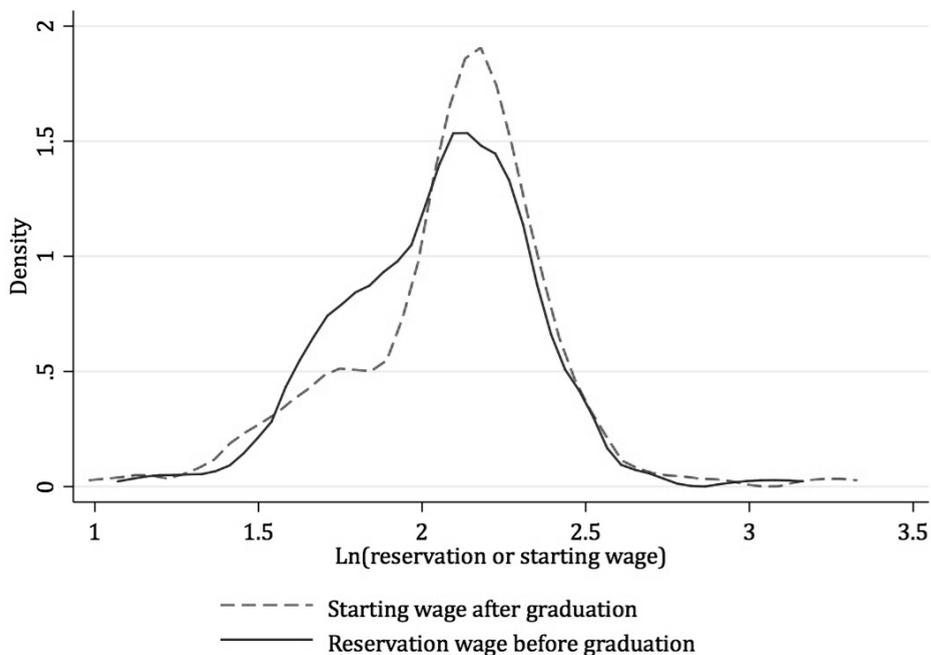


Figure 3.4 Distribution of reservation wages before and starting wages after graduation (employed graduates only; between variation)

Figure 3.5 compares reservation wages and starting wages for each employed graduate directly, by plotting the difference between the natural logarithm of wages and the natural logarithm of reservation wages of the same person (the within-subject variation). A difference of zero indicates wages equal to reservation wages, the left tail of the distribution indicates overly optimistic, the right tail cautious reservation wages. The figure displays the difference separately for the group of western and for non-western students. Western students (solid line) set more accurate and slightly more cautious reservation wages than non-western students (dashed line). Apparently, non-western students more often and to a larger extent than western students accepts wages below

their original reservation wage, indicating that they correct their wage demands downwards during job search.

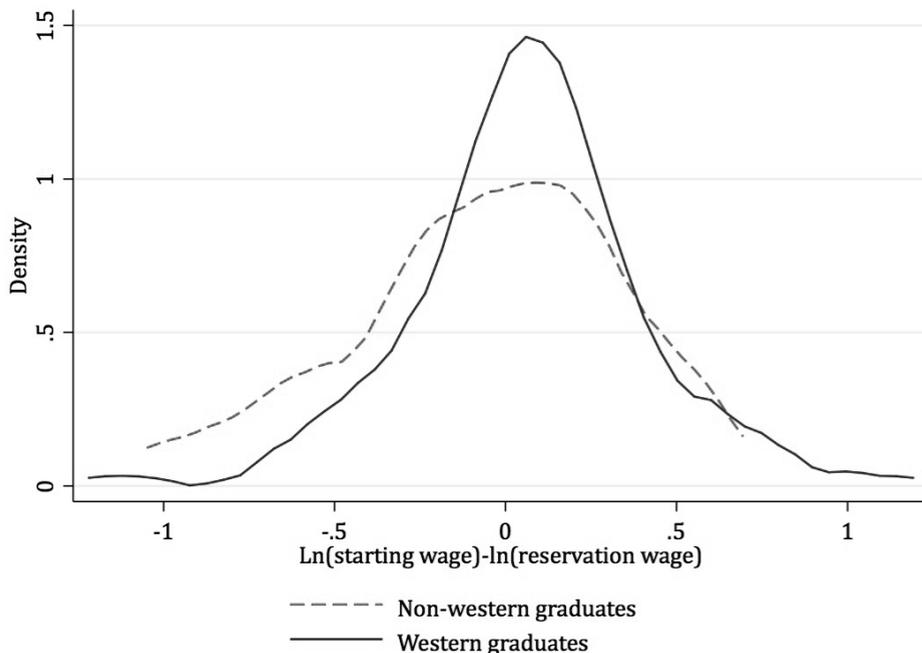


Figure 3.5 Difference between starting wage and reservation wage (within variation)

3.5 Results

Reservation wages

First we look at the determinants of reservation wages shortly before graduation and at the ethnic reservation wage gap. Table 3.4, column 1, reports OLS estimates for a log-linear reservation wage equation. The results show that older students set higher reservation wages, as would be expected, not least because of the Dutch youth minimum wage scheme. Training characteristics seem to matter less; presumably the impact of level of training is reduced by the high correlation between age and level of training²⁸.

²⁸ 42% of the youngest age group are enrolled in a level-2 training, compared to only 6-7% of the older age groups.

Table 3.4 Determinants of reservation wages (w^{re}), starting wages (w^{e+6}) and the difference between reservation wages and starting wages

	$\ln(w_i^{re})$	$\ln(w_i^{e+6})$	$\ln\left(\frac{w_i^{e+6}}{w_i^{re}}\right)$
Ethnicity (1=non-western)	0.117*** (0.0380)	-0.155 (0.103)	-0.191** (0.0871)
Gender (1=male)	0.0240 (0.0390)	0.140 (0.0915)	-0.0461 (0.0923)
Age (reference category = 18 or younger)			
<i>F</i> -test for joint significance (<i>p</i> -value)	5.28***	4.15***	2.17*
19 years	0.0766 (0.0649)	0.0333 (0.103)	0.0210 (0.145)
20 years	0.133** (0.0674)	0.187* (0.105)	0.274** (0.136)
21-22 years	0.201*** (0.0629)	0.249*** (0.0923)	0.204 (0.128)
23 or older	0.238*** (0.0674)	0.368*** (0.0997)	0.298** (0.141)
Level of Education (reference category=Level-2)			
<i>F</i> -test for joint significance (<i>p</i> -value)	1.23	1.10	0.16
Level-3	0.0706 (0.0536)	0.140 (0.103)	-0.0392 (0.148)
Level-4	0.0787 (0.0507)	0.0654 (0.0997)	-0.0711 (0.142)
Field of Education (reference category=Technical studies)			
<i>F</i> -test for joint significance (<i>p</i> -value)	3.48***	1.22	0.40
Leisure	-0.137** (0.0536)	0.0875 (0.0749)	0.128 (0.107)
Business	0.0257 (0.0515)	0.126 (0.0956)	0.0445 (0.163)
Health & Education	0.00751 (0.0493)	0.228** (0.109)	0.0931 (0.109)
Security	0.122 (0.0808)	0.108 (0.152)	-0.0258 (0.231)
<i>N</i>	558	185	130
<i>R</i> ²	0.133	0.171	0.141
<i>F</i> -test (<i>p</i> -value)	6.58***	5.01***	1.37

Note. Robust standard errors in parentheses.

*** $p < .01$, ** $p < .05$, * $p < .1$

There is no significant difference between men and women with respect to reservation wage setting, which indicates that students do not anticipate any gender wage difference. The difference between students with different ethnic family backgrounds, however, is strongly significant and large: non-western students set around 12 percent higher

reservation wages than western students. Following Constant et al. (2010), a Blinder-Oaxaca wage gap decomposition was conducted to confirm the robustness of this result in the presence of probably large differences in group composition. This analysis is presented in appendix 3A.

Unemployment and reservation wages

We analyse the ethnic differences in unemployment shortly after graduation. Table 3.5 presents the results from a probit regression analysis with employment status six months after the end of the school year as dependent variable, taking the value 1 if the graduate is employed, zero otherwise. Being from a non-western family background is strongly associated with lower probability of being in employment. While the effect size is affected by the sample - the effect seems to be larger among students that reported a reservation wage shortly before graduation than among the complete sample (29-30% in columns 2 and 3 compared to 23% in column 1 of Table 3.5) - the direction and significance of the effect remains stable across samples.

As a next step, we investigate the role of reservation wages in the risk of remaining unemployed, since, theoretically, higher reservation wages are associated with longer unemployment duration. However, our data do not confirm this association. Column 3 in Table 3.5 show that reservation wages are not significantly correlated with the likelihood of unemployment. Controlling for reservation wages also does not affect the effect of non-western ethnic background on the likelihood of employment, as is confirmed by a test for equality of the coefficient estimates from the model including and the model not including reservation wages (columns 2 and 3 in Table 3.5)²⁹.

²⁹In the case of nested models, a Wald test can be used to test the null-hypothesis that the coefficient for non-western ethnic family background in the full model (including reservation wages, column 3) is statistically significantly different from the coefficient for non-western family background in the reduced model (not including reservation wages, column 2) by stacking the models and using clustered standard errors to account for the covariance between estimators (Clogg, Petkova, & Haritou, 1995). The null-hypothesis of equality of coefficients for non-western family background from the two models cannot be rejected ($\chi^2 = 0.07$).

Table 3.5 Probability of being employed 6 months after graduation

	All	w^r available	
	(1)	(2)	(3)
Ethnicity (1=non-western)	-0.232*** (0.0696)	-0.303*** (0.0829)	-0.299*** (0.084)
Gender (1=male)	-0.0278 (0.0643)	-0.102 (0.0852)	-0.105 (0.0861)
Age (reference category = 18 or younger)			
<i>F</i> -test for joint significance (χ^2)	0.74	3.46	.492
19 years	-0.028 (0.0766)	-0.106 (0.0792)	-0.105 (0.0796)
20 years	-0.022 (0.0796)	-0.209** (0.0907)	-0.210** (0.0915)
21-22 years	-0.018 (0.0759)	-0.104 (0.0709)	-0.104 (0.0710)
23 or older	-0.063 (0.0814)	-0.129* (0.0744)	-0.129* (0.0743)
Level of Education (reference category=Level-2)			
<i>F</i> -test for joint significance (χ^2)	1.72	4.63*	4.98*
Level-3	0.094 (0.095)	0.240* (0.124)	0.252** (0.129)
Level-4	0.106 (0.089)	0.190 (0.127)	0.201 (0.134)
Field of Education (reference category=Technical studies)			
<i>F</i> -test for joint significance (χ^2)	6.35	12.79**	13.28**
Leisure	-0.057 (0.076)	-0.082 (0.060)	-0.087 (0.061)
Business	-0.207** (0.103)	-0.428*** (0.131)	-0.426*** (0.130)
Health & Education	-0.017 (0.075)	-0.118* (0.063)	-0.119* (0.062)
Security	-0.070 (0.151)	0.007 (0.060)	0.010 (0.058)
Ln (w^r)			-0.0253 (0.100)
<i>N</i>	273	189	189
<i>pseudo-R</i> ²	.12	.21	.21
<i>F</i> -test (χ^2)	32.77	34.62	35.25

Note. Robust standard errors in parentheses; dependent variable: Employed in December 2012 (1=yes); marginal effects are reported.

*** $p < .01$, ** $p < .05$, * $p < .1$

A path analysis, in which direct effect of ethnic family background and the indirect effect of ethnicity via reservation wages is estimated simultaneously, is included in appendix

3B. A significant indirect effect would indicate that the mediator (reservation wages) is the mechanism behind the relationship between dependent and independent variable. The path analysis shows no significant indirect effect³⁰; the relationship between family background and the likelihood of employment was not mediated by reservation wages.

Starting wages and the expectation-experience gap

Finally, we compare reservation wages to actual wages six months later and look at the ethnic gap in the relationship between expectations and experience, that is the difference between reservation wages and starting wages. Table 3.4 reports OLS estimates for a log-linear wage equation ($\ln(w_i^{e+6})$). Among the employed, non-western graduates seem to earn slightly lower wages; however, the effect is not significant³¹. While the objective difference between wages of employed western and wages of employed non-western graduates is small or non-existent, the ethnic gap in the difference between expectations (reservation wages) and experience (starting wages) is significant. The last column in Table 3.4 presents the results from the within-subject difference ($\ln\left(\frac{w_i^{e+6}}{w_i^{se}}\right)$). With adequate information and good forecasts, all the coefficients in this equation should be equal to zero. Non-western graduates, however, have a significantly lower starting wage/reservation wage ratio than western graduates which means the relationship between expectations and experience is less favourable for employed non-western students.

3.6 Conclusion

There is a strong negative impact of non-western ethnic family background on the labour market position, which also negatively affects the starting position of a large share of Dutch vocation students, and this study contributes to the search for explanations. We study reservation wages of Dutch secondary VET-students about to graduate and enter the labour market, in order to analyse whether differences in supply side

³⁰We also checked for a moderating effect - whether the level of reservation wage changed the impact of ethnicity on employment - by including an interaction effect between reservation wages and ethnic background. The results were not different from the results as presented in Table 3.5; the coefficient of the interaction term remains insignificantly different from zero. This indicates that the level of reservation wages does not influence the strength of the impact of ethnicity on unemployment.

³¹ When controlling for job characteristics (e.g. hours worked) we find that non-western graduates do earn significantly less than western graduates.

behaviour - higher reservation wages - contribute to the negative correlation between non-western family background and employment.

We find that reservation wages of non-western students are significantly, considerably and inexplicably higher than the reservation wages of western students. While this result is perfectly in line with the available previous research, the size of the effect (12%) is still unexpected given our comparatively homogeneous sample. We study one cohort of last year students from one, admittedly large, school, and from a small range of educational levels and age. We focus on the impact of the observed difference, but additional research into the origins of this ethnic reservation wage gap seems to be necessary to explain this phenomenon.

Job search theory predicts that high reservation wages can cause longer unemployment duration, since, with the wage distribution taken as given, the chances of finding an acceptable job are lower. Our results, however, indicate that the high reservation wages do not translate into a smaller likelihood of being employed six months after graduation. This lack of impact could be due to a downward adjustment of reservation wages during the process of job search: rather than continuing the search for high wages, students might adjust their expectations and accept lower paying jobs.

The longitudinal set-up of our data allows us to compare reservation wages stated at the end of the school year to actual wages earned six months later. To assess the accuracy of reservation wage setting, the previous literature mainly relies on estimated market wages of unemployed survey respondents or on the ability of employed survey respondents to remember what their reservation wages were before they found their current job. We find that students, on average, predict starting wages relatively well (mean ratio being 1.1), but regularly overestimate their future earnings. Students seem to accept jobs that pay less than they anticipated earlier. The starting wage/ reservation wage ratio is significantly lower for non-western students, which means that non-western students are less likely to find their expectations met or even exceeded by early labour market experience. Incidentally, the significantly lower starting wage/ reservation wage ratio of non-western students serves as additional confirmation that the difference in reservation wages is not justified by unobserved differences in labour market prospects.

To summarize, we find no indication that unrealistic expectations in the form of too optimistic reservation wages translate into objectively worse outcomes, such as higher unemployment. Rather, our results indicate that graduates of secondary vocational education are prepared to adjust their initially too optimistic reservation wages during the job search process. With respect to young labour market entrants, reservation wages seem to be rather flexible so that learning and updating of information has to be considered an important element to include in a job search model.

While the high reservation wages thus do not seem to *cause* adverse the labour market outcome of non-western students, the combination of higher expectations and lower realisation can be problematic as such as young non-western adults are more likely to be disappointed by their first labour market experience. If the lower experience/expectation ratio has negative consequences for job satisfaction and/or future career prospects, then overly optimistic reservation wages could contribute to a fragile start for this vulnerable group. Future research would need to establish where overly optimistic expectations originate, whether they contribute to disappointment and how schools, for example, could support more realistic expectations for students from different ethnic family backgrounds.

Appendix 3A Blinder-Oaxaca reservation wage decomposition

A log-linear reservation wage equation shows that students with a non-western family background set significantly higher reservation wages than students with a western family background. However, the characteristics of non-western youth differ substantially from the characteristics of western youth, which has been shown to cause differences in labour market success (Gupta & Kromann, 2013). The presented OLS regression estimates cannot fully establish that the observed differences in reservation wages between western and non-western students are not due to the differences in other characteristics between the two groups, as the marginal effect of ethnicity in the OLS regression only expresses the difference between a western and a non-western student assuming that all other characteristics are the same. If this assumption cannot be reasonably made due to the large differences in other characteristics between those two groups, the estimated effect is meaningless.

A Blinder-Oaxaca decomposition can aid in discovering whether observed differences in outcome between two groups are due to differences in observed characteristics (the endowment effect, the first part of the RHS in Equation 3.7), differences in the effect of those characteristics (the coefficient effect, which includes unexplained differences due to differences in unobserved characteristics, the second part of the RHS), or both simultaneously (the interaction effect, third part of the RHS; Jann, 2008).

Equation 3.7

$$E(\omega_w^r - \omega_{nw}^r) = [E(X_w) - E(X_{nw})]' \beta_{nw} + E(X_{nw})' (\beta_w - \beta_{nw}) + [E(X_w) - E(X_{nw})]' (\beta_w - \beta_{nw})$$

A Blinder-Oaxaca wage gap decomposition is usually applied to discover signs of discrimination on the labour market (Jann, 2008). Constant et al. (2010) have applied this technique to reservation wages to decompose the difference they found between first and second-generation immigrants' reservation wages. If applied to reservation wages, the differences in effects of characteristics is not interpreted as discrimination, but as a difference in assessment between the members of the two groups themselves. They differ in their assessment of the labour market value of characteristics such as level of training or work experience.

The Blinder-Oaxaca decomposition suggests that differences in characteristics are not able to explain the reservation wage gap (see Table 3.6; the upper panel summarizes the

total effects for the three components, the lower panel presents the detailed decomposition). The coefficient effect is significant, so it seems that non-western students judge the labour market value of their characteristics, for example their education, differently than western students do. The constant part of the coefficient effect is insignificant, which means that the overall significance of the coefficient effect is not based on unobserved characteristics alone. Introducing additional controls for work experience and family background does not change this result. We conclude that different characteristics are not the underlying cause for the observed higher reservation wage of non-western students, but that non-western students seem to assign a higher labour market value to their personal and training characteristics than western students.

Table 3.6 Blinder-Oaxaca Decomposition of difference in reservation wages

Difference	(1)			(2)		
	Endowment	Coefficient	Interaction	Endowment	Coefficient	Interaction
		-0.153*** (0.036)			-0.178*** (0.0418)	
Total	-0.0366 (0.0327)	-0.0979** (0.0389)	-0.0186 (0.036)	0.0004 0.0516	-0.130*** (0.0480)	-0.0483 (0.0567)
Detail						
Gender	0.0058 (0.0135)	0.0028 (0.0206)	-0.0021 (0.0148)	-0.0049 (0.0156)	-0.0218 (0.0226)	0.0170 (0.0183)
Age	-0.0306* (0.0172)	0.4579 (0.6908)	-0.0226 (0.0210)	-0.0296 (0.0288)	0.0559 (1.3833)	-0.0105 (0.0319)
Level of Education	0.0159 (0.0130)	-0.0018 (0.0161)	-0.0163 (0.0147)	0.0116 (0.0138)	-0.0161 (0.0278)	-0.0142 (0.0138)
Field of Education	-0.0278 (0.0251)	-0.0145 (0.0603)	0.0223 (0.0261)	-0.0134 (0.0330)	0.0285 (0.0790)	-0.0043 (0.0351)
Work experience				0.0055* (0.0170)	-0.0326 (0.0289)	-0.0258 (0.0219)
Parents' education				0.0312 (0.0239)	0.0114 (0.0265)	-0.0106 (0.0264)
Constant		-0.5424 (0.6833)			-0.1554 (1.3663)	
<i>N</i>		558			401	

Note. Standard errors in parentheses.

*** p<0.01, ** p<0.05, * p<0.1

Appendix 3B Do reservation wages mediate the effect of ethnic family background on risk of unemployment? A path analysis.

High reservation wages are expected to increase the likelihood of unemployment. We investigate whether unrealistic wage demands are (partly) responsible for the high unemployment rate of non-western students by re-estimating the probability to be unemployed while including reservation wages six months earlier as explanatory variable as well as an interaction term between reservation wages and ethnic family background (D_{nw} equal to 1 if the student is from a non-western family background). The interaction term accounts for different effects of wage demands for western or non-western.

Adding an additional explanatory variable into a model and analysing its effect on the estimates for the other explanatory variables to check for a mediating effect of the new variable, also known as the Baron & Kenny approach, estimates the different paths independently while they are in effect present simultaneously (Zhao, Lynch Jr., & Chen, 2010). Figure 3.6 illustrates the hypothesis in terms of mediation path analysis: the direct effect, path (c), is the observed strong negative effect of non-western ethnic background on the likelihood of employment. Also observed is the strong positive effect of non-western ethnic family background on reservation wages, path (a). Path (b) reflects the theoretical negative effect of reservation wages on the likelihood of employment. The indirect effect, $(a)*(b)$, is the proposed mechanism by which ethnic family background could - partially - cause a lower employment rate.

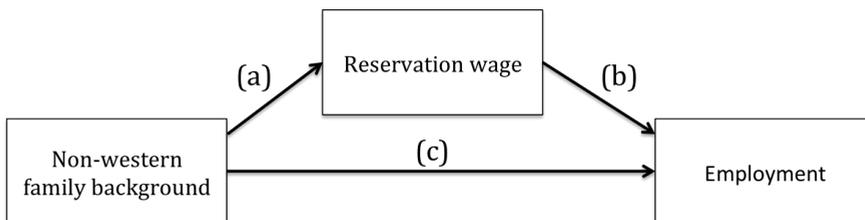


Figure 3.6 Is the effect of ethnic background on employment mediated by reservation wages?

We estimate this system of equations with Stata's `gsem` command (Stata 13) using the Bernoulli distribution and a logit link function with robust standard errors. We include

age groups, gender, field and level of training as additional controls. The estimates confirm the conclusion from the series of independent regressions, however. While both, path (c) and (a) are significant at the 1%-level, path (b) is not (see Figure 3.7). The indirect effect, (a)*(b), is found not significantly different from zero (-0.0196 , $SE: 0.077$, p -value: 0.8), which means that the direct effect of non-western ethnic background is not mediated, not even partially, by the unrealistically high reservation wages of non-western students.

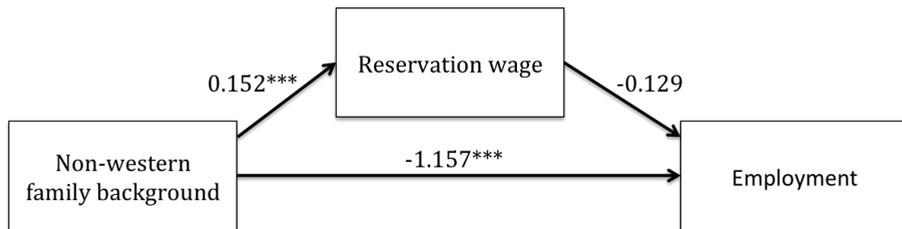


Figure 3.7 Path analysis, coefficients are displayed, * $p < 0.01$.**

4 Side Jobs and Pocket Money. The Impact of Financial Resources on the School-to-Work Transition

4.1 Introduction

Over the past decades, the character of school-to-work transitions has changed. The current youth labour market is characterised by high unemployment and a large share of non-standard and low quality employment (Lewis & Heyes, 2017; ROA, 2017). In addition, job-education mismatch is substantial. Estimates range between 25 to 30% for vertical, and 21 to 46% for horizontal mismatch, both of which are associated with negative consequences for the individual career (Somers et al., 2019; Verhaest & van der Velden, 2013; Wolbers, 2008a). Unemployment, non-standard employment and mismatch indicate that the search for stable and suitable employment can be long, and often involves multiple changes between jobs, probably including periods of unemployment (Anxo et al., 2010; Ryan, 2001; Symeonaki, Parsanoglou, & Stamatopoulou, 2019).

Searching for the determinants of successful school-to-work transitions, the school-to-work literature has focused mainly on the contribution of education, counselling and work experience in the form of internships (Ryan, 2001). In contrast, searching for the determinants of successful unemployment-to-work transitions, the job search literature particularly stresses the importance of financial resources for determining unemployment duration as well as re-employment quality (Devine & Kiefer, 1991; Holmlund, 2014). Typically, job search research concentrates on the adult unemployed worker and a large body of literature provides ample empirical evidence that more generous unemployment insurance benefits are associated with longer unemployment duration (for a review see Tatsiramos & van Ours, 2014). As new entrants are usually not eligible for unemployment benefits, they are not included in these studies.

This study contributes to the literature by studying the labour market entry and the school-to-work transition of Dutch students of vocational education (VET) using insights from the theory of job search. Two major differences between the adult worker who has lost his job and the newly graduated labour market entrant have to be taken into account: first, the financial resources they have access to and, second, the importance of schooling as an additional option.

First, new entrants rely on a combination of different financial resources; most importantly parental transfers, in cash or in kind, and income earned in side jobs. Unearned income in the form of parental transfers provides a financial resource while searching for the first post-education employment. The impact of parental transfers might resemble the impact of unemployment benefits during unemployed job search, in the sense that search incentives are reduced and unemployment duration increases. Empirical evidence of the impact of parental transfers on the school-to-work transition is rare, mainly due to data availability issues. For example, Farace, Mazzotta, & Parisi (2014) use the parents' financial position to measure financial support and its effect on youth job search and the unemployment duration of their cohabiting children, but find it hard to disentangle the effect of socio-economic status and direct financial support. For our analysis, we use the School2Work dataset, which provides detailed survey information on the composition of financial resources, post-graduation labour market status (including further education), and job quality. Our study, therefore, also contributes to the literature by describing the financial situation of students before graduation.

Income earned in side jobs provides financial resources for new entrants while searching for the first post-education employment. The impact might resemble the impact of labour income during on-the-job job search, in the sense that the income earned increases reservation wages and increases search duration. Yet, the impact of side jobs on the school-to-work transition might extend to other, non-financial aspects of working. After graduation, the side job of the student automatically turns into the precarious employment of the graduate, unless the side job is either upgraded to a regular, full job on the appropriate level, or discontinued. The empirical evidence on the effectiveness of on-the-precarious-job job search is mixed, ranging from positive effects (de Lange, Gesthuizen, & Wolbers 2014; Steijn, Need, & Gesthuizen, 2006), to positive short-term effects, that turn negative with longer duration of the precarious employment (Kyyrä, Parrotta, & Rosholm, 2013), to no effect or only positive effects in the long-run (Caliendo, Künn, & Uhlendorff, 2012). Some studies even find negative effects on the likelihood of finding a suitable job (Autor & Houseman, 2010; de Graaf-Zijl, van den Berg, & Heyma, 2011). This study, therefore, adds empirical evidence for Dutch new labour market entrants on secondary VET-level to this on-going discussion in the empirical literature.

The second difference with the adult unemployed, is that the newly graduated has the additional option of staying in or returning to full-time education in order to improve labour market prospects or even to avoid periods of unemployment in economically bad times (International Labour Organization [ILO], 2012). While the adult unemployed may also choose to follow additional training, this option is considerably more important for the newly graduated, especially for those graduating on secondary level. In fact, roughly half of all the graduates of any particular Dutch school-based secondary vocational training program decide to continue in further education (ROA, 2017). They are also encouraged to do so, especially in economically bad times, by the school career counselling programs (de Krom, 2011). Education is not usually considered as an outcome within the job search framework, but we know from labour supply theory and from human capital investment theory that financial resources play a crucial role in the choice not to be active on the labour market (Bosworth, Dawkins, & Stromback, 1996) and in the choice to invest in education (Becker, 1962). Therefore, in this chapter, further education is considered as a labour market choice and as a part of the school-to-work transition process.

Our results indicate that financial resources play an important role in shaping the school to work transition. Parental transfers mainly affect the decision to stay in school for further education, but the direction of the effect depends on the socio-economic family background. Side jobs mainly protect against periods of initial unemployment after graduation, but do not improve the transition to suitable employment in the short run.

The following section briefly states the theoretical job search model and discusses the expected effects of students' financial resources on the school-to-work transition. Section three describes the empirical strategy used. Section four introduces the data and presents the descriptive statistics, covering the financial situation of VET-students and the transition from school to working life or further education. Section five presents the results followed by the summary and conclusion.

4.2 Theory

Standard job search theory models the probability to enter employment as determined by the likelihood of receiving a job offer, the wage distribution of job offers and the financial resources while searching. While the wage distribution is given and the

likelihood to receive a job offer is largely determined by labour market conditions (albeit influenced by individual search effort), current financial resources while searching are a major source of heterogeneity between job seekers. They determine the individual evaluation of current and possible future wage offers: the higher current resources, the less attractive and acceptable a particular job offer seems. Unemployment benefits thus act as a subsidy to search for better quality re-employment. However, as reservation wages increase and/or the incentives to search for a job decrease, expected unemployment duration also increases.

In the standard job search model, the job seeker is an adult worker who has lost his job, looks for new employment and, while searching, receives unemployment insurance benefits for a fixed maximum period of time. This abstraction - "the wage income when working is w , and is b when not working" - has been criticised as an over-simplifying assumption even for the regular adult unemployed (Atkinson & Micklewright, 1991, p. 369; citing Oswald, 1986). The criticism is even more accurate when the job search of youngsters is studied as the young labour market entrant is usually not eligible for ' b when not working', but relies on income from (side) jobs and/or parental transfers in cash and kind. In addition, as formulated by Schmid (2015), "Employment can be no longer treated as a binary phenomenon": 'working' comprises different types of employment and 'not working' might mean full-time education.

Job search theory focuses on re-employment and unemployment duration; further education (and other forms of inactivity) are usually not considered. However, given the importance of postponing job search by staying in school for graduates of secondary vocational education, and given the importance of financial resources in the decision to stay in school, we expand our focus to include this option in the analysis of the school-to-work transition. In order to be *willing* to invest in additional education, the student needs to judge the pay-off of additional education higher than the costs of acquiring it. In order to be *able* to invest in additional education, the student needs to have sufficient financial resources to afford it. Family income is often found a strong predictor of educational attainment, particularly in the US and UK (Belley & Lochner, 2007; Coelli, 2011) and particularly concerning post-compulsory education decisions (Micklewright, 1989). For Dutch university enrolment, Oosterbeek & Webbink (1995) could not find such an effect. Other Dutch studies have shown that public financial transfers play an important role, as,

by international comparison, the Dutch educational system is rather accessible (Marginson, Weko, Channon, Luukkonen, & Oberg, 2008). As universal student grants are about to be discontinued in the Netherlands³², private financial resources might become more important in the future.

The following sections apply job search theory to the two most important financial resources of young labour market entrants and argue how they might impact the school-to-work transition, including the decision to stay in education.

Side Jobs

The first major source of income for VET-students is their own side job employment. The income earned in the side job should theoretically prolong the transition to stable, suitable employment. However, other aspects of the side job affect the school-to-work transition in different directions so that the full impact of side job employment on the school-to-work transition cannot be determined theoretically.

Concerning further education, a side job could provide the necessary income to finance education and to make staying in school even possible. However, a side job also increases the cost of education by increasing the opportunity costs of time and by reducing the chances of (timely) degree completion: working in a side job has been found to decrease educational attainment for school students (Gong, 2009; Wolff, 2006) and to increase the likelihood of delay in graduation or of drop-out for college students (Ehrenberg & Sherman, 1987).

With regard to labour market entry, the income earned in the side job, as well as the other job characteristics - contract type, working hours, job-education match - are a lower boundary for accepting a new job and therefore increase the reservation wage. (Caliendo et al., 2012; Parsons, 1991; Ponzio, 2012). In addition, on-the-(side)job job search is associated with less search effort, as the time spent working in a side job leaves less time available for other activities, which raises the opportunity costs of job search (Blau & Robins, 1990; Weber & Mahringer, 2008).

³² The change in the Dutch student grant system was discussed at the time the School2Work respondents were in the last year of their original training (spring 2012), but did not take place until 2014.

Other aspects of the side job, however, are expected to aid job search. On-the-job job search is associated with higher job offer arrival rates than unemployed job search since current employment signals capability to prospective employers and provides a (Koning, van den Berg, & Ridder, 1997; Weber & Mahringer, 2008; Kyyrä et al., 2013). These aspects make on-the-(side)job job search more efficient, increase chances to find suitable employment and can reduce time needed to find a new job despite lower search effort (Blau & Robins, 1990). This effect can be especially important for workers without work history or without sufficiently expressive formal certification (Levels, van der Velden, & Di Stasio, 2014; Robert and Saar, 2012).

To sum up, the total effect of side jobs on the school-to-work transition depends on the size of the different effects. As a financial resource, a side job is likely to increase the time to find suitable employment. Other aspects of the side job, however, may counteract this effect. In the same vein, a side job is likely to increase the probability of further education if it mainly acts as a means to finance education. The additional burden of working, however, may interfere with educational aspirations.

Parental Transfers

Parental transfers are the second major source of the students' financial resources. Due to the prolonged transitions from school-to-work and into independent adulthood, parental transfers have become more important than they used to be for previous generations (Goldscheider, Thornton, & Yang, 2001; Swartz & O'Brien, 2009).

First, parental transfers can be used to improve labour market outcomes by financing additional schooling. Earlier research indicated that financial resources are important in determining educational choices; lower costs of education (lower tuition fees), more generous student grants and higher household income all have positive effects on educational enrolment (Sá, Florax, & Rietveld, 2006). The non-labour income from parental transfers, might thus play an important role in the decision to continue schooling and not to enter the labour market yet.

Second, research shows that both, parents and children, expect parental support to extend well into early adulthood. Goldscheider, Thornton, & Yang (2001) found that 15% of US-American mothers would unconditionally provide financial support even if the adult child was living at home for free and not attending school. Their children were even more optimistic about the support they could expect. The Dutch students that

participated in the School2Work project agreed: 56% stated that their parents would continue to support them financially until they could manage on their own. If parental transfers are not conditional on education, but continue after graduation, they, in some respects, resemble unemployment benefits: they provide some basic financial support, which facilitates the search for suitable employment. Following this line of reasoning, we expect that parental transfers have a similar impact on job search behaviour as unemployment benefits: larger parental transfers will increase the time spent searching and thus the unemployment duration, but might improve the quality of the match.

In other respects, however, parental transfers are fundamentally different from unemployment benefits. Parental transfers are associated with close parent-child relationships and high levels of parent's involvement in the children's lives (Swartz, Kim, Uno, Mortimer, & O'Brien, 2011). This could influence the behavioural response to the financial incentive and reduce its search-subsidy effect. For example, parent's motives to provide transfers could not be purely altruistic or paternalistic, but might serve to establish a 'family constitution'; an implicit intergenerational contract that expects transfers to be met with reciprocity (Arrondel & Masson, 2006). Given such expectations, the child could prefer to receive as little transfers as possible. Another possibility is the child's preference for independence, even from an altruistic parent. As Swartz & O'Brien (2009, p. 222) describe, "Young adults may feel ambivalent about receiving support from their parents when it challenges their newly emerging identities or status as adults". Finally, it is possible that children care about their parents' utility in a way similar to the altruistic parent caring about the child's utility. While children are often modelled as opportunistic or indifferent receivers of parental transfers, taking them 'as given' (Dustmann, Micklewright, & van Soest, 2009; Keane & Wolpin, 2001), children might also act according to the expectations of the family constitution later in life (Arrondel & Masson, 2006).

Research indicates that the described mechanisms to reduce the search subsidy effect of parental transfers seem to differ by socio-economic status. Motives for transfers are shaped by economic conditions and social welfare institutions as well as culture and family values (Swartz & O'Brien, 2009). For example, Arrondel & Masson (2006, p. 1020) suggested large heterogeneity in motives for intergenerational transfers "along the income scale". They assumed that for families at the bottom of the income scale "most

transfers might obey rules of family constitution", while parents of higher socio-economic status would be more motivated by altruistic motives. In addition, children's concern for the financial burden they cause for their parents, might be especially relevant for less well-off families, where the transfer is large in relation to the parents' own resources.

To sum up, the expected effect of parental transfers on the school-to-work transition resembles the search subsidy effect of unemployment benefit for the adult worker: students are more likely to stay in school or to be unemployed than to be employed, but to have better quality jobs once employed. It seems likely, however, that the impact of parental transfers differs by socio-economic status.

4.3 Empirical Strategy

We study the effect of financial resources on the school-to-work transition of graduates from secondary vocational education and training in the Netherlands by looking at their labour market status at time t , that is 6 months after the end of their last school year. We consider four different possible labour market states: further education, unemployment, transitional employment and suitable employment. A person is considered in further education if they have finished the original training, but are still in full-time education at time t . A person is considered employed if they are no longer in full-time education and has a job for at least one hour a week, and unemployed if they are no longer in education, not currently working but looking for a job. On-the-job search of the employed respondents is used to distinguish between transitional and suitable employment. The data section discusses the dependent and explanatory variables and the measures used in detail.

Labour market status is modelled as a function of financial resources (FR) individual i had available around graduation, at time $t-1$, and of a set of time-invariant individual characteristics (X_i), including demographic characteristics, family background and training characteristics. $FR_{i,t-1}$ is a set of variables consisting of the different components of financial resources while still in education, mainly parental support and side jobs. In addition, we investigate whether the effect of parental cash transfers on child's behaviour depends on the financial situation of the parents by including an interaction term between parental cash transfers and the perceived socio-economic status of the family.

The four outcome categories cannot be considered ordered or ranked in any way. A multinomial logit model estimates the probability to sort into one of k unordered, but mutually exclusive categories. The probability of observing a particular outcome m for individual i at time t can be expressed as a ratio of this outcome compared to the sum of probabilities of all other outcomes. To identify the coefficients, all coefficients relating to one outcome (the base category) are set to zero. This results in a model with k equations as in Equation 4-1, where the first equation refers to the base category and the second to the $k-1$ other categories:

Equation 4-1

$$\Pr(Y_{i,t} = 1 | FR_{i,t-1}, X_i) = \frac{1}{1 + \sum_{j=2}^k \exp(\alpha_j + FR'_{i,t-1} \beta_j + X'_i \gamma_j)}$$

$$\Pr(Y_{i,t} = m | FR_{i,t-1}, X_i) = \frac{\exp(\alpha_m + FR'_{i,t-1} \beta_m + X'_i \gamma_m)}{1 + \sum_{j=2}^k \exp(\alpha_j + FR'_{i,t-1} \beta_j + X'_i \gamma_j)} \text{ for } m = 2 \text{ to } k$$

In this study, k equals 4 outcome categories; we use 'suitable employment' as the reference category. To interpret the results, average marginal effects (AME) were computed using predictive margins as suggested by Long & Freese (2014). We calculated the effect of a change in the explanatory variable of interest over the whole estimation sample keeping the other covariates at their observed values. The predicted effects are averaged over all observations, hence 'average' marginal effect. As Ai & Norton (2003) pointed out, in non-linear models an interaction effect can only be computed and interpreted separately for specific values of the covariates. We compute average marginal effects of small and large parental transfers as compared to no transfers on the probability of each outcome category for the range of different values of socio-economic status separately, using the procedure described above. This shows the full extent of difference in behavioural response to parental transfers for children from different socio-economic backgrounds.

The small overall sample size presents one of the main limitations of this study. In addition, since we use cross-sectional data, we cannot claim any causal relationship between financial resources and the school-to-work transition, despite the longitudinal set-up of our data. We, therefore, only describe the differences we see in our sample of young secondary VET- graduates. The nature of the question under consideration also does not allow to exploit the data's panel structure: entering the labour market - or not -

is not a decision taken repeatedly under comparable circumstances by one person. Finally, while the SES-ladder used in this study is a well-known, frequently used indicator of socio-economic status, it remains a subjective measure, reflecting an individual's view on society and his/ her place within. The correlations found between the individual's behaviour and self-reported SES may thus be caused by other unobserved factors.

4.4 Data

This study uses a unique dataset on graduates of secondary vocational education and training (VET) in the Netherlands, which was collected as part of the multidisciplinary research project School2Work. One cohort of VET-students from a regional centre for vocational education (ROC) in the Netherlands was approached to participate in this longitudinal study. The School2Work panel consists of 2,010 students aged 16 to 30 years, which were enrolled in the last curriculum-year of any one of the vocational training programs the school offered in the school year 2011/12. From this point on we will refer to the training the individual person was enrolled in at the time of the first interview as the original training. Pre-graduation interviews were conducted in school in a classroom setting, while the post-graduation follow-up interviews were conducted online. For more information on the School2Work project and the data collection procedure, see chapter 6.

At the end of the school year 2011/12, which was their expected graduation date, these students were 20 years old on average. More than half the students were female. Native Dutch students accounted for almost two thirds of the sample; two thirds of the non-Dutch students were second-generation immigrants. The majority was enrolled in the highest level of secondary vocational education (level-4), and the largest group studied health and education related vocations, such as nurse or kindergarten teacher (see Table 4.1 and Table 4.5 in appendix 4A for sample statistics).

As this chapter is concerned with the effect of financial resources on the school-to-work transition, we use the data gathered in school and in the first online survey. More than 800 respondents completed the first online survey in December 2012, six months after the end of the school year. An attrition analysis confirmed that participation in the online waves did not differ significantly with respect to demographic characteristics (chapter 6). Students that were still in the original training in December 2012 (137 people) have been

dropped from the sample, as well as graduates that reported being self-employed (10) or inactive (31)³³. In addition, 12% of the students were living independently from their parents while still in school; these students are excluded from the sample as well³⁴.

Information on pre-graduation financial resources was gathered during the last in-class interview. The section on pre-graduation finances was rather detailed (11 questions, each with a number of sub-categories), and only students that completed all questions in this section of the survey, approximately 50% of the respondents, are considered in this chapter. Information on financial resources is available for more than half of the respondents of the first post-graduation interview. Table 4.5 in appendix 4A compares the demographic composition of the full School2Work-sample to the composition of the sample after excluding students that did not report information on financial resources. A probit estimation for the likelihood of reporting information on financial resources confirms that non-Dutch students are significantly more likely to share information on finances than Dutch students, as are students that have at least one parent who is currently unemployed. Conversely, students with high-educated parents are significantly less likely to give information, than children of low or medium educated parents. No significant effect was found for all other characteristics, including labour market status after graduation. We conclude that our results do not seem to suffer from selective non-response bias with the exception of a slight overrepresentation of children of currently unemployed parents and non-Dutch students and a slight underrepresentation of children of highly educated parents.

Labour market status

The majority of the graduates (58%) decided to continue in further education and was still in full-time training at the time of the third interview; 37% were working and 6% were unemployed (representing 14% unemployment among those that entered the

³³ It has been argued, that young peoples' labour market states are volatile and that therefore the distinction between inactive and unemployed is artificial. Consequently, in the literature, the group of inactive young people is sometimes lumped together with the "unemployed" (e.g. Maani, 2000). However, from the open answers provided by many respondents we gather that the majority is waiting for a new training program to start, many while working in a side job.

³⁴ Including students that live on their own does not alter the main results, however, the effect of independent living on the early school to work transition is substantial. This effect might not only be due to the monetary value of housing costs, but could be caused by important, but unobserved differences in other characteristics as well (Swartz & O'Brien, 2009). Excluding students who live independently from their parents ensures a more homogenous sample.

labour market). Table 4.1 provides an overview of respondents' status at the time of the third interview, six months after the end of the school year.

Table 4.1 Sample statistics by status 6 months after the end of the final school year for the original training

	Further Education	Un-employment	Employment			All#	N
			All	Transitional	Suitable		
All#	57.9%	5.7%	36.5%	13.8%	22.7%		247
Gender							
female	58.3%	6.8%	35.0%	14.7%	20.3%	66.0%	163
male	57.1%	3.6%	39.3%	11.9%	27.4%	34.0%	84
						100.0%	
Ethnicity							
Dutch	54.3%	4.9%	40.8%	14.7%	26.1%	74.5%	184
Non-Dutch	68.3%	7.9%	23.8%	11.1%	12.7%	25.5%	63
						100.0%	
SES							
low	55.2%	8.3%	36.5%	12.5%	24.0%	38.9%	96
high	59.6%	4.0%	36.5%	14.6%	21.9%	61.1%	151
						100.0%	
Field of Education							
Technical	57.1%	5.7%	37.2%	14.3%	22.9%	14.2%	35
Leisure	51.3%	5.1%	43.6%	15.4%	28.2%	31.6%	78
Business	75.9%	3.5%	20.7%	3.5%	17.2%	11.7%	29
Health & Education	60.4%	5.9%	33.7%	14.9%	18.8%	40.9%	101
Security	0.0%	25.0%	75.0%	25.0%	50.0%	1.6%	4
						100.0%	
Level of Education							
Level-2	58.3%	5.6%	36.1%	11.1%	25.0%	14.6%	36
Level-3	58.5%	5.6%	35.9%	18.9%	17.0%	21.5%	53
Level-4	57.3%	5.7%	36.9%	12.7%	24.2%	63.8%	157
						100.0%	
Age, M	19.3	20.4	20.2	20.2	20.2	19.7	
N, FR available##	143	14	90	34	56	247	
N, all	259	25	179	58	121	463	

Note. SES = socio-economic status; FR = financial resources.

Excluding respondents that were self-employed, still in the original training, or inactive at the time of the follow-up interview (Dec 2012).

Due to selective non-response, children of currently unemployed parents and non-Dutch students are slightly over-represented, while children of highly educated parents are slightly underrepresented in the final sample (see Table 4.5).

More than a third of all employed graduates reported that they were currently searching for a different job at the time of the interview. In line with previous research (Böckerman & Ilmakunnas, 2009; Ponzo, 2012), we take this on-the-job search as an indication of the transitory nature of the current job, since the employee is either planning to quit the job or is expecting the job to end for other reasons. Those not currently looking for a different job are assumed to be content with the job they have and consequently considered to be in suitable employment.

Differentiating between transitional jobs and suitable jobs on the basis of the search effort may seem rather subjective, yet Table 4.2 indicates that jobs differentiated on the basis of this criterion indeed differ in most characteristics commonly used to assess employment quality: pay, working hours, contract type, and job-education mismatch.

Table 4.2 Employment characteristics by type of job (transitional or suitable)

	All employed	Transitional Jobs	Suitable Jobs
Contract Type			
Permanent contracts	20.9%	16.0%	22.4%
Temporary contracts	79.1%	84.0%	77.6%
Type of temporary contract:			
Long-term	38.8%	24.0%	43.6%
Short-term (<1 year)	18.5%	26.0%	16.0%
On-call contracts	21.8%	34.0%	18.0%
Working hours			
Small Part-time (<12 hours)	13.7%	20.4%	11.5%
Large Part-time (12-29 hours)	26.8%	42.9%	21.8%
Full-time (30+ hours)	59.5%	36.7%	66.7%
Pay			
Wage, mean	€ 8.27	€ 8.16	€ 8.33
Income, mean	€ 1,044	€ 879	€ 1,122
Mismatch			
Overeducated	20.7%	32.3%	17.4%
<i>N</i>	232	74	158

For example, the vast majority of the employed in both types of employment, about 80%, held a temporary contract, but there are large differences in quality within the category of temporary contracts with respect to length of term, prospects of renewal, etc. Respondents that report on-the-job search have significantly higher shares of low-quality temporary contacts (TEA-, on-call or short-term contracts). Similarly, part-time

employment is common among young Dutch workers (de Lange et al., 2014), and not necessarily an indication of inferior job quality. In our sample, less than two-thirds of all employed respondents had substantial jobs of 30 hours per week or more. However, the share of marginal jobs (less than 12 hours a week) was twice as high among transitional jobs as among suitable jobs. The hourly wage in the first job was, on average, 8.27 euros, but varied greatly from minimum wage (5.17 euros for a 20 year old person in 2012) to 18 euros. While average hourly wages did not differ much between transitional and suitable jobs, transitional jobs pay less monthly income on average, due to lower average working hours.

Financial Resources

Financial resources were measured at the time the students were still in school, near the end of the school year 2011/12 (see Table 4.3). The most important source of financial resources was self-earned income: more than half the students worked in a side job while in training, and, on average, earnings from these side jobs accounted for 50% of the total available monthly financial resources of the students. We use a dummy coded variable to indicate whether the respondent had a side job while still in school, or not. This refers to regular jobs only and does not include occasional work, nor the internship, which is obligatory for all VET-students in the Netherlands.

The second major financial resource are parental transfers, which ranged from a couple of euros per month in pocket money to a cash allowance of more than 1,350 euros. More than half the students received some parental cash transfers, median transfers being 85 euros per month. We use a categorical variable to indicate whether the respondent received no, small (less than 100 euros), or large (100 euros or more) monthly parental cash transfers³⁵.

Table 4.3 also indicates that the employment patterns hardly differ between students of different socio-economic status. Yet, there appears to be substantial differences in the parental transfers by socio-economic status. Students from families of low socio-economic status report more often no financial resources and, in particular, no cash transfers from parents than students from high-SES families; the reported amount of cash

³⁵ Using broad categories rather than the exact amount not only accounts for the possibility of non-linearity but helps diminish possible measurement error due to misreporting of exact amounts received.

transfers, however, was on average higher than the amount reported by children from high-SES families.

Table 4.3 Financial resources

	Total	SES	
		low	high
Total financial resources			
No cash resources	9.0%	14.7%	5.4%
Cash resources (if >0), <i>Mdn</i>	€370.00	€400.00	€338.00
Side job earnings			
No side job	39.5%	40.0%	39.2%
Has a side job	60.5%	60.0%	60.8%
Side job earnings (if >0), <i>Mdn</i>	€312.80	€356.40	€305.90
Share in total financial resources, <i>M</i>	50.8%	54.2%	48.8%
Parental transfers in cash (PTC)			
No PTC	37.7%	49.0%	30.5%
Less than 100 Euros	32.4%	25.0%	37.1%
100 Euros or more	30.0%	26.0%	32.5%
PTC (if >0), <i>Mdn</i>	€85.00	€100.00	€80.00
Share in total financial resources, <i>M</i>	30.4%	26.7%	32.5%
Parental transfers in kind (PTK)			
No PTK	35.6%	52.1%	25.2%
Receives PTK	64.4%	47.9%	74.8%
<i>N</i>	247	96	151

Note. SES = socio-economic status.

Parents did not only support their children with cash on hand, but also provided transfers in kind, by, for example, paying telephone bills or buying study books. A majority, 60%, of the students reported that parents covered at least one major type of costs (like school expenses or health insurance) for them completely. The correlation between the two types of parental financial support - cash transfers and transfers in kind - is significant and positive. Transfers in kind thus seem to supplement, rather than substitute for, cash transfers and we need to consider both together to account for the total parental financial support received. We control for transfers in kind by including a dummy coded variable indicating parental transfers in kind.

Theoretically, parental transfers and side job income could substitute one another, if parents take side job income into account when setting transfers and/or children decide to work more or less depending on the money they receive from their parents. Empirically, some studies did find an interdependence of transfers and child labour

supply (Dustmann et al., 2009; Gong, 2009), others did not (Wolff, 2006). We found no significant relationship between side job employment and the size of parental transfers in the School2Work sample, or between the amount earned in side jobs and the amount of parental transfers.

Controls

In each model, controls are included for demographic characteristics, family background characteristics, field of education and level of the original training. For demographic characteristics we include gender, age at the end of the school year 2011/12, and ethnicity. All students reporting that both parents were born in the Netherlands, are considered Dutch; all others are considered non-Dutch students. Family background is included to control for the influence of the parents on student's school-to-work transition other than via direct financial support. All family background characteristics are self-reported by the students. Parental education refers to the highest completed education of the highest educated parent; we distinguish between primary, secondary, or tertiary education. Family socio-economic status is measured on a continuous scale running from 0 to 10, where 0 is the lowest and 10 the highest status. Students were shown a picture of a ladder they should think of as the Dutch society: at the bottom are the poorest/ least educated/ no or bad jobs; on the top the richest/ highest educated/ with the best jobs. They were asked to position their family on this ladder by means of a mouse-click³⁶, similar to the method used by the Netherlands Institute for Social Research (SCP). The mean value for status is 6.8 in the School2Work-sample, which closely resembles the results for the Dutch population as published by the SCP (2014, p. 23) in which the vast majority rated themselves between 6 and 8. In addition to family socio-economic status, we control for parents' unemployment during the last school year of the child to capture any adverse effects of short-term economic difficulties of the family that might influence the child's transition. These questions are taken from the first round of interviews (December 2011). As not all students participated in both in-school rounds, the final sample sizes are smaller due to missing information for these control variables.

³⁶ The exact wording of the question in Dutch: "Kijk naar de ladder en denk aan de Nederlandse samenleving. 0 = Onderaan de ladder staan de mensen met het minste geld, weinig opleiding, en geen baan of een baan met weinig status. 10 = Boven aan de ladder staan de mensen met het meeste geld, de hoogste opleiding, en de banen met de hoogste status. Hoe hoog staan je ouders op de ladder?"

4.5 Results

The results for the multinomial logit estimates can be found in Table 4.4, as well as Figure 4.1 and Figure 4.2. Table 4.1 presents the average marginal effects of the main explanatory variables, that is the effect of a change in these variables on the likelihood of sorting into the respective categories, computed and averaged over all observations keeping the other explanatory variables at the observed levels. Figure 4.1 and Figure 4.2 illustrate the interaction effect between parental transfers and socio-economic status for the probability of further education and suitable employment.

Table 4.4 Multinomial Logit Estimates (average marginal effects)

	Further Education	Unemployment	Transitional Employment	Suitable Employment
Side-Job	.005	-.086**	.139***	-.058
(1=had a side-job)	(.066)	(.036)	(.053)	(.054)
Parental Cash Transfers (none=reference category)				
Less than 100 Euros	.106	-.008	-.053	-.045
	(.090)	(.052)	(.063)	(.079)
100 euros or more	-.048	.069	.002	-.023
	(.086)	(.043)	(.060)	(.074)
PT in Kind	.065	-.059	.020	-.026
(1=some expenses paid)	(.087)	(.043)	(.063)	(.075)
Socio-economic status	-.005	-.012	.001	.015
(1=low to 10=high)	(.023)	(.011)	(.016)	(.022)
<i>N</i>		229		
Pseudo- <i>R</i> ²		.177		
<i>F</i> -test (<i>p</i> -value)		.005		

Note. Standard errors in parentheses; Average marginal effects; control variables: gender, age, migration background, parental education, parent unemployed; interaction effect for parental transfers and SES (socio-economic status).

****p*<.01, ***p*<.05, **p*<.1

Side jobs

We found no significant effect of having a side job while studying on the likelihood of staying in school for further education. Students who had worked in a side job while in education were 9%-points less likely to be unemployed six months after the end of the school year than students who had not worked while studying. However, they were 14%-points more likely to be employed in transitional jobs only; we found no effect of a side job on suitable employment. If there is any negative impact of the income earned in side

jobs on the transition to suitable employment, it does not seem to dominate possible positive effects of a side job, such as, for example, the higher efficiency of on-the-(side) job job search.

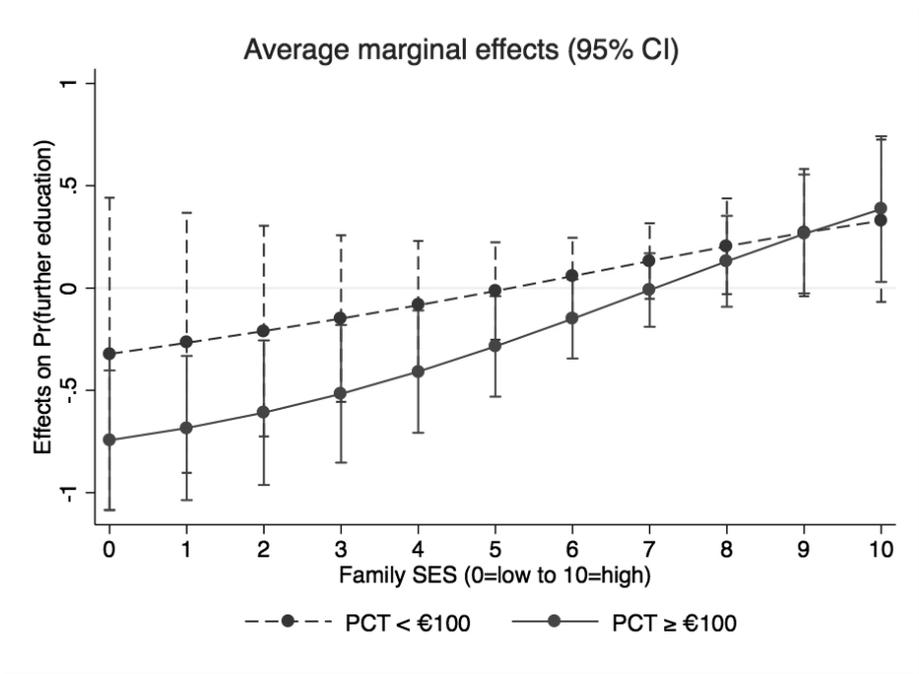


Figure 4.1 Marginal effect of parental cash transfers (PCT) on the probability of further education

Parental transfers

On average, parental cash transfers did not significantly contribute to the sorting into one of the four categories (see Table 4.4). Following earlier research on the impact of family background, we investigate whether the effect of parental cash transfers on child’s behaviour depends on the financial situation of the parents by computing average marginal effects of parental transfers separately for different family SES-values. This reveals that the lack of impact on further education is the result of averaging the effect over the whole sample. Figure 4.1 shows the change in predicted probability of further education for students that receive small (dashed line) or large (solid line) parental transfers relative to those receiving no parental transfers, for each level of family SES. This shows, that parental cash transfers have a significant impact on some student SES-

groups, but that the effects differ in size and, most importantly, direction between the different SES backgrounds. Students from low or middle range SES families (0-6) who receive large parental cash transfers are less likely to stay in school than students from the same background that receive no cash transfers. The effect size ranges from -74% ($SE\ 0.174, p<0.001$) to -29% ($SE\ 0.125, p=0.023$). Conversely, students from high SES families (8-10) are significantly more likely to stay in school if they receive cash transfers. The effect size ranges from +20% ($SE\ 0.119, p=0.087$) for small transfers to +39% ($SE\ 0.182, p=0.034$) for large transfers.

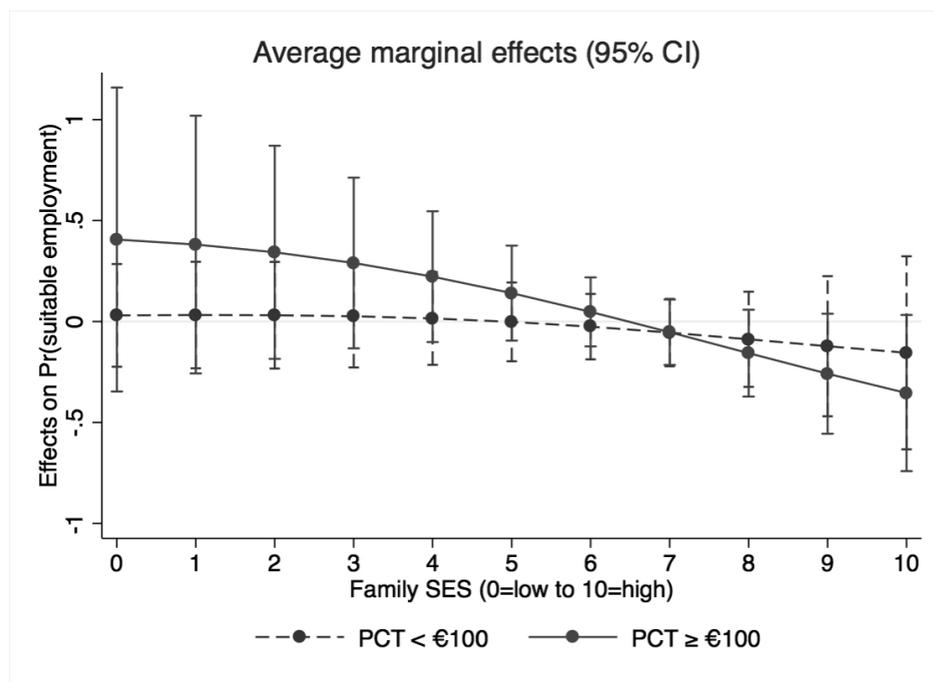


Figure 4.2 Marginal effect of parental cash transfers (PCT) on the probability of being in suitable employment

Parental transfers had hardly any significant effect on the other labour market states: only for students from the highest SES-categories (8-10) did large parental transfers decrease the likelihood of suitable employment (Figure 4.2). The effect size ranges from -26% ($SE\ 0.152, p=0.088$) to -35% ($SE\ 0.197, p=0.073$), but given that we find no effect on unemployment and transitional employment this seems to reflect the increased

likelihood of staying in school as alternative to labour market entry, rather than a less successful labour market entry.

Summarizing the results, it seems that parental transfers are not associated with a higher probability of unemployment or transitional employment, which suggests that they do not provide a search-subsidy similar to unemployment benefits. Contrary to theory, parental transfers are also not used to postpone search by staying in education, except for students from the highest SES families. Receiving large amounts of financial resources from parents seems to push students from lower SES-families to enter the labour market sooner.

Controls

Controls were included for demographic, training, and family background characteristics; the results for these are not included in the tables. We found a significant effect of demographic characteristics on the school-to-work transition, but the effect for training characteristics and family background were small. Age had a strong effect on the destination after graduation: older students were less likely to choose further education and more likely to work in both forms of employment. Male graduates were less likely to be unemployed, but gender had no significant effect on choosing further education or on types of employment. Non-Dutch students were significantly more likely to choose further education and significantly less likely to be in suitable employment. Some fields of training had a weakly significant impact on the likelihood of choosing further education and on the chances of finding suitable employment.

4.6 Conclusion

We study the effect of financial resources available shortly before graduation on the school-to-work transition and VET-students' labour market status six months after the end of the school year. We use job search theory to derive the expected effects of financial resources on the transition from school-to-work, taking two important differences between the adult unemployed worker and the young labour market entrant into account: the financial resources they have access to - side jobs and pocket money - and the importance of further education as additional labour market option. We estimate the probability to be in one of four mutually exclusive states six months after the end of the school year: further education, unemployment, transitional employment, or suitable

employment. As the four categories are not strictly ordered, a multinomial logit model was estimated.

Around 60% of the students in our sample worked in a side job while still in school and we investigate whether this financial resource increases transition duration to suitable post-education employment. The decision to delay labour market entry and continue in education was not influenced by having a side job. Students with side jobs were neither more nor less likely to continue in education. This result might reflect that side jobs are neither a particular aid in paying for education nor a particular burden by increasing the (opportunity) cost of education. The result might also reflect the fact that side jobs can be started, adjusted, and discontinued comparably easy; students that don't work near the end of the training might still take a side job (again) once exams are over and they start a new training program.

Students that had a side job while still in education were 9%-points less likely to be unemployed six months after the end of the school year. However, they were only 14%-points more likely to be employed in transitional jobs; there was no significant effect on the likelihood of suitable employment. Apparently, for young Dutch VET-graduates, the income provided by side jobs did not translate into a longer (or shorter) search period for suitable employment: any impact of the side job as financial resource on reservation wages or search costs seems to just have been off-set by the efficiency-gains of on-the-(side)job job search - at least in the short run. These findings suggest that side jobs do not provide a quick stepping-stone into the labour market for Dutch VET graduates.

Around half the students in our sample received parental transfers in cash and we investigate whether the effect of these transfers for new labour market entrants resembles the search-subsidy effect of unemployment benefits for unemployed workers: that is an increase in unemployment duration. Children from low-SES families received cash allowances and transfers in kind less often than children from high-SES families (61% and 68.5%), yet the reported amount was on average higher. Our survey data allow us to investigate the heterogeneous effects of financial support by family SES as suggested by theory.

We find that the effect of parental transfers on the school-to-work transition depended strongly on the socio-economic background of the family. Graduates from high-SES families that received parental transfers were 20-39%-points more likely to stay in

school for further education than those from the same background that received no transfers. Parental transfers thus seem to act as a 'postpone-search' subsidy for high-SES children, in the sense that they postpone labour market entry by staying in school for additional education. A stronger and larger effect to the opposite is found for children from low-SES families: those that receive large parental cash transfers were 74 to 29% less likely to stay in school for further education; the effect was large and significant even for children close to the mean value of SES. Apparently, receiving parental transfers pushed them to leave school and to enter the labour market. This result is unexpected, not only from a theoretical viewpoint, but especially given the, by international comparison, relatively accessible Dutch educational system.

We do not find any evidence that graduates used parental transfers to finance prolonged *unemployed* job search. Also, the likelihood of transitional or suitable employment was not affected by parental transfers of any kind. These findings suggest that, unlike unemployment benefits, parental transfers do not act as a subsidy to job search. Probably, expectations of reciprocity or concerns for the financial burden transfers pose on their families increase the cost of remaining unemployed, off-setting their value as financial resource while searching. It is also possible that parental transfers are, on average, not large enough to sustain extended periods of job search: median transfers were 100 euros per month, supplemented by parental transfers in kind.

We cannot determine why children from less well-off families are more likely to enter the labour market if they are financially well-supported by their parents. A possible explanation might be that these children are especially affected by expectations of reciprocity or concerns for the financial burden they pose on their families. An important implication of this result is that the well documented negative effect of socio-economic background on educational attainment might not, or at least not solely, be the result of the lower support - either financial or otherwise - from the child's family of origin. The negative effect might persist in spite, or even because of, a high level of support.

Appendix 4A

Table 4.5 Effect of non-response w.r.t. financial resources on sample composition

	Full S2W Panel	Information on FR available	
		All	T3 respondents#
Gender			
female	54.5%	59.8%	65.6%
male	45.5%	40.2%	34.7%
Ethnicity			
Dutch	63.9%	61.7%***	69.2%**
Non-Dutch	36.1%	38.3%***	30.8%**
Field of Education			
Technical	14.7%	13.4%	13.6%
Leisure	24.9%	23.8%*	27.8%*
Business	18.1%	18.0%	13.9%
Health & Education	35.7%	40.4%	43.6%
Security	6.6%	4.4%	1.2%
Level of Education			
Level-2	18.0%	17.9%	15.9%
Level-3	22.8%	24.3%	19.5%
Level-4	59.2%	57.8%	64.6%
Age, <i>M</i>	20.1	20.2	20.1
Socio-economic status, <i>M</i>	6.7	6.5	6.5
Parent unemployed	4.5%	5.8%***	6.10%***
Parental education			
Low	31.7%	36.0%	36.5%
Medium	27.7%	29.6%	28.6%
High	40.6%	34.4%**	34.9%**
Labour market status_(T3)#			
Further education	56.2%	57.2%	55.2%
Unemployed	6.7%	6.9%	5.8%
Transitional employment	11.8%	11.1%	12.7%
Suitable employment	25.3%	24.7%	26.3%
<i>N##</i>	1,907	850	360

Note. FR = financial resources. Differences between the first and the second/ third column are significant at the (***) 1%-, (**) 5%-, or (*) 10%-level (probit regression for non-response regarding financial resources).

Excluding respondents that were self-employed, still in the original training, or inactive at the time of the follow-up interview, Dec 2012.

Maximum sample size. Due to missing values, N differs for all background variables (smallest sample size for background variables for the full sample: 1,376, for status at time T3: 625). The final sample, with no missing values, contains 259 students.

5 The impact of resources on the school-to-work transition: summary and conclusion

The School2Work project set out to investigate what contributes to a successful School-to-work transition in the Netherlands, focusing on a special type of school-leavers, which, relative to its quantitative importance, is not featured much in research: graduates of school-based secondary vocational education and training. The School2Work project looks at a wide range of factors – from personality traits and social networking to HR-practices in the workplace. The studies contained in this thesis all deal with the impact of resources - guidance, information, and money - on the transition, using a job search framework applied to the situation of new entrants in the labour market.

The studies in this thesis follow the students along a small (but crucial) part of the way from school to work. In the first study, we start during their last year in training, looking at the career guidance they receive in school. One of the many things a mentor can do to improve students' outcomes is to encourage an early start in graduate job search activities, as this early start has been shown to improve a smooth transition from school-to-work. We investigate how career guidance shapes and encourages early job search activities and job search success - invitations to job interviews - shortly before graduation.

In the second study, we follow the students in their first steps on the labour market. We compare the students' expectations about their own labour market position in the form of wage-demands for the first post-education job, with their actual early labour market experiences, that is their actual chance to find a job and the wage they earn in this first job. Our main research question is whether expectations influence graduates' search behaviour, the chance to find (and accept) their first job, and wages earned.

Finally, in the third study, we look into the contribution of financial resources of students on the school-to-work-transition, looking at the status 6 months after graduation. As we know from transition research, the status 6 months after graduation is more likely to be an episode, a phase in life, rather than the final destination. We distinguish between 'transitional' and 'suitable' employment at that point in time, defining 'suitable' as employment that the graduate himself sees as stable and suitable enough to stop searching for a different job. Even if this will turn out to be 'transitional' in the near future,

the opportunity to continue the transition journey from suitable employment rather than 'transitional' employment while searching for something better should not be considered unimportant.

Availability of resources

The first thing we notice, in general, is that availability and accessibility of resources differ greatly between students. The differences with respect to in-school mentoring or career guidance, the resource in the first study, can be almost completely attributed to differences between educational level and fields. For example, students in technological fields of training (e.g. construction) are far more likely to report never talking to their mentor than students from health & education or sports & leisure related fields of study. In the case of mentoring as a resource, the differences with respect to students' demographic characteristics are relatively small once educational track is accounted for. Only older students and non-Dutch students score higher on the job search assistance topic than younger or Dutch students.

There are systematic differences between groups of students, however, with respect to information/ expectations about labour market prospects (study two) and with respect to financial resources (study three). Non-western students seem to be far too optimistic with respect to their future wages than western students which indicates that the information they have (gathered and/or received) is far less accurate than the information western students have obtained. The School2Work dataset offers little explanation why non-western students form less accurate expectations, except that non-western students are less likely to be active already on the labour market. They are less likely to work in a side job and less likely to search actively than western students; both behavioural observations that could just as well be the cause of as the result of wrong expectations with respect to the labour market. For example, non-western students might refuse to work in low paying side jobs, because they judge the value of work experience less important for their future job prospects. Family background might play a role as well: we have some indication that non-western parents do adjust their financial support downwards if the child earns its own income, something that is not found for Dutch parents. If working on a side job means less pocket money, non-western students are discouraged from gaining work experience and any informational campaign on the

value of work experience while studying is less likely to make a difference unless the parents are targeted and reached as well.

The most pronounced differences between groups of students are found with respect to financial resources. First, there are large differences in the total amount of financial resources as reported by the students themselves. Second, there are large differences with respect to the composition of the available money; the shares in the total amount that come from different sources. Finally, there are large differences not only between children from low-SES families and high-SES families, which is the focus of chapter three, but also between male and female and between Dutch and non-Dutch students as well. Children from low SES-families received cash allowances and transfers in kind far less often than children from high-SES families: 25-30% vs 50%. Yet, among those that received any, the reported amount of pocket money was higher, on average, for students with low-SES family background. A similar pattern seems to hold for gender differences: male students receive parental transfers less often, but report receiving higher amounts, on average. Dutch students earn more money themselves in side jobs than non-Dutch students and, unlike non-Dutch students, do not lose parental financial support if they earn their own income. Parents' motives for providing support would be a most interesting line of further research with respect to the 'gender & ethnic pocket money gap', but are not included in the school2work dataset.

Impact of resources on the school-to-work transition

Generally speaking, we find that resources do play a role, but not always to the extent and in the direction predicted by job search theory. The following paragraphs summarize the findings and discuss the implications of these findings: how could things be improved for (a part of) the student population. In addition suggestions for future research are given.

Study 1: Career Guidance/ Mentoring

The main task of mentors in educational programs is to guide students through their studies. Helping them in the transition to whatever comes next is just one, final, thing on the bottom of the to-do list. We found, like most Dutch studies, that education related topics are much more common in mentoring conversations than career related and labour market related issues. Mentors may argue, and rightfully so, that completing the current education successfully is the most important thing, regardless of whether the next thing is labour market entry or enrolment in further education. However, using

individual conversations to help students look beyond graduation, discuss the future and prepare concrete first steps on the post-graduation labour market seems to be possible and effective.

We find that individual mentoring conversations with a clear schedule - either regular or only as needed - are significantly correlated with higher search effort: students with regular mentoring sessions reported using 22% more different activities to search for a job during the last three months prior to the interview than students that never had individual mentoring conversations. Individual mentoring meetings also have a significant positive effect on job search success, indirectly (via the positive impact on job search effort) and directly. Group mentoring conversations, on the other hand, are not associated with more job search effort or success.

We find some evidence that relatively more attention on career and future related topics has an indirect impact on job search effort by increasing job search self-efficacy, the path we labelled 'coaxing'. The extent to which education related issues and, interestingly, also the extent to which job search issues, such as crafting a CV and preparing for an interview, were discussed explicitly, had no significant impact at all. In short, the most important mechanism by which mentors impact students job search process seems to be by monitoring and, perhaps, controlling students' search activities.

Our results seem to be in line with previous findings. Among the different types of active labour market policies studied in the literature, job search assistance and monitoring of job search effort - with or without the option of applying sanctions for insufficient effort - are the most effective, also among youth (Caliendo & Schmidl, 2016; Card, Kluve, & Weber, 2018; Fredriksson & Holmlund, 2006). An early start of job search, well before graduation, has been shown to significantly increase labour market entry success of graduates (van der Klaauw, van Vuuren, & Berkhout, 2005). Schools and, in particular, mentors, are in a unique position to provide early job search assistance to students and, considering that in-school mentoring programs provide job search assistance only as a by-product, the positive results from our study underline the potential of career guidance as an early form of active labour market policy for young people that, as our study participates did in 2012, graduate in less than optimal labour market conditions.

The best form to provide job search assistance in school seems to be individual, one-on-one conversations rather than group meetings. Individual mentoring not only increased

job search effort, but had an additional positive impact on job search success, which seems to indicate that individual coaching can improve job search skills as well. In contrast, group meetings did not have any positive impact on job search. This is unexpected, because, as an active labour market policy, job search training is often organised within a group (workshop) because it seems to be more efficient to use a group setting: one trainer can convey information to many people at the same time (which reduces costs) and participants learn from each other's questions, contributions and mistakes. Our results do not confirm this assumption, though it must be stressed that we cannot isolate the effect of group meetings that exclusively cover job search training. Group meetings as part of in-school mentoring can cover many other aspects of the VET-training and other topics besides job search, such as sharing and comparing individual experiences during internships, for example.

Mentoring is an element in Dutch secondary education that is not disputed as such, the current discussion is mainly concerned with mentoring methods, or functions. Our study uses differences in (perceived) mentoring style to identify not only if, but how mentoring might work best to increase job search effort and improve job search success. Obviously, a major limitation of this study is that we do not assign different forms of mentoring randomly, so differences in reported mentoring can be caused by (unobserved) differences between students that also influence how and how successfully these students search for a job. State of the art effect-evaluation would require conducting randomized controlled trials. Program evaluation research could contribute much to the current discussion by moving from complete program evaluation to testing very specific program elements in order to isolate the most effective ones for different aims and/or student groups.

Study 2: Information/ Expectations

The main difference between the adult unemployed job seeker and the new labour market entrant is the level of experience (e.g. Saks, 2018). Work experience is considered important, not only because of human capital considerations, but also because accurate expectations based on correct information is considered crucial in job search theory. We found that, in general, students' expectations about their future wages were rather accurate, which has also been shown by previous research. For the group of non-western students, however, this was not the case.

We find that reservation wages of non-western students are significantly, considerably and inexplicably higher than the reservation wages of western students. While this result is perfectly in line with the available previous research, the size of the effect (12%) is still unexpected given our comparatively homogeneous sample: we study one cohort of last year students from one school, and from a small range of educational levels and age.

Job search theory predicts that high reservation wages can cause longer unemployment duration, since, with a given wage distribution, the chances of finding an acceptable job are lower the higher the wage demanded. There is a strong negative impact of non-western ethnic family background on the labour market position, which also negatively affects the starting position of a large share of Dutch vocational students, and this study contributes to the search for explanations. The longitudinal set-up of our data allows us to analyse whether differences in supply side behaviour - higher reservation wages - contribute to the negative correlation between non-western family background and employment. Our results indicate that the high reservation wages do not translate into a smaller likelihood of being employed six months after graduation.

We compare reservation wages stated at the end of the school year to actual wages earned six months later and find that students seem to accept jobs that pay less than they anticipated earlier. The lack of impact of high reservation wages, therefore, could be due to a downward adjustment of reservation wages during the process of job search. Rather than continuing the search for high wages, students adjust their expectations. The reservation starting wage/ reservation wage ratio is significantly lower for non-western students, which means that non-western students are less likely to find their expectations met or even exceeded by early labour market experience. Incidentally, the significantly lower starting wage/ reservation wage ratio of non-western students serves as additional confirmation that the difference in reservation wages between western and non-western students is not justified by unobserved differences in labour market prospects.

To summarize, we find no indication that unrealistic expectations in the form of too optimistic reservation wages translate into objectively worse outcomes, such as higher unemployment. Rather, our results indicate that western and non-western graduates of secondary vocational education are prepared to adjust their initially too optimistic reservation wages during the job search process. With respect to young labour market

entrants, reservation wages seem to be rather flexible so that learning and updating of information has to be considered an important element to include in a theoretical job search model for this particular group of job seekers.

We focus on the impact of the observed difference in expectations on the objective labour market outcome, but additional research is necessary to explore two important related questions: where do the differences in expectations come from and what does the difference between expectations and experience imply for the individual? While the high reservation wages do not seem to *cause* adverse the labour market outcome of non-western students, the combination of higher expectations and lower realisation can be problematic as such as young non-western adults are more likely to be disappointed by their first labour market experience. If the lower experience/expectation ratio has negative consequences for job satisfaction and/or future career prospects, then overly optimistic reservation wages could contribute to a fragile start for this vulnerable group. Research into the origins of this ethnic reservation wage gap seems to be necessary to explain this phenomenon and formulate strategies to improve expectations of non-western students.

Study 3: Financial resources

The last study investigates the impact of financial resources – side job income and pocket money - on the school-to-work transition. Financial resources and monetary incentives are the core of economic decision making and the school-to-work transition is affected by (inter-temporal) cost-benefit considerations in multiple ways: invest in further education or enter the labour market after graduation? Invest in additional job search effort or accept the current job offer? The main question is whether the financial resources of graduates affect their job search in ways similar to the empirical effect of financial resources of the unemployed on adult job search: reduce incentives and increase unemployment duration. We find only very limited evidence of a search-subsidy effect of financial resources on the school-to-work transition and only for graduates with highest SES-scores.

We estimate the probability to be in one of four mutually exclusive states six months after the end of the school year: further education, unemployment, transitional employment, or suitable employment. Including four types of states more realistically resembles the actual possibilities faced by graduates than reducing the states to ‘employed’ versus

'unemployed'. In fact, around 60% of all students were 'employed' already before graduation, working on a side job while still in education. Unsurprisingly, these students were also significantly more likely to be employed six months after the end of the school year. However, they were only more likely to be employed in transitional jobs; there was no significant effect on the likelihood of suitable employment. Apparently, for young Dutch VET-graduates, the income provided by side jobs did not translate into a longer (or shorter) search period for suitable employment. These findings suggest that side jobs do not provide a quick stepping-stone into the labour market for Dutch VET graduates. Also the second important source of funds for students, that is financial allowances provided by parents (or guardians), has no significant impact on the likelihood of unemployment or transitional employment over suitable employment. This means that parental transfers are not used to finance prolonged job search.

The additional option of graduates compared to the typical adult job seeker is to stay in school and postpone job search altogether. Especially during economically bad times, as the Dutch situation in 2012 was, and for graduates from lower educational levels, as the secondary vocational tracks are, the option of further education is appealing. A large part of the respondents in the School2Work study choose to delay labour market entry and this decision was not influenced by having a side job. The effect of parental transfers (pocket money) on further education, however, depended strongly on the socio-economic background of the family. While children from high-SES families were 20-39%-points more likely to stay in school for further education if they got pocket money, children from low-SES families were even more affected in the opposite direction. Large parental cash transfers while in school meant they were more likely to stop school after graduation. The effect was large (29-74%) and significant even for children close to the mean value of SES. Apparently, receiving parental transfers pushed them to leave school and to enter the labour market.

We cannot determine why children from less well-off families seem to be pushed to leave school and to enter the labour market if they are financially well-supported by their parents, but this result has important implications for educational policy. Given the, by international comparison, relatively accessible Dutch educational system which, at that point, still provided ubiquitous student grants to fund higher education, this strong effect

of family financial involvement on educational decisions is unexpected. An important theoretical implication of this result is that the well documented negative effect of socio-economic background on educational attainment might not, or at least not solely, be the result of the lower support - either financial or otherwise - from the child's family of origin. The negative effect might persist in spite, or even because of, a high level of support.

The future of the school-to-work transition

The starting point for the emergence of school-to-work transition research is the growing complexity of the school-to-work transition in the past decades. This complexity originates in the growing complexity of the labour market and the acceleration of change. If judged by the amount of discussion on the “future of work”, the transition will not become easier in the future and developing strategies to assist graduates in their first steps on the labour market remains an important issue for schools, parents, and the ‘national transition system’. The common conclusion from our studies is that assistance is not futile: students and graduates do respond to guidance, rely on information and react to monetary incentives.

Another important common conclusion from our studies is that the availability of resources and the impact of resources are both not equal among different groups of students. If equality of opportunity is an important goal, this inequality with respect to resources needs to be considered. Our studies look into differences in ethnic and socio-economic family background, but we also find differences with respect to availability of resources between, e.g., genders.

The last point we wish to make in this conclusion is that the focus on negative outcomes, insufficient job search effort, unrealistic expectations, and prolonged unemployment duration is strikingly misleading for the majority of vocational students. Similarly, when starting our project we were warned that the target group is exceptionally difficult to reach and hard to motivate to cooperate in research (see the chapter 6 for details). This, too, is only part of the truth. Vocational students juggle their course load, mandatory apprenticeships and (a majority of them also) side job employment while still considered minors. They, together with parents/ guardians, have to take important life course decisions (which training to follow) and pay for them (unlike secondary general education, secondary vocational education is not free of charge). Calling them ‘students’

rather than 'pupils' is one way to recognise the grown-up decisions and choices they have to make on a regular basis.

6 School2Work - A longitudinal study of the transition from vocational education and training to the labour market in the Netherlands. Appendix written by Pieter E. Baay, Corine C.E. Buers and Lisa Dumhs

6.1 Introduction

The general aim of the School2Work project is to identify factors that explain individual differences in the school-to-work transition and early career among students enrolled in VET in the Netherlands. To identify relevant factors that influence young adults' early career chances, we combine insights from the disciplinary perspectives of psychology, sociology, economics, and public administration & organization science.

Data for the School2Work project were collected in five waves of interviews that were conducted between October 2011 and December 2014 among students from one VET institute [ROC]. The first two questionnaires were completed in school - at the start of the last year of training (T1) and shortly before graduation (T2). The follow-up questionnaires (T3 to T5) were completed online, since the majority of the students had already finished their training. The School2Work panel consists of 2076 individuals, who participated in one or multiple waves.

Selecting, administrating and collecting data from a panel is always challenging, especially if the budget is limited. The challenge becomes profound with this particular population, since response rates are generally lower among young people and those with lower levels of education. As described in the current contribution, paying close attention to survey design and survey delivery certainly helped to obtain a unique dataset providing insight into the school-to-work transitions of these young semiskilled workers.

6.2 Background School2Work project

Youth and young adults have a vulnerable labour market position compared to prime-age workers. Globally, the ratio of youth-to-adult unemployment rates has exceeded 2.5 for the last 40 years. The situation is slightly better in the Netherlands, but youth unemployment rates are still about twice those of older workers (OECD, 2008). In periods of economic recession, the relative disadvantage of youth in the labour market tends to rise, which has led to youth unemployment rates exceeding 50% in parts of the US and

Europe (Eurostat, 2012; U.S. Department of Labor, Bureau of Labor Statistics, 2014). In addition, young workers have to deal more often with precarious forms of employment than older workers (ILO, 2012; Kalleberg, 2000; OECD, 2008; Quintini, Martin, & Martin, 2007). Young adults' first years on the labour market are therefore a turbulent and uncertain period in which many struggle to find and maintain employment (Kerckhoff, Raudenbush, & Glennie, 2001).

These first years in the labour market are also likely to have consequences for the chances of young adults for securing sustainable labour market participation. Research shows that employment status and job quality during the first years in the labour market impacts both the immediate well-being (McKee-Ryan & Harvey, 2011; McKee-Ryan, Song, Wanberg, & Kinicki, 2005) and, at least for the short-term³⁷, career outcomes of young adults (Blossfeld, Bucholz, Bukodi, & Kurz, 2008; Burgess, Propper, Rees, & Shearer, 2003; de Lange et al., 2014; Gebel, 2010; Schmelzer, 2011; Steijn et al., 2006).

Society as a whole also benefits from successful school-to-work transitions (Morrison, 2002). Apart from the potential burden on the social security system in case benefits have to be paid to unemployed youth, society's investment in education is underutilized if prolonged transitions result in human capital depreciation (Coles & Masters, 2000). In addition, unemployed individuals experience lower levels of well-being and higher levels of depression (McKee-Ryan et al., 2005; Paul & Moser, 2009; Wanberg, 2012), which potentially increases the use and costs of (mental) health care as well as the risk of social exclusion. If a large share of young adults obtains 'scars' in their early career, organizations face challenges to develop and implement personnel policies to maintain a sufficient number of qualified staff needed to secure a sustainable competitive advantage. For these reasons, the labour market position and early career of young adults remains a relevant issue that receives attention from many policy makers and researchers.

Many young adults struggle to build and develop a career, but some young adults are more at risk to remain in a vulnerable labour market position than others. One important

³⁷ There is an ongoing debate regarding the time frame of the career consequences. Some scholars have demonstrated that a precarious start in terms of unemployment or having a job in the secondary segment of the labour market has long-lasting negative consequences for the career of young workers (Burgess et al., 2003; Steijn et al., 2006). In contrast to this so-called entrapment scenario, others studies have concluded that flexible employment at labour market entry may also function as a step towards more permanent employment in the further career of young adults. They show that the negative effects associated with flexible employment diminish after five years in the labour market (Gebel, 2010; de Graaf-Zijl et al., 2011).

predictor for the likelihood of unemployment and job quality is the level of education (Burgess et al., 2003; Gebel, 2010; de Lange et al., 2014). To illustrate, 22.3% of lower educated, 14.8% of intermediate educated, and 10.6% of higher educated graduates (aged 15 to 25) were unemployed in the Netherlands in 2014 (Statistics Netherlands, 2014). Due to the relatively vulnerable labour market position of lower educated youth, policy makers have devoted special attention to these groups (Ambassador for Youth Unemployment, 2013).

While there is a considerable body of internationally comparative studies on school-to-work transitions, studies on job search and career success have mainly focused on samples of university graduates (Kanfer, Wanberg, & Kantrowitz, 2001; Ng, Eby, Sorensen, & Feldman, 2005). Consequently, little is known about the job search behaviour, early career, and predictors of a successful school-to-work transition among non-collegiate (lower and middle educated) graduates. The aim of the School2Work project is, therefore, to develop a better understanding of a successful transition from school to the first years in the labour market among secondary vocational education graduates. More specifically, we examine which young workers are more likely to smoothly enter the labour market and under which conditions. We therefore contribute to the literature on school to work transitions by examining relevant skills and possible barriers in the school-to-work transition, among a specific group of labour market entrants. Simultaneously, the results of this study may be informative for policy makers, who aim “to produce better outcomes for youth in the longer run by equipping them with relevant skills and removing barriers to their employment.” (OECD, 2013, p. 2)

Vocational education and training (VET) in the Netherlands

The School2Work project focuses on youth in VET in the Netherlands. This type of training prepares students in more than 700 VET programs for a wide variety of occupations ranging from, for example, hairdressers and mechanics to nursing assistants and administrative staff. After primary education, most students enroll in pre-vocational education (VMBO; 50%), senior general vocational education (HAVO; 24%), or pre-university education (VWO; 20%)³⁸. Students graduating from pre-vocational education

³⁸ For a more detailed overview of the educational system in The Netherlands, see <http://www.uis.unesco.org/Education/ISCEDMappings/Pages/default.aspx>

typically continue with intermediate secondary vocational education (MBO) (Dutch Ministry of Education, Culture, and Science [OCW], 2012). Approximately 51% of all students who left the educational system after graduating from post-secondary education in 2012 did so with a VET degree (OCW, 2012). In the labor force, approximately 43% holds a VET degree (Statistics Netherlands, 2014). In sum, VET is the largest educational track in the Netherlands and, consequently, the most frequent preparation for labor market entrance.

VET is offered at four levels and in two learning pathways. Students can follow a school-based pathway (BOL) in which practical training takes up 20% to 60%. Students can also follow a workplace-based pathway (BBL) in which learning in the classroom is limited to one day per week and practical training takes up more than 60% of the time. Given the close link between school and labor market for students enrolled in a workplace-based pathway, these students generally experience a smoother school-to-work transition than students enrolled in a school-based pathway. This notion is empirically supported by lower unemployment rates among BBL graduates (12%), compared to BOL graduates (22%) (ROA, 2013). In the School2Work project, we therefore focus on students enrolled in the school-based pathway (BOL).

VET programs are offered at four levels of training: the assistant level (level-1; 5%), basic vocational level (level-2; 25%), full professional level (level-3; 27%), and specialist level (level-4; 43%) (Statistics Netherlands, 2014). From level 2 onward, graduation completes education at this particular level and graduates can start working or continue in a higher level of training. Graduates from the highest (specialist) level can continue in tertiary vocational education (HBO).

In the School2Work project, we focus on students enrolled in the basic vocational level (level-2) or higher, since students enrolled in the assistant level (level-1) are formally not qualified for the labor market ³⁹. Moreover, additional research reports of the School2Work project that focused on assistant level students have shown that they have

³⁹ MBO level-1 corresponds to the international ISCED level 254, lower secondary education or second stage basic education, which is not yet considered a preparation for the labor market (Statistics Netherlands, 2018b). The qualification requirements of the Dutch educational system require a person under the age of 18 with a level-1 diploma to continue education (extension of compulsory education).

different characteristics and they experience different school-to-work transitions (Baay & Schipper, 2014; Baay & van Pinxteren, 2014).

Project structure

The general aim of the School2Work project is to identify factors that explain individual differences in the school-to-work transition and early career among students enrolled in VET. To identify relevant factors that influence young adults' early career chances, we combine insights from the disciplinary perspectives of psychology, sociology, economics, and public administration & organization science.

While economic theory looks at human capital and supply/demand conditions to explain employment chances, psychological theories concentrate on personality features (motivation and self-control) to explain individual differences in school-to-work transition success. The sociological perspective adds the effect of social capital (networks, social contacts), while an institutional approach would focus on institutional and legal arrangements (making available information, social security, minimum pay law and services from intermediate organizations like job agencies and the Dutch Employee Insurance Agency [UWV]) to explain young people's search behavior and the match between individual capabilities and job requirements. These partial approaches result only in partial answers. The multidisciplinary School2Work project combines these disciplinary insights in order to gain a better understanding of the mechanisms that contribute to a successful school-to-work transition.

In addition to the multidisciplinary perspective, the School2Work project contributes to the literature by examining within-group differences. While most studies have taken a comparative perspective by examining differences between educational groups or countries, within group variation is often disregarded. Hence, the School2Work project contributes to current literature by focusing on differences among young semiskilled workers.

Sub-projects

The first sub-project (with Pieter Baay as primary researcher) centers on the question how people in the job search process can take advantage of who they are. Assets that are studied in this sub-project are both ascribed (e.g., ethnic background) and achieved (proactive coping skills); individual (e.g., self-control, personality) and contextual (e.g.,

social networks). The common ground in these assets is that prior studies have shed relatively little light on mechanisms through which these factors influence the job search process. In a set of studies, we borrow from psychological and sociological theories to propose ways through which job seekers can take advantage of these characteristics (Baay, 2015).

The second sub-project (with Lisa Dumhs as primary researcher) investigates the role of student's resources in facilitating a smooth transition from school to work, taking into account material (parental allowances, wages, savings) as well as immaterial (counselling, information) resources. The role of financial resources, such as unemployment benefits, for labor market outcomes is well-established for adult unemployed job seekers, but, so far, little is known about the actual resources available to VET students as well as their impact on the labor market entry success.

The third sub-project (with Corine Buers as primary researcher) focuses on the interplay between young adults and (training) organizations that employ them. More specifically, this project aims to explain differences in the early career of young VET graduates by examining the behaviors of employers and young adults. To investigate this issue, a set of studies considers the role of enacted human resource policies, managers' employment decisions and the experiences of young adults in (training) organizations (Buers, Karpinska, & Schippers, 2018). In contrast to previous work on early careers, both the perspective of employers (i.e., the demand-side of the labor market) and the perspective of young adults (the supply-side of the labor market) are taken into account to explain differences in the attainment of young adults.

6.3 Preparation for data collection

Study design

To follow the school-to-work transition of VET students a longitudinal survey was designed. Despite that longitudinal data allow to study the school-to-work transitions as a process over time that starts before and continues well after graduation, one important concern, especially with this particular target population, is relatively low response rates over time. Also, panel attrition may be selective, possibly leading to biased results. Similarly, while computer-administered surveys have advantages, such as shorter transmitting time, lower delivery cost, more design options, less data entry time and easy

participation for frequent computer users such as young adults (Israel, 2011; Couper, 2000), they also suffer from lower and possibly more biased results compared to traditional postal or phone surveys (Manfreda, Bosnjak, Berzelak, Haas, & Vehovar, 2008; Shih & Fan, 2008; Nulty, 2008; Couper, 2000). To illustrate, a meta-analysis of Manfreda et al. (2008) showed that response rates of web-based surveys are approximately 11% lower than that of other survey modes. We detail below which strategies were used in the current project to deal with (possibly selective) panel attrition, which might be enhanced by the use of computer-administered surveys in this longitudinal project.

Manfreda et al. (2008) emphasize that response rates are highly dependent on the design and delivery of the survey. They state that studies comparing the response rates of computer-based surveys and other survey modes have produced rather inconsistent results due to the different sampling strategies, survey designs/ modes, study attributes and study samples. This implies that response rates are highly dependent on the study context and can be influenced by careful implementation. We used various insights regarding (1) survey design and (2) survey delivery to arrive at acceptable response rates for our study group (Cook, Heath, & Thompson, 2000; Fan & Yan, 2010; Porter & Whitcomb, 2003; Shih & Fan, 2008).

Survey design refers to the presentation and the content of the survey, while survey delivery refers to the contact with and the delivery of the survey to potential respondents. The presentation of the survey, which refers to wording, question ordering, question display (lay-out), etc., should help respondents to fill out the questionnaire and thus increase response rates and survey completion. With respect to the content of a questionnaire, Fan & Yan (2010) stress the importance of official sponsorship - response rates tend to be higher when surveys are sponsored by academic or governmental agencies -, a highly salient topic and questionnaire length.

Building on these insights, we paid particular attention to the presentation, especially to the comprehensibility of the questions and the question display. Previous studies have shown that comprehensibility is important for the quality of the answers and that participants are discouraged to continue if they have difficulties understanding the questionnaire (Buers, Triemstra, Bloemendal, Zwijnenberg, Hendriks, & Delnoij, 2013; de Leeuw, Hox, & Huisman, 2003; Tourangeau, Rips, & Rasinski, 2000). Given the large differences in language proficiency in our sample - varying between CEF A1 to B2

(Onderwijsinspectie, 2013) - comprehensibility was particularly important. When formulating new items and adjusting existing scales, we built on suggestions from experts in the field (Bureau Taal⁴⁰, the Centre of Expertise for Vocational Education and Training [ecbo], and MBO Diensten) as well as prior work on questionnaire development (Buers et al., 2013; Tourangeau et al., 2000). The experts' general advice was to formulate clearly, specifically and neutrally. Additionally, they provided specific suggestions on formulating questions and response categories. With regard to the formulation of questions, we were encouraged to: 1) Formulate short and active sentences (10-15 words), 2) Adjust the language level to the target group (level A2) and avoid jargon and abstract concepts (i.e., ask about concrete behaviors), 3) Limit the use of negatively formulated items (e.g., "I do not want others to think I am lazy"), 4) Limit the use of brackets, commas, and bold words, and 5) Start sentences with the main concept/ topic. With regard to formulating response categories we were encouraged to: 1) List answering categories in a logical order and formulate them consistent with the question, 2) Aim to cover all possible answers, 3) Ensure that numbering of answer categories is consistent across scales. Besides taking account of these recommendations, pop-up text boxes were used to provide explanations for words potentially unfamiliar to the respondents, such as "disposable income" or "timid".

The layout of the questionnaire as well as the graphical presentation of the questions can affect attractiveness and comprehensibility, both closely linked to response rates (Couper, 2000; Dillman & Bowker, 2001; Fan & Yan, 2010). One difficulty with computer-based surveys as compared to paper forms is the inability for respondents to "see the whole". This can be discouraging and cause people to quit before completion. Previous studies analyzing the use of an indicator to track progress throughout the questionnaire (Fan & Yan, 2010) found mixed (positive, as well as negative) effects and we accordingly looked for a different solution. We choose to present the questionnaire structure upfront in the introduction, with reminders at the start of each individual section. Also, to address that respondents tend to prefer variation, we alternated between fixed categories (e.g., a 7-point Likert scale) and vertical bars with a continuous scale between fixed end-points (e.g., 0. Strongly disagree, 100. Strongly agree). With regard to technical issues involving

⁴⁰ A webservice for adapting language to the proficiency level of the target population (www.bureautaal.nl).

screen-by-screen or scrolling survey layouts, we realized that many of our respondents fill out the survey on their mobile phone, so we limited scrolling by presenting a maximum of four items below each other.

In addition to the comprehensibility of the questionnaire and the question display, we used insights from survey research regarding the questionnaire length, salience of the topic and informing students about questionnaire sponsoring (Cook et al., 2000; Fan & Yan, 2010). While the length of a survey is generally found to have a negative linear relationship with response rates, this might not be the case for topics of high salience. As the school-to-work transitions relate to the near future for participants, the questionnaire dealt with a salient topic and we tried to emphasize the importance during conversations, introduction and reminders. Nevertheless, efforts were made to limit the questionnaire length by focusing on central concepts and preferring scales with limited numbers of items. Furthermore, in line with the notion that people are more willing to participate in studies organized by governmental and non-profit organizations (Fan & Yan, 2010), we informed students face-to-face and in every contact that this project is a collaboration between an academic institute (Utrecht University) and their vocational education and training (VET) institute.

Studies examining factors relating to the delivery of the survey have identified various factors that could impact the response rates such as the types and number of contacts, design of invitations (personalization, automatic or password protected access), and incentives. The number of contacts, such as pre-notifications, invitations and reminders, appears to increase response rates, especially when these are personalized. While e-mail is the main means of contacting potential respondents, alternative delivery modes (e.g., mail, telephone, and short messaging service) or mixed modes surveys are increasingly used. Up to date, it has not been discovered if the mode of contact matters. Incentives could also increase the response rates for specific situations, but their effect seems to be varying with types, timings, and amount of incentives (see for an overview Fan & Yan, 2010).

In line with these studies, we undertook various attempts to adjust the delivery of the survey, paying particular attention to personalized contacts and invitations. Before starting the survey, students were informed by researchers present in the classroom about the School2Work project. Researchers and research assistants tried to establish a

firm basis for long-term cooperation by personally explaining the aim of the project and answering students' questions in the classroom. They also distributed candy to make sure that the School2Work project had some positive memory attached to it – and to provide the students with a short-term energy-boost that was much needed after half an hour of answering questions. As an incentive to participate in each online wave after graduation, all respondents who finished the questionnaire partook in a lottery, which raffled an iPad as primary prize and several gift certificates as secondary prizes. Efforts were made to remind the students of the project also between waves. Between the first and second wave, individual personality profiles including a comparison with the average student's profile of their school were sent to the participants. Regular project updates along with other related information and promotion videos were posted on Facebook and announced via Twitter.

Testing

After designing the questionnaire (and before distributing the survey), experts in the field were asked to check the survey on clarity of the questions/response categories and time needed to complete the survey. This group of 'evaluators' consisted of (1) scholarly experts in the field of psychology, economics, sociology and human resource management; (2) researchers employed by the Centre of Expertise for Vocational Education and Training; and (3) teachers in VET. They provided comments and additional suggestions to adjust the School2Work questionnaires in order to balance scientific requirements (validated scales) and cooperation from our target group (comprehensibly and feasibility). Furthermore, a pilot study was conducted among 136 vocational students in May 2011. Based on this pilot study, final changes were made and the final version of the questionnaire was put online.

School2Work questionnaire

The School2Work questionnaires covered different topics. To study changes in a construct from one period to another, most items were measured at least at two waves; see Table 6.1 for an overview.

Table 6.1 School2Work questionnaire - topics per wave

Categories	Waves					
	T1	T2	T3	T4	T5	
General	Demographics	if absent at T1				
	Socio-economic background	if absent at T1				
	Living situation		x	x	x	
	Work experience Big Five Personality	x				
	Self-control					
Attitudes & Behaviours	Work identity	x				
	Work motivation	x				
	Work norms					
	Job search	x	x	x	x	
		Career exploration		x	x	
				Organizational citizenship behaviour	x	x
Expectations & Experiences	Plans after graduation			Job performance	x	x
		x	x			
		Career expectations	x	x	x	
Resources	Social network	x	x			
	Income	x	x	x	x	
	Career guidance		x			
		Support at internship/work	x	x	x	
Career- & Labour market outcomes			Labour market situation	x	x	
			Job characteristics	x	x	
			Career success	x	x	
			Employability	x	x	
Institutional characteristics	Education	x	x	x	x	
		Internship/Work	x	x	x	

Note. 'x' represents cases in which the question was repeated in that subsequent wave.

6.4 Procedure and statistics

Data collection: waves and procedures

Data for the School2Work project were collected in five waves of interviews that were conducted between October 2011 and December 2014 among students from one VET institute [ROC]. This school is situated in the center of the Netherlands and provides training in several hundred different vocations on all four levels of intermediate vocational education. Organized in twelve different colleges, the trainings cover fields as diverse as automotive, beauty and healthcare. In 2011-2012, approximately 10,000 students were enrolled in all school-based VET programs on all levels combined in this particular school (ROC Midden Nederland, 2011).

The data collection started in the school year 2011/2012, and all last-year students enrolled in school-based training programs from at least level two were invited to participate in the series of questionnaires over a period of three years, thus covering the last phase of training and the first years of work-life or higher education. In total, more than 2,000 students filled in at least one of five questionnaires. Figure 6.1 provides an overview of waves and response information.

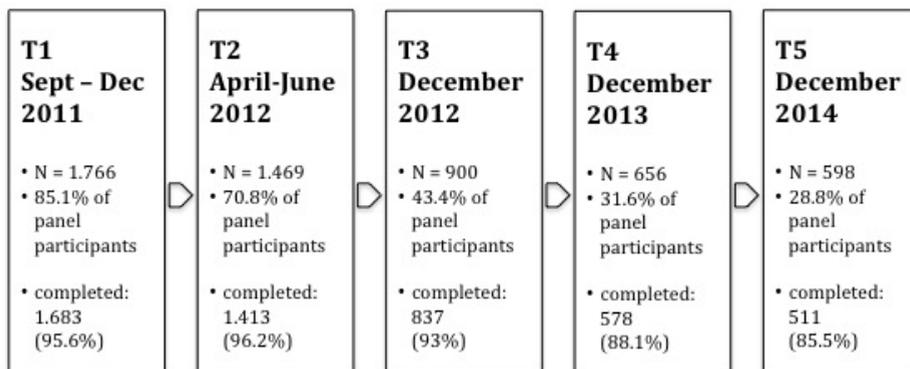


Figure 6.1 Overview School2Work data collection waves: participation and response rates

The first two questionnaires were completed in school - at the start of the last year of training (T1) and shortly before graduation (T2). The researchers and research assistants made appointments with teachers to visit the students at school during a regular class. After a short introduction on the project and the questionnaire, students completed the

digital questionnaires individually; a personal login code was used to allow for matching of the different waves. Students were free to provide contact details to allow invitation to the last three rounds of questionnaires, and the majority of the participants of T1 and/or T2 did (93.6%).

Depending on class size, one or multiple researchers or research assistants were present while students completed the questionnaires to assist them with any difficulties computer-related and otherwise; to clarify issues concerning the questions asked in the questionnaire and to answer questions about the project. Sometimes students needed special assistance such as reading the questions aloud to them to help them stay focused on the task or to overcome general reading difficulties. Often students needed encouragement to continue, as the questionnaires took 35 minutes on average to complete. These first two questionnaires were long as they covered a wide range of topics (Table 6.1).

The follow-up questionnaires (T3 to T5) were completed online, since the majority of the students had already finished their training. Consequently, those questionnaires were considerably shorter, covering mainly the current situation of the respondent (Table 6.1 for details). Most students had provided contact details with the first two interviews, such as e-mail-addresses, telephone numbers, home addresses, or social media account information (Facebook, Hyves). Initially, invitations for the third, fourth and fifth interview were sent out by e-mail. The invitation was repeated in the form of three e-mail reminders sent out over six weeks' time. Respondents who did not respond to the e-mails were approached by phone. During the first online wave (T3), invitations were also repeated in messages via social media and traditional mail, using all the information respondents had previously provided. In addition, the school agreed to send out an invitation in their own name, asking their former students to contribute to the School2Work project by completing the questionnaire. However, while personal invitations through telephone were generally received well by participants – approximately half of the completed questionnaires were filled out after the respondent had been spoken with on the phone – the other methods proved ineffective and were not employed in wave four and five. Nearly all students had provided contact information in the in-school questionnaires, so that around 1.900 respondents could be invited for the T3 follow-up survey by mail. Over the course of the follow-up surveys, less than 100

students indicated the desire to be removed from the database, so the number of invitations stayed high, however the amount of inaccurate information – invitations returned as undeliverable – increased. About half the students had provided telephone numbers and were contacted by telephone to encourage participation; in addition, 140 letters and 60 social media messages were sent during T3.

Due to the organization of VET in the Netherlands, the clear set-up of the interview waves – two in-school rounds (T1 at the beginning of the last year, T2 close to graduation) and three after-school rounds of questionnaires (6, 12 and 24 months post-graduation) – were not attained for a large share of the project participants. VET is organized on an individual basis, so no school-wide graduation date exists. Especially in smaller VET programs, each participant graduates as soon as all requirements are completed. Therefore, a number of students had already left school when they were approached for T2 in May 2012. They were asked to complete the wave-3 questionnaire (167 respondents did). At the time of T3 (December 2012), those respondents were invited to complete the wave-3 questionnaire again, together with the rest of the panel (107 complied). Conversely, a number of students were still in their original training when they were approached for T3 in December 2012, those were asked to instead complete the wave-2 questionnaire (again) (139 students). To attain a comparable sample for the before- and after-graduation waves for data analysis, the latest observed pre-graduation questionnaire (wave-2 at either T2, T3 or T4) as well as the first observed post-graduation questionnaire (wave-3 at either T2, T3 or T4) should be combined to produce one wave.

Sample statistics

Descriptives

The School2Work panel consists of 2.076 individuals, 45% is male and 63% is Dutch (i.e., both parents were born in the Netherlands). Table 6.2 shows sample statistics for the School2Work panel as well as population statistics for VET students in the region and country. A comparison of the sample and population statistics reveals that the School2Work panel is largely representative of Dutch students who participate in VET. The School2Work sample is older, which makes sense given the focus on students in their final year.

Table 6.2 Comparison sample- and population statistics

	School2Work sample (2011-2012)	School-based vocational students in region (2011-2012)	School-based vocational students in country (2011-2012)
Age	20.6 years	<i>No information available</i>	18.8 years
Gender			
Male	45.3%	47.5%	48.0%
Female	54.7%	52.5%	52.0%
Ethnicity			
Dutch	63.4%	58.4%	70.2%
2nd generation non-Dutch	23.1%	29.8%	20.9%
1st generation non-Dutch	13.5%	11.8%	8.9%
Level of Education			
Level-2	17.5%	19.6%	18.4%
Level-3	23.4%	24.8%	24.7%
Level-4	59.1%	55.5%	56.9%

Participation in the different waves varied considerably. Specifically, 15.4% of the panel (319 respondents) participated in all five interviews. The largest group (634 students, 30.5%) only filled in one of the questionnaires (T1 or T2); a smaller fraction (24.2%, 503 people) took part in two rounds; 15.4% (320) participated in three waves, and 14.3% (298) participated in four waves. An overview of sample sizes and response rates for each wave is given in Figure 6.1.

Panel attrition has two main causes: not succeeding to reach participants and participants refusing to participate upon contact. As mentioned, 6.4% did not provide any contact information in the first two rounds and could not be contacted again. Some contact information was no longer accurate at the time of trying to approach respondents (7%). Of those that should have received an invitation, more than 46% (T3) and more than 36% (T4) and 34.6% (T5) participated, which compares favorably with response rates usually found in web-based surveys (34% according to Shih & Fan, 2008). Comparable research among VET students in the Netherlands yielded response rates between 15% and 25% (ROA, 2014). The next section deals with panel attrition analysis, establishing whether attrition has led to bias in the School2Work data.

Representativeness

Although we made various efforts to increase response rates, researchers have also argued that coverage and response representativeness are more important than response rates to prevent nonresponse biases that could result in misleading information on a topic (Cook et al., 2000). While response rates are important if it bears on representativeness, underrepresentations of specific groups - such as the lower educated - could jeopardize the validity of survey research (Dillman, 1978; Goyder, Warriner, & Miller, 2002). To establish the representativeness of the School2Work panel for the population studied, sample statistics are compared to the characteristics of the overall population of vocational students in the region (Table 6.2). Overall, the School2Work panel matches the target population closely.

Table 6.3 Attrition analysis per wave

	Wave-1	Wave-2	Wave-3	Wave-4	Wave-5
Age	.05	.05	.08	.04	.05
Parental education	.07	.22***	.05	.16***	.20***
Ethnic minority (0) / Majority (1)	.06**	.05*	.13***	.19***	.20***
Dropout T-1			.04	.02	.01
Male (0) /Female (1)	.00	.11***	.11***	.06**	.08***
NEET T-1			.01	.04	.02
Has a job T-1		.01	.03	.05	.02
Unemployed T-1			.11	.07	.02
Western (0) /non-western minority (1)	.06	.06	.04	.03	.08*
Level of Education before School2Work	n/a	.06	.11***	.12***	.13***
Level of Education School2Work	.09**	.13***	.14***	.18***	.15***
Field of Education School2Work	.14***	.18***	.18***	.13***	.13***
Status T-1			0.1*	.07	.05

Note. Values represent Cohen's *d* or Cramer's *V* estimates; T-1 refers to the wave previous to the one for which wave participation is calculated; NEET = Not in education, employment, or training.

****p* < .001 ***p* < .01 **p* < .05.

The main concern with panel attrition, apart from sample size considerations, is the risk of biased results due to self-selection in the longitudinal sample of people with certain personal characteristics. To establish the extent to which self-selection bias has occurred in the School2Work project, effect sizes and significance levels were computed for the association between participation in each wave on the one hand, and all major control and outcome variables on the other hand (Table 6.3). In general, the tests revealed no indication for severe selection bias due to voluntary participation. Even though

significance testing revealed several significant relations, these are partly due to the large sample size. All effect sizes were smaller than .20, which is considered a small effect (Cohen, 1992). Effect sizes were largest with personal characteristics, such as ethnicity (.19) and level as well as sector of education (.18). Importantly, status at time of the previous questionnaire (i.e., being unemployed, employed, self-employed, in education, or else) can be ruled out as an important predictor of survey participation as effect sizes do not exceed .11. These relatively low effects sizes between participant characteristics and survey participation suggests that there is no severe self-selection bias in the School2Work data, which makes results better generalizable to the target population of VET graduates in the Netherlands.

6.5 Conclusion and acknowledgements

The School2Work project conducted a four-year longitudinal survey study among students enrolled in VET in the Netherlands. Selecting, administrating and collecting data from a panel is always challenging, especially if the budget is limited. The challenge becomes profound with this particular population, since response rates are generally lower among young people and those with lower levels of education. Paying close attention to survey design and survey delivery certainly helped to obtain a unique dataset providing insight into the school-to-work transitions of these young semiskilled workers, but we could never have done this without the help of the teachers and support staff of the school. They not only helped collecting the information needed to find the eligible students, but also helped carrying out the data collection by making (and keeping) appointments, organizing computer space, and motivating students when necessary.

The School2Work research team at Utrecht University (which consists of the three authors of this appendix as well as professors Marcel van Aken, Paul Boselie, Peter Leisink, Tanja van der Lippe, Frans Pennings, Janneke Plantenga, Denise de Ridder, and Joop Schippers) would like to thank a number of people explicitly: Robert Koch, who laid the groundwork within the schooling center where the data collection was started; Leonard Geluk, chairman of the board of directors, who provided all the institutional support necessary, and Peter Taffijn, who provided moral and administrative support. Also, our appreciation goes to Utrecht University's focus area Coordinating Societal Change (CSC) and Instituut GAK, who provided funding for this intensive project, which

enabled us to employ several research assistants to motivate the respondents face-to-face and on the phone. Last but not least, we would like to thank our participants for their time and effort to fill in the questionnaires.

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Nederlandse samenvatting

Elk jaar ontvangen in Nederland zo'n 95.000 mensen een diploma van een mbo-opleiding in de beroepsbegeleidende leerweg (BOL). Al deze jonge afgestudeerden staan voor belangrijke keuzes: kies ik een vervolgopleiding of ga ik aan het werk? Hoe vind ik een goede baan en, trouwens, wat is een goede baan? Neem ik dit baanaanbod van mijn stageplek aan, of zoek ik naar 'een andere uitdaging'? De studies in dit proefschrift gaan over deze vragen en over de impact van de hulpbronnen die de afgestudeerde in deze cruciale fase van zijn of haar leven ter beschikking heeft.

De studies in dit proefschrift zijn onderdeel van het grotere onderzoeksproject 'School2Work'. School2Work is in 2011 gestart om de overgang van school naar werk van jonge afgestudeerden van het middelbaar beroepsonderwijs in Nederland te bestuderen. Op dat moment was er in Nederland sprake van een economische crisis en werden studenten - waarschijnlijk geïnspireerd door onderzoek naar de negatieve effecten van het afstuderen in economisch slechte tijden - actief gestimuleerd om zo mogelijk te kiezen voor een vervolgopleiding (het zogenaamde School-Ex programma; Meng, Verhagen, Korthals, & Huijgen, 2014).

Er is veel literatuur over de overgang van school naar werk, maar het meeste onderzoek naar individuele gedragsaspecten vindt plaats onder afgestudeerden van de universiteit. Waarschijnlijk is dit een gevolg van het feit dat deze groep veel toegankelijker is voor (universitaire) onderzoekers. Een belangrijke bijdrage van het School2Work project aan de literatuur is daarom de focus op de grote groep van mbo-studenten en de uitgebreide, longitudinale gegevens die over deze specifieke populatie zijn verzameld.

Het onderzoeksproject School2Work is multidisciplinair van aard en bestaat uit drie delen, die elk gericht zijn op verschillende aspecten van de overgang van school naar werk. Deel één gaat in op de rol van persoonlijke kenmerken en sociale netwerken in de carrièreplanning en het zoeken naar werk (Baay, 2015). Het voorliggende proefschrift is onderdeel twee van School2Work en bekijkt het zoekgedrag en de invloed van hulpbronnen op het zoeken naar werk. Deel drie omvat de carrièreplanning en de HR-praktijken op de werkplek. Meer gedetailleerde informatie over het School2Work-project is te vinden in hoofdstuk 6 van deze dissertatie. Dit hoofdstuk is gezamenlijk geschreven door de drie promovendi van School2Work.

Het School2Work-project kijkt naar een breed scala aan factoren - van persoonlijkheidskenmerken en sociale netwerken tot HR-praktijken op de werkplek. De studies in dit proefschrift gaan allemaal over de impact van hulpbronnen - begeleiding, informatie en geld - op de overgang van school naar werk. Als theoretisch kader is met name de economische theorie van baanzoekgedrag gebruikt, waarbij deze wordt toegepast op de specifieke situatie van nieuwkomers op de arbeidsmarkt.

De studies in dit proefschrift volgen de leerlingen langs een kort (maar cruciaal) deel van hun weg van school naar werk. In het eerste onderzoek starten we met het laatste jaar van hun opleiding. We kijken naar de loopbaanoriëntatiebegeleiding (LOB) op school. Een van de vele dingen die een mentor kan doen om de overgang naar werk te verbeteren, is het aanmoedigen van een vroege start bij het zoeken naar een eerste baan in de arbeidsmarkt, na afronding van de studie. Eerder onderzoek toonde namelijk aan dat een vroege start een vlotte overgang van school naar werk bevordert. We onderzoeken hoe loopbaanbegeleiding aanzet tot vroege zoekactiviteiten en hoe de begeleiding het succes van het zoeken naar een baan beïnvloedt.

In het tweede onderzoek volgen we de studenten bij hun eerste stappen op de arbeidsmarkt. We vergelijken de verwachtingen van de studenten over hun eigen arbeidsmarktpositie met hun daadwerkelijke vroege arbeidsmarktvervingen. Meer concreet gaan we na in hoeverre het lukt om binnen zes maanden een baan te vinden en in hoeverre het salaris dat ze in deze eerste baan verdienen overeenkomt met hun verwachtingen. Onze belangrijkste onderzoeksvraag is of verwachtingen van invloed zijn op het zoekgedrag van afgestudeerden, op de kans om een eerste baan te vinden (en te aanvaarden) en op het loon dat ze verdienen.

In het derde onderzoek kijken we naar de invloed van beschikbare financiële middelen van studenten op hun situatie zes maanden na het afstuderen. Zoals we weten uit transitieonderzoek is de status zes maanden na het afstuderen vaker een tussenstap - een fase in de overgang van school naar werk - dan de eindbestemming. We maken op dat moment onderscheid tussen een 'overgangsbaan' en een 'geschikte baan', waarbij we 'geschikt' definiëren als een baan die door de afgestudeerde zelf als stabiel en geschikt genoeg wordt beschouwd om te stoppen met het zoeken naar een andere baan.

Beschikbaarheid van hulpbronnen

De resultaten van het onderzoek laten zien dat de beschikbaarheid van hulpbronnen sterk verschilt tussen studenten. De verschillen met betrekking tot loopbaanoriëntatiebegeleiding (LOB) op school, de hulpbron die we bekijken in de eerste studie, kunnen bijna volledig worden toegeschreven aan verschillen tussen onderwijsniveau en vakgebied. Leerlingen in technische opleidingen (zoals de bouw) geven bijvoorbeeld veel vaker aan dat ze nooit met hun mentor hebben gesproken dan leerlingen in de opleidingen zorg en welzijn of sport. In het geval van LOB als hulpmiddel zijn de verschillen met betrekking tot de demografische kenmerken van studenten dus relatief klein wanneer we corrigeren voor het gevolgde onderwijstraject. Op de vraag hoeveel prioriteit onderwerpen omtrent 'het zoeken naar een baan' hebben tijdens LOB, geven oudere studenten en niet-Nederlandse studenten gemiddeld hogere scores dan jongere of Nederlandse studenten.

Er zijn echter systematische verschillen tussen groepen studenten met betrekking tot informatie/verwachtingen over de kansen op de arbeidsmarkt (studie twee) en met betrekking tot de financiële middelen (studie drie). Niet-westerse studenten lijken veel optimistischer over hun toekomstige loon te zijn dan westerse studenten. Dat kan erop wijzen dat de informatie die zij hebben verzameld en/of ontvangen veel minder nauwkeurig is dan de informatie die westerse studenten hebben gekregen. De dataset van School2Work biedt weinig verklaring voor het feit dat niet-westerse studenten minder nauwkeurige verwachtingen vormen, behalve dat niet-westerse studenten minder vaak al actief zijn op de arbeidsmarkt. Zij hebben minder vaak een bijbaan en zoeken ook minder vaak al actief naar een baan dan westerse studenten. Beide aspecten houden mogelijk verband met verwachtingen ten opzichte van de arbeidsmarkt. Niet-westerse studenten kunnen bijvoorbeeld weigeren te werken in laagbetaalde nevenfuncties, omdat zij de waarde van werkervaring minder belangrijk vinden voor hun toekomstige kansen op de arbeidsmarkt. Ook het gedrag van de ouders zou een rol kunnen spelen. Er zijn aanwijzingen dat niet-westerse ouders, anders dan Nederlandse ouders, hun financiële steun naar beneden bijstellen zodra het kind zijn of haar eigen inkomsten heeft. Als het hebben van een bijbaan minder zakgeld betekent, worden niet-westerse studenten ontmoedigd om werkervaring op te doen. Dit impliceert onder andere dat een voorlichtingscampagne over de waarde van werkervaring tijdens het

studeren minder succesvol zal zijn wanneer ouders niet bij deze campagne worden betrokken.

De grootste verschillen tussen groepen studenten zijn te vinden in de financiële middelen zoals deze door de studenten zelf worden gerapporteerd. Er zijn verschillen in de hoogte en samenstelling van de financiële middelen. Ook zijn er relatief grote verschillen tussen kinderen uit gezinnen met een lage en een hoge sociaaleconomische status (SES), tussen mannen en vrouwen en tussen Nederlandse en niet-Nederlandse studenten. Kinderen uit families met een lage SES ontvangen veel minder vaak zakgeld dan kinderen uit gezinnen met een hoge SES en geven ook vaker aan dat zij bepaalde kosten (voor telefoon, studie, enzovoort) al zelf moesten dragen. Het gemiddeld bedrag aan zakgeld, indien er zakgeld was, was voor studenten met een lage SES-familieachtergrond gemiddeld hoger dan voor studenten met een hoog SES. Een vergelijkbaar patroon lijkt te gelden voor genderverschillen: mannelijke studenten krijgen minder vaak toelages van hun ouders, maar melden gemiddeld hogere bedragen te ontvangen. Nederlandse studenten verdienen zelf meer geld met bijbanen dan niet-Nederlandse studenten. Bovendien worden zij, in tegenstelling tot niet-Nederlandse studenten, niet gekort op de financiële steun van hun ouders als ze hun eigen inkomen verdienen. De motieven van ouders om steun te verlenen aan hun kinderen zouden een interessant vervolgonderzoek kunnen zijn. Zeker met betrekking tot de 'zakgeldkloof' tussen mannen en vrouwen en tussen allochtone en autochtone Nederlanders. Over deze motieven hebben wij echter geen informatie in de dataset van School2Work.

Effect van de hulpbronnen op de overgang van school naar werk

Uit het onderzoek blijkt dat de hulpbronnen over het algemeen een belangrijke rol spelen in de overgang van school naar werk, maar niet altijd in de mate en in de richting die de economische theorie van baanzoekgedrag voorspelt. De volgende paragrafen vatten de bevindingen samen en bespreken de implicaties van deze bevindingen: hoe kan een soepele transitie voor (een deel van) de studentenpopulatie worden bevorderd? Daarnaast worden suggesties gegeven voor toekomstig onderzoek.

Studie 1: Loopbaanoriëntatiebegeleiding/Mentoren

De belangrijkste taak van mentoren in onderwijsprogramma's is het begeleiden van studenten bij hun studie. Het helpen bij de overgang van school naar werk, staat helemaal onderaan de to-do-lijst. In lijn met de meeste Nederlandse studies over dit onderwerp

blijkt ook uit onze gegevens dat onderwijsgerelateerde onderwerpen, concreet: het behalen van een diploma, veel vaker voorkomen in mentorgesprekken dan carrière- en arbeidsmarktgerelateerde onderwerpen. Uiteraard kunnen mentoren hier tegenover stellen dat het afronden van de huidige opleiding het meest belangrijk is, of het nu gaat om de toegang tot de arbeidsmarkt of de inschrijving voor een vervolgopleiding. Toch lijkt het mogelijk en ook effectief om Individuele gesprekken te gebruiken om studenten te helpen verder te kijken dan het behalen van een diploma.

We stellen vast dat het voeren van individuele mentorgesprekken met een duidelijk schema - regelmatig of alleen als dat nodig is - significant gecorreleerd is met een hogere zoekactiviteit. In de laatste drie maanden voorafgaand aan de enquête, hebben studenten die regelmatig mentorgesprekken hadden, naar eigen zeggen gemiddeld 22% meer verschillende activiteiten gebruikt om een baan te zoeken dan studenten die nooit individuele mentorgesprekken hebben gehad. Individuele mentorbijeenkomsten hebben ook een significant positief effect op het succes van het zoeken naar een baan. Dit geldt zowel indirect (omdat zij dus meer inspanningen doen om een baan te vinden) als direct. Gesprekken in groepsverband zijn daarentegen niet gecorreleerd met meer inspanningen of meer succes bij het zoeken naar een baan.

We vinden wat zwakke aanwijzingen dat relatief meer aandacht voor loopbaan- en toekomst-gerelateerde onderwerpen een indirecte impact zou kunnen hebben op de inspanningen om een baan te zoeken, omdat op deze manier de zelfeffectiviteit wat betreft het zoeken naar een baan wordt vergroot. De mate waarin onderwerpen over de studie en, enigszins verrassend, ook de mate waarin concreet het zoeken naar werk wordt behandeld, zoals het opstellen van een cv en de voorbereiding van een interview, blijkt geen enkele significante impact te hebben. Het belangrijkste mechanisme waarmee mentoren het zoekproces van studenten naar een baan beïnvloeden, lijkt echter te bestaan uit het monitoren (en wellicht controleren) van de zoekactiviteiten van studenten.

Onze resultaten lijken in overeenstemming te zijn met eerdere bevindingen. Van de verschillende soorten actief arbeidsmarktbeleid die in de literatuur worden bestudeerd, is de hulp bij het zoeken naar werk en het monitoren van de inspanningen - met of zonder de mogelijkheid om sancties toe te passen bij onvoldoende inspanningen - het meest effectief, ook bij jongeren (Caliendo & Schmidl, 2016; Card, Kluve, & Weber, 2018;

Fredriksson & Holmlund, 2006). Vroeg beginnen met het zoeken naar werk, ruim voor het afstuderen, blijkt het succes van afgestudeerden op de arbeidsmarkt aanzienlijk te vergroten (van der Klaauw, van Vuuren, & Berkhout, 2005). Scholen, en in het bijzonder mentoren, bevinden zich in een unieke positie om studenten vroegtijdige hulp te bieden bij het zoeken naar een baan. Onze resultaten onderstrepen dat LOB deze functie inderdaad kan vervullen. In ieder geval voor jongeren die, zoals onze respondenten in 2012, afstuderen in relatief slechte economische omstandigheden.

De beste vorm van hulp bij het zoeken naar werk op school, lijkt individuele, één-op-één gesprekken te zijn in plaats van groepsbijeenkomsten. Individuele begeleiding door een individuele mentor vergroot niet alleen de inspanningen bij het zoeken naar werk, maar heeft ook een extra positieve invloed op het succes van het zoeken naar werk. Dit lijkt erop te wijzen dat individuele coaching ook de vaardigheden om werk te vinden kan verbeteren. Groepsbijeenkomsten daarentegen hadden geen positief effect op het zoeken naar werk. Dit is een onverwachts resultaat, aangezien sollicitatietrainingen in het kader van activerend arbeidsmarktbeleid juist vaak als groepstraining (workshop) worden aangeboden. Op voorhand lijkt dit een efficiënte keuze: één trainer kan informatie overbrengen aan veel mensen tegelijk (wat de kosten drukt) en deelnemers leren van elkaars vragen, bijdragen en fouten. Onze resultaten bevestigen deze veronderstelling echter niet. Daarbij moet wel de kanttekening worden geplaatst dat we niet naar groepsbijeenkomsten kijken die uitsluitend betrekking hebben op sollicitatietraining. Waarschijnlijk worden de groepsbijeenkomsten in het kader van LOB op school voor andere, vakinhoudelijke, doeleinden gebruikt, zoals bijvoorbeeld het delen en bespreken van individuele ervaringen tijdens stages.

De huidige discussie omtrent LOB als element van het Nederlandse middelbaar beroepsonderwijs gaat eigenlijk niet over de vraag of, maar vooral over de vraag hoe deze moet worden vormgegeven. De discussie gaat vooral over de methodes en de functies van de mentor. Ons onderzoek maakt gebruik van verschillen in (gepercipieerde) mentorschapsstijl om niet alleen vast te stellen of, maar ook hoe mentorschap het beste zou kunnen werken om een soepele overgang van school naar werk te bevorderen. Een belangrijke beperking van deze studie is uiteraard dat we geen verschillende vormen van LOB willekeurig kunnen toewijzen. Dit betekent dat verschillen in gerapporteerde LOB-stijlen kunnen worden veroorzaakt door (niet waargenomen) verschillen tussen

studenten die ook van invloed zijn op hoe - en hoe succesvol - deze studenten naar een baan zoeken. Harde uitspraken over het effect van een interventie vereisen het uitvoeren van gerandomiseerde, gecontroleerde experimenten (RCT). Daarbij is de uitdaging om de specifieke elementen van LOB te testen om de meest effectieve methodes te isoleren voor verschillende doelen en/of verschillende groepen studenten: wat werkt voor wie?

Studie 2: Informatie/ Verwachtingen

Het belangrijkste verschil tussen een volwassen werkloze werkzoekende en een nieuwkomer op de arbeidsmarkt is het ervaringsniveau (Saks, 2018). Werkervaring wordt belangrijk geacht, niet alleen vanwege overwegingen van de opbouw van menselijk kapitaal, maar ook omdat werkervaring de verwachtingen omtrent de arbeidsmarkt vormt en verwachtingen een cruciale rol spelen in de theorie van het zoeken naar werk. In lijn met eerder onderzoek, blijken de verwachtingen van autochtone studenten over het algemeen vrij nauwkeurig te zijn; voor de groep niet-westerse studenten is dit echter niet het geval.

Uit de onderzoeksresultaten blijkt dat het gemiddelde reserveringsloon van niet-westerse studenten significant, aanzienlijk en onverklaarbaar hoger is dan dat van westerse studenten. Hoewel dit resultaat in lijn is met het eerder onderzoek, is de omvang van het effect (12%) onverwachts hoog gezien onze relatief homogene steekproef: we bestuderen één cohort van laatstejaars-leerlingen van één school.

De theorie van het zoeken naar werk voorspelt dat een hoger reserveringsloon kan leiden tot een langere werkloosheidsduur, vanwege een lagere kans op het vinden van een acceptabele baan. Er is sprake van een sterk negatief effect van niet-westerse etnische afkomst op de arbeidsmarktpositie. Vaak wordt gewezen op verklaringen vanuit de vraagzijde van de arbeidsmarkt. De longitudinale opzet van onze gegevens stelt ons in staat om te analyseren of verschillen in gedrag aan de aanbodzijde - hogere reserveringslonen - bijdragen aan de negatieve correlatie tussen niet-westerse gezinsachtergrond en werk. Onze resultaten geven aan dat de hoge reserveringslonen zich niet vertalen in een kleinere kans om zes maanden na het afstuderen aan het werk te zijn.

Als we het reserveringsloon aan het einde van het schooljaar vergelijken met het werkelijke loon zes maanden later, blijkt dat studenten een baan accepteren met een lager loon dan ze eerder hadden verwacht. Kennelijk is er sprake van een neerwaartse

aanpassing van het reserveringsloon tijdens het zoeken naar werk. Oftewel: In plaats van verder te zoeken naar een hoger salaris, passen studenten hun verwachtingen aan. Het gevolg is dat de verhouding tussen aanvangsloon en reserveringsloon aanzienlijk lager is voor niet-westerse studenten dan voor westerse studenten. Niet-westerse studenten merken dus minder snel dat hun verwachtingen worden ingelost (of zelfs overtroffen) door vroege ervaringen op de arbeidsmarkt. De beduidend lagere loon/reserveringsloon-verhouding van niet-westerse studenten dient overigens als extra bevestiging dat het verschil in reserveringslonen tussen westerse en niet-westerse studenten niet wordt gerechtvaardigd door onopgemerkte verschillen in arbeidsmarktvooruitzichten.

Samenvattend vinden we geen aanwijzingen dat onrealistische verwachtingen in de vorm van te optimistisch gestelde reserveringslonen zich vertalen in objectief slechtere resultaten, zoals een hogere werkloosheid. Onze resultaten geven eerder aan dat niet-westerse afgestudeerden van het secundair beroepsonderwijs bereid zijn om hun aanvankelijk te optimistische reserveringslonen aan te passen tijdens het zoeken naar een baan. Kennelijk is het reserveringsloon bij nieuwkomers op de arbeidsmarkt nog relatief flexibel. Dit resultaat betekent ook dat het leren en actualiseren van informatie moet worden beschouwd als een belangrijk element in de theorie van het zoeken naar werk.

Ons onderzoek betreft de impact van het geobserveerde verschil in verwachtingen op het objectieve arbeidsmarktresultaat. Aanvullend onderzoek is nodig om twee belangrijke gerelateerde vragen te beantwoorden: waar komen de verschillen in verwachtingen vandaan en wat betekent het verschil tussen verwachting en realisatie voor een individu? Hoewel de hoge reserveringslonen geen negatieve gevolgen lijken te hebben voor de arbeidsmarktresultaten van niet-westerse studenten, kan de combinatie van hogere verwachtingen en lagere realisatie toch problematisch zijn, omdat hierdoor de eerste arbeidsmarktveraring tamelijk teleurstellend kan zijn. Als deze teleurstelling zich vervolgens vertaalt in een lagere baantevredenheid en/of minder positieve loopbaanvooruitzichten, dan kan een al te optimistisch reserveringsloon bijdragen tot een fragiele start voor deze kwetsbare groep. Onderzoek naar de oorsprong van deze etnische loonkloof lijkt noodzakelijk om dit fenomeen te verklaren en strategieën te

formuleren om de verwachtingen van niet-westerse studenten in meer realistische zin bij te stellen.

Studie 3: Financiële middelen

De laatste studie onderzoekt de invloed van financiële middelen – bijbaantjes en zakgeld - bij de overgang van school naar werk. Financiële middelen en financiële prikkels vormen de kern van de economische theorie over gedrag en besluitvorming. De overgang van school naar werk wordt op verschillende manieren beïnvloed door (inter-temporele) kosten-batenoverwegingen: is het zinvol om te investeren in een vervolgopleiding of is het toch raadzamer om na het afstuderen de arbeidsmarkt te betreden? Loont het om te investeren in extra inspanningen om een baan te zoeken of is het beter om de eerste de beste baan te accepteren? De belangrijkste vraag in deze studie is of de financiële middelen van afgestudeerden hun zoektocht naar een baan op een vergelijkbare manier beïnvloeden als de standaard 'volwassen' werkzoekenden. Namelijk dat financiële middelen de prikkels verminderen en de duur van de werkloosheid verhogen. Uit ons onderzoek blijkt het zoek- en subsidiëringseffect van financiële middelen op de overgang van school naar werk slechts zeer gering en het blijft beperkt tot de afgestudeerden met de hoogste SES-scores.

We schatten de kans dat afgestudeerden zes maanden na het einde van het schooljaar in een van vier elkaar uitsluitende situaties zijn: vervolgonderwijs, werkloosheid, een 'overgangsbaan' of passend werk. Door deze vier situaties te onderscheiden krijgen we een realistischer beeld van de mogelijkheden van afgestudeerden dan een simpele tweedeling tussen 'werkend' en 'niet-werkend'. In feite was circa 60% van alle studenten al voor hun afstuderen 'aan het werk', omdat ze een bijbaan hadden naast de studie. Het is dan ook niet verwonderlijk dat deze studenten zes maanden na het einde van het schooljaar ook aanzienlijk meer kans hadden op een baan. Zij hadden echter alleen maar meer kans op een 'overgangsbaan'; het effect op de kans op passend werk was niet significant. Blijkbaar vertaalde het inkomen uit een bijbaantje zich voor jonge Nederlandse afgestudeerden in het beroepsonderwijs niet in een langere (of kortere) zoekperiode naar passend werk. Deze bevindingen wijzen erop dat bijbaantjes voor MBO-studenten geen snelle opstap vormen naar de arbeidsmarkt. Ook de tweede belangrijke financieringsbron voor studenten, namelijk de financiële toelage van ouders (of verzorgers), had geen significante invloed op de kans op werkloosheid of een

overgangsbasis boven passend werk. Dit betekent dat ouderlijke bijdragen niet worden gebruikt voor de financiering van het langdurig zoeken naar werk.

Net afgestudeerden hebben nog een extra optie die de standaard 'volwassen' werkzoekenden niet (of in veel mindere mate) hebben, namelijk om op school te blijven en het zoeken naar werk uit te stellen. Vooral in economisch slechte tijden, zoals in Nederland in 2012, is dit een aantrekkelijke optie voor afgestudeerden van middelbaar opleidingsniveau. Een groot deel van de respondenten in de studie School2Work koos ervoor om de toetreding tot de arbeidsmarkt uit te stellen. Deze beslissing werd niet beïnvloed door het hebben van een bijbaan. Het effect van ouderlijke bijdrage (zakgeld) op het verder studeren was echter sterk afhankelijk van de sociaaleconomische achtergrond van het gezin. Terwijl kinderen uit gezinnen met een hoge sociaaleconomische status 20-39%-punten meer kans hadden om op school te blijven voor vervolgonderwijs als ze zakgeld kregen, was het tegenovergestelde effect in nog grotere mate zichtbaar voor kinderen uit gezinnen met een lage sociaaleconomische status. Door de hoge financiële bijdrage van de ouders tijdens hun schooltijd hadden zij juist meer kans om na hun afstuderen van school af te gaan. Het effect was aanzienlijk (29-74%), zelfs voor kinderen die voor wat betreft SES niet ver van het gemiddelde afweken. Blijkbaar zette het ontvangen van een ouderlijke bijdrage hen ertoe aan de school te verlaten en de arbeidsmarkt te betreden.

Wat de achtergrond is van het resultaat dat kinderen uit minder welvarende gezinnen sneller ertoe worden aangezet om de arbeidsmarkt te betreden als ze financieel goed worden ondersteund door hun ouders, is onduidelijk. Dit resultaat kan evenwel belangrijke implicaties hebben voor het onderwijsbeleid. Gezien het, internationaal gezien, relatief toegankelijke Nederlandse onderwijssysteem met (op het moment van dataverzameling) studiefinanciering voor het hoger onderwijs, is dit sterke effect van financiële betrokkenheid van het gezin op onderwijsbeslissingen tamelijk onverwachts. Dat er een sterk effect is van de sociaaleconomische status van de familie op het onderwijsniveau van een kind is ook uit ander onderzoek bekend. Een belangrijke theoretische implicatie van ons resultaat is dat het negatieve effect mogelijk niet, of althans niet uitsluitend, het gevolg is van minder (financiële) steun vanuit het ouderlijk huis. Het negatieve effect kan aanhouden ondanks, of zelfs juist vanwege, een hoge mate van steun.

De toekomst van de overgang van school naar werk

Een belangrijke reden om de overgang van school naar werk te onderzoeken, is de toenemende complexiteit hiervan, mede als gevolg van recente veranderingen op de arbeidsmarkt. Als we kijken naar de vele discussies over de "toekomst van het werk", lijkt het onwaarschijnlijk dat de overgang van school naar werk in de toekomst gemakkelijker zal worden. Het ontwikkelen van strategieën om afgestudeerden te helpen bij hun eerste stappen op de arbeidsmarkt blijft een belangrijke kwestie voor scholen, ouders en de overheid. De gezamenlijke conclusie van onze studies is dat steun niet zonder betekenis is: studenten en afgestudeerden reageren wel degelijk op begeleiding, zijn afhankelijk van informatie en reageren op financiële prikkels.

Een andere belangrijke algemene conclusie is dat de beschikbaarheid van middelen en het effect van middelen niet gelijk zijn tussen de verschillende groepen studenten. Als gelijke kansen een belangrijk doel is, moet deze ongelijkheid met betrekking tot de middelen in aanmerking worden genomen. In dit onderzoek zijn wij vooral ingegaan op verschillen in etnische en sociaaleconomische gezinsachtergrond, maar we vinden ook verschillen in de beschikbaarheid van middelen tussen bijvoorbeeld mannen en vrouwen.

Een laatste opmerking betreft het feit dat discussies over MBO-studenten vaak een negatieve lading kennen. Het gaat dan over slechte resultaten, onvoldoende inspanningen om werk te zoeken, onrealistische verwachtingen en een langere werkloosheidsduur. Zo werden we bij de start van ons project gewaarschuwd dat de doelgroep bijzonder moeilijk te bereiken en te motiveren is om mee te werken aan onderzoek (zie hoofdstuk 6 voor details). In de praktijk is dit slechts een klein deel van de werkelijkheid. MBO-studenten jongleren vaak met hun studielast, verplichte stages en (in de meeste gevallen ook) bijbaantjes, terwijl ze nog steeds als minderjarig worden beschouwd. Zij moeten samen met ouders/verzorgers belangrijke beslissingen nemen over hun levensloop ('welke opleiding moeten we volgen?') en de financiële consequenties daarvan. In tegenstelling tot het secundair algemeen onderwijs is het secundair beroepsonderwijs immers niet gratis. Door hen "studenten" in plaats van "leerlingen" te noemen, worden hun 'volwassen' beslissingen en keuzes erkend en gewaardeerd.

Curriculum vitae

Elisabeth Dumhs was born and raised in Vienna. In 1996 she graduated from vocational education (social work) and started to study economics at Wirtschaftsuniversität Wien. As a student, she moved to the Netherlands and graduated from the University of Amsterdam. After living in Berlin for a couple of years, she returned to the Netherlands to start a PhD-program as part of the School2Work research project at Utrecht University School of Economics.

Since 2016, Elisabeth Dumhs is a researcher at the Dutch Employee Insurance Agency (UWV). Currently, her main research interest is the labour force participation of people with disabilities, in particular people with childhood-onset disabilities.

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Family, friends, loved ones and colleagues, old and new. It is your support and encouragement, interest and criticism that helped, or pushed, me through. Sometimes you need to hear 'no matter what, we love you'. Sometimes you need to be challenged by 'how's research?' Sometimes even a little threat can do the trick (or a bribe, I do prefer bribes!). Sometimes a simple 'everything's fine here in Abcoude, don't worry, kids are happy, I'll get dinner started!' has really made my day. You provided it all, and then some. I believe support and gratitude cannot be measured and compared. I believe every bit counts. Thank you. We did it!

I left writing this until the very last moment, partly because I'm terribly superstitious, partly because I'm terribly tired. Now, to write it properly, I would have to take at least one more weekend off from family-life to 'work on my thesis', and I'm afraid that could be the final straw. So, I'll just keep it very short: Many thanks to you all! I did it!

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Each year, around 95.000 people graduate from school-based upper secondary vocational education in the Netherlands. Each of these young graduates has to take important life decisions: do I stay in school and continue training for a higher level degree, or do I start working life? How do I find a good job, and, by the way, what is a good job? Do I take this job offer, perhaps from my internship employer, or do I search for other opportunities? The studies in this thesis are concerned with these questions and with the impact of resources available to the graduate in this crucial phase of their life.

This thesis is part of the School2Work project, a multi-disciplinary research project that consists of three parts, each focussing on different aspects of the school-to-work transition. Very generally speaking, part one looks at the role of personal characteristics and social networks in career planning and job search, part two (this thesis) at resources and job search behaviour, and part three at career planning and organisational behaviour in the workplace.

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