

# Vocational identity of at-risk youth

Tailoring to support career chances

Rineke Keijzer-Groot



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Universiteit  
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# ico

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# Vocational identity of at-risk youth

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Denn die einen sind im Dunkeln  
Und die andern sind im Licht  
Und man siehet die im Lichte  
Die im Dunkeln sieht man nicht

(Bertold Brecht, Die Dreigroschenoper)

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## I. General introduction

## **I.1 Introduction**

This dissertation focuses on the vocational identity of at-risk youth. It explores insights into relationships between individual characteristics of at-risk youth and their vocational identity, and into mentor qualities as perceived by at-risk youth and mentors. This introductory chapter presents (1) the relevance of the study, (2) the aim, (3) the educational context, (4) the conceptual framework, and (5) the design and outline of the study.

## **I.2 The need for a better understanding of vocational identity of at-risk youth**

Societal participation and inclusion are priorities for European and Dutch youth policy. The Council of Europe wants youth to play an active role in both civil society and the labor market (2020). Government policy in the Netherlands states that every young adult deserves guidance toward a secure and independent life (Ministerie van Volksgezondheid, 2019). Work is an important means to that end, enabling young people to live independently, care for themselves and their families and structure their lives. It also addresses the immaterial goal of personal wellbeing as work can contribute to the psychological need to express one's vocational identity: defining yourself as a worker (Christiansen, 1999). Having a vocational identity means that you are aware of your capabilities, ambitions, values and goals concerning work. A vocational identity helps people to make appropriate choices and acts as a guide throughout their working lives (Skorikov & Vondracek, 2012).

Whereas developing a vocational identity is an essential task for all young people (Wong & Kaur, 2018), it is all the more important for youth with a vulnerable school career, that is, who are at risk of leaving school ungraduated or already did so previously. Their schooling can be at a very basic level and dropout is a permanent threat. Even when they have graduated, low-skilled workers are more vulnerable to unemployment (CBS [Statistics Netherlands], 2020b; Onderwijsinspectie [Inspectorate of Education], 2020) and they are at greater risk of unemployment during a recession (Carcillo, Fernández, Königs, & Minea, 2015). Developing a strong vocational identity may help to counterbalance the risks these young adults face as it can ensure that they learn about the work they could and want to do, and how to get these jobs in the future. A strong vocational identity can provide for better work and societal prospects. This may in turn reduce the risk of problems of a personal or social nature that many at-risk youth have to deal with, such as debts, poor social support, or young parenthood (e.g., Brahm, Euler, & Steingruber, 2014; Sulimani-Aidan, 2017a).

Despite their vulnerability at-risk youth are an understudied group (Elffers, Oort, & Karsten, 2012; Gushue & Whitson, 2006). Programs and practitioners seek approaches to fostering vocational identity that are attuned to the capabilities and characteristics of their specific populations; one-to-one mentoring provides the setting to incorporate such approaches. To inform practices dedicated to supporting at-risk

youth, more insights are needed into relationships between their characteristics and vocational identity in order to optimize their vocational identity and into preferred mentoring approaches.

### **1.3 Aim of the study**

This research project is about youth with vulnerable school careers with a risk of not being able to develop a strong vocational identity. Studies on projects and trajectories addressing goals with respect to work preparation for at-risk youth have mainly concentrated on general evaluative aspects, including cost-effectiveness (e.g., Heinrich & Holzer, 2011; Spencer, 2006). They have not included a close examination of target groups attending such trajectories, so the opportunity to customize both design of programs and mentoring approach of target groups may have been missed. This study aimed to contribute to filling this gap.

The overall aim of the research project was to gain knowledge about and insights into the vocational identity of at-risk youth. The aim was broken down into two objectives. The first objective was to gain detailed knowledge about and insights into various individual characteristics of at-risk youth that relate to their vocational identity. The focus was placed on those characteristics that are malleable, that is, characteristics that can be changed. Paying attention to vocational identity, involving the individual characteristics that are related to it and utilizing the malleable characteristics among them, are not part of any subject-teaching. Mentoring is the main instrument used to address such non-academic and immaterial matters. Furthermore, mentoring is a key element in interventions directed at at-risk youth and mainly implies keeping an eye on personal well-being and providing support in case of setbacks. It is all the more important, then, that mentoring proceeds as smoothly as possible in these settings and that mentor qualities meet the preferences and expectations of at-risk young people and mentors. The second objective of this research was to explore mentor qualities that are perceived as most valuable by at-risk youth and their mentors which can be used during one-to-one mentoring to optimize attention for non-academic matters, such as vocational identity.

The primary aim, therefore, was to gain knowledge and insights into a scarcely explored subject among an under-researched group. Based on that knowledge, the secondary aim was to be able to suggest how to use these insights so that improved approaches can be adjusted to the needs of subgroups and individuals. Improvements may relate to design and programming, and to mentors, teachers, and social workers.

Four studies were conducted to achieve the aims. The first study investigated to what extent various individual characteristics of at-risk youth relate to their vocational identity. As the ultimate purpose was to contribute to improving efforts of programs and practitioners, specific attention was paid to malleable characteristics. Second, to further address the individual characteristics of at-risk youth, the next two studies elaborated on two specific malleable characteristics, namely school engagement and resilience. It was examined to what extent individual characteristics changed the relationships between these



two malleable characteristics and vocational identity, and to what extent differences emerged between subgroups of at-risk youth. For example, the sense of belonging at school is known to relate positively to vocational identity, but the strength of this relationship may vary between males and females. In the fourth study mentoring practice was examined. In one-to-one mentoring meetings mentors and at-risk youth discuss all kinds of subjects, including non-academic matters, such as vocational identity. In such settings it is vital that perceptions of at-risk youth and mentors about mentors' qualities match. The fourth study explored these perceptions.

The project started with a broad focus on the relationship between vocational identity of all at-risk youth and all characteristics, shifted to a more detailed focus on those characteristics that may change these relationships for subgroups of at-risk youth, and finally narrowed down to perceived mentors' qualities in one-to-one mentoring.

#### **1.4 Educational context of at-risk youth in the Netherlands**

The at-risk youth of our study consisted of students attending two schools for senior secondary vocational education (SSVE), students attending a preparatory rebound program (RP), and young people who visited the municipal youth information helpdesk, all in the city of Rotterdam (see block in the right corner of Appendix A that provides an overview of the Dutch education system). Being at risk of school dropout is shown from the fact that they participate in one of these programs. Four institutions were purposely invited because they are dedicated to creating and improving the life chances of at-risk youth and supporting them in preparing for adult life. Figure 1.1 gives an overview of the institutions from which participants were recruited.

The two SSVE institutions are the largest in the area and offer all four levels in a range of vocational education tracks. Some other smaller SSVE institutions offer only one specialized track at one level, for example, furniture manufacturing, and were not included. The four SSVE levels include the entry-level training, the lowest level. Entry-level training has a duration of one year and precedes basic level, which takes two years and forms the minimum required graduation level, the start-qualification. Young people up till 27 years without such a qualification must look for a job or continue in education, they cannot claim social security benefits (I8ennu [I8andnow], 2020). The entry-level department of SSVE is required by law to accept all students, including dropouts, who formerly may have attended higher educational levels, students with learning or behavioral difficulties, newly arrived migrants, and also pupils from mainstream preparatory secondary vocational education. As a result, previous schooling and learning capabilities of these students represent a wide range. Dropout rates at entry-level of SSVE more than double those at basic level and dropouts rates of Rotterdam students outnumber those of the three other largest cities of the Netherlands (Ministerie van Onderwijs Cultuur en Wetenschap [Ministry of Education Culture and Science], 2020a, 2020b). The combination of students facing various personal obstacles, class compositions, and high



dropout rates makes SSVE at entry-level a challenging context for both students and staff. Students who graduate at entry-level can continue to the basic level or they can start work.

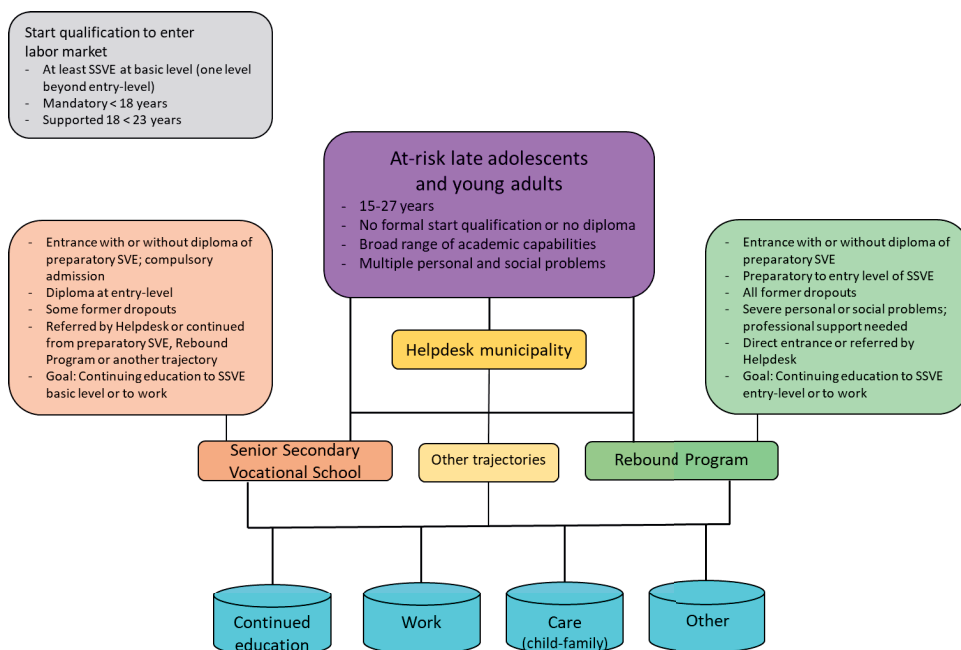


Figure 1.1. Sample of at-risk youth and participating institutions

Specific trajectories exist for at-risk youth who are former dropouts and who have severe problems and are in need of professional care. One such trajectory is a rebound program (RP), which supports at-risk students in getting their lives back on track. The area of interest of the RP is threefold: It combines care to improve basic life conditions; job experience to discover talents and interests; and education to prepare for rejoining regular education, for instance, entry-level SSVE. The RP provides support in the form of extensive coaching and is highly personalized; as a result, it may have a duration between twenty weeks and more than a year. The explicit aim of RP is to prepare at-risk youth to rejoin regular education.

The municipal youth information helpdesk is the central source of information for all young people up to 27 years facing problems of various kinds. Visitors who consult the municipal youth information helpdesk are commonly without work, and not following any education or training. Some are dropouts, others have completed some form of education at minimum level or above. Some have severe problems, such as homelessness or psychiatric disorders; these young people are referred to specific supportive routes prior to educational trajectories. Most, however, are sent back to school, such as SSVE, or referred to a specific trajectory, such as RP.

## 1.5 Conceptual framework

### 1.5.1 Vocational identity among at-risk youth

The four institutions participating in the studies encourage youth to graduate. Personal and social obstacles might distract at-risk youth from their studies and may even deter them from attending school. SSVE and RP try to prevent dropout and to prepare their students to continue to the next educational level or to work. SSVE and RP do not focus solely on gaining qualifications, they also aim to foster vocational identity in order to optimize the chances of sustainable work, even for those at-risk youth who are unable to graduate. Vocational identity, also referred to as work, career, professional or occupational identity (Chávez, 2016; Skorikov & Vondracek, 2012), is "the conscious awareness of who you are as a worker" (Skorikov & Vondracek, 2012, p. 693). It is the central mechanism with which individuals can guide their career through all stages, and is seen as a lifelong process (Chávez, 2016). The target group under investigation is made up of youth who have no career yet; they are preparing to take their first career steps. Some may do so after they graduate, others may dropout before. For many, career choices will be restricted to rather simple tasks as these groups attend the lowest level of senior secondary education. They are trained to assist basic skilled employees. Low-skilled workers are most vulnerable to economic fluctuations: They are often victims of the last-in first-out principle (Carcillo et al., 2015). As a consequence, their choices are limited and the steering guide mechanism of vocational identity may come under pressure. A complicating factor is the current labor market in which multiple job transitions are commonplace, in contrast to having 'a job for life' which used to be more common (Bimrose & Hearne, 2012). This requires an adaptive and flexible vocational identity (Skorikov & Vondracek, 2007), and a degree of self-agency and volition, which challenges the competences of vulnerable groups with fewer choices (Blustein, 2013). Labor market circumstances and fluctuations as well as constraints on at-risk youth stemming from obstacles they face and their prospective working level, underline the necessity for them to develop a strong vocational identity, and to become able to self-direct a career that may help them to overcome challenges. This goal is crucial yet difficult to realize, both for the at-risk youth and the institutions that support them.

Vocational identity acts as a cognitive guide that encourages youth to start and actively adapt to career trajectories (Fugate, Kinicki, & Ashforth, 2004): It helps them to create and realize work aspirations and opportunities (Ashforth & Fugate, 2001); it is valuable in career-exploring and flexible decision-making (Gushue, Scanlan, Pantzer, & Clarke, 2006; Worth, 2002); it helps them to set goals and to cope with stress and challenges with respect to work (Skorikov & Vondracek, 2012); and it relates to developing vital work attitudes and realistic job perspectives (Turner & Lapan, 2013). For at-risk youth, a strong vocational identity is a solid basis on which they can prepare to start career trajectories as assistant workers engaging in appropriate behavior for the job.

The development of a vocational identity starts in childhood and intensifies during the final stage of schooling when occupational choices are to be made (Noack, Kracke,

Gniewosz, & Dietrich, 2010; Sulimani-Aidan, 2017a). As developing a vocational identity is a critical task in adolescence (Wong & Kaur, 2018), schools play a crucial role. They can encourage students, for example during mentoring hours, to explore future careers through assignments, internships and conversations (Skorikov & Vondracek, 2012).

### 1.5.2 Components of vocational identity

Vocational identity represents how an individual defines her or his occupational abilities, interests, goals, values, and roles (Skorikov & Vondracek, 2012) and how an individual can interpret these competences and goals and link them to acceptable career roles (Meijers, 1998). Vocational identity is a multi-layered construct in that it not only refers to possible content of careers, it also includes elements of structure and processes, such as the exploration, commitment and reconsideration of careers (Porfeli, Lee, Vondracek, & Weigold, 2011).

Elaborating on work of Fugate et al. (2004), vocational identity is interpreted as a construct consisting of three components:

- Being aware of your capabilities and interests with respect to work, reflecting vocational self-image (Who am I?),
- Knowing your career ambitions and goals, reflecting vocational future image (Who do I want to be?),
- The belief to be able to successfully practice work values and habits with which you can actually get where you want to get, reflecting vocational self-efficacy (Am I able to get there?).

Vocational identity with its three components of vocational self-image, vocational future image, and vocational self-efficacy is represented as the central construct in the conceptual model of the research project (Figure 1.2). Various individual characteristics are grouped into five clusters ranging from most proximal to least proximal, indicated by the distance of the arrows to the components of vocational identity in the oval shape; proximity represents characteristics' order of potential influence on vocational identity, that is, the shorter distance, the earlier it may have had an influence on vocational identity. The most proximal cluster consists of demographic characteristics, the least proximal consists of school engagement characteristics. In the conceptual model not only the length of the arrows to the oval shape of vocational identity differs, also their thickness does. Thickness of arrows represent malleability; the thicker the arrow, the more opportunities to modify the particular individual characteristics. They range from least malleable (demographics) to most malleable (school engagement). Each cluster consists of several characteristics.

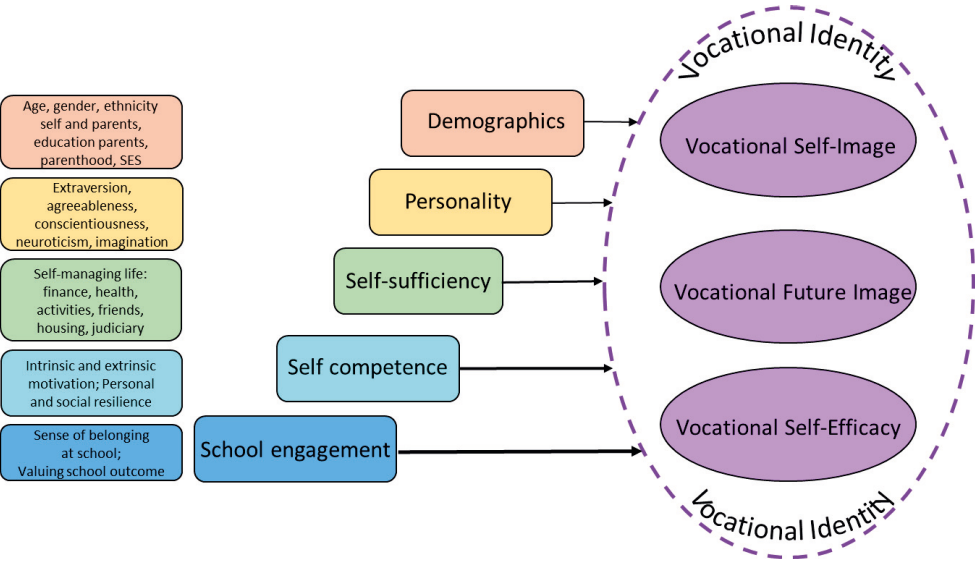


Figure 1.2. Conceptual model of the research

### 1.5.3 Individual characteristics

Exploring and committing to possible careers is shaped by individual characteristics and the social context of at-risk youth (Skorikov & Vondracek, 2007). Relationships between individual characteristics and vocational identity among diverse populations have been identified in literature (e.g., Coutinho & Blustein, 2014; Lindstrom, Doren, Metheny, Johnson, & Zane, 2007; Luyckx, Soenens, & Goossens, 2006; Wong & Kaur, 2018).

As the aim of this project was to contribute to improving efforts in practice, it was pursued to obtain detailed insights into relationships between individual characteristics of at-risk youth and vocational identity and into differences among those relationships. Treatments can be adjusted accordingly, for example, by taking family background indicators into account. In addition, the most valuable insights may be derived from characteristics that are malleable and can be changed, and thus can be applied by practitioners to foster vocational identity, such as motivation and a sense of belonging at school. The diversity of at-risk youth, the generally difficult circumstances of their lives, their different schooling backgrounds and prospects, justifies questioning a one-size-fits-all approach in fostering their vocational identity. This explains the in-depth concentration of this research on individual characteristics of at-risk youth in exploring relationships with vocational identity and their perceptions of mentor qualities.

### 1.5.4 School engagement and resilience

Two malleable characteristics that connect to vocational identity are described in literature: school engagement (Coutinho & Blustein, 2014; Wong & Kaur, 2018) and

resilience (Barto, Lambert, & Brott, 2015; Turner & Conkel, 2010). Emotional school engagement expresses feelings related to school and the school process. It distinguishes between sense of belonging at school, that is, being part of the school and feeling that school plays an important part in your life, and valuing school outcome, which refers to appreciating schooling and educational goals, including a qualification (Bakadorova, Lazarides, & Raufelder, 2020; Finn, 1989). School engagement is conditional for school attendance (Archambault, Janosz, Fallu, & Pagani, 2009; Elffers et al., 2012) and correlates with lower dropout and higher graduation rates (Fredricks, Blumenfeld, & Paris, 2004; Wong & Kaur, 2018). As a consequence, school engagement can contribute to the development of a vocational identity during schooling through assignments and internships (Skorikov & Vondracek, 2012) and to better preparation to perform appropriate jobs.

The second malleable characteristic is resilience, the ability to positively adapt to and function in adversity (Brownlee et al., 2013; Herrman et al., 2011; Luthar & Cicchetti, 2000). As many at-risk youth may encounter various constraints and obstacles, resilience is a relevant strength for them. Personal and social resilience are distinguished. Personal resilience refers to independence and self-sufficient decision-making which may support the steering mechanism of vocational identity. Social resilience refers to having and utilizing supportive social networks, which can help at-risk youth to find work that suits them best (Sulimani-Aidan, 2017a).

### **1.5.5 Mentor qualities**

Attention is paid to academic progress and achievements during mentoring hours. Mentors are valuable in that they support school attendance (Wallace, Abel, & Ropers-Huilman, 2000), motivate students to do better in school (Weiss, Harder, Bratiotis, & Nguyen, 2019), and give mentees the feeling they can count on their mentor (Mac Iver, Sheldon, Naeger, & Clark, 2017). Mentoring at-risk youth is different from mentoring in regular educational contexts, in that it requires the mentor to be supportive and helpful at all times with respect to coping with adversities and the forming and development of the student as a person. It forms an essential part of the program and transcends the importance of regular subject-teaching. At-risk youth need support, encouragement and confirmation. Mentor qualities that contribute to sound mentoring relationships include mutual respect (Vaclavik, Sanchez, Buehler, Gray, & Rodriguez, 2017) and empathy (Ehrich, Hansford, & Tennent, 2004).

Mentoring, as distinguished from subject-teaching, provides the opportunity par excellence to address non-academic matters. Vocational identity is one such topic that benefits from being discussed regularly. Furthermore, mentoring provides a unique opportunity to fully attend to the individual mentee as it takes place in a one-to-one setting. There is no need to take problems, questions, characteristics of other students into account. It is a context in which subjects can be addressed in a way that is particularly relevant to the individual student. This may be specifically relevant to the vocational identity and related characteristics of individual at-risk students.



To make mentoring efforts worthwhile, perceptions of mentor qualities were identified that respond to students' needs and enable mentors to adapt their efforts accordingly. A mismatch of perceptions can be counterproductive, may frustrate mentoring efforts and endanger school attendance and graduation.

## 1.6 Outline of the dissertation

The components, methods, sample size, and research questions of the four studies are summarized in Table 1.1.

Table 1.1. *Components, methods, sample size, and research questions of the four studies*

Chapter	Component	Method	Research question
2	Relationships between individual characteristics and vocational identity	Questionnaire $N = 996$	To what extent do individual characteristics related to demographics, personality, self-sufficiency, self-competence and school engagement explain differences in vocational self-image, vocational future image and vocational self-efficacy of at-risk emerging adults?
3	Resilience specifying relationships	Questionnaire $N = 996$	To what extent do individual student characteristics moderate the relationship between personal and social resilience, on the one hand, and vocational identity, on the other hand?
4	School engagement specifying relationships	Questionnaire $N = 996$	To what extent do at-risk students' individual characteristics moderate the relationship between sense of belonging at school and valuing school outcome on the one hand, and vocational identity on the other?
5	Mentor qualities	Individual interviews $N_{students} = 31$ $N_{mentors} = 24$	How do students and mentors perceive (a) the mentors' tasks; (b) qualitative and quantitative aspects of their relationship; and (c) characteristics of mentors?

Different terms were used in the four studies to refer to at-risk youth. In Chapter 2 the term 'at-risk emerging adults' was used to express their age range from 15 till 27 years (Arnett, 2000). An alternative would be less precise or less concise; for example, 'at-risk adolescents' is rather short but would neglect the older participants; 'at-risk adolescents, young adults, and adults' would be too lengthy and unreadable. The term 'at-risk emerging adults' was chosen to describe a transitional period from adolescence into adulthood. This transitional period is experienced and gone through by each individual in their own way and at their own rate. In other words, there are no strict limits to ages, and boundaries are fluid. This may be especially appropriate for at-risk emerging adults. In her study on defining adolescence and age boundaries, Curtis (2015) described transitional age youth as being associated with disconnected adolescents and young adults at risk of poor developmental outcomes. She emphasized that "there is currently no

accepted chronologic definition for transitional age youth; age ranges can extend from 14–29 years, however a frequently used designation includes the ages of 16–24 years” (2015, p.17). This range coincides to a large extent to the age range of the participants in the sample of this research project.

In Chapters 3 and 4 ‘at-risk students’ was used to refer to the sample to emphasize the conceptual perspectives underpinning the second and third studies, though participants of the youth helpdesk are also included. In Chapter 5 only SSVE and RP students were invited to participate and they were referred to as ‘at-risk students’.

The first three studies were quantitative, large-scale questionnaire studies. They were cross-sectional and of an exploratory and explanatory nature. In these studies, convenience sampling was applied and four institutions that are dedicated to supporting and improving opportunities for at-risk youth were invited to participate: two institutions for SSVE, the RP, and the municipal youth helpdesk.

**Chapter 2** reports on the results of the first quantitative study. First, it examines to what extent each of the included individual characteristics related to the three components of vocational identity. Figure 1.2 shows the individual characteristics in the blocks on the far left. The characteristics are grouped into five clusters according to the sequence of the supposed influence of the characteristics. For example, gender and ethnicity precede all other characteristics as they are given by birth. Other characteristics follow, from lesser to least proximal, indicated by the length of the arrows. Thickness of the arrows represent the malleability of the characteristics. At one end (Figure 1.2 – upper-left) clusters of characteristics are placed that cannot or can hardly be altered by program design or practitioners, for example, demographic characteristics. At the other end (Figure 1.2 – lower-left) clusters of characteristics are placed that are most malleable, for example, self-competence. For each of the clusters the additional proportions of explained variance in the components of vocational identity were investigated in order to determine to what extent the malleable characteristics contribute to explaining vocational identity after controlling for the effects of nonmalleable characteristics.

Insights from the first study into relationships between individual characteristics and vocational identity provided a basis to go into more detail on differences among the at-risk youth in **Chapters 3 and 4**. It could well be assumed that the strength of these relationships would not apply evenly to all. An example may clarify this. Valuing school outcome means that a person attaches importance to learning and academic development. Suppose males who report a low valuing of school outcome show a lower vocational identity compared to males who report a high valuing of school outcome, whereas females report a high level of vocational identity regardless of the level of valuing. It might then be particularly important to put efforts into strengthening the valuing of school outcome by males. For females such efforts would be less beneficial. This difference could in turn be explained by, for instance, females exploring and making preliminary career decisions earlier than males. This example reflects a moderator effect in which gender (males vs. females) changes the relationship between valuing school outcome and vocational identity.

The second and third studies examined such moderator effects in order to provide knowledge about and insights into differences between subgroups of at-risk youth. Given the purpose to also provide suggestions to practitioners on how to foster the vocational identity of the at-risk youth they are working with, there was an emphasis on two characteristics that are malleable and can be applied by practitioners in their approach, namely resilience and school engagement. **Chapter 3** reports on the moderating effects of the demographic, personality, self-sufficiency, motivation, and school engagement variables on the relationships between personal and social resilience and the three components of vocational identity. **Chapter 4** follows the same structure and describes the moderating effects of the demographic, personality, self-sufficiency, motivation, and resilience variables on the relationships between the two variables of school engagement, that is, sense of belonging at school and valuing school outcome, and the three components of vocational identity.

**Chapter 5** concerns the qualitative study in which both students' and mentors' perceptions about mentors' qualities are explored, which are operationalized into tasks of mentors, relationships between mentors and students, and characteristics of mentors. In this study event sampling was applied to invite students and mentors of SSVE and RP.

Finally, **Chapter 6** starts with an overview of the main findings of the four studies. It then offers theoretical considerations on how our findings could contribute to the knowledge about vocational identity of at-risk youth, including a section with reflections on theories on vocational identity regarding self-agency and volition of at-risk youth. Practical implications are presented. Finally, methodological considerations are addressed and related suggestions for future research are discussed.

## 2. Vocational identity of at-risk emerging adults and its relationship with individual characteristics



### **Abstract<sup>1</sup>**

Vocational identity, the conscious awareness of oneself as a worker, is understood to be an essential prerequisite for enhancing chances of employment and societal inclusion. This specifically applies to at-risk emerging adults who are former dropouts or are at risk of doing so. Therefore, school curricula and rebound programs need insights into at-risk emerging adults' individual differences to effectively foster their vocational identity. The purpose of the current study is to examine the relationship between individual characteristics and vocational identity, identifying three components: vocational self-image, vocational future image, and vocational self-efficacy. Based on a questionnaire study among at-risk emerging adults in the Netherlands ( $N=996$ ), blockwise entry regression analyses are performed with clusters of demographic, personality, self-sufficiency, self-competence, and school engagement characteristics. Results show strongest effects for personality traits and, to a lesser extent, for motivation, resilience, and valuing school outcome. For schools and rebound programs these malleable characteristics offer promising opportunities to encourage the vocational identity of at-risk emerging adults. Findings are discussed in the context of more personalized approaches in curricula to strengthen vocational identity.

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## 2.1 Introduction

In modern Western society, work is understood to be not only a necessary source of income, but also a condition for inclusion and quality of life, and a means of self-expression through one's identity (Christiansen, 1999). For at-risk emerging adults, obtaining a formal qualification is helpful in improving the chances of employment and reducing risks of long-lasting unemployment, societal exclusion, and drifting into criminality (Bäckman & Nilsson, 2016; Lochner, 2011). Essential for work and, in this line, income and inclusion, is acquiring a vocational identity, which is understood as the realization of an increasingly stable conceptualization of one's own vocational interests, talents, and goals (Holland, Daiger, & Power, 1980). Vocational identity is acknowledged to be crucial in educating emerging adults. At-risk emerging adults in The Netherlands are young people who are at risk of dropping out before graduation. Some attend a school at the entry training level, the lowest level of senior secondary vocational education in The Netherlands (see block right corner of Appendix A which provides an overview of the Dutch education system), others attend a rebound program to prepare them to rejoin this level of secondary vocational education, and others look for appropriate education or work. They may be burdened by risks of a personal or social nature, such as deprived living conditions, debts, drug abuse, young parenthood, and low socioeconomical levels of parents (cf. Brahm et al., 2014). Because graduation forms a serious challenge for some of the at-risk emerging adults, schools not only concentrate on qualifications, but also on preparing their students for career trajectories as assistant workers conducting appropriate job behavior. Schools therefore explicitly expend efforts to foster vocational identity.

### 2.1.1 Conceptualizations of vocational identity

Vocational identity is of value in creating and realizing career opportunities and aspirations (Ashforth & Fugate, 2001), is positively associated with career-related skills, such as career exploration, career decision-making and self-efficacy (Gushue et al., 2006), provides a framework for vocational goals, and helps emerging adults to cope with career-related stress and challenges (Skorikov & Vondracek, 2012).

Vocational identity also acts as a substantial source of meaning-making, well-being and mental health during adolescence (de Goede, Spruijt, Iedema, & Meeus, 1999; Meeus, Deković, & Iedema, 1997). It is understood to be an important predictor of success during the transition from school to work (Lapan, 2004), especially for deprived adolescents (Diemer & Blustein, 2006). Although much is known about the construct of vocational identity and what it entails, not much is known about which individual characteristics of at-risk emerging adults are related to vocational identity. These insights are necessary in order to know how to adjust practices dedicated to optimizing vocational identity among at-risk emerging adults.

Though conceptualizations of vocational identity slightly vary in whether it can be influenced, the notion of vocational identity as a person's clear and stable picture of goals,

interests and talents with regard to career is widely accepted (e.g. Flum & Blustein, 2000; Turner et al., 2006). Due to increasingly uncertain working conditions and circumstances, continuous and active agency is assumed to be needed for a person to adjust to a context of rapid changes (Blustein, 2013; Brown & Lent, 2016). The self-perceived abilities, interests, values, self-efficacy beliefs and aspirations (Vondracek & Skorikov, 1997), connected to work domains and roles (Baumeister, 1999), enables a prospective employee to answer three main questions with respect to work: 1) *Who am I?*, 2) *Who do I want to be?*, and 3) *Am I able to get there?* (Fugate et al., 2004, p. 17).

The *Who am I?* question aims to discover vocational strengths, talents, capabilities and possibilities and implies recognizing one's own individual talents. Asking *Who do I want to be?* means considering vocational ideas, interests, and aspirations leading to possible goals or outcomes of working futures and is regarded as career exploration. The transition from ideas to realization requires special attention, since many emerging adults hold unrealistic images of their opportunities and perspectives. They tend to overestimate financial rewards, set high value on status-expressing properties, and underestimate necessary efforts (van Zenderen, 2011). *Am I able to get there?* expresses a question into expectations of successful performance and reflects work habits and values. Vocational self-efficacy is the customized version of Bandura's self-efficacy (2006), and expresses a student's belief that he or she is or is not able to successfully perform the duties required for an occupation (Ji, Lapan, & Tate, 2004). The answers to the three main questions can be conceived as vocational self-image (Who am I?), vocational future image (Who do I want to be?) and vocational self-efficacy (Am I able to get there?) as conceptual components of vocational identity. We assume vocational identity to be of value in general and particularly for at-risk emerging adults.

### **2.1.2 Individual characteristics related to vocational identity**

We used a grouping of individual characteristics related to vocational identity to distinguish the extent to which educational or rebound programs can influence them. Five clusters were formed, based on empirical studies as explained below: 1) demographics, 2) personality, 3) self-sufficiency, 4) self-competence, and 5) school engagement.

Studies which report gender differences in vocational identity vary in the extent to which males and females diverge. Skorikov and Vondracek (2012) only report small differences in vocational identity between males and females, whereas Elffers (2012) reports higher risks of dropout for males than for females. Dropout may in turn affect vocational identity negatively, as educational contexts create conditions for their students to learn about and to become aware of career interests and skills (Skorikov & Vondracek, 2012). A low parental educational level is understood to be a risk factor for vocational identity, since it may impede the ability to supply the level of support at-risk emerging adults need, such as an adequate room for homework and emotional support (van Zenderen, 2011). Fouad and Byars-Winston (2005) report that migrant minorities perceive more barriers to career success and fewer career opportunities. Further, Diemer and Blustein (2006) found a strong and flexible vocational identity to be especially

beneficial for deprived and ethnic minorities. Favorable living conditions and positive family relationships may also affect vocational identity (Skorikov & Vondracek, 2012). Yet, peers are influential too and both family and peers appear more important for females than for males (Blustein, Palladino Schultheiss, & Flum, 2004). Fouad (2007) reports a relationship between socioeconomic status and vocational identity, whereas others found socioeconomic status not to be related to vocational identity (Skorikov & Vondracek, 2012).

The second cluster consists of personality characteristics which tend to stabilize during adolescence and early adulthood (Borghuis et al., 2017). As identity formation is largely determined by vocational identity, personality factors are assumed to explain differences in vocational identity (Skorikov & Vondracek, 2012). Studies have shown positive relationships between vocational identity and personality traits, such as extraversion, conscientiousness, and imagination. Especially neuroticism is found to be related to career exploration (Baay, van Aken, van der Lippe, & de Ridder, 2014; Fouad, 2007; Hirschi, 2012b; Skorikov & Vondracek, 2012).

Aspects related to self-sufficiency factors form the third cluster and refer to factors that influence how at-risk emerging adults can manage aspects of their daily lives, and include, for example, finances, social support, and judicial experiences. Social support has shown to influence career exploration (Kracke, 1997). With respect to experiences in the judicial system, the number of arrests is a predictor of unemployment, but the negative effects of unemployment can be mediated by a strong vocational identity (Fouad, 2007; Meeus et al., 1997). The problematic circumstances and sociopolitical barriers endured by at-risk emerging adults limit their access to learning opportunities and may hinder vocational identity (Diemer & Blustein, 2006; van Zenderen, 2011).

The fourth cluster, referred to as self-competence, comprises the malleable characteristics motivation and resilience. Achievement motivation is supposed to contribute to goal orientation (Kappe, 2011; Kim, Schallert, & Kim, 2010), which is related to vocational future image and vocational self-efficacy (Lent, Brown, & Hackett, 2000). Intrinsic motivation is seen as less malleable than extrinsic motivation, and the latter can be encouraged by, for example, offering prospective salaries or other career outcomes.

Herrman et al. (2011) point to the contribution of resilience to work productivity as part of general well-being. Di Maggio, Ginevra, Nota, and Soresi (2016) define resilience as resistance, or a response to strain, in order to maintain equilibrium. Based on empirical studies, they report that resilience can be developed and is not innate. Several scholars stress the importance of resilience in the light of rapidly changing work demands (e.g. Blustein, 2013; Brahm et al., 2014; Heinrich & Holzer, 2011; Maree, 2017). Resilience includes personal and social competence, respectively reflecting independence and self-sufficient decision-making concerning main life issues, and the ability to build a social network and to appeal for support from others if necessary (Hjemdal, Friborg, Stiles, Rosenvinge, & Martinussen, 2006).

Finally, the fifth cluster consists of school engagement, which is presumed to be malleable (Fredricks et al., 2004). Emotional school engagement refers to attitudes

toward school and schooling. Elffers (2011) distinguishes two aspects of emotional school engagement: 1) sense of belonging, the extent to which students commit to being at school, and 2) valuing school outcome, the extent to which students value qualification. Skorikov and Vondracek (2012) report education to contribute significantly to vocational identity through the acquisition of work skills, students’ awareness of their career interests and their possibilities to guide their own career. The influences of education on vocational identity are mainly promoted by integrating prospective working circumstances and conditions into the curriculum, for instance through internships. Within the scope of curriculum-related characteristics, youths’ engagement with school is related to persistence and success, that is, with continuing schooling until graduation.

In Figure 2.1, we present our conceptual model with the three constituent components of vocational identity (on the right) and the five clusters of individual characteristics (on the left). The distance of the arrows to the oval image represents characteristics’ order of potential influence on vocational identity, that is, the shorter distance, the earlier it may have had an influence on vocational identity. Thickness of arrows represent malleability; the thicker the arrow, the more opportunities to modify the individual characteristics.

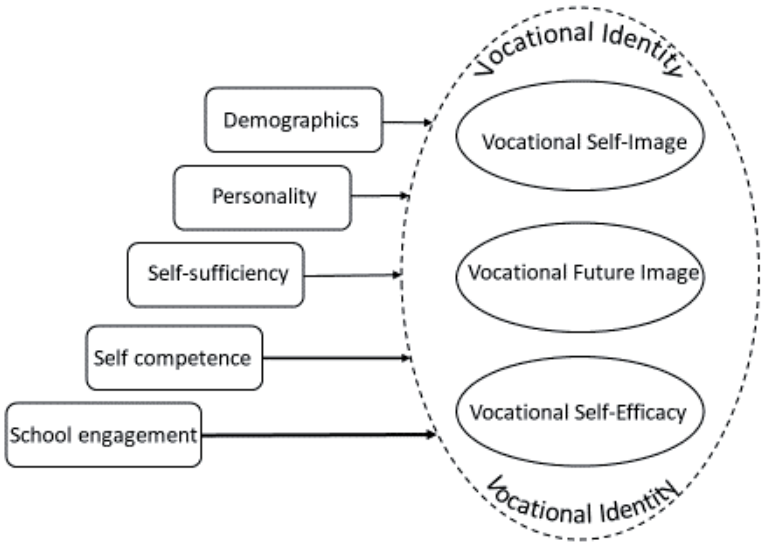


Figure 2.1. Conceptual model of the study

The above description makes clear that studies into the relationships between individual characteristics and vocational identity show a fragmented picture. Furthermore, a relatively small number of these studies is about at-risk emerging adults. The current study therefore has an exploratory character and addresses the following research question: “To what extent do individual characteristics related to demographics, personality, self-sufficiency, self-competence and school engagement explain differences

in vocational self-image, vocational future image and vocational self-efficacy of at-risk emerging adults?”

## **2.2 Method**

### **2.2.1 Research context**

This exploratory cross-sectional study was carried out in the metropolitan area of Rotterdam, the Netherlands. Respondents were included based on (a) attendance at either one of two institutions offering education at the entry training level, the lowest level of senior secondary vocational education (see Appendix A), (b) attendance at a rebound program for former dropouts to prepare them for re-entry vocational education, or (c) visiting the youth information desk, a municipal authority that guided youths who were not employed, not in training or education, and that sent many of them to school or a rebound program.

We invited these institutions because they share in common to take care of vulnerable youths, of whom some were former dropouts and others were at risk of dropping-out. The attended entry level of secondary vocational education aimed at leading students to continuing education or to a job. Official governmental qualification to enter labor markets requires graduation at basic vocational training level, which is the next level. Some of the participants at these institutions will obtain a diploma and continue education at the basic level, others may have difficulty to graduate from the entry level.

### **2.2.2 Procedure and participants**

Data collection took place at all eleven locations of four educational and community institutions, among which were the largest in the area. Three small-scale educational institutions, offering specialized study programs at the same educational level, were not included. Over a period of five months, a questionnaire was administered to the included target groups of emerging adults in classrooms and at the youth information desk. Participation was voluntary in all cases, leading to a sample of 996 respondents, consisting of 44% women and 56% men. Mean age of the total sample was 21.7 years, ranging from 15 to 27 years. Throughout this study we refer to our participants as emerging adults, based on Arnett's definition (2000), applying to (late) adolescents, emerging adults and adults, as these age groups were all represented in our sample.

Seventy percent of the respondents had a Dutch origin, and 25% reported a Dutch origin of their parents. Non-Dutch ethnicities included Surinamese and Caribbean origins, former colonies of the Netherlands (11% of respondents, 25% of parents). Fifty percent of the respondents reported a level of secondary education or higher of parents. One-third of the respondents did not know the educational level of their parents. The rest of the parents had only been educated at primary school level or had had no education



Table 2.1. *Clusters with variables and example of item, and reliability of sums*

Cluster	Variable	(Example of) item	N	Final number of items in scale <sup>a</sup>	$\alpha$	Range rit's
Demographic						
Gender	Are you male or female?			1		
	Date of birth			1		
	What kind of school did your father attend?			1		
	Ethnicity mother	What is the native country of your mother?		1		
	Living conditions	Who are you living with?		1		
SES-following news	I watch the news on TV occasionally		914	4	.696	.348-.649
Personality						
Extraversion	I talk to a lot of different people at parties		896	4	.616	.285-.470
	I am kind to almost everyone		899	3 (1)	.677	.419-.530
	I persevere until a task is finished		921	4	.527	.230-.420
	Sometimes I feel happy, sometimes I feel sad		937	2 (2)	.645	.476-.476
	I come up with new ideas		909	4	.481	.246-.349
Self-sufficiency						
Self-sufficiency	How satisfied are you about what you do during daytime?		926	7 (1)	.840	.429-.735
	How satisfied are you about the way you deal with drugs?		913	5	.899	.593-.859
	Have you ever been in contact with police or judiciary?			1		
	Is there a case pending now?			1		
	Have you ever been sentenced by juvenile guided correction?			1		
Addiction	Have you ever been sentenced by a community penalty?			1		
	Have you ever been sentenced by detention?			1		
	No sentence, but judicial measure			1		
	No sentence, no judicial measure			1		
Self-competence						
Self-competence	I do my best because others want me to		929	3 (1)	.681	.316-.601
	I do my best because I feel that's important		945	3 (1)	.774	.546-.650
	I am sure I can well care for myself		832	10	.897	.502-.758
	I ask for help if I need to		882	8 (1)	.865	.505-.714

(Table 2.1 continues on next page)

Cluster	Variable	(Example of) item	N	Final number of items in scale <sup>a</sup>	$\alpha$	Range rit's
School engagement	Sense of belonging Valuing	I prefer being somewhere other than at school (R) I'm sure that I will finish a training	894	5 (1)	.812	.498-.744
			891	5	.876	.657-.774
Dependent	Vocational self-image Vocational future image Vocational self-efficacy	I know what I'm good at I want to discover what kind of work I can do Later on, at my job, I'll stick to the rules	874	7 (1)	.818	.196-.702
			897	3 (1)	.642	.399-.517
			893	7	.922	.538-.839

Note.  $\alpha$  = Cronbach's alpha. Range rit's = item rest correlation.

<sup>a</sup> In parenthesis number of items per scale removed according to CFA.

at all. Ten percent of the respondents lived with their own child(ren), and 13% lived on their own. Concerning contact with police, 8% of the respondents reported actual contact and 42% previous contact. Fifty-eight percent of the respondents was not convicted; sentences concerned juvenile measure (13%), community penalty (21%), and detention (11%).

### 2.2.3 Measures

A questionnaire (see Appendix B) was designed based on existing scales (see section 2.2.4), which were adapted in content and layout to cater for the language proficiency of the respondents. Professionals working with the respondents were involved in the design of the questionnaire and a draft was reviewed by them in order to optimize length, phrasing and degree of difficulty. An adjusted version was subsequently piloted with some at-risk emerging adults and discussed with them afterwards. Their answers, interpretations, and comments led to final adjustments. Their data were not included in further analyses. In Table 2.1, we give an overview of all included variables with an example of items.

Apart from background information on sociodemographic data and experiences in the judicial system, all items were phrased to evoke respondents' own experiences or self-perceptions, preceded by subheadings like 'Who are you?' and 'How do you feel about school?'. Respondents answered on a five-point Likert scale from *(totally) No* to *(totally) Yes*; *totally* was printed in bold capitals. A score of 3 represented *no No, no Yes*. A question mark could be chosen if respondents could not answer or if they thought a question did not apply to them. The Likert scale accompanying the items on self-sufficiency consisted of five emoticons ranging from *very dissatisfied* to *very happy* as answering categories, to facilitate responding and to avoid misunderstandings. All items were coded with scores ranging from 1 to 5, with 3 as a neutral position, and higher scores reflecting more positive outcomes.

### 2.2.4 Vocational identity

Our main conceptual interest concerned relationships between individual characteristics and three components of vocational identity, which were inspired by three basic questions on working life: *Who am I*, *Who do I want to be*, and *Am I able to get there* (Fugate et al., 2004). The three questions were operationalized into vocational self-image, vocational future image and vocational self-efficacy, respectively reflecting the way at-risk emerging adults perceive their capabilities and talents, their aspirations, and their ability to perform at work. The operationalization of these three components of vocational identity was based on the Career and Talent Development Self-Efficacy Scale of Yuen, Gysbers, Chan, Lau, and Shea (2010).

In order to adjust to the competences of respondents, additional sources were used for final items on vocational self-image (Jackson et al., 2011; Kuijpers, Meijers, & Gundy, 2011; Nauta, 2010), vocational future image, and vocational self-efficacy (Flouri &

Buchanan, 2002; Nauta, Kahn, Angell, & Cantarelli, 2002; Restubog, Florentino, & Garcia, 2010). See Appendix B for the complete questionnaire.

### 2.2.5 Five clusters of individual characteristics

The first cluster with demographic variables included age, gender, educational level of parents, and respondents' and parental ethnic backgrounds. Living conditions and whether the respondent followed the news indicated levels of independence and socio-economic status respectively. The second cluster consisted of personality variables for which we adapted the validated and translated items of the Mini-IPIP Scales (Denissen, Geenen, van Aken, Gosling, & Potter, 2008; Donnellan, Oswald, Baird, & Lucas, 2006). Adjustments were made to simplify wording without changing content.

The third cluster was formed by self-sufficiency variables indicating the level of satisfaction with different life circumstances and behavior. We rephrased items of the self-sufficiency matrix to act as an instrument for self-reporting (Fassaert et al., 2014) by asking to what extent respondents were satisfied with their own (control of) behavior (money, addiction), experiences (friends, judiciary), and circumstances (housing). From the original scale we used items on finance, daily activities, living conditions, family relationships, physical health, mental health, social network, societal participation, addiction, and contacts with police and experiences with judiciary.

Variables related to self-competence formed the fourth cluster. For these items we built on work on personal and social resilience (Brahm et al., 2014; Heinrich & Holzer, 2011; Ryan & Deci, 2000; Ungar et al., 2008) and, in particular, on items on personal competence and social resources, stemming from the Resilience Scale for Adolescents (READ), developed and psychometrically tested in several studies (e.g. Hjemdal, Friborg, Stiles, Martinussen, & Rosenvinge, 2006; von Soest, Mossige, Stefansen, & Hjemdal, 2009; Windle, Bennett, & Noyes, 2011). Items on intrinsic and extrinsic motivation stemmed from the Learning Self-Regulation Questionnaire SRQ-L (Ryan & Connell, 1989), using the items on pride and importance, and remained unchanged.

Finally, the fifth cluster was formed by two variables on school engagement: sense of belonging at school, and valuing the intended outcome of school attendance. We based the items on studies of Elffers (2012) and of Elffers, Oort, and Karsten (2012). Some of these items were not applicable, as they suggested that students had a choice in which program to participate. For some of the participants in our study, the attended program offered a last chance to complete school.

### 2.2.6 Analyses

#### 2.2.6.1 Validity

The validity of the seventeen constructs that each were measured by several items was verified by confirmatory factor analyses (CFA), using version 7 of the Mplus program (Muthén & Muthén, 1998–2015). Because variables were categorical, we used as an estimation procedure Weighted Least Squares with Means and Variances (WLSMV).

Seventeen latent traits were included in the model; the remaining six constructs were measured by only one item and were therefore not included in the CFA.

Model fit was evaluated by means of goodness-of-fit indices: the Chi-square statistic ( $\chi^2$ ), the Root Mean Square Error of Approximation (RMSEA), the Comparative Fit Index (CFI), and the Tucker Lewis Index (TLI). The Chi-square statistic tests exact fit, which is a very strict criterion for the social sciences (MacCallum, Browne, & Sugawara, 1996). Moreover, the Chi-square statistic is highly sensitive to sample size. The additional fit indices compensate for these restrictions. RMSEA values below .05 are considered indicative of close fit, values between .05 and .08 indicate fair fit, values between .08 and .10 indicate mediocre fit and values above .10 indicate poor fit (Hu & Bentler, 1999; MacCallum et al., 1996). In addition, a model fit is considered acceptable when CFI and TLI are larger than .90 and good when above .95 (Bentler, 1992; Hu & Bentler, 1999).

The first model showed close fit according to RMSEA but had insufficient values for CFI and TLI. We therefore used modification indices and standardized residuals to trace the items that caused misfit. In reviewing the content of these items, decisions to remove items were made on both empirical and theoretical grounds. In subsequent steps, CFAs were performed again with adjusted models, resulting in the fourth model with  $N = 996$ ;  $\chi^2 = 9328.021$ ,  $df = 3266$ ,  $p < .000$ ; RMSEA = .043 with a 90% confidence interval of .042-.044 (close fit); and CFI = .909, TLI = .903 (both acceptable). Out of the 104 original items, in this close-fitting model ten items of nine variables were removed (see Table 2.1). All remaining items showed significant loadings on the construct they were intended to measure.

#### 2.2.6.2 Reliability

Sums were made for each of the seventeen variables, using only items remaining in the close-fitting model. As model fit in Mplus does not guarantee an acceptable level of reliability of sums, reliability of the sums was estimated by means of Cronbach's alpha. Alphas need to be at least .60 for research at group level (Bryman, 2012). The scales of conscientiousness and imagination showed slightly lower levels, which should be kept in mind when interpreting the results. All other alphas varied between .616 and .922 indicating good to high reliability (see Table 2.1).

#### 2.2.6.3 Regression Analyses

To estimate effects of variables on the three components of vocational identity, we used regression analyses in two steps. First, regression analyses were conducted to estimate the main effects of individual characteristics to at least one of the vocational identity components. See Appendix C for regression coefficients. Only variables that showed a significant univariate relationship with a dependent variable are presented.

Second, individual characteristics showing significant relationships were then selected for multivariate regression analyses with blockwise entry to investigate the extent to which the first cluster of variables contributed to the proportion of explained variance, and, subsequently, the extent to which each following cluster of variables contributed to a



change in the proportion of explained variance for each of the three vocational identity components while controlling for the contribution of variables of former clusters. As we look for malleable characteristics that can be encouraged by curricula, that is, for self-competence and school engagement characteristics, we need to avoid attributing relationships to characteristics while they in fact should be attributed to other characteristics. For this reason, variables were placed in sequential clusters of hypothesized influence, and the analysis was performed accordingly. Following the sequence of Figure 2.1, the analyses started with demographic factors, continued with, respectively, personality and self-sufficiency, and ended with self-competence and school engagement variables. By controlling for the effects of covariates, false inferences were minimized, enabling justified conclusions about the most malleable factors. Since the CFA model does not include variables with only one indicator, e.g. age and ethnicity, to obtain a full overview, correlations of these variables with each of the three dependent variables were computed (see last three columns in Appendix C).

As eleven locations of four institutions were involved in our study, we checked for the need for multilevel regression analyses by verifying whether adding a variance level to the random part of the regression model significantly improved model fit. For vocational self-image, a significant proportion of .025 location level variance was found; however, after adding predictors, the multilevel structure disappeared and no further multilevel analysis was needed. The other two dependent variables showed no significant intra-class correlation for institutes or locations. Further, we also checked for correlated error with the Durbin-Watson test; values lower than 1 and larger than 3 indicate that residuals are correlated too much.

We therefore performed regression analyses, starting with demographic variables, to explain the proportion of variance of this cluster in the three vocational identity components ( $R^2$ -change). Non-significant variables were removed stepwise: the variable with the highest  $p$ -value was omitted first. Then the analysis was repeated, until only significant predictors of the cluster remained. In the first model, 1a (see Appendices D, E, and F for the three vocational identity components respectively), results of the first regression analysis of the demographic cluster of variables were reported. Then the contribution of the personality variables cluster was analyzed while controlling for the effect of the demographic variables. Non-significant predictors were again removed, thus starting with the variable with the highest  $p$ -value, and continuing until only significant predictors remained, resulting in the personality variables which accounted for a change in the proportion of explained variance. Model 2b (see Appendices D, E, and F) shows the results of the second cluster. Next the change in proportion of variance explained by the third cluster, the self-sufficiency variables, was computed, controlling for the effects of the first and second clusters of variables. The same procedure was followed for the clusters of self-competence and school engagement, finally resulting in a model with those variables that sufficed to explain the variance, and potentially showing any change in proportion of explained variance caused by malleable variables.

## 2.3 Results

The components of vocational identity were measured on a five-point Likert scale with 3 as a neutral position. The means were 4.05 for vocational self-image, 3.54 for vocational future image, and 4.51 for vocational self-efficacy. The at-risk emerging adults in our study evaluated their capabilities and their prospective work behaviors as quite positive.

Final models of the blockwise entry regression analyses for each vocational identity component are presented in Appendices D (Vocational self-image), E (Vocational future image), and F (Vocational self-efficacy). Please note that only final models of each cluster are reported. Neither the reference models (models 2a, 3a, 4a, and 5a), nor intermediate models are included in the tables. An overview of the percentages of explained variance by cluster for each component of vocational identity, after correction for preceding clusters, is shown in Table 2.2, with an enumeration of the significant variables.

Table 2.2. *Percentages of explained variance for vocational self-image, vocational future image, and vocational self-efficacy, after correction for preceding clusters*

Cluster of variables	Vocational self-image (see App. D)	Vocational future image (see App. E)	Vocational self-efficacy (see App. F)
Demographics	3.6 Gender	3.9 Dutch mother Living caregiver Living child	6.7 Gender
Personality	18.8 Agreeableness Conscientiousness Imagination	6.2 Imagination	21.8 Agreeableness Conscientiousness
Self-sufficiency	3.1 Self-sufficiency	1.0 Self-sufficiency	n.s.
Self-competence	12.2 Intrinsic motivation Personal resilience Social resilience	3.3 Extrinsic motivation Social resilience	10.6 Intrinsic motivation Personal resilience
School engagement	n.s.	1.3 Valuing	.8 Valuing
Total percentage of explained variance	40.3%	13.1%	39.4%

Most attention is drawn to the variables from the self-competence and school engagement clusters, as our search is directed to the additional proportion of explained variance of malleable and applicable characteristics. Durbin-Watson values did not indicate too much correlated error (all were between 1–3).

### 2.3.1 Vocational self-image

Results for vocational self-image reflect the *Who am I?* question, addressing self-perceptions of at-risk emerging adults on their vocational capabilities. Appendix D shows results of additional proportions of variance ( $R^2$ -change) in vocational self-image explained by the five clusters of predictors. The demographic variables explained 3.6% of variance in vocational self-image, which should be ascribed to females as they showed higher levels of vocational self-image than males, and to the degree to which respondents follow the news, as following more news coincided with a lower level of vocational self-image. These results for gender and socio-economic status disappeared, however, after subsequent clusters of variables were added to the model. Agreeableness, conscientiousness, imagination and neuroticism explained an additional 18.8% of variance in vocational self-image. Self-sufficiency contributed significantly to the prediction of vocational self-image after correcting for the former clusters with 3.1% of additional explained variance, but its effect was no longer significant when variables of the cluster self-competence were added in a subsequent model. The cluster of self-competence variables contributed significantly and substantially to the explained variance in vocational self-image (12.2%). This can be seen by the beta coefficients confirming the most prominent positions for personal and social resilience (see last column in Appendix D). Finally, the additional variance explained by school engagement, the most malleable factor, was not significant for vocational self-image after correcting for previous clusters.

In sum, the variables that contributed most to the prediction of the final model of vocational self-image were personal and social resilience, followed by intrinsic motivation, agreeableness, conscientiousness, and imagination. The total percentage of variance in vocational self-image explained by all individual characteristics was 40.3%.

### 2.3.2 Vocational future image

Vocational aspirations and ambitions of at-risk emerging adults, put into the *Who do I want to be?* question, are represented in the variable vocational future image (see Appendix E for results). Demographic variables explained a significant proportion of variance (3.9%), with positive effects of living with father and caregiver, but with a negative effect of living with a child, which is interpreted as a consequence of necessary time and attention for a child instead of efforts put into school or homework. After correcting for the demographic variables, the personality variables explained a relatively large percentage of variance, 6.2%, in vocational future image, exclusively accounted for by imagination. Self-sufficiency, and more specifically addiction, added significantly but modestly to the explained variance in vocational future image (1.0%), but the effect disappeared after adding the school engagement constructs. The cluster of self-competence explained an additional 3.3% of the variance of vocational future image, which was ascribed to extrinsic motivation and social resilience. Additionally, beta coefficients showed that the contribution to the total variance explained by self-competence variables should mainly be attributed to extrinsic motivation. In contrast with vocational self-image, one of the

two school engagement variables did add significantly to the explained variance in vocational future image, namely valuing (1.3%; see model 5c, Appendix E).

Summarizing findings on vocational future image, the total percentage of explained variance was 13.1%. The variables that contributed most to the prediction of vocational future image were imagination, extrinsic motivation, valuing and social resilience, as did having a Dutch mother and living with a child, these last two coinciding with a lower level of vocational future image.

### 2.3.3 Vocational self-efficacy

Vocational self-efficacy beliefs of at-risk emerging adults on their work habits and values reflect the *Am I able to get there?* question. Appendix F shows results of analyses of clusters of variables which contributed most to the percentage of explained variance in vocational self-efficacy. The demographic variables accounted for 6.7% of explained variance in vocational self-efficacy, predicted by gender and socio-economic status. Females showed higher levels of vocational self-efficacy than males, and respondents who follow the news compared to those who don't, showed a lower level of vocational self-efficacy. The results thus resembled those in vocational self-image, yet, the significance of gender did not disappear in subsequent models. The cluster of the personality variables significantly explained 21.8% of the variance in vocational self-efficacy, with important contributions of agreeableness and conscientiousness. After correction for demographic and personality variables, self-sufficiency variables did not explain a significant extra percentage of variance. The cluster of self-competence variables contributed significantly to the prediction of vocational self-efficacy after correction for the former clusters with 10.6% of additional explained variance. Standardized beta coefficients show that the main contribution could be attributed to personal resilience and intrinsic motivation. Finally, from the cluster of school engagement, valuing accounts for an additional 0.8% of explained variance in vocational self-efficacy after correcting for all variables in the former clusters (model 5b).

Summarizing the results concerning vocational self-efficacy, the total percentage of explained variance was 39.4%. The variables in the final model that contributed most to the prediction of vocational self-efficacy were personal resilience and intrinsic motivation, followed by valuing, agreeableness and conscientiousness.

## 2.4 Discussion

Differences in vocational self-image, vocational future image, and vocational self-efficacy of at-risk emerging adults were explained by a series of individual characteristics. The individual characteristics were grouped in demographics, personality traits, self-sufficiency, self-competence, and school engagement. The self-competence characteristics consisted of intrinsic and extrinsic motivation and personal and social resilience. The school engagement characteristics concerned sense of belonging at school

and valuing school outcome. Self-competence and school engagement are the variables that can be influenced by school programs. Due to the conceptualization of vocational identity into three components, our findings cannot in all cases be directly connected to those of previous studies and at times interpretations were made from a more general perspective.

Three main findings were shown. First, the cluster of personality traits explained the highest proportions of variance, mainly due to agreeableness, conscientiousness, and imagination. Second, self-competence and school engagement contributed additionally to the proportion of explained variance of vocational identity after correcting for former clusters of characteristics. These specifically concerned extrinsic and intrinsic motivation, personal and social resilience, and valuing school outcome. Third, characteristics that contributed to the proportion of explained variance of vocational self-image and vocational self-efficacy differed from those contributing to vocational future image.

With respect to the personality traits, our findings partly coincided with findings of former studies. Extraversion did not contribute to any of the vocational identity components in the final models, but agreeableness and conscientiousness did contribute considerably to vocational self-image and vocational self-efficacy. Whereas the relationship between conscientiousness and vocational identity was reported previously (e.g. Fouad, 2007; Skorikov & Vondracek, 2012), the result for agreeableness with respect to vocational self-image and vocational self-efficacy adds to literature. In contrast to what could have been assumed based on a study of Hirschi (2012b), neuroticism did not contribute to vocational future image. In the current study we found that imagination was most strongly related to vocational future image and, moreover, that imagination was the only personality trait that contributed to this component of vocational identity. This result underlined the importance of open-mindedness for explorative behavior.

With respect to the second main finding, Table 2.3 presents an overview of the three characteristics from the self-competence and school engagement clusters showing the highest proportion of explained variance for each of the three vocational identity components (in terms of beta-coefficients, see last column in Appendices D, E, and F). Because of their malleable nature, these characteristics offer promising opportunities to foster vocational identity. These insights add to literature and enable refined approaches to the at-risk emerging adults.

These findings were generally in line with the findings of former studies, which also showed the relationships between motivation, resilience, or engaging at school and vocational identity (e.g., Blustein, 2013; Skorikov & Vondracek, 2012). However, no additional proportion of variance was explained by the sense of belonging at school of our participants. General attitudes toward schooling showed no connection to self-perceived capabilities, ambitions and anticipated behaviors at work. This finding suggests that for the at-risk emerging adults in our study the sense of belonging at school represents a dimension that has mainly to do with present school life and less so with future careers. The other malleable characteristics all contributed to the final models.



Table 2.3. *Contribution of variables of the clusters self-competence and school engagement to proportions of explained variance in the three components of vocational identity, based on the magnitude of standardized regression coefficients*

Main Contributions	Vocational self-image	Vocational future image	Vocational self-efficacy
1	Personal Resilience	Extrinsic Motivation	Personal Resilience
2	Social Resilience	Valuing	Intrinsic Motivation
3	Intrinsic Motivation	Social Resilience	Valuing

Regarding motivation, results revealed that extrinsic motivation only related to vocational future image. This exclusive contribution of extrinsic motivation to vocational future image is interpreted as the at-risk emerging adults' valuing of expected rewards and their sensitivity for status, corresponding to former findings (Chaves et al., 2004; van Zenderen, 2011). Ambitions may extend beyond capabilities, and acknowledging limits and performances may force to more realism. The drive for external rewards was absent for vocational self-image and vocational self-efficacy, but intrinsic motivation showed to relate to these components of vocational identity. Self-perceived job capabilities, that is, knowing what you are good at, and expected performances at work, that is, appropriate work behavior, stem from internally-driven perspectives. These refinements between the contribution of extrinsic motivation on vocational future image on the one the hand and of intrinsic motivation on vocational self-image and vocational self-efficacy on the other hand could not be recognized in former studies.

Resilience contributed to all three components of vocational identity. Social resilience did so with regard to vocational self-image and vocational future image, which can be explained by the contribution of social support to adaptable and explorative nature (Kracke, 1997; Maree, 2017). Personal resilience contributed to vocational self-image and vocational self-efficacy. These findings on at-risk emerging adults align with the findings from studies about other target groups (e.g. Brahm et al., 2014; Chaves et al., 2004), but the refinements of our findings add to literature. Students' resilience is understood to be a characteristic that can be fostered by educational or rebound programs (Di Maggio et al., 2016).

Finally, the significant contribution of valuing school outcome to vocational future image and vocational self-efficacy expressed its connection to work exploration and prospective work behaviors. Apparently, insights of at-risk emerging adults into their own talents and capabilities, or their vocational self-image, were independent of their wish to graduate, in contrast to aspirations and anticipated performances for which this graduation forms a necessary prerequisite.

The third main finding related to different relationships of the three components of vocational identity. A first difference referred to the total proportion of explained variance, which was some 40% for both vocational self-image and vocational self-efficacy, whereas the included individual characteristics only explained 13% variance in vocational future image. Further, some distinctions were noticed in which characteristics contribute

to the results. Imagination was the most important characteristic in vocational future image, but played a smaller role in vocational self-image, and is absent in the model of vocational self-efficacy. The reverse was seen in the result of extrinsic motivation. For at-risk emerging adults imaging your future (vocational future image) was strongly related to expected rewards (extrinsic motivation), in a material or immaterial sense. This motivation is fed by ideas about an imaginative future, which may lead to further expectations about rewards. Both extrinsic motivation and imagination coincide and reinforce each other. In this sense, imagination expresses the challenge emerging adults experience when trying to set realistic future goals (Mortimer, Zimmer-Gembeck, Holmes, & Shanahan, 2002), which complicates the process of settling a vocational identity. Valuing imagination should then be faced with caution. At the same time, however, imagination as expression of open-mindedness, is known to be helpful in career exploration (Fouad, 2007; Skorikov & Vondracek, 2012). A teaching approach which focuses on stimulating the open-mindedness of at-risk emerging adults, does have the potential to encourage a strong vocational identity. Thus, imagination can be both an obstructing and a helpful component in vocational identity: It prevents students from forming realistic future goals, but it might also be necessary to allow them to have dreams and remain motivated.

Some final results are discussed. In contrast to former studies, the at-risk emerging adults with Dutch parents showed negative relationships with vocational identity (van Zenderen, 2011). An explanation might be that migrant parents put stronger emphasis on the careers of their offspring, based on their own experiences with barriers and in an attempt to contribute to better perspectives for them. Partly in line with results from Fouad's review (2007), experiences in the judicial system related to vocational identity, but only with respect to vocational self-efficacy, and for the at-risk emerging adults in our study these effects disappeared after the self-competence and school engagement clusters were taken into account.

#### **2.4.1 Practical implications**

Findings of the current study provide educational and social professionals input to strengthen their students' vocational identities by making use of the motivational and resilience characteristics and by integrating modifications to improve vocational identity into their programs. They support their students to define and work on their own goals, in order to stimulate feelings of intrinsic motivation and enable their students to experience self-rewarding benefits. Additionally, professionals can use personality variables to carefully adapt their approaches to characteristics of the target (sub)groups. During internships, fostering agreeable, conscientious, and imaginative acting through design of assignments is recommended. In order to apply these strategies, professionals need to know the nature and level of motivation and of resilience of the emerging adults they guide, and have insights into their personality traits, especially imagination and conscientiousness.

The combination of valuing and extrinsic motivation, both fostering the development of at-risk emerging adults' vocational identities, also deserves consideration here. These emerging adults are willing to persevere to obtain a school certificate in return for expected rewards. Considering the extrinsic motivation and open-mindedness of at-risk emerging adults, professionals should stress the value of obtaining a qualification, and simultaneously lead emerging adults' future ideas and perspectives toward achievable goals.

Finally, the importance of personal and social resilience creates opportunities for teachers, mentors and coaches to adapt the design of their programs and the guidance they offer to their students. Professionals who challenge emerging adults' decision-making proficiency, provide them the opportunity to gradually rely on their own competences. Emerging adults can also best be encouraged to ask for help and support from others. Through strategies like these, both personal and social aspects contribute to boosting resilience levels and thus indirectly to an improved vocational identity.

### **2.4.2 Limitations**

Participants in our study were referred to as emerging adults. This term is not completely accurate, as respondents were aged in between fifteen and twenty-seven years and thus also included (late) adolescents and adults. However, no indications were detected that results did not apply for all included age groups. Results are relevant to at-risk emerging adults who formerly dropped out or are at risk of doing so, and of whom many may struggle with diverse obstacles, during a schooling period and the transition period between school and work.

For this study a questionnaire was based on existing validated scales and items. Adjustments were limited to rephrasing in order to align with the vocabulary and comprehension of our target groups of at-risk emerging adults, of whom many attended a school at the lowest level of senior secondary vocational education or a preparatory rebound program. Analyzing the validity of our model showed a satisfactory result. A full psychometric evaluation has not been done yet, and this would add to the value of our instrument.

### **2.4.3 Directions for future research**

This study confirms the complexity of vocational identity among at-risk emerging adults. It shows that its three components each has its own specific value for the fostering of at-risk emerging adults' overall vocational identity. This multifaceted perspective establishes a wide range of new research questions, such as the interconnectedness of the three components of vocational identity, the differences between malleable characteristics and characteristics which can enable subgroup composition and the potential different sequences with which the three components are best encouraged.

To address the latter question, fostering idealistic visions about the working future can act as a prerequisite for gaining realistic ideas about a future career and a person's

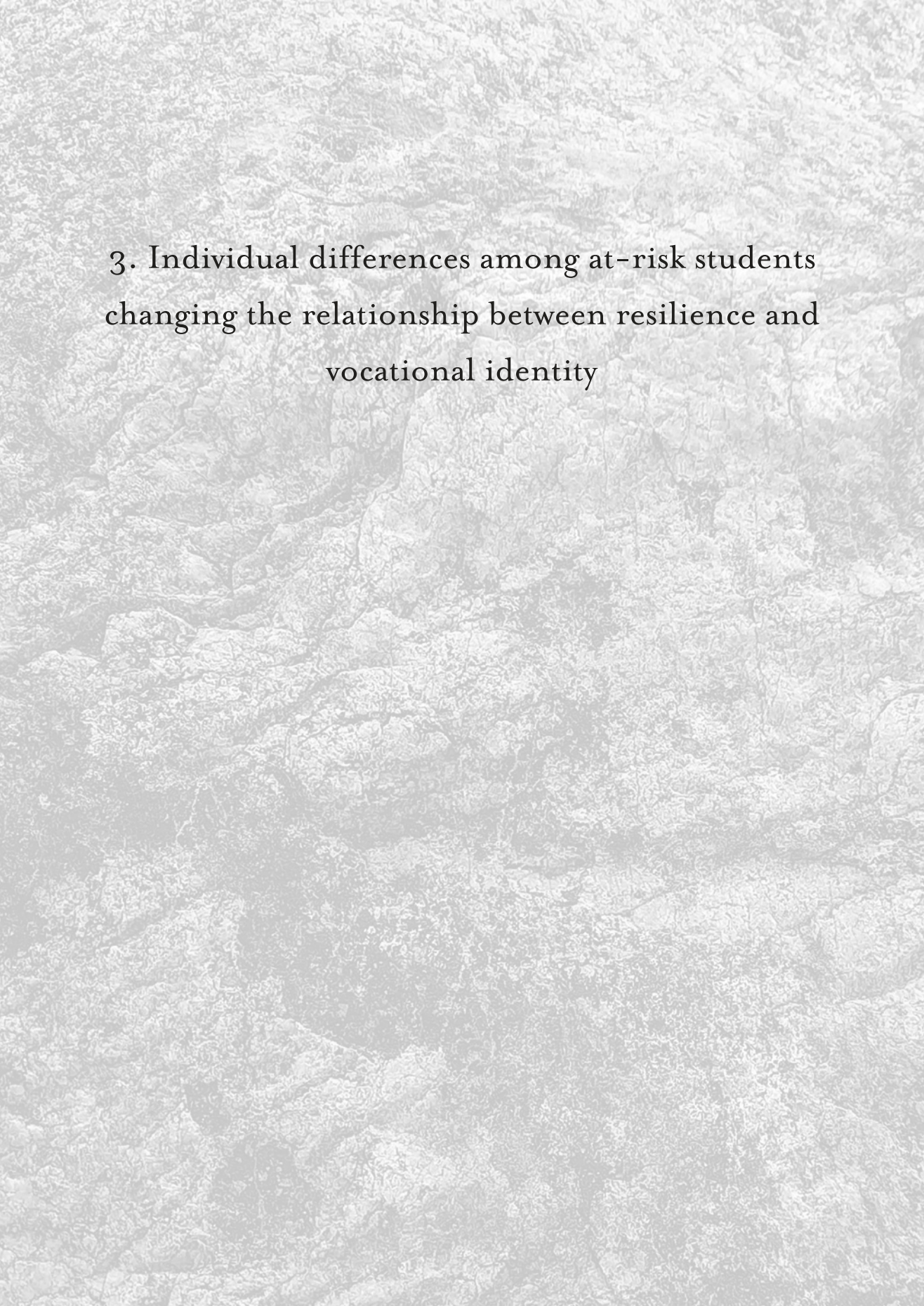
role and performance in it, emphasizing the merits of imagination. Generating ideas about a vocational future image then helps at-risk emerging adults to acquire a clear picture of their vocational self-image and vocational self-efficacy. This reasoning could be turned around, and as a consequence, actual capabilities and expected performing abilities direct, or even limit, the future potential. Both approaches are conceivable and may be equally valuable. Longitudinal research is needed to shed light on the respective contributions and the interrelationships of the three vocational components to the vocational identity of at-risk emerging adults, and the balance of realism versus idealism that accompanies these questions.

#### **2.4.4 Concluding remarks**

Five clusters of individual characteristics in a hierarchy of malleability are related to the vocational identity of at-risk emerging adults. Most malleable characteristics contribute significantly to the three components of vocational identity, enabling professionals who guide this target group to adjust their approach and program content. More specifically, based on the results from this study, addressing extrinsic and intrinsic motivation, personal and social resilience and valuing school outcome opens a spectrum of possibilities to professionals to further vocational identity and thus strengthen the social position of at-risk emerging adults.







### 3. Individual differences among at-risk students changing the relationship between resilience and vocational identity

### **Abstract<sup>2</sup>**

Vocational identity, being aware of yourself as a worker, is key in shaping a career, and in enhancing chances of employment and inclusion. This specifically applies to students who previously dropped out of school or are at risk of doing so. Special programs therefore aim at developing their vocational identity. This challenging task may be eased by stimulating resilience, which supports to function in adversity. The purpose of this cross-sectional study is to explore whether differences in individual characteristics of at-risk students moderate the relationship between resilience and vocational identity. A survey is administered to at-risk students ( $N=996$ ), aged between 15 and 27 years ( $M = 21.7$ ;  $SD = 3.3$ ), and consisting of 44% females. The results show that higher resilience coincides with higher vocational identity for all subgroups and that the strength of the relationships varies dependent on the characteristic. The relationship is stronger for males, the younger at-risk students, those who are less agreeable, and those who experience less motivation and school engagement. The relationships between resilience and vocational identity are not univocal and differ dependent on the individual characteristic. Results invite to careful attuning to profiles of individual at-risk students. Implications for practice and future research are discussed.

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<sup>2</sup> This chapter has been submitted in adapted form as:

Keijzer, R., van der Rijst, R., van Schooten, E., & Admiraal, W. (under review). Individual differences among at-risk students changing the relationship between resilience and vocational identity.

### 3.1 Introduction

Many if not all students who are in danger of dropping out of school, so called at-risk students, face obstacles both at school and in personal life. Brahm et al. (2014) and Sulimani-Aidan (2017a) mention, for example, poor social support, chronic poverty, criminal surroundings, broken families, and the burden of young parenthood. These problems can deter at-risk students from attending school and may hinder graduation or continuing education. Educational programs therefore focus on developing a strong vocational identity for this group of students; they support their students in thinking about desirable careers with appropriate working behavior. Vocational identity refers to how a person views her or his occupational interests, abilities, goals, and values (Hirschi, 2012a; Turner et al., 2006). Vocational identity has been found to support career success and satisfaction (Skorikov & Vondracek, 2007). A strong vocational identity may help at-risk students to acquire a more valuable, independent, and sustainable position in society. For at-risk students developing a vocational identity might be especially demanding due to the problems they encounter. Keijzer, Admiraal, van der Rijst, and van Schooten (2020) found that resilience of at-risk students is strongly related to their vocational identity.

Resilience might offer a buffer against difficult circumstances, as it enables a person to function in adversity. Coping with repeated exposure to difficulties may even reinforce resilience (Di Maggio et al., 2016). For at-risk students, resilience may result in, for example, persevering to study or work, even when faced with severe problems, such as an incident of violence in their neighborhood or stress caused by an addicted parent.

Special curricula at senior vocational schools and a rebound program in the Netherlands are attended by at-risk students. At the senior vocational schools, students were educated at entry training level, the most basic level of this type of education. The goal of entry training was to enable students to continue in education or to start working. The rebound program prepared former dropouts to rejoin regular education, such as entry training, or to enter the labor market. Both programs intensively addressed the development of a vocational identity.

To inform special curricula about how to enhance their students' resilience and vocational identity, insights are needed into the relationship between resilience and vocational identity. Potentially not all students will be helped with resilience. For example, for a strong vocational identity, strongly motivated students may need less resilience; they might compensate this lower resilience by firmer motivation. Lower motivated students, in contrast, might be in need of stronger resilience to obtain similar levels of vocational identity. This means that the relationship between resilience and vocational identity would be stronger for the lower motivated groups of at-risk students, with motivation as an individual characteristic that moderates this relationship.

The way resilience is related to vocational identity may not be univocal and relationships might differ between different groups of at-risk students. In order to provide ample information for schools, teachers and mentors to adapt their education to the various subgroups of at-risk students, we need more knowledge about the relationship

between resilience and vocational identity for the various subgroups. The aim of the current study is to provide insights into the moderating effects of individual differences among at-risk students on the relationship between their resilience and vocational identity.

### 3.1.1 Vocational identity

Vocational identity includes a person's insights into her or his own career capabilities, goals, and expected success at work, labeled respectively: vocational self-image (Who am I?), vocational future image (Who do I want to be?), and vocational self-efficacy (Am I able to get there?) (Fugate et al., 2004; Keijzer et al., 2020). In their review, Brown and Lent (2016) concluded that vocational identity is related to feelings of *agency* through adaptability (i.e., the perceived ability to cope with unpredictable tasks within changing work conditions), *self-efficacy* (i.e., beliefs about personal capabilities), and *volition* (i.e., individuals' interpretations of their ability to make occupational choices despite constraints). Sulimani-Aidan (2017a) reported that limited personal assets narrow career paths. Her study among Israeli social workers who work with vulnerable youth showed that the realization of a vocational identity was a greater challenge for at-risk emerging adults than for young people in more favorable conditions. Sulimani-Aidan (2017a, p. 150) concluded that "features of emerging adulthood as a period of exploring possibilities are not evident or very limited among at-risk young adults". More constraints, such as limited personal assets, may be associated with less work volition.

Developing a vocational identity is seen as essential for young adults (Skorikov & Vondracek, 2012; Zimmer-Gembeck & Mortimer, 2006). In a study among American urban high school students, Gushue et al. (2006) found that vocational identity was positively related to students' career decision-making, career-readiness, and career-decidedness. Several studies have suggested successful outcomes of vocational identity: It is connected to students' development toward required work attitudes and realistic expectations about careers (Turner & Lapan, 2013); to guidance in career opportunities (McArdle, Waters, Briscoe, & Hall, 2007); and to flexible decision-making skills (Worth, 2002). In a German longitudinal study among high school students, Noack et al. (2010) showed that exploring vocational interests intensified when students attended higher grades and that this especially applied to students at low-track schools compared to peers from high-track schools. In a study located in the United States, Diemer and Blustein (2006) found that during transitions vocational identity was especially valuable for urban adolescents of color from poor and working class neighborhoods, when they were exposed to surmountable sociopolitical barriers.

Bimrose and Hearne (2012) suggested that a series of transitions of work-places instead of one lifelong employment await all prospective employees. According to Blustein (2013) and Brown and Lent (2016), the development of vocational identity has become more important because of the need to navigate volatile labor markets. This is acknowledged by at-risk youths themselves, as they anticipate being in less stable work than



they would like, as shown in Worth's (2002) study among middle school pupils in the United Kingdom. These changes place high demands on adaptability, self-efficacy, and volition. In a Canadian study among managers and professionals, Lyons, Schweitzer, and Ng (2015) found that a successful route to dealing with career difficulties is to develop resilience, which is most probably even more important for at-risk students given their tough life circumstances.

### 3.1.2 Resilience

Resilience is the dynamic process of positive adaptation, despite experiencing adversity (Brownlee et al., 2013; Herrman et al., 2011; Luthar & Cicchetti, 2000). Resilience is considered to be malleable and may grow due to successfully adapting to barriers (Di Maggio et al., 2016). Several scholars have suggested that educational interventions targeting vulnerable groups should include efforts to foster resilience (e.g., Herrman et al., 2011; Jain & Cohen, 2013). Strategies to strengthen resilience relate to, for example, the development of social competence and increasing caring relationships (Brooks, 2006).

Two different aspects are distinguished in the concept of resilience: personal resilience and social resilience, although given different labels in different studies (Brownlee et al., 2013; Hjemdal, Friborg, Stiles, Rosenvinge, et al., 2006). Personal resilience includes internal qualities and refers to independence and self-sufficient decision-making in main domains of life, such as education, friends, and work, presuming a sense of self-efficacy, perceived control, and the capacity to regulate one's own life. This aspect of resilience relates to the agentic nature of vocational identity and individual volition in work. Social resilience is externally oriented and refers to having supportive social networks, and the ability and willingness to utilize them. This aspect will help at-risk youth in times of adversity and can support them in their search for the work that suits them best. In the study by Sulimani-Aidan (2017a), social caseworkers stated that building formal social resources (i.e., connecting youth with services and programs) and informal social resources (i.e., learning to lean on their social networks) was critical for at-risk emerging adults for learning about new opportunities, becoming connected with services that could help them, and being supported in decision-making processes in important areas of life, such as education and work.

Previous research of Hjemdal, Friborg, Stiles, Martinussen, et al. (2006) showed that boys reported significantly higher levels of personal resilience and girls reported higher levels of social resilience. A study of von Soest et al. (2009) among young adults between the ages of 18 and 20 years, showed no correlations of girls' and boys' age with personal or social resilience, small correlations of socioeconomic status, and very small to non-significant correlations of smoking, use of drugs, theft, and violent behavior with personal or social resilience. The Big Five personality traits (i.e., extraversion, agreeableness, conscientiousness, openness, and emotional stability) were found to variably contribute to resilience (Friborg, Barlaug, Martinussen, Rosenvinge, & Hjemdal, 2005; Herrman et al., 2011).



Stress factors such as low socioeconomic circumstances and living in deprived communities are part of the daily lives of many at-risk students. Managing such stress factors, that is being resilient, acted as mediator between these circumstances and positive social, emotional, and academic outcomes, as reported in a review of 59 studies by Devenish, Hooley, and Mellor (2017). Nieuwenhuis, Yu, Branje, Meeus, and Hooimeijer (2016) showed that resilient young Dutch adults were less strongly influenced by negative consequences of neighborhood poverty than their more vulnerable peers. In their study among high school dropouts, Bowers and Sprott (2012) found three different categories of students who would benefit from concordant different personalized approaches to prevent dropout, and for all subgroups resilience was found to be positively related to graduation. The importance of resilience in support of educational outcomes, such as academic engagement and achievement, was also shown by Martin et al. (2015). The authors found that at-risk youth making use of educational or community services had significant lower resilience levels compared to peers who did not attend such services. In addition, for the latter group no interaction effect of resilience was found, whereas for the service-users resilience coincided significantly with educational outcomes.

Resilience has been intensively studied from career perspectives and was found to be related to career adaptability (Barto et al., 2015; Santilli et al., 2015). In the career construction theory of Savickas, career adaptability refers to “resources of individuals for coping with current and anticipated tasks, transitions, traumas in their occupational roles” (Savickas & Porfeli, 2012, p. 662). In Lapan’s (2004) integrative contextual model of career development, developing resilience will enable youth to handle the demands of responsibility and self-determination needed for functioning in challenging and unpredictable work environments. A counseling intervention among poor inner-city youth, based on this integrative approach, was found to significantly and positively enhance social, prosocial and work readiness skills, and emotional support (Turner & Conkel, 2010).

### 3.1.3 Current Study

At-risk students’ careers and societal position receive considerable attention, especially at vocational schools and in rebound programs for vulnerable youth, which acknowledge the importance of developing a vocational identity. The at-risk students attending such programs differ with respect to individual factors, such as sociodemographic characteristics, personality, and motivation for learning and work. As shown in the literature reviewed above, personal and social resilience appeared to be related to various individual factors as well as to the development of vocational identity (Hirschi, 2012b; Keijzer et al., 2020; Skorikov & Vondracek, 2012).

It may be assumed that the relationship between resilience and vocational identity gets stronger as adversity and difficulties of at-risk students increase, and weaker as obstacles decrease. In fact, a direct link between resilience and vocational identity may not provide a valid representation with the reality of the composition of their characteristics. Subgroups of at-risk students may differ from each other in this respect and may need

different intervention strategies. Yet, the question of whether differences in student characteristics affect the relationship between resilience and vocational identity is under-researched.

This study explored the assumption that individual characteristics of the at-risk students—combined with different levels of resilience—matter to their vocational identity. We expect the relationship between resilience and vocational identity is not equally strong for all student groups and might be moderated by individual characteristics of the at-risk students. The conceptual model is illustrated in Figure 3.1, with the individual characteristics as moderators at the left, resilience as the independent variable, and vocational identity as the dependent variable.

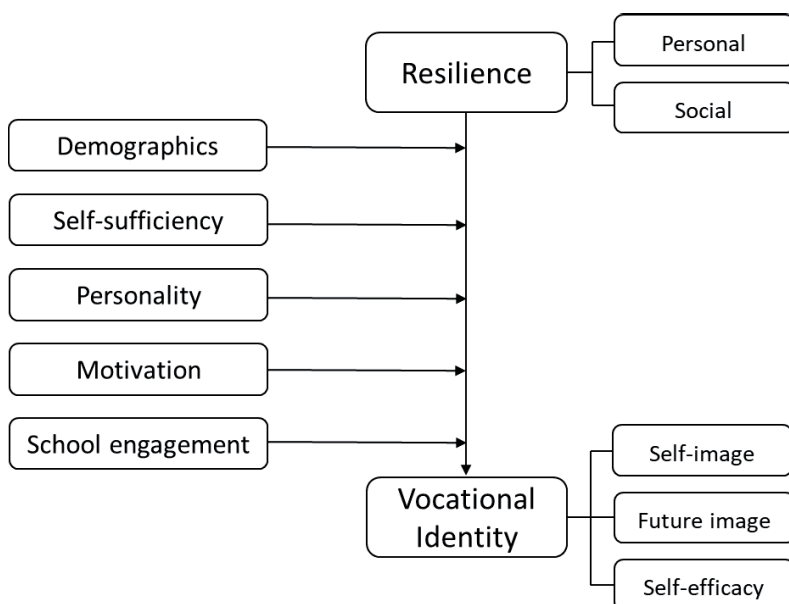


Figure 3.1. Conceptual model in which individual characteristics moderate the relationship between resilience and vocational identity

Building on the work of previous studies, several sociodemographic characteristics, personality traits, and indicators of self-sufficiency were included. Further, motivational and school engagement factors were included because they are considered to be malleable and can be applied by educational and social practitioners to have an impact on their students' vocational identities. Intrinsic and extrinsic motivation were involved (Chávez, 2016). Concerning school engagement, participants' sense of belonging at school and valuing school outcome (i.e., obtaining a qualification) were distinguished. School engagement is understood to contribute to stimulating occupational interests, work skills, and career guidance during schooling (Elffers, 2012; Skorikov & Vondracek, 2012). Both motivation and school engagement were found to be related to vocational identity (Keijzer et al., 2020).

Based on previous literature, we anticipated at least major moderation effects related to gender, age, socioeconomic status, and self-sufficiency. First, as females reported to be less personally resilient, stronger personal resilience is assumed to have a greater impact on vocational identity for them compared to males. In turn, as males reported to be less socially resilient, it is assumed that the relationship between social resilience and vocational identity is stronger for males than for females. Second, we expect to identify age differences, such that for older subgroups, their levels of resilience are less relevant with respect to their vocational identity perception and for younger subgroups the relationship is stronger. Third, we assume at-risk students from lower socioeconomic backgrounds and those who report addictive or delinquent behavior to show stronger relationships; the value of resilience gets stronger as the at-risk students encounter more such adversities. Additionally, moderation effects are expected to be stronger for the at-risk students with lower levels of the personality traits, and with lower reported motivation and feelings of engagement to school.

The following research question directed this exploratory study: "To what extent do individual student characteristics moderate the relationship between personal and social resilience, on the one hand, and vocational identity, on the other hand?"

## 3.2 Method

### 3.2.1 Participants

Four institutions in the metropolitan area of Rotterdam, the Netherlands, were invited to participate, applying convenience sampling. Two institutions offered senior secondary vocational education at entry training level. The third institution was a rebound program, preparatory to senior secondary vocational education. The fourth institution was the community youth helpdesk, mainly visited by youths who were unemployed and had not graduated, and of whom many were sent back to school or to a special trajectory like the rebound program. These institutions were invited because they are all dedicated to optimizing future chances of at-risk young adults, labeled as 'at-risk students' in this study.

All four institutions agreed to participate. They were mainly situated in deprived neighborhoods. The community helpdesk had only one site; the institution running the rebound program had three sites; the two institutions for senior secondary vocational education were the largest in the area and had seven sites. From these institutions, 996 respondents participated, aged between 15 and 27 years ( $N = 983$ ;  $M = 21.7$ ;  $SD = 3.34$ ). The sample consisted of 44% females. Other background characteristics of participants are reported in Table 3.1.

Table 3.1. *Main background characteristics of participants (N = 996)*

Background variable	Category	Proportion
Ethnicity	Dutch	.70
	Surinamese or Caribbean <sup>a</sup>	.11
	Other	.19
Ethnicity parents	Dutch	.25
	Surinamese or Caribbean	.25
	Other	.50
Education parents	No education	.08
	Primary school level	.08
	Secondary school or higher	.50
	Unknown	.33
Living conditions <sup>b</sup>	With mother	.51
	With father	.29
	With brother	.25
	With sister	.23
	Respondent on his/her own	.13
	With child(ren)	.10
Police	Previous contact	.42
	Current contact	.08
Criminal justice <sup>b</sup>	No sanction	.58
	Community penalty	.21
	Juvenile measures	.13
	Detention	.11

<sup>a</sup> Former colonies of the Netherlands.<sup>b</sup> Not adding up to 1 because combinations are possible.

### 3.2.2 Measures

In addition to the background variables, the constructs included in the study were vocational self-image, vocational future image, and vocational self-efficacy, personal and social resilience, and twelve constructs that could possibly moderate the relationship between resilience and vocational identity. Among them were non-malleable characteristics: (1) the personality traits extraversion, agreeableness, conscientiousness, neuroticism, and imagination (Baay et al., 2014; Hirschi, 2012b; Skorikov & Vondracek, 2012), (2) self-sufficiency, which refers to the extent to which at-risk students report that they are satisfied about managing main domains of life. This included their self-evaluation of addictive behavior (Fassaert et al., 2014; Fouad, 2007; Heinrich & Holzer, 2011; Meeus et al., 1997), and (3) socioeconomic status (SES), measured by the extent to which participants followed news items. Malleable characteristics that were included concerned intrinsic and extrinsic motivation (Chávez, 2016), and sense of belonging at school and valuing school outcome, which are understood as two aspects of school engagement (Elffers, 2012; Skorikov & Vondracek, 2012). Table 3.2 contains variables, example items, and an overview of descriptives of the constructs.

Table 3.2. Descriptives of variables with example items and reliability of sums

Cluster	Variable	Example item	N	Missings	M	SD	Final number of items in scale <sup>a</sup>	Cronbach's $\alpha$	Range rit <sup>b</sup>
Vocational identity	Vocational self-image	I know what I'm good at	873	123	4.1	.60	7 (1)	.82	.196-.702
	Vocational future image	I want to discover what kind of work I can do	896	100	3.53	.81	3 (1)	.64	.399-.517
Resilience	Vocational self-efficacy	Later on, at my work, I'll stick to the rules	892	104	4.51	.56	7	.92	.538-.839
	Personal resilience	I am sure I can care for myself well	831	165	4.07	.60	10	.90	.502-.758
Motivation	Social resilience	I ask for help if I need to	881	115	4.02	.74	8 (1)	.87	.505-.714
	Extrinsic motivation	I do my best because others want me to	928	68	2.81	.94	3 (1)	.68	.316-.601
School engagement	Intrinsic motivation	I do my best because I feel that's important	944	52	4.28	.67	3 (1)	.77	.546-.650
	Sense of belonging at school	I prefer being somewhere other than at school (R)	893	103	3.50	.84	5 (1)	.81	.498-.744
Personality	Valuing school outcome	I really want to graduate	890	106	4.41	.72	5	.88	.657-.774
	Extraversion	I talk to a lot of different people at parties	895	101	3.43	.73	4	.62	.285-.470
	Agreeableness	I am kind to almost everyone	933	63	4.16	.61	3 (1)	.68	.419-.530
	Conscientiousness	I persevere until a task is finished	920	76	3.87	.58	4	.53	.230-.420
Self-sufficiency	Neuroticism	Sometimes I feel happy, sometimes I feel sad	936	60	3.06	1.07	2 (2)	.65	.476-.476
	Imagination	I come up with new ideas	908	88	3.61	.64	4	.48	.246-.349
	Self-sufficiency	How satisfied are you about what you do during the daytime?	925	71	3.69	.79	7 (1)	.84	.429-.735
	Addiction	How satisfied are you about the way you deal with drugs?	913	83	4.08	1.11	5	.90	.593-.859
Background	SES-following news <sup>c</sup>	I watch the TV news occasionally	913	83	0.12	.33	4	.70	.348-.649

<sup>a</sup> Final numbers. In parenthesis number of items per scale removed after CFA results.

<sup>b</sup> Item test correlations.

<sup>c</sup> Measured by four dichotomous items, summed and divided by four as one variable. All other variables measured by Likert-scales (range 1-lowest to 5-highest, and 3 as a neutral position).

A paper-and-pencil questionnaire was developed with practitioners, and then piloted with some of the participants, discussed with them afterwards, and adapted according to their responses. Apart from the background variables, items were answered by means of Likert-scales. The questionnaire is included in Appendix B. Data were collected over a period of five months. Questionnaires were distributed at times and in settings that were most appropriate for a particular participant group. Participation was voluntary in all cases. Parental consent was obtained for the participants under eighteen.

The items for measuring vocational self-image, vocational future image, and vocational self-efficacy were adopted from the Career and Talent Development Self-Efficacy Scale of Yuen et al. (2010) and based on additional sources (de Vos & de Jong, 2011; Flouri & Buchanan, 2002; Jackson et al., 2011; Kuijpers & Meijers, 2008; Kuijpers et al., 2011; Nauta, 2010; Nauta et al., 2002; Restubog et al., 2010). The measurement of the constructs of personal and social resilience was based on the validated Resilience Scale for Adolescents (Hjemdal, Friborg, Stiles, Martinussen, et al., 2006; von Soest et al., 2009) and studies by Brahm et al. (2014), Heinrich and Holzer (2011), and Ungar et al. (2008). Items originated from the concepts of personal competence and social resources. Items for the personality traits, self-sufficiency indices, motivation, and school engagement were generated from validated questionnaires (Denissen et al., 2008; Donnellan et al., 2006; Elffers, 2012; Fassaert et al., 2014; Ryan & Connell, 1989).

### 3.2.3 Data Analyses

#### 3.2.3.1 Validity

The validity of the measurement of the 17 constructs was verified by means of confirmative factor analysis (CFA), using version 7 of the Mplus program (Muthén & Muthén, 1998-2015). A measurement model was fitted with 17 latent traits or constructs and the scores on the items for measuring each of them as indicators of each construct. Because model fit initially was insufficient, out of the 104 original items, ten items of nine variables were removed based on large modification indices or residual variances. Fit indices of the final model were adequate ( $N = 996$ ;  $\chi^2 = 9328.021$ ,  $df = 3266$ ,  $p < .001$ ; CFI = .909, TLI = .903, and RMSEA = .043 with a 90% confidence interval of .042 - .044). These indices indicated fair fit for CFI and TLI and close fit for RMSEA (Bentler, 1992; Hu & Bentler, 1999; MacCallum et al., 1996). All remaining items showed significant loadings on the construct they were intended to measure. These results supported the validity of the measurement of the 17 constructs.

#### 3.2.3.2 Reliability

Mean scale scores were computed over the items remaining in the final model for each of the constructs in the CFA. To estimate the reliability of these mean scale scores, Cronbach's alpha was calculated for each construct (see Table 3.2). The alphas for conscientiousness and imagination were insufficient. The other alphas, ranging from .616 to .922, indicated reasonable to good reliability (Bryman, 2012).



### 3.2.3.3 *Main effects and moderator analyses*

In a previous study, data were used to conduct regression analyses to examine main effects of the included variables on the three components of vocational identity (Keijzer et al., 2020). Appendix G provides results of significant main effects. For the current study, we verified whether individual characteristics moderated the relationship between resilience and vocational identity. The moderator effects were estimated by means of multilevel regression analyses. Only characteristics that showed significant main effects on vocational identity were included, since the chance of finding moderator effects of variables showing a non-significant main effect is very small.

A moderator effect implies that an individual characteristic of the at-risk emerging adult significantly influences the relationship between resilience and vocational identity, making it stronger or weaker depending on the score on the student characteristic, i.e., the moderator variable. Moderator effects were analyzed by comparing two models: (1) a model with one of the three vocational identity components as a dependent variable, and one of the two resilience aspects and the individual characteristic as independent variables; and (2) the same model plus the interaction term between resilience and the individual characteristic. The interaction term represents the moderator effect. Significance of the moderator effect was calculated by computing the difference in deviance scores between both models, one with and one without the interaction term. The significance of regression coefficients was also calculated by means of the Wald-Z statistic. When the difference in deviance between two models appeared significant, effect-sizes were computed as the percentage of (total) variance explained by the moderator effect.

To evaluate significant moderator effects, the regression equation was used to make plots. Plots were made for mean values of both resilience and the individual characteristic, and the mean values, respectively, plus and minus one standard deviation. All continuous variables were grand mean centered before entering them in the regression analyses.

When necessary, regression analyses were conducted multilevel for the three components of vocational identity, because the data were nested within institutions and sites. For vocational self-image and vocational future image, the intraclass correlations for sites and institutions were non-significant, so moderation effects for these dependent variables were analyzed at student level only. For vocational self-efficacy, moderation effects of resilience with individual characteristics were analyzed at student and site level; the intraclass correlation for institutions were non-significant.

## 3.3 Results

Of the 101 moderation effects tested, 53 appeared significant: 25 for personal resilience and 28 for social resilience. Most effect sizes varied between .80 and 4.00 percent explained total variance. To compensate for capitalization on chance and to limit the results to meaningful effects, only effects equal to or greater than one percent are included in the findings section. Given the large number of variables that might affect vocational identity, one percent seems a reasonable, not too low, threshold. Table 3.3

shows results with an effect size of one percent or more explained total variance. Appendix H presents a condensed overview of all results. Appendix I contains plots for all significant results explaining at least one percent of total variance.

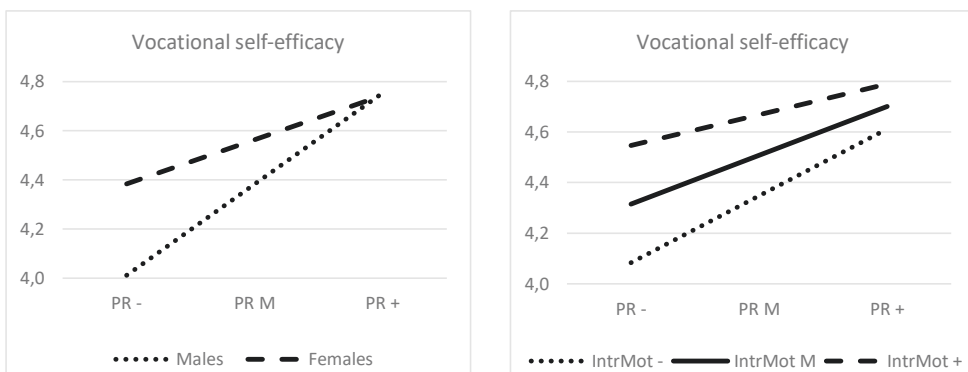
Table 3.3. *Moderation effects (percentages of explained total variance) on vocational self-image, vocational future image and vocational self-efficacy of personal resilience and social resilience moderated by individual characteristics (effect sizes  $\geq 1.00\%$ )*

Individual characteristic	Personal resilience			Social resilience		
	Vocational self-image	Vocational future image	Vocational self-efficacy	Vocational self-image	Vocational future image	Vocational self-efficacy
Gender			3.30	1.01		
Age				2.03		2.55
SES-following news			3.62			3.25
Self-sufficiency				1.99		
Satisfaction with addiction						1.80
Police contact			1.77			1.44
Detention			1.77			2.52
Agreeableness			8.50	1.11		7.23
Conscientiousness			1.00			
Neuroticism	1.59	1.86		6.31	1.44	
Imagination			2.23			3.31
Intrinsic motivation			4.10			3.21
Sense of belonging at school			3.11			
Valuing school outcome			4.21			2.37
Personal resilience						3.56

### 3.3.1 Personal resilience

The results of the moderation analyses showed that higher personal resilience scores were associated with higher vocational identity for all participant groups. Yet, the strength of the relationship between personal resilience and vocational self-efficacy varied: It appeared to be stronger for males, for participants with some contact with the criminal justice system, and for those who reported low values on other characteristics, except SES. The relationship between personal resilience and both vocational self-image and vocational future image was stronger for participants who reported lower levels of neuroticism.

Figure 3.2 illustrates two examples. The left-hand picture demonstrates the stronger relationship between personal resilience and vocational self-efficacy for males, compared to females. For the highly personally resilient respondents, no differences were found between males and females. The right-hand picture shows a stronger relationship between personal resilience and vocational self-efficacy for the participants with low intrinsic motivation as compared to highly motivated participants.



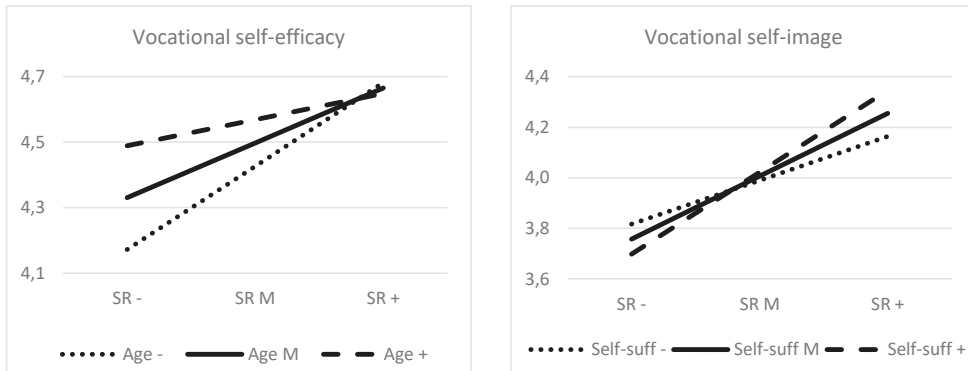
**Figure 3.2.** Relationships between personal resilience and vocational self-efficacy moderated by gender (left-hand side) and intrinsic motivation (right-hand side) of at-risk students.

*Notes.* PR = Personal resilience. IntrMot = Intrinsic motivation. - = 1 SD below mean. M = mean. + = 1 SD above mean.

### 3.3.2 Social resilience

The results of the moderation analyses showed that higher social resilience scores were also associated with higher vocational identity for all participant groups, and again, that the strength of the relationship between social resilience and vocational identity varied. Concerning vocational self-image, it appeared to be stronger for males and for the more self-sufficient respondents. Regarding both vocational self-image and vocational future image this relationship was stronger for participants who reported lower levels of neuroticism. With respect to vocational self-image and vocational self-efficacy, it appeared to be stronger for the younger and for the less agreeable respondents. Finally, the relationship between social resilience and vocational self-efficacy appeared to be stronger for those with experiences in the judicial system, for the higher SES respondents, and for those who reported low values on other characteristics. Overall, the findings for social resilience closely resembled those for personal resilience.

Figure 3.3 illustrates two examples of moderator effects of social resilience. The left-hand picture shows the stronger relationship between social resilience and vocational self-efficacy for the younger respondents, compared to their older peers. For the highly socially resilient respondents, no differences were found between different age groups. The right-hand picture shows a stronger relationship between social resilience and vocational self-image for the highly self-sufficient participants, compared to their less self-sufficient peers. Highly self-sufficient participants with low scores on social resilience assessed their vocational self-image to be lower than their less self-sufficient peers. Those highly self-sufficient participants who assessed their social resilience to be high reported a higher vocational self-image than the less self-sufficient at-risk students. This effect occurred within the range of plus and minus one standard deviation.



**Figure 3.3.** Relationship between social resilience and vocational self-efficacy moderated by age (left-hand side) and relationship between social resilience and vocational self-image moderated by self-sufficiency (right-hand side) of at-risk students.

Notes. SR = Social resilience. Self-suff = Self-sufficiency. - = 1 SD below mean. M = mean. + = 1 SD above mean.

### 3.4 Discussion

This study showed that several individual characteristics of at-risk students moderated the relationship between personal and social resilience, on the one hand, and vocational self-image, vocational future image, and vocational self-efficacy, on the other hand. A high level of personal resilience or social resilience was associated with the best possible outcome on vocational identity for all student groups. Yet, the strength of the relationships varied depending on individual characteristics. Our general assumption that negatively evaluated characteristics related to a stronger relationship between resilience and vocational identity was identified regarding most individual characteristics of the at-risk students, such as judicial experiences, low motivation, and lack of valuing school outcome. However, exceptions were found too: For SES and self-sufficiency, lower levels coincided with weaker relationships. In some cases, differences in vocational identity between high and low levels of the individual characteristics disappeared for the highly resilient at-risk students. For example, for the highly socially resilient respondents, no differences were found between males and females. This also applied to age, SES, imagination, and sense of belonging at school.

Our conclusion, that at-risk students' individual characteristics can act as moderators, refine existing literature, as previous studies have concentrated on main relationships between characteristics and vocational identity components (e.g. Gushue et al., 2006; Hirschi, 2012b; Noack et al., 2010; Sulimani-Aidan, 2017a). By going one level deeper and examining moderator effects of individual characteristics of at-risk youth, our findings contribute to the theoretical understanding and practical application of the strengths and strains of resilience. As resilience is malleable, it can be a useful construct for adapting educational and social practices (Di Maggio et al., 2016). The newly gained insights enable educational settings to improve and refine intervention

strategies. Vocational schools and rebound programs could implement activities that encourage personal resilience and social resilience to optimize their students' vocational identity, focusing on those subgroups that can be considered as representing largest risks: males, younger subgroups, the at-risk students who are less agreeable, imaginative, emotionally stable, and conscientious, and those who are less intrinsically motivated and show less sense of belonging and valuing school outcome.

Similar patterns between personal and social resilience were found, which contradicts our assumption with respect to gender. The relationship between both personal and social resilience and vocational identity was stronger for males. Resilience among males in our sample was more strongly related to their vocational identity than it was for females. This may point to a more developed personal and social resilience of females in our sample. As expected, age moderated the relationship between resilience and vocational identity. We interpret this as relating to at-risk students' feelings of volition and self-agency (personal resilience) and relying on social networks outside the family (social resilience) as they grow older. As a result, the relationship between resilience and vocational identity is stronger for younger subgroups. The personality traits, judicial experiences, intrinsic motivation, sense of belonging at school, and valuing school outcome, operated as assumed: Lower levels of the characteristic coincided with stronger relationships between resilience and vocational identity.

Results for SES and self-sufficiency require to interpret previous research outcomes carefully. For example, Lindstrom et al. (2007) found that lower SES – compared to higher SES – related to higher vocational identity by motivating stable employment. Based on our findings, we can revise this. Their conclusion only applied to the less resilient at-risk students with low SES in the present study. For the highly resilient participants, no differences were found between those of low and high SES. An explanation for the lower vocational self-efficacy of the less resilient respondents of high SES compared to those of low SES might lie in high expectations the at-risk students experience from home or tough demands they put on themselves.

Though the moderation effect of agreeableness on the relationship between resilience and vocational identity was expressed in the largest percentages of explained total variance (8.50 and 7.23 respectively), two other characteristics with large effect sizes were noticeable and might be more interesting because of their applicability in intervention strategies: intrinsic motivation and valuing school outcome. Their changeability implies a potential choice to either boost the resilience factor or address the concerning characteristic or both. This freedom of choice enlarges opportunities to foster vocational identity. For instance, for the less resilient at-risk students with low scores on valuing school outcome, both stimulating resilience and valuing obtaining a qualification could nourish their vocational identity.

To conclude, though higher resilience always coincided with higher vocational identity, a one-size-fits-all approach will not likely be applicable due to the variety in various characteristics among the at-risk group of students and due to the fact that the relationships between resilience and vocational identity is affected by these various characteristics. Exclusive attention on resilience in favor of vocational identity risks

overlooking differences between student groups in the relationship between resilience and vocational identity.

### **3.4.1 Limitations, strengths and future directions**

This study has shown that including moderator effects of individual differences of at-risk students refines our knowledge about the relationships between resilience and vocational identity. The individual characteristics partly reinforced and partly contradicted our assumption that lower levels of them would be expressed in stronger relationships between resilience and vocational identity. Further, moderation effects were explored only one by one. Effects regarding males might in fact be due to more constraints they experience, and not to their gender in itself. Explanations are awaiting, and future research may shed light on these issues.

Generalization of our results is limited due to the applied method of convenient sampling in a specific urban context. Nonetheless, youth with similar constraints to our sample of at-risk students do exist elsewhere. Replication of this study would thus be interesting to deepen our theoretical insights into effects of individual characteristics as moderators that can be incorporated in strategies to stimulate resilience.

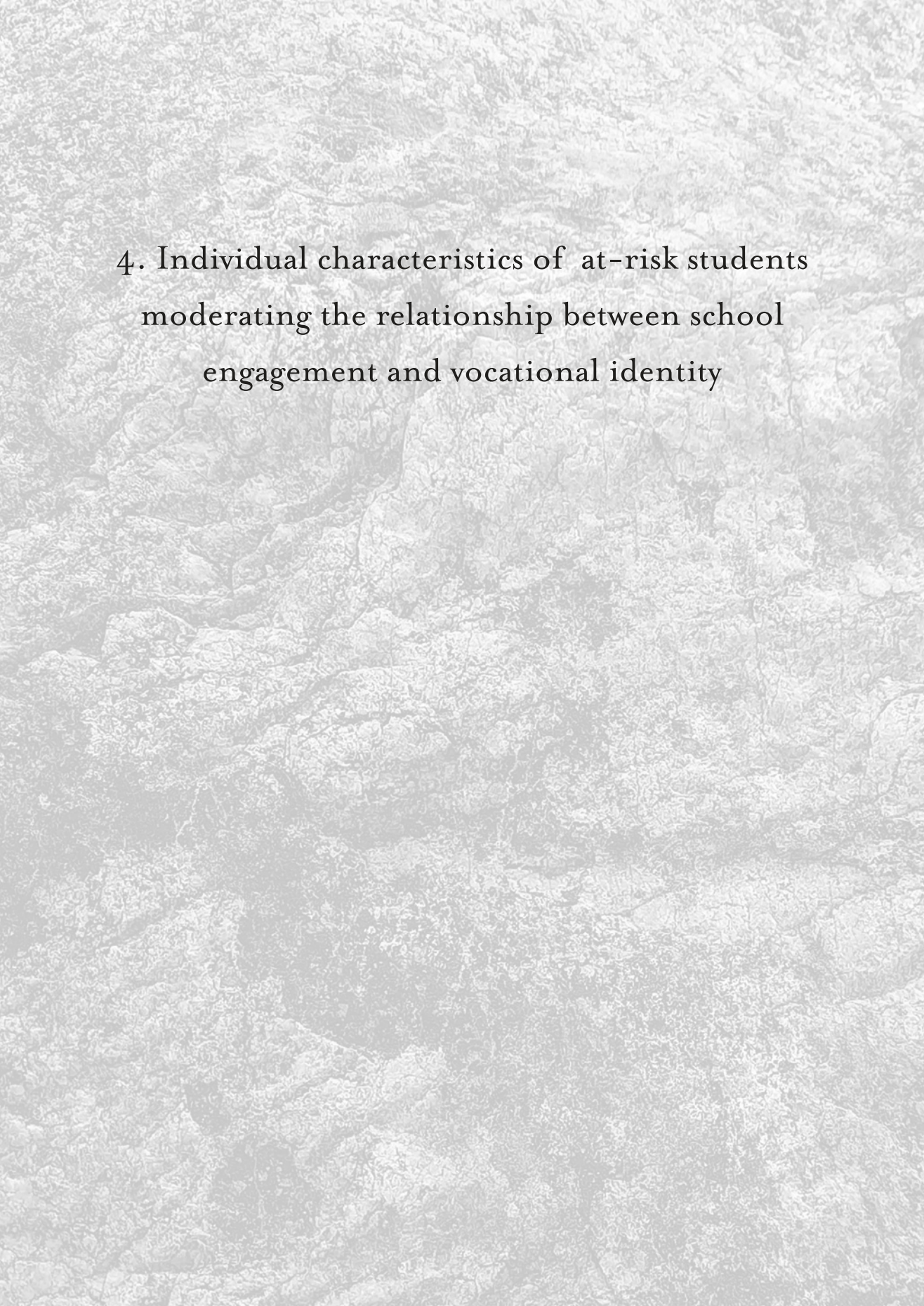
The cross-sectional design of this study put some limits on its interpretations and practical implementation. We do not know how relationships between resilience and vocational identity would evolve over time and to what extent individual characteristics maintain this moderating effect. A longitudinal study could shed light on these questions, by measuring the included variables at multiple time points.

Likewise, no conclusions can be drawn about the effect of stimulating resilience on the vocational identity of the at-risk students. An experimental or quasi-experimental design might provide answers to the issue of what extent an elaborated curriculum and mentoring approach in an experimental condition would stimulate students' personal and social resilience. In the comparison condition, no specific changes would be implemented compared to the previous curriculum. Pretest and posttest measures, as well as fidelity checks, would need to be conducted to reveal possible differences in experimental and control conditions with respect to the at-risk students' vocational identity.

To take account of the moderator effects shown, precise and tailored treatments may effectively adjust to different needs of individual and subgroups of at-risk students. Individual student profiles could help practices to nourish resilience and the vocational identity of individuals in this population, which could, subsequently, help to avoid social disconnection. Hence, we recommend vocational schools and rebound programs to assess the variety of individual characteristics of their at-risk students, for instance, during intake procedures, and to monitor whether applying this knowledge could improve the resilience and vocational identity of these students. In so doing, more opportunities emerge to reconnect at-risk students to education, work, and society.







#### 4. Individual characteristics of at-risk students moderating the relationship between school engagement and vocational identity

### **Abstract<sup>3</sup>**

In any country there is a group of students who are at risk of dropping out of school without a diploma. This is detrimental for the students, because non-graduation enlarges risks of unemployment and societal exclusion. To reduce this risk, specialized curricula aim to prepare at-risk students to their working life by fostering the development of a vocational identity, that is, how they define themselves as a worker. As a prerequisite to establish this goal, at-risk students need to attend school and feel engaged with school. Curricula seek for ways to stimulate emotional school engagement, taking into account the group of at-risk students they serve. This questionnaire study ( $N=996$ ) conducted in the Netherlands explores how various individual characteristics of at-risk students moderate the relationship between emotional school engagement and vocational identity. Results show that stronger school engagement always coincides with a stronger vocational identity. Stimulating emotional school engagement is specifically important for the at-risk students who are young, less agreeable, less motivated and less resilient. In order to foster the vocational identity of their at-risk students, the specialized curricula are recommended to formulate refined strategies to effectively respond to them.

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<sup>3</sup> This chapter has been accepted for publication in adapted form as:

Keijzer, R., van Schooten, E., van der Rijst, R., & Admiraal, W. (in press). Individual characteristics of students in vocational education moderating the relationship between school engagement and vocational identity. *European Journal of Psychology of Education*. doi.10.1007/s10212-021-00580-y

## 4.1 Introduction

Dropping out of school without a diploma indicates a severe risk, as it may narrow down career perspectives for the students under concern. To counteract the dropout risk, specialized curricula in the Netherlands concentrate on career perspectives of at-risk students through internships, job skills practicing, and other job-related tasks at school. These curricula aim to foster students' vocational identity, that is, defining yourself as a worker (Skorikov & Vondracek, 2012). Forming a vocational identity is an essential developmental task for at-risk students who prepare themselves for their career futures (Wong & Kaur, 2018). Yet efforts of the specialized curricula can only be successful if the at-risk students attend school, which is challenging as they are former dropouts or are at risk of doing so, at times due to circumstances that distract students' attention from school. This leads to a permanent threat of dropout. Therefore, it is desirable they feel emotionally engaged with school, expressed by a sense of belonging at school and valuing school education (Finn, 1989). Emotional school engagement is acknowledged to be a prerequisite for school attendance, persistence and graduation (e.g., Archambault et al., 2009; Elffers et al., 2012). This makes emotional school engagement an important intermediate purpose for specialized curricula that aim to stimulate the vocational identity of at-risk students.

At-risk students may encounter several problems of a personal or social nature. They may grow up in broken families or in criminal surroundings without much support for schooling. Young parenthood might form an additional obstacle (Brahm et al., 2014; Sulimani-Aidan, 2017a). These problems distract their attention from school work, may prevent them from attending school and result in high dropout rates. Not attending school further increases their life problems, leading to a downward spiral: no qualifications, insufficient preparation for the labor market, and unemployment. This spiral can lead to poverty, poor health, and involvement in crime (Bäckman & Nilsson, 2016). Also, individual characteristics of at-risk students may relate to different effects of school engagement. For example, Wang and Eccles (2012) showed that valuing school decreases with age. This might be explained by progressively independent behavior in anticipation of graduation and a career of the older students. For younger at-risk students a longer period at school is still awaiting and strong connectedness to school may well help them to finish school. Encouraging school engagement among the older groups, then, is of limited value as they might already emotionally anticipate further education or working life, whereas the younger subgroups benefit from attendance and, subsequently, the opportunity to develop their vocational identity.

Instead of one single intervention to strengthen school engagement among all at-risk students, it may be more effective to customize strategies that suit different subgroups. To inform teachers, mentors or coaches of specialized curricula about the ways they can encourage their students' school engagement in order to foster the development of vocational identity, and in order to improve specialized curricula, insights are needed into the relationship between school engagement and vocational identity and how this relationship varies depending on individual characteristics of at-risk students. Insights

will lead to curricula that are better attuned to at-risk students and optimize their chances to develop a strong vocational identity.

#### **4.1.1 Students at risk of dropout**

In the Netherlands, specialized curricula cater for adolescent and young adult students who do not have a diploma at the so-called entry-level of senior secondary vocational education. This education precedes the basic level, which is mandatory by government to enter the labor market for youth up to 23 years and is advised for youth in between 23–27 years. Without a diploma at basic level social assistance is refused and youth are sent back to school.

Some students attend entry-level training, others attend a preparatory rebound program to rejoin this form of regular education. The goal of both curricula is to continue schooling at a next level or to start working. The latter goal contradicts the government requirement of a diploma at basic level, based on feasibility in practice. Students attending these programs are diverse: Whereas some lack elementary language and math literacy, others meet higher educational demands but need prior graduation at entry-level. Still others who currently do not work or attend school, are encouraged to join either program. For many of them school dropout forms a persistent threat. Participating in one of the programs justifies to indicate them as ‘at-risk students’.

#### **4.1.2 Vocational identity**

During schooling at the specialized programs at-risk students are prepared for jobs in which they will assist employees who work at basic levels. The OECD mentions less-skilled groups to be the first to become unemployed during economic decline and the last to get work again (Carcillo et al., 2015). Also, the nowadays more flexible labor markets put high demands on an employee’s self-agency and volition, competences that are argued to be more challenging for vulnerable groups who have less choices (Blustein, 2013). A thorough preparation to their working lives in which at-risk students can make informed decisions about career steps is important yet difficult to realize.

The essence of this preparation is developing a vocational identity, which refers to how students define themselves in a career context (McArdle et al., 2007; Skorikov & Vondracek, 2012). Vocational identity is a multifaceted construct, laid out in three components: 1) vocational self-image, 2) vocational future image, and 3) vocational self-efficacy, reflecting respectively self-perceived interests and capabilities (Who am I?), ambitions and exploration of possible outcomes (Who do I want to be?), and expected successfulness of working habits and values (Am I able to get there?) (Fugate et al., 2004; Keijzer et al., 2020; Lent, 2013). Developing a vocational identity is a lifelong process (Chávez, 2016) and becomes especially important in the final stage of schooling (Noack et al., 2010; Sulimani-Aidan, 2017a). During this period, vocational schools should support students to figure out what vocation suits them best. Schools thus form important places to develop a vocational identity. Assignments and internships help students to



discover their work interests, practice their work skills, and develop the ability to self-direct their careers (Skorikov & Vondracek, 2012).

Skorikov and Vondracek (2012) report positive outcomes of vocational identity, such as making sound career decisions, being able to structure working life, and coping with career-related stress and challenges. Turner and Lapan (2013) found that for youth vocational identity relates positively to setting realistic expectations about careers and forming promising work attitudes, and Wallace-Broschious, Serafica, and Osipow (1994) showed that a strong vocational identity is helpful for adolescents in exploring and planning their careers. For at-risk adolescents who experience sociopolitical barriers to participate socially, a strong vocational identity has been found to facilitate the school-to-work transition as well as working life in general (Diemer & Blustein, 2006).

Diverse individual characteristics are found to be associated with vocational identity. Studies of Lindstrom et al. (2007) and Chaves et al. (2004) show that lower-class young adults put more emphasis on work to earn money, restricting initial career decision-making and vocational identity development, compared to their upper-class peers who consider work as a means of self-expression and are more likely to explore possible careers. The personality traits extraversion, conscientiousness and imagination show positive relationships with vocational identity whereas neuroticism is found to be related to the explorative aspect of vocational identity, that is, vocational future image (Baay et al., 2014; Hirschi, 2012b). In a study of Luyckx et al. (2006) undergraduate female students with a strong vocational identity report higher levels of emotional stability, conscientiousness, extraversion, imagination and agreeableness compared to those with a less developed vocational identity.

A study of Keijzer et al. (2020) shows associations between vocational identity and aspects of self-sufficiency, consisting of the ability to manage daily life, experiences in the judicial system, such as a community sentence, and satisfaction about addiction (e.g., drugs, alcohol, gaming). Fouad (2007) report that number of arrests predicts unemployment, but that a strong vocational identity compensates for this negative effect. Career adaptability, defined as being ready for and having resources to face vocational tasks, occupational transitions, and unexpected challenges, relates positively both to the motivation of high school students (Pouyaud, Vignoli, Dosnon, & Lallemand, 2012) and to the personal and social resilience reported by nurse students, that is, their ability to cope with adverse events and their perceived support from family, friends, and significant others, respectively (Tian & Fan, 2014).

School engagement also shows associations with vocational identity. Coutinho and Blustein (2014) found that vocational identity protects Cape Verdean high school students with high levels of perceived ethnic discrimination from school disengagement. A study of Wong and Kaur (2018) shows that the exploration of specific occupational choices relates positively to undergraduates' school engagement. In a study of Keijzer et al. (2020) both aspects of emotional school engagement, that is, sense of belonging at school and valuing school, are found to be significantly related to vocational identity. As malleable characteristics, they can be particularly useful in improving curricula (Bakadorova et al., 2020).



### 4.1.3 School engagement

School engagement is the extent to which a student is committed to school and education. Stronger school engagement is related to lower dropout and higher graduation rates (Archambault et al., 2009; Fredricks et al., 2004; Wong & Kaur, 2018). A commonly used categorization distinguishes behavioral, cognitive, and emotional dimensions of school engagement (Fredricks et al., 2004; Wang, Willett, & Eccles, 2011). Behavioral engagement refers to students' participation in learning activities and cognitive engagement concerns their cognitive efforts to learn. Emotional engagement reflects students' affective relatedness to school and the school process, expressed in sense of belonging at school, that is, the feeling that one is part of the school environment and that school plays an important role in daily life, and valuing school, that is, appreciating an education and school-relevant goals, including a qualification (Bakadorova et al., 2020; Finn, 1989). In this study these concepts are abbreviated to sense of belonging and valuing respectively. Students' emotional ties to school and schooling are agreed upon to be essential prerequisites for effort, achievement and persistence (Elffers et al., 2012; Green et al., 2012).

Though Janosz, Archambault, Morizot, and Pagani (2008) found that a majority of pupils and students showed stable and satisfactory levels of school engagement from primary to secondary school and beyond, studies of Motti-Stefanidi and Masten (2013) and Wang and Eccles (2012) show a decline, indicating that students feel less connected to school as they grow older. This decline may in turn precede dropping out of school (Wang et al., 2011). An explanation for this decline might be that students feel increasingly independent of teachers, whereas their relationships with peers is assumed to intensify (McGrath & Van Bergen, 2015). In addition to changes in school engagement related to age and independence, Li and Lerner (2011) and Wang et al. (2011) report lower emotional school engagement for boys compared to girls and for African-American students compared to European-American students. Further, students from lower socioeconomic status generally show less emotional school engagement (Li & Lerner, 2011).

Also, differential effects have been found. Fredricks (2011) reports that consequences of lower emotional school engagement on graduation and employment are even more severe for youth from more disadvantaged backgrounds. This finding exemplifies a moderating effect of the relationship between an individual characteristic (background) and school engagement on outcome goals (graduation and employment). Considering the importance of career preparation for at-risk students it is important to investigate how various individual characteristics affect the relationship between school engagement and vocational identity.

### 4.1.4 Current study

Overlooking the connections between school engagement and vocational identity (Coutinho & Blustein, 2014; Keijzer et al., 2020; Wong & Kaur, 2018) and between

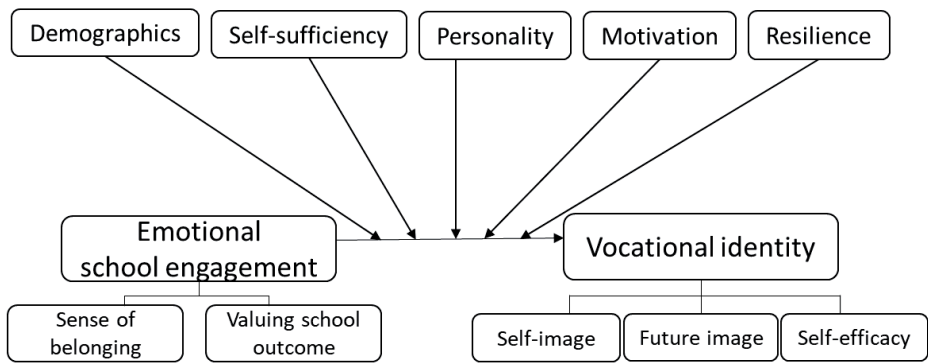
several individual characteristics and vocational identity, emotional school engagement or both concepts, it is interesting to examine moderator effects. These relationships may well be different for different subgroups of at-risk students. Consequently, it may mean that stimulating sense of belonging or valuing in order to foster vocational identity while following a same approach for all at-risk students, implies doing too little for some and too much for others.

For example, students of lower socioeconomic status tend to show weaker feelings of school engagement (Li & Lerner, 2011), exposing them to risks of lower school attendance or even dropout (e.g., Wong & Kaur, 2018), and, as a consequence, of the disability to develop a vocational identity (e.g., Noack et al., 2010). Further, students from lower socioeconomic status are more money-driven with respect to work compared to those of higher socioeconomic status (e.g., Lindstrom et al., 2007). The relationship between school engagement and vocational identity could be weaker for students from low socioeconomic status: Due to the money-driven orientation, feelings of school engagement may have a lower impact on their vocational identity. Students of higher socioeconomic status tend to be more oriented to self-expression compared to those of lower socioeconomic status and stimulating school engagement may well affect their vocational identity. Socioeconomic status acts as the individual characteristic that changes this relationship, implying that the relationship between school engagement and vocational identity is weaker for students of lower socioeconomic status and stronger for those of higher socioeconomic status.

To provide for insights into the relationship between the two aspects of emotional school engagement and the three components of vocational identity, the current study investigates the extent to which individual characteristics of the at-risk students moderate the relationships between sense of belonging and valuing on the one side, and vocational self-image, vocational future image and vocational self-efficacy on the other side. These insights not only extend our knowledge, they may enable the specialized curricula to attune to differences among their at-risk students, an understudied group that may well benefit by customized approaches (Elffers et al., 2012; Gushue & Whitson, 2006). The conceptual model is presented in Figure 4.1, with the individual characteristics as moderators above, the two aspects of emotional school engagement as the independent variables, and the three components of vocational identity as the dependent variables.

We investigate moderator effects of several individual characteristics. First, during the period of school-to-work transition, older at-risk students approaching the transition from school to work, have shown to intensify the forming of a vocational identity (Noack et al., 2010; Sulimani-Aidan, 2017a), while at the same time their emotional school engagement declines as a result of feelings of independence and greater self-sufficiency (Motti-Stefanidi & Masten, 2013; Wang & Eccles, 2012). They anticipate to leave school and enter continuing education or work. We therefore assume that the relationship between school engagement and vocational identity becomes weaker for them; stimulating school engagement is less effective. In contrast, a stronger relationship between school engagement and vocational identity is expected for younger subgroups. It should be noted however, that stable moderate to high levels of school engagement during

high school have been reported too, which may complicate our assumption (Janosz et al., 2008).



*Figure 4.1.* Conceptual model in which individual characteristics moderate the relationship between the two aspects of emotional school engagement and the three components of vocational identity

Concerning gender, males were found to have lower feelings of school engagement compared to females (Li & Lerner, 2011; Wang et al., 2011). Yet specifications as to sense of belonging and valuing are unknown, and relationships between the aspects of emotional school engagement and vocational identity may well be different for males compared to females. It is assumed that stimulating school engagement has a greater impact on this relationship for males.

Further, as outlined in the example above, the relationship between school engagement and vocational identity for youth from lower socioeconomic status is expected to be weaker compared to peers from higher socioeconomic status. More specifically, we assume this effect to be larger for valuing than for sense of belonging as it relates more explicitly to the preferred money-earning function (Chaves et al., 2004). In addition, we expect that the relationship between school engagement and vocational identity will be stronger for the at-risk students with delinquent and less self-sufficient behavior and those who are less satisfied about their addictive behavior; the value of emotional school engagement gets stronger as they encounter more such adversities. Finally, stronger moderator effects are expected for those with less-pronounced personality traits, and those who are less intrinsically and extrinsically motivated, and personally and socially resilient. Other youth, in contrast, are expected to show weaker relationships between emotional school engagement and vocational identity.

The following research question guides this exploratory study: “To what extent do at-risk students’ individual characteristics moderate the relationship between sense of belonging at school and valuing school on the one hand, and vocational identity on the other?”

## 4.2 Method

### 4.2.1 Participants and procedure

A sample of 996 students was recruited from four institutions. These institutions were purposely invited to participate because they are dedicated to improve chances of at-risk youth; they support youth in trying to get their lives back on track, urge them to persevere and complete school, and try to optimize labor market prospects. Most of the at-risk students had not yet graduated at the entry-level of senior secondary vocational education, some of them were not in any training or education, and some were dropouts or former dropouts. Participants were aged between 15 and 27 years ( $N = 983$ ;  $M = 21.7$ ;  $SD = 3.3$ ). Parental consent for students under 18 years was secured. Other background characteristics of participants are reported in Table 4.1.

Table 4.1. *Main background characteristics of participants (N = 996)*

Background variable	Category	Proportion
Gender	Women	.44
Ethnicity of parents	Dutch	.25
	Surinamese or Caribbean <sup>a</sup>	.25
	Other	.50
Ethnicity of participants	Dutch	.70
	Surinamese or Caribbean <sup>a</sup>	.11
	Other	.19
Parental educational level	Secondary school or higher	.50
	Primary school	.08
	No education	.08
	Unknown	.33
Living conditions <sup>b</sup>	Respondent on his/her own	.13
	With child(ren)	.10
	With mother, father, or both	.80
	With sister	.23
Police	Previous contact	.42
	Current contact	.08
Sentences <sup>b</sup>	Community sentence	.21
	Juvenile measures <sup>c</sup>	.13
	Detention	.11
	No sanction	.58

<sup>a</sup> Former Dutch colonies.

<sup>b</sup> Combinations possible.

<sup>c</sup> For youth under 18 years.

We conducted a cross-sectional study. Two out of the four institutions offered senior secondary vocational education at entry-level; all their seven sites were included. The third institution, with three sites, provided a rebound program to prepare former dropouts to rejoin regular education. The fourth institution, with only one site, was a

drop-in helpdesk for young adults, many of whom were disconnected from both school and work. They were commonly referred back to school. All sites were in the metropolitan area of Rotterdam, the Netherlands, and mainly situated in deprived neighborhoods. Data collection took place over a period of five months.

#### 4.2.2 Measures

A self-completion paper and pencil questionnaire was designed. To verify language comprehensibility for the at-risk students, it was piloted among a few target group members who were not included in the final sample. Results and feedback were processed in the final version of the questionnaire.

In addition to the background characteristics (see Table 4.1), seventeen constructs originating from the literature reviewed, were included in the study. Variables, examples of items, and an overview of descriptive statistics are displayed in Table 4.2. Items consisted of statements accompanied by five-point Likert scales, with answers ranging from 1 (totally disagree) to 5 (totally agree). Answers to the self-sufficiency and addiction items were categorized into five emoticons ranging from very dissatisfied to very satisfied, coded 1–5 respectively. Socio-economic status was operationalized by means of four dichotomous items about following the news. Appendix B contains the full questionnaire.

The three components of vocational identity, that is, vocational self-image, vocational future image, and vocational self-efficacy (Fugate et al., 2004), were measured by means of items adopted from the Career and Talent Development Self-Efficacy Scale by Yuen et al. (2010). We used additional sources (de Vos & de Jong, 2011; Flouri & Buchanan, 2002; Jackson et al., 2011; Kuijpers & Meijers, 2008; Kuijpers et al., 2011; Nauta, 2010; Nauta et al., 2002; Restubog et al., 2010), and selected some relevant items to be added.

Items for the two aspects of emotional school engagement, that is, sense of belonging and valuing, were based on studies of Fredricks et al. (2004), Archambault et al. (2009) and Elffers (2012). We used validated instruments for all other constructs, such as the Mini-IPIP Scales for the personality traits (Denissen et al., 2008; Donnellan et al., 2006); the self-sufficiency matrix for self-sufficiency, addiction, and judicial experiences (Fassaert et al., 2014); and for extrinsic and intrinsic motivation (Ryan & Connell, 1989). The items personal and social resilience were based on the subject description of personal competence and social sources in the resilience scale for adolescents (Ungar et al., 2008; von Soest et al., 2009; Windle et al., 2011).

#### 4.2.3 Data analysis

##### 4.2.3.1 Validity and reliability check

We applied confirmatory factor analysis (CFA) and used version 7 of the Mplus program (Muthén & Muthén, 1998–2015) to verify the validity of the measurement of the seventeen constructs (see Table 4.2). Item scores were used as indicators of latent traits.

Table 4.2. Descriptives of variables with example items and reliability of sums

Variable	Example of item	N	Missings	M	SD	Items in scale <sup>a</sup>	Cronbach's $\alpha$	Range rit <sup>s,b</sup>
Vocational self-image	I know what I'm good at	873	123	4.05	.60	7 (1)	.82	.20-.70
Vocational future image	I want to discover what kind of work I can do	896	100	3.54	.81	3 (1)	.64	.40-.52
Vocational self-efficacy	Later on, at my work, I'll stick to the rules	892	104	4.51	.56	7	.92	.54-.84
Sense of belonging	I prefer being somewhere other than at school (R)	893	103	3.50	.84	5 (1)	.81	.50-.74
Valuing	I'm sure that I will finish a training	890	106	4.41	.72	5	.88	.66-.77
SES-following news <sup>c</sup>	I watch the news on TV occasionally	913	83	0.12	.33	4	.70	.35-.65
Extraversion	I talk to a lot of different people at parties	895	101	3.43	.73	4	.62	.29-.47
Agreeableness	I am kind to almost everyone	933	63	4.16	.61	3 (1)	.68	.42-.53
Conscientiousness	I persevere until a task is finished	920	76	3.87	.58	4	.53	.23-.42
Neuroticism	Sometimes I feel happy, sometimes I feel sad	936	60	3.06	1.07	2 (2)	.65	.48-.48
Imagination	I come up with new ideas	908	88	3.61	.64	4	.48	.25-.35
Self-sufficiency	How satisfied are you about what you do during daytime?	925	71	3.68	.79	7 (1)	.84	.43-.74
Addiction	How satisfied are you about the way you deal with drugs?	913	83	4.08	1.11	5	.90	.59-.86
Extrinsic motivation	I try to do well because others want me to	928	68	2.81	.94	3 (1)	.68	.32-.60
Intrinsic motivation	I try to do well because I feel that's important	944	52	4.28	.67	3 (1)	.77	.55-.65
Personal resilience	I am sure I can take care of myself	831	165	4.07	.60	10	.90	.50-.76
Social resilience	I ask for help if I need to	881	115	4.02	.74	8 (1)	.87	.51-.71

<sup>a</sup> Final numbers; in parenthesis number of items per scale removed according to confirmative factor analysis (see section 4.2.3.1).

<sup>b</sup> Item rest correlation.

<sup>c</sup> Measured by four dichotomous items, summed and divided by four, to act as one variable.



As an estimation procedure we used Weighted Least Squares with Means and Variances (WLSMV) because item scores are categorical. Model fit was evaluated by means of several fit indices: the Chi-square statistic ( $\chi^2$ ), the Comparative Fit Index (CFI), the Tucker Lewis Index (TLI), and the Root Mean Square Error of Approximation (RMSEA). The Chi-square statistic is sensitive to sample size and it tests exact fit, which is a very strict criterion for the social sciences (MacCallum et al., 1996). The additional fit indices compensate for these restrictions. Generally, a model fit is considered acceptable when CFI and TLI are larger than .90 and good when above .95. RMSEA is considered to indicate close fit when values are below .05, fair fit when values are between .05 and .08, and mediocre fit for values between .08 and .10; values above .10 indicate poor fit (Bentler, 1992; Hu & Bentler, 1999).

Because initial model fit was unsatisfactory with respect to CFI and TLI ( $N = 995$ ;  $\chi^2 = 13421.919$ ,  $df = 4049$ ,  $p < .001$ , CFI = .867, TLI = .860, and RMSEA = .048 (90% Confidence Interval .047 - .049)), out of the 94 original items, ten items of nine variables were removed based on low item rest correlation, large modification indices, residual variances, or non-significant factor loadings (see Table 4.2). Fit indices of the final model indicated fair fit according to CFI and TLI and close fit according to RMSEA ( $N = 996$ ;  $\chi^2 = 9328.021$ ,  $df = 3266$ ,  $p < .001$ , CFI = .909, TLI = .903, and RMSEA = .043 (90% confidence interval .042 - .044)). All remaining items showed significant loadings on the construct they were intended to measure. These results supported the validity of the measurement of the seventeen constructs.

For each of the constructs in the CFA, mean scale scores were computed over the items remaining in the final model. To estimate the reliability of these sums, Cronbach's alpha was calculated for each sum (see Table 4.2). Alphas for two constructs were insufficient (conscientiousness and imagination), warning for careful interpretation of findings. All other alphas, ranging from .616 to .922, indicated reasonable to good reliability (Bryman, 2012).

#### 4.2.3.2 Main effects and moderator analyses

As a preliminary step, we examined main effects of all individual characteristics on the three components of vocational identity by means of regression analyses. Subsequently, we only checked for moderator effects for the characteristics that showed a significant main effect on one of the three components, because variables showing non-significant main effects are less likely to significantly moderate the relationship between emotional school engagement and vocational identity.

Because the data are nested within institutions and sites, we checked whether regression analyses needed to be conducted multilevel. In these multilevel checks, we either included sense of belonging or valuing in the regression model. Variance levels were added when they significantly improved model fit, which implies that the intra-class correlation is significantly larger than zero. Significance of fit improvement was calculated by means of the difference in  $-2 \times \log\text{likelihood}$  of the nested models. This difference has a Chi-square distribution with one degree of freedom; because variances

cannot be negative, the p-value of this Chi-square must be divided by two to obtain the real p-value (Hox, 2010).

Moderator effects were also estimated by means of regression analyses. A moderator effect implies that an individual characteristic of the at-risk students significantly influences the relationship between emotional school engagement and vocational identity; the relationship is stronger or weaker depending on the score on the individual student characteristic that is used as moderator. Moderator effects were analyzed by comparing two models: a) a model with one of the three vocational identity variables as dependent variable and one of the two emotional school engagement variables and the individual characteristic as independent variables; and b) the same model but with an added interaction term between the two independent variables. The interaction term represents the moderator effect. Significance of the moderator effect was calculated by computing the difference in deviance scores between both nested models, one with and one without the interaction term. This difference has a Chi-square distribution with one degree of freedom. The significance of regression coefficients was also calculated by means of the Wald-Z statistic or critical ratio. When the difference in deviance between two models appeared significant, effect-sizes were computed in terms of the proportion of variance explained by the moderator effect at each included variance level (i.e., the moderator effect on vocational identity by either sense of belonging or valuing and an individual characteristic). All continuous variables were grand mean centered before they were entered in the regression analyses.

### 4.3 Results

The regression coefficients and percentages of explained variance of significant main effects of the included characteristics are presented in Appendix G. For all significant main effects, moderator effects were estimated for both sense of belonging and valuing. This led to analyzing 104 estimations of moderator effects of which 47 showed to be significant: 18 with sense of belonging and 29 with valuing. Most effect sizes of the moderator effects were small. To avoid interpreting negligible moderator effects and to correct for capitalization on chance, we applied a threshold of one percent explained total variance for inclusion in the findings section. This resulted in including 26 moderator effects as presented in Tables 4.3 and 4.4 (see Sections 4.3.1 and 4.3.2 respectively); the 21 moderator effects that did not pass the threshold were ignored, reducing capitalization on chance. Given the possible number of variables affecting vocational identity, we considered one percent to be a meaningful effect. Appendix J gives a condensed overview of all significant results of the moderator analyses.

For vocational future image the intra class correlations for sites and institutions were non-significant, so these regression analyses were conducted unilevel. For vocational self-image and vocational self-efficacy, the intra class correlations for institutions were non-significant, but site level showed a significant intra class correlation for both. For

these two components of vocational identity, therefore, moderator effects of both sense of belonging and valuing were analyzed multilevel.

### 4.3.1 Sense of belonging

For all at-risk students results showed that the stronger their sense of belonging the stronger the vocational identity, but the strength of the positive relationship varied due to individual characteristics (see Table 4.3). The relationship between sense of belonging and *vocational self-image* showed to be stronger for the at-risk students in our sample with non-Dutch parents (father and mother), stronger for the less extravert participants, and for those who reported lower levels of neuroticism. The relationship between sense of belonging and *vocational future image* appeared to be stronger for those who did not live with a sister in comparison with those who did.

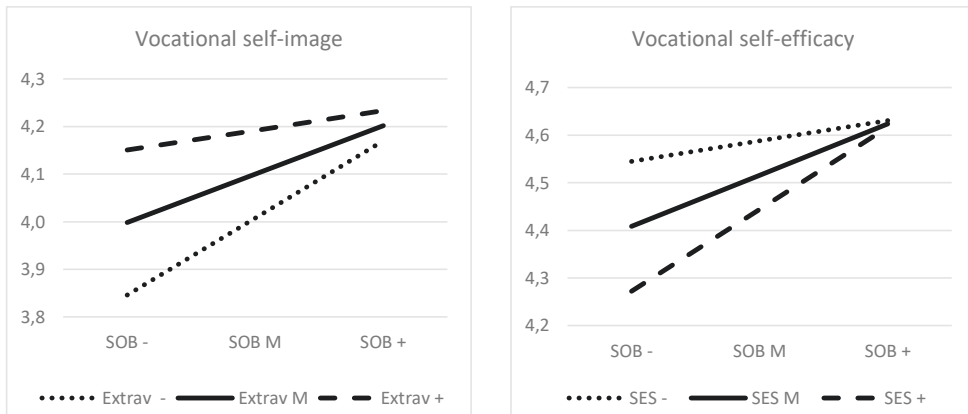
Table 4.3. *Moderator effects (percentages of explained total variance) on vocational self-image, vocational future image and vocational self-efficacy of sense of belonging moderated by individual characteristics (effect sizes  $\geq 1.00\%$ )*

Individual characteristic	Sense of belonging		
	Vocational self-image	Vocational future image	Vocational self-efficacy
Dutch ethnicity father	1.23		
Dutch ethnicity mother	1.22		
Living sister		1.07	
SES-Following news			1.40
Extraversion	1.16		
Agreeableness			1.26
Neuroticism	1.14		
Personal resilience			2.64

The relationship between sense of belonging and *vocational self-efficacy* was found to be stronger for the less agreeable and less personally resilient at-risk students and for those from higher socioeconomic status. For participants from lower socioeconomic status, the level of sense of belonging hardly affected their perceived vocational self-efficacy.

Figure 4.2 illustrates two examples of moderator effects of sense of belonging. For these plots we used mean values, and the mean values plus and minus one standard deviation as average, high, and low values respectively. In the left-hand picture a stronger relationship between sense of belonging and vocational self-image is shown for the less extravert compared to the more extravert respondents. Intensity of sense of belonging hardly affected the vocational self-image perception among the most extravert respondents, whereas it does for their less extravert peers. Also, extraversion indicated vocational self-image for at-risk students with low sense of belonging, but less so for those

with high sense of belonging. The right-hand picture shows that for the respondents with a strong sense of belonging no differences were found in vocational self-efficacy among students from low and from high socioeconomic status. But for the at-risk students from high socioeconomic status a stronger relationship between sense of belonging and vocational self-efficacy was found. Hence, socioeconomic status was stronger related to vocational self-efficacy for at-risk students with low sense of belonging than for those with high sense of belonging.



**Figure 4.2.** Relationships between sense of belonging and vocational self-image moderated by extraversion (left-hand side) and between sense of belonging and vocational self-efficacy moderated by socioeconomic status (right-hand side) of at-risk students

*Notes.* SOB = Sense of belonging. Extrav = Extraversion. SES = Socioeconomic status. - = 1 SD below mean. M = mean. + = 1 SD above mean.

### 4.3.2 Valuing

As with sense of belonging, results showed that for all at-risk students the stronger they value school the stronger their vocational identity, and that the strength of this relationship varied with varying scores of individual characteristics (see Table 4.4). The positive relationship between valuing and *vocational self-image* appeared to be stronger for the younger participants, the more self-sufficient, the less agreeable, the less neurotic, and the less intrinsically motivated at-risk students in our sample. The relationship between valuing and *vocational self-efficacy* was found to be stronger for younger subgroups, those of higher socioeconomic status, and for the less extravert, agreeable, conscientious, and curious participants. This relationship also showed to be stronger for the participants who reported to be less satisfied about their addictive behavior, and those who had been sentenced. Stronger relationships were found between valuing and *vocational self-efficacy* for the less intrinsically motivated, and the less personally and socially resilient participants. Finally, the effect of sense of belonging on the relationship

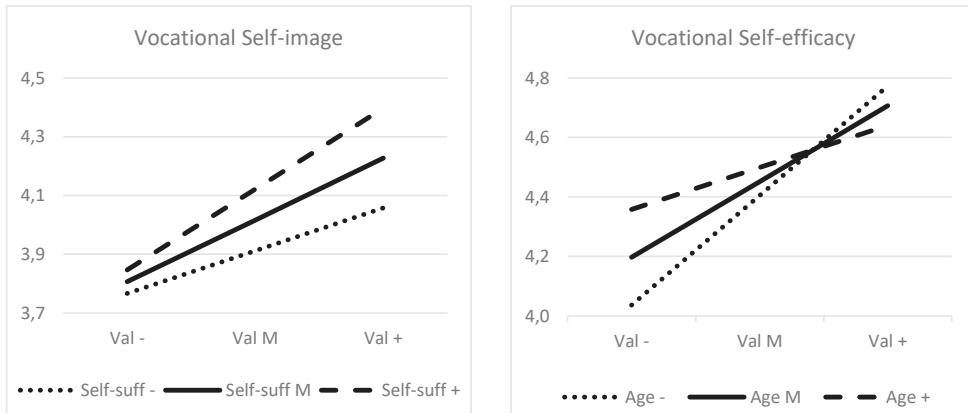
between valuing and vocational self-efficacy was stronger for the participants with a lower sense of belonging.

Table 4.4. *Moderator effects (percentages of explained total variance) on vocational self-image and vocational self-efficacy of valuing moderated by individual characteristics (effect sizes  $\geq 1.00\%$ )*

Individual characteristic	Valuing <sup>a</sup>	
	Vocational self-image	Vocational self-efficacy
Age	1.90	4.65
SES-Following news		4.23
Extraversion		1.18
Agreeableness	1.05	4.00
Conscientiousness		1.89
Imagination		1.56
Neuroticism	2.79	
Self-sufficiency	1.57	
Addiction		2.31
Community sentence		1.15
Detention		1.92
Intrinsic motivation	1.86	1.85
Personal resilience		4.21
Social resilience		2.37
Sense of belonging		1.15

<sup>a</sup> A column for vocational future image is absent, since no significant moderator effects of valuing on vocational future image were found.

Figure 4.3 illustrates two examples of moderator effects concerning valuing. The left-hand picture shows a stronger relationship between valuing and vocational self-image for the more self-sufficient respondents compared to their less self-sufficient peers. Further, self-sufficiency strongly indicated vocational self-image for at-risk students with high valuing but not for those with low valuing. In the right-hand picture a stronger relationship between valuing and vocational self-efficacy is shown for the younger respondents compared to their older peers. Of the participants who reported *above* mean scores of valuing, the younger group showed the highest vocational self-efficacy whereas out of the participants with *below* mean scores of valuing, the older respondents showed the highest vocational self-efficacy.



**Figure 4.3.** Relationships between valuing and vocational self-image moderated by self-sufficiency (left-hand side) and between valuing and vocational self-efficacy moderated by age (right-hand side) of at-risk students

*Notes.* VAL = Valuing. Self-suff = Self-sufficiency. - = 1 SD below mean. M = mean. + = 1 SD above mean.

#### 4.4 Discussion

The current study examined the extent to which individual characteristics of at-risk students moderate the relationship between two aspects of emotional school engagement (i.e., sense of belonging at school and valuing school) on the one hand, and three components of vocational identity (i.e., vocational self-image, vocational future image, and vocational self-efficacy) on the other. For all the at-risk students in our sample it appeared that the stronger the emotional school engagement the stronger their vocational identity. The strength of this relationship varied with different scores of individual characteristics. These insights into moderator effects of individual characteristics of at-risk students extended our knowledge about the relationship between emotional school engagement and vocational identity. Results confirm our assumption that main effects are imprecise as a basis for interventions in specialized programs because the effects do not apply evenly to all at-risk students.

Though most moderator effects were in line with our assumptions, some interesting nuances became visible. In addition to their main effects on vocational identity (e.g., Luyckx et al., 2006), personality traits appeared to act as moderators to change the relationship between emotional school engagement and vocational identity. For the less extravert, agreeable, conscientious, neurotic and openminded at-risk students encouraging emotional school engagement is expected to contribute to their vocational identity. However, neuroticism more strongly predicted vocational self-image for at-risk students with high valuing and high sense of belonging but not for those who expressed low levels of emotional school engagement, whereas the moderator effects of the other personality traits became most apparent for the participants with below mean levels of emotional school engagement.

Age of the participants appeared to moderate the relationships between valuing and both vocational self-image and vocational self-efficacy as assumed: Older subgroups may be hindered, whereas younger subgroups may benefit substantially from a high level of valuing. This difference in age groups may be attributed to future expectations. Older groups may have lost confidence in their chance of gaining a qualification, or may have already experienced more sociopolitical barriers during their lives, holding them back from having high expectations (Diemer & Blustein, 2006). This finding may be explained by an increasing alienation of older students from school, as mentioned by Motti-Stefanidi and Masten (2013), though we think a moderator effect with sense of belonging, and not with valuing, would have been more plausible in that case. Surprisingly, we did not find such a moderator effect.

Concerning the ethnicity of parents, levels of sense of belonging of the participants with Dutch parents were irrelevant as to their vocational self-image. For the participants with parents from non-Dutch backgrounds, higher scores for sense of belonging were related to a higher level of vocational self-image, but lower levels of sense of belonging were not related to vocational self-image. This finding is to some degree in line with the study of Motti-Stefanidi and Masten (2013), who reported greater student disengagement for students of first generation immigrants. However, most of the participants in our study were born in the Netherlands (see Table 4.1), and belonged to second or third generations of immigrants. The result on vocational self-image may be explained by the relative importance for students of non-Dutch ethnic backgrounds to experience feelings of belonging. More efforts may be needed for them to experience feelings of inclusiveness than for participants stemming from Dutch origin.

As assumed, at-risk students from higher socioeconomic status were found to show stronger relationships between emotional school engagement and vocational self-efficacy compared to their peers from lower socioeconomic status. Family expectations may have played a role in this finding, as families from low socioeconomic status set little value on schooling and more on stable employment (Lindstrom et al., 2007). Effects became most apparent for those with weak levels of emotional school engagement. Further, the moderator effect of socioeconomic status was indeed larger for valuing compared to sense of belonging, indicating more interest in gaining a qualification than feeling at home at school.

#### **4.4.1 Limitations and future directions**

As this study was conducted in the Netherlands with specific groups of at-risk students within specified educational settings, replication studies in other contexts and countries may add meaningful insights. Special attention is recommended with regard to age ranges, gender, regular and rebound school curricula, and contexts (education system, diverse neighborhoods).

Insights from this self-administered questionnaire study could be extended by means of a follow-up including multiple informants, such as coaches and parents. Also, follow-up studies could concentrate on qualitative aspects as to interpret findings,



preferably among the at-risk students and relevant others. For instance, we do not know to what extent the at-risk students in our sample had encountered barriers connected to their societal positions prior to the study. They may have suffered negative experiences during apprenticeships, or they may have failed in application procedures for a part-time job. A qualitative approach could reveal motives and expectations, could help to interpret findings and may contribute to understanding how and why experiences affect the relationship between emotional school engagement and vocational identity.

Finally, longitudinal research might reveal patterns of moderator effects over time and how this may affect vocational identity. Differences between age groups found in our study point to the possibility of such patterns. Such differences may well exist with respect to other individual characteristics too, such as intrinsic motivation or resilience. A deeper understanding of the developmental processes their at-risk students go through, could help educational and social practitioners to refine their efforts to further the vocational identity of vulnerable youth.

#### **4.4.2 Practical implications**

Encouraging sense of belonging or valuing may substantially contribute to the vocational identity of the younger at-risk students, and those who are less agreeable, neurotic, personally and socially resilient, and those who are from higher socioeconomic status. Additional effects on vocational identity may be expected from stimulating sense of belonging for the at-risk students of non-Dutch ethnic backgrounds, and from stimulating valuing for the more self-sufficient at-risk students, those with judicial experiences and those who are less intrinsically motivated.

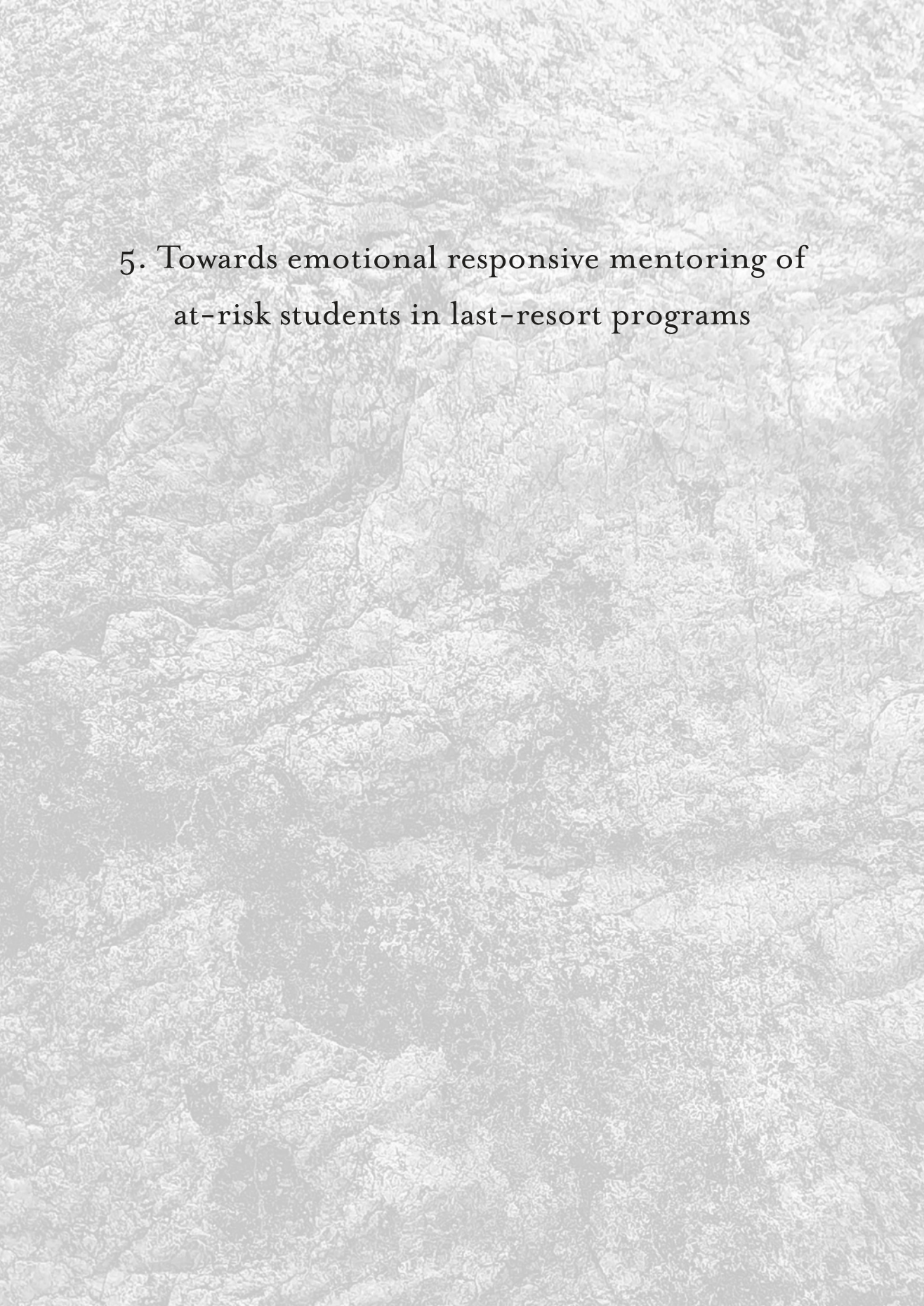
Generally, moderator effects are more pronounced for the at-risk students who show lower than average levels of a characteristic compared to their peers with a higher than average level. Stimulating such a characteristics, as long as it is malleable, seems to be most relevant for the at-risk students lagging behind on this quality. Yet, effects vary for different groups of at-risk students, so, in order to obtain best results in vocational identity, professionals should customize their actions. For example, the vocational identity of older and more agreeable at-risk students and those of low socioeconomic status might hardly be fostered by encouraging valuing. For them, focusing on other characteristics they possess and that are malleable, such as self-sufficiency and social resilience, seems a more appropriate intervention. Hence, overlooking these nuances would mean missing opportunities to adjust schooling and guidance to meet personal needs and to achieve best results in fostering at-risk students' vocational identity.

#### **4.4.3 Concluding remarks**

Various individual characteristics have shown to moderate the relationship between emotional school engagement and vocational identity. Findings indicate that refined approaches are needed when studying vocational identity among at-risk students in order to arrive at justified and applicable interpretations. Including moderator effects as a way

to examine and address the complexity and diversity of at-risk students' individuality and real lives has been shown to be highly relevant and to provide for detailed and pragmatic insights.

As emotional school engagement has a strong relationship with vocational identity, schools and rebound programs are recommended to incorporate effective strategies to stimulate vocational identity by using insights about the moderator effects of a series of individual characteristics of at-risk students that alter this relationship. A one-size-fits-all approach does not work, and refined adjustments to suit different at-risk students would substantially increase the chance of fostering their vocational identity.



## 5. Towards emotional responsive mentoring of at-risk students in last-resort programs

### **Abstract<sup>4</sup>**

Mentors guide students in their challenges at school and in life. At-risk students in last-resort programs who are at a high risk of leaving school unqualified are especially in need of highly competent and adaptive mentors. This study therefore aims to identify mentor qualities as perceived by at-risk students and their mentors that meet students' needs and mentors' capabilities. Face-to-face individual semi-structured interviews are conducted with 31 students and 24 mentors of two specialized programs in the Netherlands. Sensitizing concepts are used to identify themes. The mentor qualities that at-risk students and their mentors report are classified in three different clusters. Mentor tasks consist of guiding and motivating students and providing them with tangible methods of support. Relationships between mentor and student are based on levels of respect, equality, and bonding. Characteristics of mentors relate to empathy, care, and trust. Findings implicate that mentors have to walk a tightrope between keeping professional distance and being sensitive, suggesting constant attention to their professional development is needed. Emotional responsiveness deserves further exploration as it appears to be an underlying concept of being a good mentor.

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<sup>4</sup> This chapter has been submitted in adapted form as:

Keijzer, R., van der Rijst, R., van Schooten, E., & Admiraal, W. (submitted). Towards emotional responsive mentoring of at-risk students in last-resort programs.

## 5.1 Introduction

In many educational settings, teachers are assigned an additional task as mentor and they can be particularly meaningful in supporting and guiding students. Compared to mentors in regular educational programs, mentoring can be assumed to be especially important in specialized curricula that offer a final chance to graduate. These last-resort programs target former dropouts or students who are at risk of dropping out. The challenges at school and in the lives of those at-risk students are strongly entangled and mentoring is imperative to their well-being and academic achievement.

Yet at-risk students generally may put little effort into schooling, as many of them are burdened by disadvantageous life conditions. Sulimani-Aidan (2017a) found several barriers that deterred vulnerable young adults from attending school. They lacked environmental support for learning and schooling and had low self-efficacy. The key, therefore, for at-risk students in particular, is to attend school and stay motivated for learning. Supporting at-risk students at school and in life is vital to improve their chances of graduating and of subsequently finding appropriate apprenticeships and succeeding in their future jobs (Organisation for Economic Cooperation and Development (OECD), 2017). Without formal qualifications, the ungraduated face a serious risk of lasting unemployment and social exclusion (Bäckman & Nilsson, 2016; CBS [Statistics Netherlands], 2020a).

Mentoring in the context of last-resort programs is a challenge as mentors need to adapt their mentoring to the specific needs of at-risk students in a context in which school dropout is a real threat. To do so adequately, mentors need to have appropriate qualities to adaptively guide and support at-risk students. The current study aims to contribute to insights into the qualities mentors need to have to mentor at-risk students in last-resort programs.

### 5.1.1 Mentors and mentoring

We reviewed literature on mentors and mentoring in broad contexts of education, community, and business. We identified three clusters of mentor qualities: mentor tasks, that is, actions and behaviors of a mentor; relationships between mentor and student, that is, how mentor and student interact; and mentor characteristics, that is, traits that mentors possess.

#### 5.1.1.1 *Mentor tasks*

A main task of mentors is to provide guidance and to enhance motivation for learning, which involves encouraging school attendance and achievement, constructive feedback on assignments, setting high expectations of what their students can achieve, and helping their students to believe in their dreams and develop career ambitions (Weiss et al., 2019). Vaclavik et al. (2017) conducted a study on the quality of youth-adult mentoring relationships in the setting of an out-of-school-time (OST) program that links young people's academic learning and personal passions. In five focus groups, 26



adolescents reflected on mentor tasks. They specifically valued guidance from adults who attempt to gradually convince them to have confidence in their own abilities. Sulimani-Aidan (2017b) showed that students perceive their mentors to be supportive when they follow a non-judgmental guiding approach. Encouragement and constructive criticism have also been found to be of value for mentees in professional contexts, as reported in a review of over 300 studies in contexts of education, medicine, and business by Ehrich et al. (2004).

Another identified task is emotional support, conceptualized by Vaclavik et al. (2017) as tangible help in the event of personal problems. The authors found that perceived emotional support from mentors contributes to positive outcomes for youth, such as a sense of empowerment. Other studies have interpreted emotional support as a mentor characteristic (e.g., Spencer, 2006; Suldo et al., 2009). Two more tasks have been identified. Vaclavik et al. (2017) found that adolescents appreciate mentors who provide information or advice concerning education or work, and who connect them to persons who can support them in exploring possibilities for internships or work, resulting in the expansion of young people's formal or informal networks. This informational support is found to be an important supportive task of mentors (Suldo et al., 2009). A final task of mentors is instrumental or skill-based support with, for example, academic tasks. Suldo et al. (2009) showed that academic support, such as being responsive to students' understanding of academic material and encouraging them to ask questions in classroom environments, relates strongly to students' subjective well-being. Instrumental support also applies to professional settings. Ehrich et al. (2004) showed that help with selecting strategies to improve mentees' performance and to broaden subject knowledge are among the mentor tasks that mentees most appreciate.

#### *5.1.1.2 Relationships between mentor and student*

Spencer (2006) examined mentoring relationships in a community-based mentoring program, which matched disadvantaged youth with volunteer adults. In 24 duo interviews, mentors and students reported that a successful mentoring relationship can be characterized as mutual, authentic, collaborative, and one of companionship. Students evaluated the relationship positively when the mentor's attitude shifted from helping needy persons to supporting students to reach their full potential and when mentors engaged in a genuine way with their students recognizing their individuality. Spencer (2006) concludes that a successful lasting mentoring relationship can be established when adolescents feel that their mentor treats them as equals. Several of these aspects of a good mentor-student relationship are similar to those found in the OST program examined by Vaclavik et al. (2017), in which mutual respect created a fruitful context for interacting on an equal footing. Students highly appreciated mentors who expressed respect, acted as a role model, and cultivated youth voice. The latter means encouraging students to think autonomously and speak out, resulting in students' feelings of empowerment and control over their future.

According to Rhodes (2002), good mentoring starts with a strong interpersonal connection between mentor and mentee. Without an emotional bond a mentor cannot



serve as a role model for possible futures, and positive changes in social skills and well-being of mentees are not likely to occur. Liang, Spencer, Brogan, and Corral (2008) found that older students attach more value to an equal relationship with their mentors compared to younger peers. The older students think it is important that they keep a balance between being connected to their mentor and autonomous decision-making. They also reported that they wish to be taken seriously. In his review of best mentoring practices, Miller (2010) concludes that mentors should not act like a parent or show authoritarian behavior and that they should focus instead on creating a bond and a sense of equality with their mentee.

DuBois, Holloway, Valentine, and Cooper (2002) conducted a meta-analysis of 73 evaluative studies of mentoring programs and they infer that frequent interaction, longevity of the relationship as well as emotional closeness between mentor and student are strongly linked to beneficial outcomes. This vitality of intense relationships between mentors and disconnected youth is also reported by Heinrich and Holzer (2011). Finally, connecting and conveying friendship are also found to be important aspects of mentoring relationships (Ehrich et al., 2004; Liang et al., 2008; Vaclavik et al., 2017).

### *5.1.1.3 Mentor characteristics*

Adolescents in the OST program (Vaclavik et al., 2017) were found to appreciate genuine interest on the part of mentors engaging with them, which facilitates good mentor-mentee relationships. This also applies to far-reaching involvement of mentors that exceeds adolescents' expectations, indicated as "going above and beyond", including, for example, writing a letter of recommendation or attending an out-of-school event such as a music rehearsal. This shows a mentor's interest in more areas of life than just a student's academic performance, which was also valued by students studied by Suldo et al. (2009).

In a mixed-method study on forms of social support, Suldo et al. (2009) discerned three aspects of emotional support: showing empathy, providing care, and building trust, as necessary characteristics that enable mentors to adequately perform their tasks and to build sound relationships with their students. Like instrumental support, emotional support was found to be independently and highly related to students' well-being. Focus group discussions with students revealed that they most appreciate those teachers who are interested in them personally and create a positive and honest atmosphere (Suldo et al., 2009). The effects of showing empathy and providing care were also reflected in the empathic relationship between mentor and student as examined by Spencer (2006). Students appreciated being shown empathy as the understanding of another person's frame of reference.

According to Rhodes (2002), if mentors show empathy and if both mentor and mentee experience mutual trust, this can improve mentees' feelings of well-being and increase their sources of support and encouragement in and around their community. Similar conclusions were formulated by Liang et al. (2008) who found that in informal mentoring contexts participants value mentors who show trust and fidelity, interpreting trust as being serious and honest with each other and relying on mentors to keep

participants' secrets confidential. Yu et al. (2019) found that youth who hesitate to attach to significant non-parental adults specifically benefit from mentors they trust and who adapt to their needs by listening and caring.

### 5.1.2 Current study

Several mentoring tasks, aspects of relationships and characteristics of mentors can be identified in the literature on mentors and mentoring. Yet few studies have focused on mentoring in last-resort programs that offer at-risk students a final chance to graduate. Dropout from last-resort programs forms a real threat to students' future life chances and a good mentoring relationship might help to keep them on track. Given this precarious situation, it is important to examine whether at-risk students place different demands on mentoring from students in mainstream education. For this group of students, in particular, it is important to get a better understanding of how they perceive and value mentoring in order to align their values and needs with the views and capabilities of mentors. Furthermore, perspectives of mentors themselves have received limited scholarly attention. Mentors' views and capabilities need to be taken into account to avoid a one-sided emphasis on how mentoring is evaluated. A mismatch of perceptions between students and mentors can be counterproductive and may frustrate mentoring practices.

In the current study, we investigated how at-risk students and their mentors of two specialized last-resort programs in the Netherlands valued mentor tasks, the relationships between the students and their mentors, and mentor characteristics. Three research questions guided this study: (a) How do students and mentors evaluate tasks and methods of support offered by mentors? (b) How do students and mentors value aspects of their relationship? (c) How do students and mentors evaluate characteristics of mentors?

## 5.2 Method

### 5.2.1 Participants and context

Purposive sampling at two specialized programs situated in the urban area of Rotterdam, the Netherlands, resulted in 31 students and 24 mentors who participated voluntarily in this study (see Table 5.1). Students were invited by the education staff or their mentor. We aimed to recruit a variety of respondents with regard to gender and age. No non-responses were reported. Parental consent for students under 18 years was secured prior to data collection. Informed consent for the interviews was also obtained from all students and mentors at the time of the interview.

Participants were recruited from a rebound program (RP; these were all former dropouts) and the two largest schools for senior secondary vocational education (SSVE) in the area (with many former dropouts). Other students were at risk of dropout mainly because of stressful personal circumstances. Many of the students were from deprived urban neighborhoods characterized by poverty, unemployment, lack of social cohesion

and insecurity. These difficulties contributed to a permanent threat of student dropout. Mentors' efforts therefore combined psycho-social counseling and academic mentoring. If the at-risk students of the programs needed specialist help, mentors might refer students to appropriate professionals.

Table 5.1. *Student and mentor participants' program, gender, and age*

		SSVE <sup>a</sup>		RP <sup>b</sup>		Total
		Males	Females	Males	Females	
Students	16-17 yrs.	4	5	2	2	13
	18-20 yrs.	4	2	2	1	9
	21-28 yrs.	4	3	1	1	9
	<i>Total</i>	<i>12</i>	<i>10</i>	<i>5</i>	<i>4</i>	<i>31</i>
Mentors	28-39 yrs.	1	3	3	2	9
	40-49 yrs.	2	1	3	1	7
	50-64 yrs.	2	4	1	1	8
	<i>Total</i>	<i>5</i>	<i>8</i>	<i>7</i>	<i>4</i>	<i>24</i>
Overall		<i>17</i>	<i>18</i>	<i>12</i>	<i>8</i>	<i>55</i>

<sup>a</sup> School for senior secondary vocational education

<sup>b</sup> Rebound program

The RP and SSVE programs combine elements of (a) school-based programs emphasizing dropout prevention and strategies to promote access to higher educational levels, and out-of-school-time or community-based programs focusing on taking up or rejoining education, training, or employment; and (b) formal mentoring with a teacher who is assigned the additional task of mentor and informal mentoring between an adolescent and a supportive adult, e.g., a neighbor or sports instructor. Despite recognition of these elements, both programs in our study were school-based programs with formal mentors. The duration of both RP and SSVE programs is about one year, but can be adjusted to individual students. Students need to finish this specialized program before choosing between continuing education at the next level or starting work.

The RP is a special, non-mainstream educational trajectory to which students can be referred by a municipal youth help-desk. It is specifically directed at former dropouts and is intended to prepare students to rejoin regular education, such as SSVE. Support is provided in order to enable school attendance, such as assistance with housing and coping with addiction or debts. The program starts with the basics of attending school: coming in on time, bringing their materials, and getting used again to the normal routines at school. Then the focus shifts to curriculum content and assignments.

SSVE is part of the regular Dutch education system. It offers school-based curricula at entry-level training, the lowest level of senior secondary vocational education. Entry-level education consists to a large extent of practical lessons and part-time internships. SSVE is obliged to accept all students under 23 years, with or without a diploma. As a consequence, the student population is heterogeneous with respect to abilities and background. Students lack elementary language or math skills, are former dropouts, or are recently arrived immigrants who need to acquire a basic level of Dutch

language proficiency. The curriculum and student population of the SSVE largely correspond to those of the RP.

### **5.2.2 Data collection**

The first author and research assistants performed semi-structured individual interviews. The research assistants were informed about the background and content of the curricula. Interviews with students lasted on average 20 minutes and took place in a quiet room, during or after class. Mentors were interviewed after working hours and the conversations took about 40 minutes each. All interviews were audio-taped and transcribed verbatim. A topic list acted as a guide, to enable the interviewees to elaborate on issues that were important to them. Topics for the student interviews concerned evaluation of the school atmosphere, the program itself and the mentor. Topics for the mentors were evaluation of the program goals and implementation. Open questions were used to stimulate participants to talk freely, to spontaneously mention any subjects or perspectives relevant to them and to avoid directing participants to predetermined subjects, so that information and themes emerged from the participants themselves (Creswell, 2009).

### **5.2.3 Data analyses**

We derived several sensitizing concepts from the literature on mentors and mentoring within the three clusters of mentor tasks, relationships between mentor and student, and mentor characteristics. This can be understood as a preliminary theory-driven analytical approach (Krippendorff, 2019). Qualitative content analyses were performed in three main steps that followed a data-driven approach, that is, all data were fully analyzed and explored in-depth to clarify subthemes emerging from the data (Krippendorff, 2019). These analyses were meant to elaborate on the three clusters from the data to produce insights into the meanings of these clusters within the context of last-resort programs.

In the first step, we selected and labeled fragments that fitted the sensitizing concepts. The units of analysis expressed a single thought or feeling and ranged from a few words to an entire paragraph. The second step consisted of axial coding and, by means of close reading, fragments with similar content were clustered into categories. When a fragment related to more than one category, it was assigned to the best fitting one. All fragments were interpreted and coded in an iterative process and definitions of categories were adapted along the way. Dialogical reliability was established by discussing minor issues with the first and second author, and major issues with all authors. In the third step, all transcriptions were coded again according to the revised descriptions and definitions of the categories, and all fragments were re-labeled based on the final coding system. The final description included six categories of mentor tasks, five of relationships between mentor and student, and three of mentor characteristics.

After the data analyses, an audit was conducted to assess their quality. A procedure described by Akkerman, Admiraal, Brekelmans, and Oost (2008) was followed to determine the visibility, comprehensibility, and acceptability of our coding. The audit was conducted by an external auditor who had not been involved in any part of the study based on a draft of the paper. The audit report (available on request) showed satisfactory results and the auditor did not formulate any recommendations to adjust the data analyses.

### 5.3 Results

Various categories within the three clusters were distinguished. The first cluster, mentor tasks, refers to acting, performing, conducting, or what a mentor *does*. This cluster involves ways of providing support. The second cluster, relationships between mentor and student, refers to the “inherently interpersonal endeavor” (DuBois et al., 2002, p. 189), and expresses the way of *interacting*. The third cluster, mentor characteristics, relates to perceived characteristics that mentors preferably possess to perform and interact. This cluster is about what a mentor *is* or *has*. These three clusters of mentoring qualities represent acting, interacting and having, respectively.

#### 5.3.1 Mentor tasks

Categories of mentor tasks were recognized: guidance tasks, approach to guidance, motivation, and different forms of support of students. Table 5.2 contains the six categories and their definitions.

Table 5.2. *Mentor tasks*

		What mentor does or should do
ACTING	Guidance tasks	Mentor guides student in activities, performance, and development
	Approach in guidance	Pedagogical approach during mentors' guidance and ways of performing
	Motivation	Mentor stimulates student, shows a positive attitude, continues to believe in student
	Emotional support	Mentor provides tangible help in case of personal problems
	Academic support	Mentor helps student with learning and with academic tasks
	Informational support	Mentor supports student with information or advice concerning choices in education or work

*Guidance tasks* were almost exclusively mentioned by mentors. Important tasks they perceived were to help students to engage or re-engage with the education system and to keep attending school. Mentors also mentioned that they have to enable students to grow and help them to develop a realistic future perspective. Some mentors valued the combination of guiding students on both academic and non-academic issues. The

students stressed a task-oriented element of guiding: The mentor mediates in conflicts that a student may have with a teacher or another student, and makes sure that students are prepared for school.

Two quotations below illustrate mentor tasks in guidance. The first example illustrates the role of a mentor in engaging students to attend school and the second example is about helping students to set realistic goals.

They have been home for a while. Most of the time and energy goes into ensuring that someone can rejoin the system of going back to school, keeping to agreements. (mentor 4)

So, creating that realistic perspective. The pace at which they get things done, they have an unrealistic view of the timeline. Earning money fast, getting your diploma fast, now, now, now. They do not know how to invest in themselves. And bear in mind, they have to start at the bottom, in fact, they have to start far below. To open doors to themselves. (mentor 17)

Aspects of the *approach in guidance* were also mainly reported by mentors. They perceived it as necessary to align their approach to individual needs and to have an understanding of the student's life issues. This approach includes working step-by-step, allowing students to make mistakes, and staying positive. This step-by-step approach is illustrated by the following quotation.

You cannot get them out of the lifestyle of years in a few weeks. Especially not by taking too big steps, that is a pitfall. I wanted to do that in the beginning, but it doesn't work. (mentor 21)

However, according to mentors, they have to restrict their efforts, especially in cases where students do not seem to make an effort themselves. The following quotation expresses seeking a balance between mentors' efforts and subsequent activity of students.

I say this is my offer and the student takes it or doesn't. If someone doesn't want to, then I also let go. Some people have to hit that bottom to (make a mental) switch. (mentor 22)

Mentors tried to *motivate* students for school by expressing their confidence that the students can perform well, emphasizing all kinds of successes, such as completing an assignment and showing up on time for an internship, and showing genuine interest in students' preferences when, for example, they were more motivated for work than for school. The mentors considered it important that students were motivated for either work or school and their efforts to support students' motivation was also strongly appreciated by their students. This appreciation was formulated by a student:



I especially think the way teachers can deal with the students. Even if you opted out of it completely, you can still get back into the school system. I think it is great that teachers can motivate the students. (student 28)

*Emotional support* in the strict sense of tangible help with personal problems was hardly mentioned by mentors or students. Mentors provided *academic support* to respond to the students' academic abilities. Students varied in their evaluation of this academic help. Some were very satisfied because of, for example, clear instructions, and others were very dissatisfied, when, for example, they felt that they were left to their own devices. A student expressed a negative opinion about academic support in the following quotation.

The school doesn't really help. You have to do everything yourself. You have the pen, the pencil and the eraser and the teacher only gives you the paper. (student 2)

Students generally evaluated the *informational support* positively. For example, in conversations about continuing education or work, students reported that mentors noticed their personal preferences. The following quotation illustrates a student's evaluation of informational support from their mentor.

A mentor also gave me a tip to do the Logistics track]. [...] Then I started thinking and googling, visited open days and I found Logistics to be more fun, so I think that's good of the teachers. They are really involved with the student. (student 16)

### 5.3.2 Relationships between mentor and student

Five categories were distinguished with respect to the relationships between mentor and student (see Table 5.3).

Table 5.3. *Relationships between mentor and student*

		How relationship between mentor and student is or should be
INTERACTING	Respect & Equality	Student feels he/she is being taken seriously; interaction is on an equal footing
	Authority	Authentic mentor role legitimates appealing to and exercising authority
	Autonomy	Mentor encourages student's independent decision-making and taking responsibility
	Contact	Student feels mentor is (frequently) accessible and available
	Personal bonding	Mentor and student express the quality of interpersonal connection

The first three categories (respect, authority and autonomy) imply that the mentor takes the student seriously and interacts on an equal footing, while at the same time maintaining his authoritative role as a mentor. The other categories were labeled contact and personal bonding.

Some mentors described showing their *respect* for students as interacting with students on an equal footing. Students reported experiencing respect when their mentor treated them as an adult. In contrast, they experienced a lack of respect when they felt that their mentor did not care about their opinion. The following quotation illustrates a lack of respect according to a student.

As a student you are only told that you will do the Trade track next year and nothing else. Nothing is discussed with you. (student 1)

According to mentors, keeping a professional distance from students is necessary to maintain their *authority*. They want to be by their students' side but not to become their friend, as expressed by a mentor in the following quotation.

I am seen as a nice and funny coach, but they know what to expect from me. Laugh and cry, but there is also work to be done. Students know the limit. (mentor 19)

When students reported about authority, they were especially negative about the overfamiliar behavior of some mentors. Both overfamiliar and authoritarian behavior of mentors thwarted students' *respect* for them. Furthermore, students perceived *autonomy* provided by the mentor as an indicator of *respect* and equality. Some mentors felt the need to encourage a student's independence. A student expressed the link between respect and authority in the following quotation.

The tip I want to give is that the teacher must stick to his own principles and not try to run with young people so that young people will like them. The student is not a teacher's friend. The teacher must maintain some form of authority or they [the students] will walk all over you. (student 29)

Most mentors perceived *contact* as an important aspect of a good mentoring relationship and mentioned that they were permanently available in order to avoid losing their students. Mentors usually had daily intermediate conversations in addition to scheduled mentoring meetings. The students appreciated extensive mentor availability and frequency of contact.

If there is no contact, then there is no opening to achieve anything. I think we are very good at that. Having time, having your own coach, being allowed to make mistakes, sitting down one-on-one, easily accessible. With contact you can make steps together. (mentor 23)

Mentors valued *personal bonding* since individual attention is crucial to enable students' development. They thought students should feel welcome and noticed. Students evaluated the bond with their mentor positively. For some of them, the bond acquired a personal touch. Yet mentors reported that they intended to remain professional. A student expressed the meaning of personal bonding as follows:

As a teacher you are a teacher and of course you should help someone if someone has problems, but my mentor discusses it in-depth. She is not only a mentor, but also a supervisor, sister, mother to me. (student 18)

### 5.3.3 Mentor characteristics

Three characteristics of mentors distinguished were empathy, genuine interest, and trust (see Table 5.4).

Table 5.4. *Mentor characteristics*

		What a mentor is or should be, or has or should have
HAVING	Empathy & Affinity	Mentor 'gets' student', empathizes and sympathizes with student and target group
	Genuine Interest & Care	Mentor is committed, cares about student, and wants to be meaningful
	Trust	Student can trust the (confidentiality of the) mentor

In the interviews, the mentors reported a need to feel involved with their students. These statements were labeled as *empathy*. They mentioned that, as a mentor, they are supposed to have *affinity* and to sympathize with at-risk students. Some mentors added that this can be challenging –though energizing as well– because of the diversity of the target group.

If you behave like a mentor who tries to understand their mindset, you can be the connection between learning and growing up. (mentor 16)

Students identified empathy as a core characteristic of mentors and they reported both positive and negative experiences, as illustrated in the quotations below.

It is a school that aims to help you, they take you into account, if anything they try to help you. It is a school that is really focused on your living environment, your living conditions and who you really are. That is good thing. (student 15)

They may need to put younger teachers in front of the class. They understand us better. They were brought up in a different world. They were all brought up in 1960. [...] They don't understand young people. (student 2)

Mentors expressed *interest and care* for their students, by being committed and willing to be meaningful and take action. A mentor expressed a need for this interest as follows:

The people who work here are very committed to the students, don't just give classes from 9 to 5 [...], otherwise you are not going to make it with these students. (mentor 2)

Students mentioned that some mentors go beyond what they expected by, for example, making a house call. This was valued by most students who addressed this point. The following quotation illustrates the extensive commitment of a mentor.

If you miss something, she will text or call you immediately. She does not let the grass grow under your feet. If you have to catch up on something or if you have missed something, she will call you. (student 17)

Mentors mentioned showing *trust* as an important mentor characteristic. In their opinion, trust requires a non-judgmental attitude in which the mentor accepts the student. The mentor quoted below much appreciated a student's trust.

The best thing is if you feel as a teacher and as a person that students like you, accept you. Pour their heart out and trust you. (mentor 10)

Students also reported openness and trust as important mentor characteristics. Some students discussed all kinds of personal issues with their mentor and appreciated the mentor as an outlet, trusting that their mentor would keep the information confidential. Other students expressed some hesitation about discussing personal or home problems with their mentor, as they wished to keep some privacy. The balance between trust and privacy is illustrated in the following quotation.

My mentor is just fine. He has been in the business for years and knows what he is doing. [...] I talked to him this morning, because I had a few things. [...] I discuss almost everything with my mentor. Also private things, but I prefer not to talk to my mentor about some things because they are very personal. (student 5)

## 5.4 Discussion

This study aimed to identify mentor qualities as perceived by at-risk students and their mentors that meet students' needs and mentors' capabilities. Three main aspects of mentoring were identified from literature: mentor tasks, relationships between mentor and student, and mentor characteristics. Perceptions of students and mentors were related to these three main aspects. The student evaluations of mentoring might reveal

specific needs that differed from students in mainstream education. To avoid a one-sided view of mentoring, mentors' perceptions were also included. Discrepancies between students' and mentors' perceptions of mentoring may frustrate effective mentoring practices. Similarities and discrepancies between students' and mentors' perspectives will therefore now be discussed.

Mentoring tasks and approach to student guidance were mentioned less often by students than mentors. This may mean students take guidance for granted, not reflecting on it explicitly, or they may attach less value to it. According to mentors, important mentor tasks in guidance were to re-engage their students into the system and help them develop realistic future perspectives. Their approaches concentrated on aligning their guidance to individual needs and students' life issues, restricting their own efforts in correspondence with those of students. Both at-risk students and mentors underlined the important mentors' task to motivate students for school. Students experienced and highly valued motivating mentor approaches. Students appreciated mentors who supported them with information or advice. Some students felt that support with studying was lacking as it was not always addressed adequately. The diversity of the group of at-risk students, especially with respect to their academic development, may explain their different needs for academic support. The student population varied from participants who formerly attended schools for special educational needs to students who were actually capable of meeting academic standards but who still had to graduate at entry-level training due to a history of non-attendance.

Both groups expressed experiencing respect in their relationships where students were taken seriously by their mentors and they interacted on an equal footing. Furthermore, both students and mentors concluded that mentors must have authority without becoming authoritarian. Mentors should meanwhile have respect for students' autonomy in decision-making. Some students warned against overfamiliar behavior on the part of mentors as it could undermine students' respect. Frequent and close interaction was appreciated by students and mentors, although mentors also emphasized the need for professional distance.

Mentors expressed the view that a good mentor characteristic was to have deliberately chosen to work with last chance students. According to many mentors, it is hard to persevere in this context without such affinity. Students generally indicated that mentors showed empathy and a genuine care for their well-being. Both mentors and students considered trust an important characteristic and valued openness.

Based on this comparison between students' and mentors' perspectives on mentor qualities, we conclude that mentoring at-risk students is like tightrope walking, balancing between keeping a professional distance and being sensitive. This balance requires close relationships between mentors and students. At-risk students want to be noticed and respected. The mentor should genuinely care about the student, be available, and respect a student's autonomy and privacy. At the same time, students want mentors to maintain their authority without becoming authoritarian, referring to professional role-taking. That mentor role also includes individual academic support. Mentors need to be willing to customize their mentoring approach to specific needs of their students and to help

students develop realistic future perspectives. Mentors should notice students' individual needs and capabilities and be prepared to search for ways to do justice to them. In so doing, and in contrast to students, their focus generally retains a professional character.

The question that arises then is how close should mentors get? Or how distant should they be? How do they balance personal and professional attention, the mentor's authority versus interaction on an equal footing? It is in this space of tension that mentors have to seek the most appropriate mentoring strategies and find out which elements of their mentoring repertoire best suit the individual at-risk student. This requires, first and foremost, empathic mentors who continually seek to attune pedagogically to the individual student. Meanwhile mentors should bear in mind that it may be counterproductive to cultivate personal bonding as a primary goal and that the focus of their relationship should be directed at goal-oriented tasks (DuBois, Portillo, Rhodes, Silverthorn, & Valentine, 2011). Based on the results and the discussion, we can now state that mentoring at-risk students implies a permanent delicate balancing act, a sensitive and demanding venture.

Although the at-risk students in our population were permanently confronted with a variety of personal problems, our findings revealed that they had little need for tangible emotional support. The term 'emotional support' was defined in our study to mean help with personal problems, interpreted as a task (Vaclavik et al., 2017). Emotional support has also been defined in more general terms, including "[...] perceptions of trust and love, as well as communications of empathy and care" (Suldo et al., 2009, p. 68). Our results did not find need for emotional support in the form of tangible help, like informational or academic support, but, instead, they pointed to a prerequisite underlying characteristic needed to establish a sound relationship with students and to perform mentoring tasks.

To make a clear distinction between emotional support as an underlying characteristic and emotional support in the sense of tangible help, we propose to replace 'emotional support' as defined in general terms with the concept of *emotional responsiveness*. In the context of mentoring at-risk students, we define mentors' emotional responsiveness as empathizing and sympathizing with the target group students, being sincerely committed, wishing to be meaningful and responding actively, being open to students, willing to attune to their needs, and to reflect on their own behavior. This definition comprises trust, empathy and genuine care, indicating the concept's overarching character. Being emotionally responsive to at-risk students then forms the core of a mentor's necessary repertoire. It is the comprehensive concept that defines being a good mentor. Emotional responsiveness does not mean that mentors uncritically fulfill their student's wishes. It may ask for in-depth conversations with the student, consulting colleagues, thinking and rethinking, resulting in a well-considered tailor-made mentoring approach.

### **5.4.1 Further research**

Insights from this study could be extended by investigating to what extent the observed mentor qualities prove relevant in other specialized programs for at-risk students. Though each program will have its own emphases in targeting at-risk groups and its own curriculum, it would be interesting to identify generic qualities of mentors that should be applied in last-resort programs directed at at-risk students. These investigations could be of a qualitative nature or they could follow a quantitative or mixed methods approach. Such studies could contribute to the generation of hypotheses about outcomes of mentoring at-risk students in terms of their academic achievement and well-being. Subsequently, results could be used to test such hypotheses in quantitative studies.

Additional insights into the significance of mentoring in last-resort programs could be gained from follow-up interviews with graduates of last-resort programs. Graduates could be invited to reflect on the mentoring they received and provide valuable insights based on their experiences within the programs and their experiences with continuing education, job, or other activities. Their reflections could provide clues to further improve the mentoring practices in last-resort programs.

Further research in last-resort programs is recommended on the proposed core quality for mentors of being emotionally responsive. Insights are needed into the value of the construct to understand and interpret mentoring in these contexts, and into how to break down emotional responsiveness into its components: empathy, care and trust. Subsequent application of these insights into practice may prove useful in determining to what extent mentors meet requirements and need further training.

### **5.4.2 Strengths and limitations**

A substantial at-risk student group has been taken into account in this qualitative study. They were given a voice to communicate their opinions and feelings on mentor qualities and the voices of mentors themselves were also interpreted. In so doing, insights were gained into students' and mentors' perceptions of mentor qualities and into the extent to which preferences and nuances were aligned. These insights have added to knowledge about mentoring qualities in the context of last-resort programs that offer at-risk students a final chance to graduate.

Bias may have occurred, as invitation of participants by mentors and staff was restricted to students who attended school.

### **5.4.3 Implications for mentoring practice**

Core conclusions of our study are the need for mentors to (a) be emotionally responsive; (b) align their approach to the individual at-risk student; and (c) meanwhile keep a professional distance. Alignment presupposes that mentors know their individual students. Time should therefore be scheduled from the beginning of the program to



enable mentors to really get to know their students and their needs, wishes, personal preferences and problems.

Mentors themselves reported that they need to sympathize with their students. Empathy for the target group could be assessed during application procedures to ascertain a mentor's fitness instead of assigning the mentor's role by default. Assigning the role of mentor to teachers who lack empathy in the context of last-resort programs might be ineffective and might have negative consequences for both mentors' job satisfaction and students' well-being and achievement.

Mentors may be quite capable of both counseling and educating. Initial teacher education, however, is mostly focused on subject matter. Though mentoring is a frequently and naturally occurring intervention in education, not all teachers have the required mentor qualities. Given the importance and intricacy of mentoring at-risk students, mentors should be trained during their teacher education, guided during induction programs, and supported during their careers. It is essential to develop a sense of emotional responsiveness. This relates to the gentle mentor balance between keeping distance and being sensitive. Students want personal and emotional closeness while valuing the more distant authority role of mentors. Mentors wish to show empathy and concern, and to provide support while maintaining a professional distance. This delicate balance should be one of the core themes to be discussed during initial pedagogical training and continuous teacher professional development.

#### **5.4.4 Concluding remarks**

Mentoring implies acting in the pedagogical space in which mentors make their informed decisions. In the context of last-resort programs, mentoring at-risk students undeniably means walking a tightrope: show empathy but do not be overfamiliar; be trustful but keep your distance; build a personal bond but do not become friends; provide support but do not become authoritarian; and sit by your student's side but keep your mentor's role. Understandably, mentors regard mentoring at-risk students as energizing though challenging.

## 6. General conclusions

## 6.1 Introduction

This dissertation has focused on the vocational identity of at-risk youth who are in the transition phase from school to work and preparing themselves to participate in society as independent adults. The youth who participated in our study either had visited the municipal youth information helpdesk that referred most of them (back) to school or attended one of two specialized programs, in a mainstream or non-mainstream educational context. The first specialized program was a non-mainstream rebound program to get young people back into education; these students were all former dropouts. The second specialized program offered entry-level training at a regular school for senior secondary vocational education, characterized by a diverse student population with respect to educational abilities and background. In both programs, many of these youth faced personal and social obstacles that may distract their attention from school. The permanent threat of dropout and the risk of leaving school without graduating qualifies this group as at-risk youth.

Leaving school unqualified may in turn lead to unemployment and social exclusion. A strong vocational identity may help to overcome these risks, since it makes at-risk youth explicitly aware of occupational capabilities and choices in working life which can guide them throughout their career. Developing a strong vocational identity is particularly valuable for at-risk youth to improve their societal chances. The included institutions were purposefully invited as their mission is to create and improve chances in the lives and future of at-risk youth and because their professionals are dedicated to supporting these at-risk youth in preparing for a career.

The aim of this research was to provide theoretical knowledge and practical insights that contribute to fostering at-risk youth' vocational identity. This was done by focusing on individual characteristics relating to their vocational identity and by exploring mentor qualities needed in one-to-one mentoring, according to students and mentors. In contrast to subject teaching, one-to-one mentoring is a setting in which vocational identity is typically addressed.

In this Chapter the main findings are summarized, then the theoretical contribution of this thesis to knowledge about the vocational identity of at-risk youth and their mentoring is discussed. Implications for practice in curricula and mentoring are explored. Finally, methodological observations with suggestions for future research are presented.

## 6.2 Main findings

The project consisted of four studies, the main findings of which are summarized in Table 6.1.

Table 6.1. *Overview of main findings in the four studies of this thesis*

Chapter	Topic	Variables and data collection	Main findings
2	Relationships between individual characteristics and vocational identity	<ul style="list-style-type: none"> <li>• Vocational identity measured by vocational self-image, vocational future image, and vocational self-efficacy</li> <li>• Individual characteristics measured by demographic data, personality traits, self-sufficiency, motivation, resilience, and emotional school engagement</li> <li>• Questionnaire study</li> <li>• <i>N</i> = 996</li> </ul>	<ul style="list-style-type: none"> <li>• All individual characteristics studied related to at least one of the three components of vocational identity</li> <li>• Total proportions of explained variance were 40.3% for vocational self-image, 13.1% for vocational future image and 39.4% for vocational self-efficacy</li> <li>• Cluster of personality traits showed largest effects (in terms of additional proportions of explained variance) for all three components of vocational identity</li> <li>• Motivation and resilience showed second largest effects (additional = after correction for former clusters of characteristics)</li> <li>• Smaller additional effects for valuing school outcome</li> </ul>
3	Specifying relationships between resilience and vocational identity	<ul style="list-style-type: none"> <li>• Resilience measured by personal resilience and social resilience</li> <li>• Questionnaire study</li> <li>• <i>N</i> = 996</li> </ul>	<ul style="list-style-type: none"> <li>• The higher personal resilience or social resilience, the higher the vocational identity component, regardless of the moderating individual characteristic</li> <li>• Stronger relationships for males and younger subgroups, and for those with experiences in the judicial system</li> <li>• Stronger relationships in cases of lower levels of personality characteristics, motivation, and valuing school outcome</li> <li>• Stronger relationships in cases of higher levels of socioeconomic status and self-sufficiency</li> <li>• Most moderating effects of individual characteristics on vocational self-efficacy</li> <li>• Effects for personal and for social resilience about equal in number</li> </ul>
4	Specifying relationships between emotional school engagement and vocational identity	<ul style="list-style-type: none"> <li>• Emotional school engagement measured by sense of belonging at school and valuing school outcome</li> <li>• Questionnaire</li> <li>• <i>N</i> = 996</li> </ul>	<ul style="list-style-type: none"> <li>• The stronger sense of belonging at school or valuing school outcome the stronger the component of vocational identity, regardless of the moderating individual characteristic</li> <li>• Stronger relationships for younger subgroups and those who had been sentenced</li> </ul>

(Table 6.1 continues on next page)



Chapter	Topic	Variables and data collection	Main findings
5	Mentor qualities	<ul style="list-style-type: none"> <li>• Perceptions of mentoring of at-risk students and mentors</li> <li>• Individual interviews</li> <li>• <math>N_{students} = 31</math></li> <li>• <math>N_{mentors} = 24</math></li> </ul>	<ul style="list-style-type: none"> <li>• Stronger relationships for the more self-sufficient subgroups, those of higher socioeconomic status, those who felt less satisfied about addictive behavior, and those with lower levels of other characteristics</li> <li>• Very few effects for vocational future image, most for vocational self-efficacy</li> <li>• More effects for valuing school outcome compared to sense of belonging at school</li> <li>• Three clusters of mentor qualities with several categories in each: mentors' tasks, relationships between mentors and students, and mentors' characteristics</li> <li>• Guidance, motivation and support as mentors' tasks</li> <li>• Respect, equality, autonomy, and bonding as relationships</li> <li>• Empathy, genuine care, and trust as mentors' characteristics</li> <li>• Tension between emotional proximity and professional distance</li> <li>• Emotional responsiveness as a new comprehensive concept of being a good mentor</li> </ul>

In Chapter 2 a conceptual model was presented with three components of vocational identity, that is, vocational self-image, vocational future image, and vocational self-efficacy, and five clusters of individual characteristics, consisting of demographics, personality, self-sufficiency, self-competence and school engagement. The five clusters were assumed to represent the order of potential influence on vocational identity. The characteristics of the first cluster, demographic data, exert their influence from birth, whereas the influence of characteristics of emotional school engagement, the fifth cluster, only begins at the moment preschoolers start schooling. In addition, the conceptual model indicated the degree of malleability of the clustered characteristics, that is the extent to which they can be modified. Malleability of characteristics provides practitioners with cues to improve educational and mentoring practices directed at fostering vocational identity and to better adjust activities, teaching and learning environments to the needs of at-risk youth. The model expresses that the least proximal clusters, that is, those of self-competence and school engagement, contain the most malleable characteristics. Relationships between the individual characteristics and the three components of vocational identity were examined, as was the extent to which clusters of characteristics explained additional proportions of explained variance. The total proportion of explained variance of scores in vocational future image was 13%; this was about 40% for

both vocational self-image and vocational self-efficacy. The cluster of personality traits explained the largest proportion of variance in all three components of vocational identity, followed by the malleable characteristics motivation, resilience, and valuing school outcome. Results for vocational future image differed in some respects from those for the other two components of vocational identity, which will be discussed in section 6.3.2.

Subsequently, to explore how exactly the malleable characteristics related to vocational identity, individual characteristics of at-risk youth were examined that moderated the relationships between respectively resilience (Chapter 3) and emotional school engagement (Chapter 4), on the one hand, and the three components of vocational identity, on the other hand. Both studies found moderator effects for various individual characteristics. More specifically, they showed that, from an overall perspective, more resilience as well as more school engagement related to a stronger vocational identity, regardless of the moderating individual characteristic. Detailed inspections showed more nuanced differences between the moderating effects of the various characteristics.

With respect to resilience (Chapter 3), personal and social resilience were distinguished. Results showed that many characteristics significantly changed the strength of the relationships between personal and social resilience, on the one hand, and vocational self-efficacy, on the other hand. With regard to vocational self-image and vocational future image only a few moderator effects were found. Interventions to strengthen resilience with the aim of fostering vocational identity seemed most valuable for males, younger subgroups, and those at-risk youth who reported being less motivated and experienced a lower sense of belonging and a lower valuing of school. The results with respect to personal and social resilience were quite similar.

With respect to emotional school engagement (Chapter 4), two aspects were distinguished: sense of belonging at school and valuing school outcome. Results showed some individual characteristics changed the strength of the relationship between sense of belonging at school and the three components of vocational identity, with only one significant moderator effect for vocational future image. More effects were found for valuing school outcome compared to sense of belonging at school, though none were found for vocational future image. Most moderator effects were found for vocational self-efficacy. In attempts to strengthen vocational identity, stimulating emotional school engagement was specifically important for the young, less agreeable, less motivated, and less resilient subgroups of at-risk youth. The results of Chapters 3 and 4 contributed to the aim to gain insights into individual differences among at-risk youth with which personalized approaches to foster their vocational identity can be effectuated in program implementation, in teaching, and in mentoring.

Finally, results presented in Chapter 5 showed what mentor tasks, what elements of relationships between mentor and student, and what mentor characteristics were perceived as most valuable by mentors and at-risk students in one-to-one mentoring. Some important tensions became apparent to which mentors have to relate, requiring a mentor to be a jack of all trades. Mentoring at-risk youth requires balancing emotional

closeness and professional distance and calls for emotional responsiveness. Results and insights from this study could help to improve one-to-one mentoring, resulting in more effective addressing of non-academic subjects, of which vocational identity should be the primary focus in the programs under study.

## 6.3 Theoretical considerations

### 6.3.1 Accounting for the heterogeneity of at-risk youth

The central aim of the study was to gain knowledge and insights about at-risk youth' vocational identity, following three perspectives: (a) at-risk youth' individual characteristics that were related to vocational identity, (b) at-risk youth' individual characteristics that moderated the relationships between either resilience or school engagement, on the one hand, and vocational identity, on the other hand, and (c) perceptions of at-risk students and their mentors about mentoring. At-risk youth' heterogeneity was reflected in these three perspectives. First, relationships between the individual characteristics and the three components of vocational identity appeared to be numerous and differed in strength (main effects). Second, relationships between resilience and school engagement, on the one hand, and the three components of vocational identity, on the other hand, varied substantially for different individual at-risk youth, depending on various individual characteristics (moderator effects). Third, a great variety of perceptions and preferences of at-risk students and mentors about mentoring was found.

Results did not apply evenly to the group of at-risk youth as a whole, but, instead, suggest careful attention needs to be paid to individuals. Individual adaptation and customization are key in effective interventions to foster the vocational identity of at-risk youth and in optimal mentoring. In Chapter 3 and Chapter 4 effects of individual characteristics as moderator variables that could change the strength of relationships between either resilience or school engagement and vocational identity were fully explored. Many moderator effects were found and applying them in specialized programs may be beneficial to the vocational identity of subgroups of at-risk youth.

The heterogeneity of at-risk youth is illustrated on the basis of three examples. First, as reported in Chapter 2, a significant main effect of extrinsic motivation was only found for vocational future image but did not appear for vocational self-image and vocational self-efficacy. In contrast, for gender, no main effect was found for vocational future image but it did significantly relate to the other two components of vocational identity.

The second example concerns the moderator effect of self-sufficiency. A main effect was found between self-sufficiency and vocational self-image. More detailed relationships were explored between vocational identity and school engagement, that is, sense of belonging at school and valuing school outcome, and to what extent these relationships were moderated by individual characteristics, such as self-sufficiency



(Chapter 4). A stronger relationship between valuing and vocational self-image was found for the more self-sufficient participants compared to their less self-sufficient peers. It was concluded that for the *highly* self-sufficient at-risk youth a promising strategy in fostering vocational self-image would be to encourage their feelings of valuing school outcome. But, for the *less* self-sufficient at-risk youth another approach may fit better. Though encouraging the feelings of valuing of the less self-sufficient participants may slightly affect their vocational self-image positively, strengthening their self-sufficiency may be fundamental for the following reasons. Stronger self-sufficiency is valuable in general as it reflects better capabilities to manage daily aspects of life, such as activities, friends, housing, and finance. Further, equipped with greater self-sufficiency, these at-risk youth may subsequently follow the strategy of the more self-sufficient subgroup of at-risk youth, that is, the strategy to encourage feelings of valuing school outcome.

The third example stems from the effects of agreeableness as a moderator variable on the relationship between resilience, both personal and social, and vocational self-efficacy (Chapter 3). The highly agreeable respondents reported strong vocational self-efficacy, regardless of their levels of resilience. For the less agreeable respondents, stronger resilience coincided with stronger vocational self-efficacy. Encouraging resilience among this subgroup would therefore be recommended.

These examples illustrate the value of examining moderator effects in this project about at-risk youth. Previous research has concentrated on main effects between individual characteristics and vocational identity and related constructs (e.g., Chávez, 2016; Johnston, 2018; Noack et al., 2010; Wong & Kaur, 2018). The difficulty with trying to replicate the findings of these authors, or even those in social scientific research in general, may partly be ascribed to failure to attend to such potential moderator effects. Instead of selecting samples to be treated as one cohort, research on at-risk youth should take into account differences between individuals and subgroups within this larger group.

In Chapter 5, different perceptions of students and mentors concerning mentor qualities were explored. The general conclusion was that mentoring adaptively is vital. A mentor's core quality is encapsulated by the overarching construct of emotional responsiveness, as it entails feeling, knowing and understanding what a student needs and being able to act accordingly. The challenge for mentors was how exactly to display this quality as several tensions in perceptions became apparent. They can be summarized as the divide between emotional closeness and professional distance. Thus, individual adaptation and customization of efforts toward at-risk students are also essential with respect to mentoring. This conclusion reinforces the conclusion drawn from the results presented in Chapters 2, 3, and 4, as it points in the same direction.

### 6.3.2 Channeling daydreams

Vocational identity, as defined in this dissertation, consists of three components: vocational self-image, vocational future image, and vocational self-efficacy. As was shown in Chapters 2, 3, and 4, results for vocational future image differed in some respects from those for the other two components. The first difference among the three components

was reflected in the proportion of explained variance (Chapter 2). The included characteristics explained 13% of variance in vocational future image, much less than the proportion of explained variance in vocational self-image and vocational self-efficacy, which were both about 40%. Second, fewer moderation effects of individual characteristics moderating the relationships between vocational future image and resilience (Chapter 3) and school engagement (Chapter 4) were found, and the strength of effect sizes was lower than those on vocational self-image and vocational self-efficacy.

Deviant results for vocational future image invite us to rethink the relative importance of the three components of vocational identity, and to conceptually reconsider the construct of vocational future image and its position in vocational identity. It may be hard for at-risk youth to imagine the role they can play in working life ("*Who do I want to be?*", vocational future image); harder than estimating their strengths ("*Who am I?*", vocational self-image), and prospective capabilities ("*Am I able to get there?*", vocational self-efficacy). These differences lead to further consideration of at-risk youth's work orientation, as described by Skorikov and Vondracek (2012).

Skorikov and Vondracek (2012) distinguished four categories made up of combinations of extrinsic versus intrinsic motivation toward work, and beliefs about having a stable versus a growing career. An extrinsically driven and stable belief results in (a) work as a job, and an intrinsically driven and stable belief results in (b) work as a calling. In contrast, when beliefs assume potential growth, extrinsic motivation leads to the view of (c) work as a social ladder, and intrinsic motivation to (d) work as a career. Their model might be helpful in assessing the work orientation of at-risk youth, specifically because of the proven relationship between extrinsic motivation and vocational future image, as reported in Chapter 2. Such an approach might shed light on vocational future image as part of the construct of vocational identity. In addition, imagination may be a powerful tool for at-risk youth, enabling them to work toward a bright future. It supports open-minded exploration of a career (Fouad, 2007; Skorikov & Vondracek, 2012), but might hinder realism (Mortimer et al., 2002) and expected material rewards may never materialize. Applying the four categories instead of using the overall aspect of vocational future image may help at-risk youth to better understand their orientation toward work and help them to act proactively in changing work environments.

Finally, results described in Chapters 2 and 5 revealed an interesting resemblance regarding future expectations. In Chapter 2, the exclusive relationship between extrinsic motivation and vocational future image was interpreted as an appreciation by at-risk youth of goals involving visible rewards, in terms of money and status (e.g., Chávez, 2016). But ambitions may exceed capabilities, resulting in a confrontation between idealism and realism. This issue was raised by mentors who felt a need to point out to students that they have to learn and acknowledge their limits (Chapter 5). Mentors do this in the belief that they need to protect their students from setbacks and pitfalls, and to not create false expectations. Despite good intentions, this may be a hard lesson. Here the emotional responsiveness of mentors comes into the picture: They have to convey their message but should do it tactfully, sympathizing with the student's ambitions while staying realistic about the possibility of achieving them.

### 6.3.3 Connecting mentoring, resilience, and school engagement

The one-to-one meetings in which mentoring takes place provide the opportunity to adapt to the differences between at-risk youth as described in Chapters 3 and 4. The multidimensional nature of vocational identity enabled us to estimate to what extent individual characteristics of at-risk youth moderated the relationship between vocational self-image, vocational future image, and vocational self-efficacy, on the one hand, and resilience (Chapter 3) and school engagement (Chapter 4), on the other hand. Results demonstrated that various characteristics changed the strength of these relationships, indicating a need for customization in fostering the vocational identity of individual at-risk youth. Differences between at-risk students are the challenge in adaptive mentoring.

Wang and Eccles (2012) showed that mentors may play a particularly important role in preventing or fighting the risks of decline in school engagement that may lead to drop-out. These authors further mentioned the growing need of adolescents and young adults to have close relationships with adults other than their family members. In addition, encouraging resilience also places demands on mentors, since resilience “rests, fundamentally, on relationships” (Luthar, 2006, p. 780). As such, mentoring can be of great value as a means to strengthen school engagement and resilience, which both relate positively to vocational identity. Again, and in line with results described in Chapter 5, the mentor emerges as the backbone who develops a sincere and personal bond with students and expresses care and respect for them.

### 6.3.4 The need to customize theories of vocational identity

This dissertation adds to knowledge about vocational identity by showing the importance of adaptation and customization of efforts to foster the vocational identity of individual at-risk youth. Existing models of vocational identity are not well suited to such a specific target group, and potential differences between members of such target groups seem to be ignored. Therefore it is proposed to reconsider theories of vocational identity and specify how to apply them to at-risk youth.

The concept of self-agency is at the heart of many theories of vocational identity. Vocational psychology and career counseling should be directed at empowering employees to adapt to radical and rapid changes in the world of work (Hartung & Subich, 2011). According to Fugate et al. (2004), career identity acts as the cognitive compass to navigate careers and reflects how individuals define themselves in a career context. It also encompasses knowing-why competencies, such as career motivation, personal meaning, and individual values (McArdle et al., 2007). This internal career compass by which individuals choose, select, and direct their career opportunities has gained importance in the present-day labor market, in which a job-for-life is the exception rather than the rule and in which, instead, people have to deal with multiple career transitions (Bimrose & Hearne, 2012). Career trajectories are less externally defined (McGreevy, 2003) and, as a consequence, operating in the world of work requires “dexterity, flexibility, creativity,

resilience, relational support, and high levels of literacy and numeracy skills” (Blustein, 2013, p. 18).

Yet vocational identity models are mostly tested and validated among college and university students as they are an easy to target group for many researchers (e.g., Chan et al., 2015). These samples have in common that the participants are in a more privileged position and have substantial freedom of choice. Vocational theory models are constituted on the premise of this freedom of choice. For example, the central construct of career adaptability in career construction theory means “to choose suitable and viable opportunities to become the person she or he wants to be” (Savickas, 1997, p. 257). Social cognitive career theory emphasizes the way people exercise agency over their careers (Lent et al., 2000). In our view, these arguments about choice and agency might mean that theories of vocational identity are mainly relevant for the more educated among us and for those who work, for instance, in a publicly financed institution with little risk of dismissal. College and university students generally possess the capacities and flexibility that enable them to explore and benefit from career alternatives. However, at-risk youth differ in many ways from college students and therefore it cannot be assumed that previously validated models and theories are applicable to that target group. To what extent is it realistic to assume such self-directionality among at-risk youth? In general, people facing social and economic barriers feel that they have little control over their work and experience fewer career choices (Blustein, 2013). In other words, they lack work volition, a central concept in the psychology of working perspective, representing how people assess their ability to make career choices despite constraints (Brown & Lent, 2016). These constraints, in particular, form a hurdle for the supposed volition of at-risk youth (Sulimani-Aidan, 2017a).

This reflection leads to three suggestions to refine vocational identity theories to meet the specific needs of at-risk youth stemming from their vulnerability. They face limited career alternatives and do not exhibit the assumed self-agency and volition. First, further research is needed into career decision-making of at-risk youth. They may well need intensive guidance, counseling and support in selecting and making career choices, during schooling, during the transition period from school to work, and during their first job. In addition, Brown and Lent (2016) argue that efforts to help at-risk youth find a working environment that fits their capacities are more beneficial to those who experience less work volition than to those with greater volition. In short, at-risk youth need more help during their career decision-making. An intervention aimed at this goal would need to include intensive mentoring.

Second, and in line with section 6.3.3, vocational identity theories should take account of the potential contribution of school engagement to the development of at-risk youth' vocational identity. Stronger school engagement, expressed in sense of belonging at school and valuing school outcome, contributes to school attendance and perseverance and diminishes the threat of dropout (Archambault et al., 2009; Wong & Kaur, 2018). As such, stronger feelings of school engagement indirectly enable at-risk youth to pay attention to job skills practicing, internships, and academic achievements; activities that increase the chances of developing and fostering the vocational identity of at-risk youth

(Skorikov & Vondracek, 2012). Further, mentoring efforts aimed at supporting and guiding individual students who are exploring career preferences and opportunities can continue during schooling.

Third, and in line with this suggestion, vocational identity theories should be refined to include the concept of resilience, the ability to positively adapt to and function in adverse circumstances (Brownlee et al., 2013; Luthar & Cicchetti, 2000). Resilience has the potential to directly strengthen at-risk youth as individuals and to indirectly further their vocational identity. During schooling and mentoring, efforts could be directed to encouraging the personal and social resilience of students, for example by training them in decision-making and learning to accept support from others. Including guidance in career-decision-making and the concepts of emotional school engagement and resilience within vocational identity theories is justified by the specific needs of this target group. It would contribute to deepening our insights into the construct of vocational identity and ways to foster it and, as a consequence, to increasing opportunities for successful careers and societal participation.

## **6.4 Practical implications**

The predominant implication based on the findings is the importance of adapting curricula, interventions and mentoring to the individual at-risk student and being aware of differences among at-risk youth relating to vocational identity and mentoring perceptions. These insights have given a better understanding of the needs of at-risk youth, and how to convert the gained knowledge into improved educational and mentoring practices directed at fostering their vocational identity. Educational settings and program features could benefit from being organized around the evidence-based knowledge and insights gained in this study, and mentoring efforts would best be tailored to the individual student.

### **6.4.1 Customization as a starting point**

For every action, activity, redesign of curriculum components to foster the vocational identity of at-risk youth and to improve mentoring efforts, the starting point of considerations should be to customize to individual needs of students. This implies that these needs are known. Assessing individual student profiles, consisting of needs and characteristics, is a prerequisite, and these assessments are best started during intake procedures, and repeated several times during program implementation. In line with the relationships found between vocational identity and resilience, as described in Chapter 2, at-risk youth showing weak resilience could be provided with interventions to strengthen this feature. As a goal in itself to strengthen the resilience of at-risk youth and as an intermediate goal to foster their vocational identity, such a program would serve multiple purposes. Based on the evidence presented in Chapter 3, this is particularly recommended for those weakly resilient at-risk youth who are male, belong to youngest

subgroups, and have been sentenced. For emotional school engagement a similar implication applies since it serves as an intermediate goal toward fostering vocational identity through higher chances of completing school and lower dropout rates. In Chapter 4 it was shown that efforts to encourage school engagement are best directed at valuing school outcome, since moderator effects were found to be more numerous and stronger than those for sense of belonging at school. For example, younger at-risk youths, those who have been sentenced, and the less intrinsically motivated subgroups may particularly benefit from such encouragement to foster their vocational identity.

It cannot be overemphasized, however, that interventions should be customized. Older subgroups of at-risk youth hardly benefit from stronger resilience and school engagement. For them, focusing on other features, such as motivation or agreeable behavior, seems more appropriate. Ignoring these nuances implies missing actual opportunities to respond to individual differences in attempts to foster vocational identity.

#### **6.4.2 Implications regarding mentoring training**

Customization continues to be the focus of all actions and activities, also regarding mentoring. This is inevitably time-consuming as, first of all, it requires that a mentor really gets to know his or her student. What are the student's needs, preferences, personal constraints, ambitions, deficiencies? Whereas implications for curriculum activities or group composition are directed at groups or subgroups of at-risk youth and time investments are spread over several students, in mentoring differentiation goes even further: It is the unique individual student in whom the investment is made. Staff and mentors have to continuously maintain this investment and be convinced of its return.

Mentoring at-risk youth is a demanding role that requires special human qualities. This topic receives too little attention in teacher education that mostly addresses subject teaching and didactical principles. Mentoring should be part of learning how to act pedagogically. Teachers may be good mentors, but there is no guarantee. In order to mentor at-risk youth adequately and, especially given the precariousness of this task for this target group, student teachers should be prepared for this role and trained during their teacher education.

As described in Chapter 5, mentoring at-risk youth is an exercise in tightrope walking. Mentors benefit from knowing and understanding the balance between emotional closeness and professional distance, and how to act accordingly. This is the essential basis for all mentors to adaptively guide, support, and counsel their at-risk students. Mentors can be supportive, aim to give their student experience of success, compliment their student, reflect together on abilities; all of these are activities and approaches that fit mentors like a glove. As stated above, the mentor's role is not given much attention during teaching education. It is recommended, therefore, that a prospective mentor's qualities be assessed in advance during application procedures, and that the role of mentor should not simply be assigned by default. When assessment indicates that an individual lacks the necessary qualities, the candidate mentor should be

given specific training sessions or other interventions. This would create a pathway of continuing professional development that starts during initial teacher education, continues during application procedures, and can be furthered during induction programs and collegial consultation.

### 6.4.3 Broad versus targeted programming

At the schools for senior secondary vocational education and the rebound program at-risk youth are prepared for jobs as assistant workers, working closely with and under the supervision of more skilled employees. To reduce the risk of unemployment, for example due to economic recession, it may be an advantage for at-risk youth to possess generic job skills and to develop the flexibility to apply them in several sectors and organizations, and not just in, for example, the construction or catering industry. Pursuing this goal would result in a broad and non-specific education of at-risk youth, enabling them to work anywhere. Versatility could make at-risk young people more attractive to employers. However, more importantly from their own point of view, this broad education could circumvent or at least diminish the need for volition and self-agency on their part, qualities which many of them may lack. As a component of vocational identity, vocational self-efficacy reflects the extent to which people believe they can be successful in performing the duties required *for an occupation* (Ji et al., 2004). This belief implies the prospect of a particular, already chosen occupation, that is, someone knows what job and tasks she or he is preparing for. In contrast to a broad education, this line of thought suggests that a targeted education, aimed at a pre-selected profession, is more appropriate for developing a vocational identity.

This division into broad versus targeted education reflects a discussion that has been going on for a long time in the Netherlands (Coenen, Heijke, & Meng, 2012; Karsten, 2016). Those on one side of the discussion state that targeted vocational education is needed for jobs to comply with specific demands of companies. Those on the other side argue that vocational education can never keep up-to-date with commercial demands, that it will always lag behind market and technical developments, making it more effective to offer a broad educational basis and for organizations themselves to provide further in-company training to meet their specific needs. However, the debate has never specifically paid attention to at-risk youth. The importance of flexibility will probably remain the same or will even increase given the volatility of labor markets. Being flexible without having at least some idea of direction is pointless. That is why it is argued for a combined track at entry-level for at-risk youth with an emphasis on generic job skills and a few electives from which they can specialize up to a certain extent.

This debate, finally, is not only motivated by the assumed need for flexibility to move around labor markets, it also relates to the ability of self-reflection. Introspection and reflexive consciousness are helpful capacities to empower employees to guide their careers (Hartung & Subich, 2011). At-risk youth may find this difficult and training in this would seem useful and worthwhile. The one-to-one setting of mentoring is the finest



opportunity to address introspection and self-reflection. Attention could be paid both to learning how to self-reflect and to what subjects to reflect on.

## 6.5 Limitations and future directions

In this section methodological issues are considered and corresponding directions for future research are suggested. It is recommended to implement and investigate an extended mentoring period.

### 6.5.1 Sample of at-risk youth

We classified the students attending the rebound program and the senior secondary vocational education and the young people who visited the municipal information helpdesk as at-risk youth. They share a vulnerable school career and the risk of not obtaining a diploma at entry-level training. Students of the rebound program were all former dropouts. This also applied to visitors of the helpdesk of whom many were sent back to school. Students of the institutions for senior secondary vocational education included young people who formerly attended the preparatory rebound program or a school for special educational needs, who were redirected to school by the municipal helpdesk, or who had a history of non-attendance and still had to graduate at entry-level training. The four institutions aimed to improve the prospects of the young people by fostering their vocational identity.

Considering these groups of at-risk youth as one group may raise questions about whether implications of the current study can be formulated that apply for all students. However, the participants of this study share their vulnerable school career and risk of dropout from school. The current research aimed to gain insight into various individual characteristics of at-risk youth that relate to their vocational identity, and, more specifically, to the malleable characteristics that could be addressed in education and mentoring practices to strengthen vocational identity. Future research could be directed to investigating what personal or social obstacles hinder the at-risk youth to develop a strong vocational identity and how these obstacles relate to other individual characteristics.

Characteristics of at-risk youth and implications for specialized programs were investigated and therefore the dissertation concentrated on participants of those programs and those who may qualify for them. Many at-risk youth were willing to participate, both in the questionnaire studies and in the interview study. As these youth generally have regular meetings with representatives of organizations to discuss their issues in life and provide personal data, some of them experience fatigue and they are not very willing to cooperate if they do not need to. Achieving a sample of this size for our research was therefore satisfying.

Despite the size of our sample, it is assumed that it does not represent all at-risk youth. They were the youth who could be reached through the participating institutions.

It is likely there is a substantial group that could not be included because they are roaming the streets, are homeless, have not contacted any social services, or have not asked for any support. Their social problems may therefore be even greater than those shown by the participants, and the conclusions expressed in this dissertation might not be applicable to this severely disadvantaged group. Future research should therefore be directed at this group, as it is needed to know more about their vocational identity in order to support them in preparing for working life. One solution to this limitation might be to extend the search to find them to community centers, police stations, the Salvation Army, coffee shops, prisons etc., but also to simply recruit them from the street or in skate parks. Such labor-intensive methods are worth trying as a consequence of the wish to increase opportunities for this most disadvantaged group of at-risk youth to live independent lives in society.

### 6.5.2 Questionnaire quality and additional measures

At-risk youth have been purposefully given a voice themselves and have been asked to report on their own opinions and feelings, instead of collecting others' observations and opinions about them, as has often been done by the institutions themselves. This choice was inspired by Malecki and Demaray (2003) who found that self-perceptions of youth adequately indicated their well-being, as compared to answers of third parties, such as mentors or coaches, though these measures may be seen as more objective. Instead of inviting involved professionals to talk *about* at-risk youth, at-risk youth could speak out and respond to the questions themselves. To account for well-known disadvantages of surveys, such as difficulty of wording, interpretation of questions and length of the survey, it was tested among the target group.

Results of surveys, whether self-reported or not, reflect the subjective views of the respondents. This perspective can be broadened by using additional and more objective indicators to estimate the vocational identity of at-risk youth. They can be asked how often they arrive late at their internship and at school, how often they finish their homework and assignments on time, whether and what problems occur at school or during their internship. Mentors and representatives of internship companies can be asked the same questions. Participants may also be asked to keep a log on daily activities and possible problems they encounter, for example relating to their physical or mental health, debts, and family issues. These measures may complement the survey data and provide a more complete picture of the vocational identity of at-risk youth.

### 6.5.3 Working mechanisms

Mentoring is a key element in the specialized programs and its different elements and approaches are intended to have an impact on program outcomes. In addition, the programs themselves consist of several elements, such as theory and practice-oriented content of subjects, structure of the curriculum, internships, and the proportions of

theoretical and practical training. In this project the programs were approached as a whole and no specific working mechanisms were considered.

Insights into working mechanisms combined with knowledge about relationships between at-risk youth' characteristics and vocational identity could contribute to developing and improving tailor-made efforts to optimize impact. Research on working mechanisms can concentrate on various aspects of the programs and those who are involved in the implementation. A central role is reserved for mentors, as program implementation is dependent to a large extent on them and is closely bound to the mentor as a person. Sub-questions can be directed at the basic repertoire mentors must have, including to be emotionally responsive, and to what extent this repertoire needs to be attuned to individual students. Should mentors, for example, specialize in specific problems students may have, such as drug abuse or maltreatment, or should they be able to tackle all kinds of difficulties and have a broad repertoire?

Such questions need to be answered by examining the effects, whereas this project was of an explanatory nature. It is therefore recommended that the working mechanisms of the specialized programs be investigated, by consistently varying its constituent parts in carefully designed interventions. Concerning mentoring, such interventions would require precise and patient research in which small and controlled changes in mentoring approaches for individuals at-risk (and subgroups) are applied —within ethical boundaries— and examined. Qualitative methods would be appropriate due to the small scale, with regular examination of students' and mentors' perceptions during program implementation and reflections on non-academic outcomes afterwards.

Concerning the specialized program as a whole, empirical data should be collected longitudinally to test its effects on strengthening of vocational identity. It could be conducted with a quasi-experimental design by randomly assigning sites of the institutions, or classes within them, as experimental and comparison groups. Pretest and posttest measures and fidelity checks would be needed to determine possible differences between experimental and control groups. The exact intervention would best be developed by staff, mentors, teachers, and professional researchers working in close cooperation. Specific aspects of the intervention should be varied, implemented, and monitored accurately. The aspects to be varied can be numerous. For example, the resilience of young and male at-risk youth could be explicitly encouraged; mentors could receive training in emotional responsiveness; addictive behavior among at-risk youth could be discouraged. The intervention could be investigated using a mixed method approach, applying regular surveys and interviews and additional instruments, addressing the central constructs of vocational identity, resilience, and school engagement. Measurements are preferably taken during intake and just after program enrollment, and repeated every half year until one year after leaving the program.

#### **6.5.4 Extended period of mentoring**

A final suggestion for future research is to focus on the meaningfulness of mentoring over an extended period of time, by continuing the mentoring relationship

after the student has graduated from school or even after dropout, provided the mentee can still be found. The rationale is that at-risk youth can be expected to still need support and may well appreciate the opportunity to discuss their experiences in the new educational or work environment and the choices they have to make. This mentor would preferably be a person the former student is familiar with, ideally their former school mentor. As shown in Chapter 5, longevity of relationships contributes to achieving mentoring goals (DuBois et al., 2002) and an extended relationship could build on the confidence and bonding built up during schooling. Mentoring relationships are precarious for at-risk youth, and building on an existing relationship, assuming both student and mentor perceive a match, would be preferred over starting a new one. Such an intervention might mean far-reaching tailoring of the mentoring efforts and it may also be difficult to distinguish the effects of these efforts from the influence of the mentor as a person. This would require dedication on the part of the mentors involved to keep notes of actions, decisions, and events. Their notes should be accepted without discussion or hesitation to prevent socially desirable research results and should be reflected upon afterwards. Nonetheless, such research could follow a quasi-experimental design by comparing at-risk youth given an 'extended mentor' with those who were not—within ethical boundaries—. It would be reasonable to have this experiment funded by the municipality, as improved chances of school completion and appropriate follow-up customized to the young person concerned may reduce demands on the legal system or requests for social security assistance.

## 6.6 Concluding remarks

This research aimed to gain knowledge and insights about at-risk youth' vocational identity. Results of the four studies provided insights into individual characteristics of at-risk youth relating to vocational identity; into individual characteristics moderating relationships between vocational identity and malleable characteristics, namely, resilience and school engagement; and into mentor qualities as perceived by at-risk youth and their mentors. They showed that fostering the vocational identity of at-risk youth can be more effective when their different individual characteristics are taken into account and when preferences of the at-risk youth and their mentors concerning mentor qualities are addressed during mentoring sessions. Tuning into these different characteristics and needs implies customization in programming and mentoring. The findings led to practical implications about fostering vocational identity as an essential asset in working life. In this way, this dissertation contributes to knowledge about reconnecting with at-risk youth and keeping them on track at school and at work, resulting in better future prospects and an independent and sustainable position in society.





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# Summary

## I. Introduction

Strengthening the societal position of at-risk youth has been on the agenda for quite some time. This is challenging, because of problems that are hard to solve. Yet it is necessary to put energy into searching for possibilities, so that at-risk youth have better opportunities to participate in society and to become independent. At-risk youth are defined as late adolescents and young adults –roughly between 15 and 25 years old– who have not yet graduated and are at risk of leaving school unqualified. Those who do attend school often attend low-level educational programs. As unqualified or minimally qualified workers, even when they do finish school, they are at a greater risk of unemployment. Many of them encounter multiple personal or social problems, such as debt, lack of social support, taking care of children at a young age, or growing up in broken families or in a criminal surrounding. These problems put at-risk youth in a survival mode, distract their attention from school, and may even prevent school attendance.

Given the complexity and persistence of problems at-risk youth face, it is difficult to improve their chances of achieving economic and societal independence. Having a job can substantially contribute to that goal. To stimulate searching, finding, getting, and keeping a job and to shape a career during working life, it is important that at-risk youth develop a strong vocational identity. Vocational identity is defined as being aware of your own capabilities, ambitions, and values concerning work. It is a multifaceted concept that is defined in this dissertation as consisting of three components: vocational self-image, vocational future image, and vocational self-efficacy. Individuals with a strong vocational self-image know their capabilities, possibilities, and interests concerning work. Individuals who have a clear vocational future image are aware of their work ambitions and goals. Vocational self-efficacy reflects the degree to which individuals believe they are able to successfully practice work values and habits needed in work. The three components are articulated in three core questions by which individuals define themselves as workers:

- Who am I? Awareness of capabilities, possibilities, and interest concerning work (vocational self-image)
- Who do I want to be? Awareness of work ambitions and goals (vocational future image)
- Am I able to get there? Awareness of values and habits in work needed to realize the ambitions (vocational self-efficacy).

Though the strengthening of vocational identity is relevant for all, it is especially important for at-risk youth, because it can help to counterbalance their problems and the risks they face. To develop a strong vocational identity they need to learn what work they want and can do and how to get suitable positions in the future. As such, a strong vocational identity can support at-risk youth to escape from their precarious circumstances and offer them better prospects of suitable work and a better standing in society.

This research project aimed to provide knowledge about and insights into the vocational identity of at-risk youth. This aim was broken down into two sub-goals. The **first sub-goal** was to discover how several characteristics of at-risk youth relate to their



vocational identity. Special attention was given to malleable characteristics for the purpose of application in practice. An obvious opportunity to do this was provided by one-to-one mentoring sessions between mentor and student. Because mentoring forms an important element of schooling and programs for at-risk youth, it is essential that mentor qualities meet perceptions of the youth and their mentors. The **second sub-goal**, therefore, was to discover which mentor qualities are perceived as most valuable by students and mentors. These qualities can be applied in one-to-one mentoring sessions to generate an appropriate ambience and conditions to address non-academic matters, such as vocational identity. Four studies were conducted to pursue this dual aim.

The first sub-goal related to the *extent* to which relationships between individual characteristics and vocational identity appear to exist. Quantitative methods were applied in three cross-sectional questionnaire studies to investigate this. The second sub-goal required a qualitative methodological approach to explore *perceptions* of both students and mentors about mentor qualities. An in-depth interview study was conducted to investigate this.

Four institutions dedicated to creating and improving opportunities for at-risk youth were invited to participate in these studies. The first two institutions are the largest schools for senior secondary vocational education in the area of Rotterdam. They offer several levels of education, among which is entry-level training, the lowest level these schools offer (see Appendix A for an overview of the Dutch education system). Entry-level training precedes basic training level, which is the officially required government qualification to enter labor markets for young adults up to 23 years and recommended for young adults between 23-27 years. Schools for entry-level training are obliged to accept all students younger than 23 years, regardless of their prior education or the lack thereof. The student population attending entry-level training is very diverse and dropout is a permanent threat. All of the students attending the schools for senior secondary vocational education who participated in the studies were entry-level students.

The third institution was a rebound program for former dropouts who have been out of the school system for some time, mostly because of serious problems that complicated school attendance. These former dropouts want to go back to school and to enable that, they get intensive support at the rebound program to get their lives back on track. At the same time the program helps them to get used again to the daily routine of attending school, keeping to appointments, and doing assignments. The fourth institution was the municipal youth information desk, a helpdesk that helps and advises youth and young adults with issues varying from homelessness to applying for social assistance benefits. These at-risk youth are not in training, at school or in employment. Many of these at-risk youth are referred back to school, either to a special program, such as the rebound program, or to a school for senior secondary vocational education.

## 2. Individual characteristics of at-risk youth

Chapter 2 presented the first study exploring which individual characteristics of at-risk youth related to the three components of vocational identity, that is, vocational self-image, vocational future image, and vocational self-efficacy. This exploration

included several characteristics that were inspired by previous studies, though their results were in many cases obtained among other populations than at-risk youth and showed a fragmented picture with regard to related characteristics. First, the relationship was examined between at-risk youth' characteristics and the three components of vocational identity. Second, to gain insight into possible improvements in practice, special attention was paid to those characteristics that could be addressed by educational and social professionals.

A conceptual model was developed to guide the study (see Figure Su.1). This model expresses the sequence of the supposed influence of the characteristics. Some characteristics exert their influence before all the others, such as gender and ethnicity. They are given by birth and are an individual 's most proximal characteristics. Other characteristics follow, from lesser to least proximal, and were grouped into five clusters.

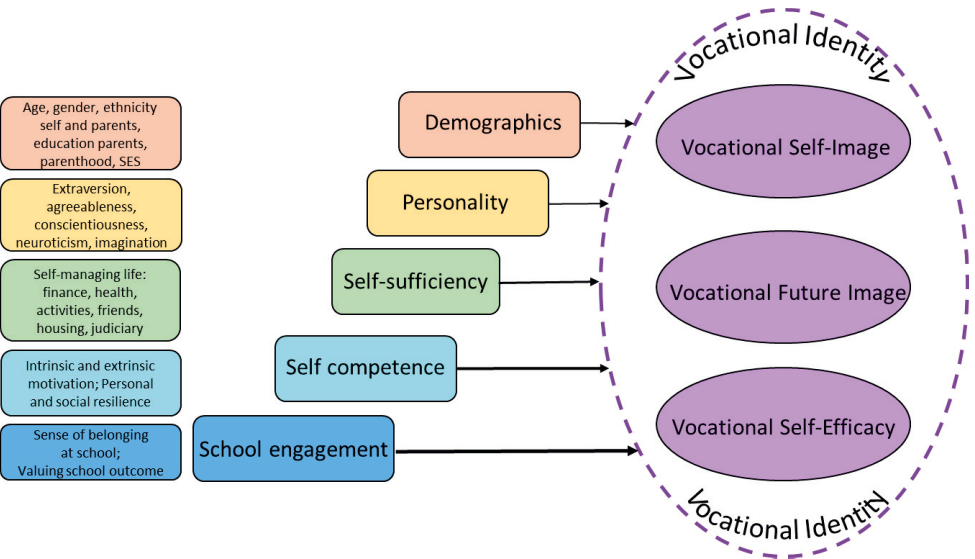


Figure Su.1. Conceptual model of the study

In the conceptual model, the distance of the arrows to the components of vocational identity (oval shape) represents the order of the potential influence of characteristics on vocational identity, that is, the shorter the distance, the earlier it may have had an influence on vocational identity. The most proximal cluster consists of demographic characteristics: age, gender, ethnicity of participants and their parents, parenthood of participants, and socioeconomic status (top left, first text box). The second cluster contains the Big-5 personality traits: extraversion, agreeableness, conscientiousness, neuroticism, and imagination (second text box). They are assumed to exert influence on vocational identity after the demographic characteristics and before characteristics of the third cluster, consisting of self-sufficiency characteristics (third text box). This cluster includes aspects of managing life: money, daily activities, housing,

mood at home, health, feelings, friends, addiction (to smoking, alcohol, drugs, gambling, or gaming), and contact with police or judiciary. The fourth cluster is defined as self-competence with characteristics that are assumed to have an influence on vocational identity after the three preceding clusters (fourth text box). Self-competence characteristics are intrinsic and extrinsic motivation, and personal and social resilience. The fifth and final cluster contains characteristics of school engagement: sense of belonging at school and valuing school outcome (fifth text box). They are assumed to exert their influence only from the time that preschoolers start schooling.

Based on this conceptual model, multivariate regression analyses with blockwise entry were performed. It was analyzed how much the most proximal cluster of demographic characteristics contributed to the proportion of explained variance in each of the three components of vocational identity. Subsequently, the following clusters were added to the analyses one by one in their sequence of assumed proximity, to determine to what extent each of them changed the proportion of explained variance. As a result, it became clear what extra proportions of variance the less proximal characteristics could explain on top of the proportions of explained variance already explained by more proximal characteristics.

In the conceptual model, not only the length of the arrows to the oval shape of vocational identity differs but also their thickness. Thickness of arrows represent malleability; the thicker the arrow, the more opportunities to modify the particular individual characteristics. The model shows that the least proximal clusters, that is, those of self-competence and school engagement, contain the most malleable characteristics. The aim of the study was to examine the relationship between malleable characteristics and vocational identity. Should the blockwise entry analyses indicate that these clusters could still explain additional proportions of variance of vocational identity, it would mean that these malleable characteristics provide opportunities for intervention by educational professionals who could employ them to foster the vocational identity of at-risk youth.

In order to extract the voices, opinions and ideas of the at-risk youth themselves, a self-report questionnaire was deliberately chosen as data-collection method. It was based on other questionnaires that were adjusted to the goal and the target group of this study. The questionnaire was validated by professionals and subsequently piloted among target group members. The questionnaire can be found in Appendix B. The constructs that were measured by several items showed a good fit in a confirmatory factor analysis with the items as categorical indicators of latent traits. The validity of the measurement was thus confirmed. Convenience sampling was applied for data collection and 996 at-risk youth participated.

The first step of the analyses showed many significant main effects of individual characteristics with one or more of the components of vocational identity. The second step, the blockwise entry analyses, showed that about 40% of the variance of both vocational self-image and vocational self-efficacy and about 13% of vocational future image was explained by the characteristics that showed significant main effects. From the cluster of personality traits, agreeableness and conscientiousness explained the largest proportions of variance for all three components of vocational identity. They were

followed by the self-competence characteristics: For vocational self-image intrinsic motivation and personal and social resilience explained additional variance of about 12%; for vocational future image extrinsic motivation and social resilience additionally explained about 3%; and for vocational self-efficacy intrinsic motivation and personal resilience additionally explained about 10%. Finally, from the emotional school engagement cluster, valuing school outcome appeared to explain modest additional variance in scores on vocational future image and vocational self-efficacy.

Intrinsic and extrinsic motivation, personal and social resilience, and valuing school outcome, in particular, emerged from this study as malleable individual characteristics that look promising for fostering the vocational identity of at-risk youth.

### **3. Resilience and differences among at-risk youth**

Chapter 3 focused on at-risk youth' resilience, the ability to face and act upon challenges. Though it is important for everyone to be resilient, it is vital for at-risk youth given the obstacles they are confronted with. Personal resilience enables at-risk youth to independently solve their problems and make decisions about the main issues in life, such as education, work, and money. Social resilience means that at-risk youth have a network of persons who they can turn to in case of problems and who they can actually ask for help if needed.

Resilience is not a fixed fact; it is malleable and can be strengthened. Chapter 2 described a significant relationship between personal and social resilience and the three components of vocational identity. This relationship is promising because it legitimates investigation into whether stimulating resilience helps to further vocational identity. The relationship may not be univocal, however, due to the heterogeneity of the population of at-risk youth. At-risk youth differ with respect to their individual characteristics. Such differences may be expressed in different strengths of the relationship between resilience and vocational identity, in which case there is a moderation effect, that is, the relationship is modified. When indeed the relationship between resilience and vocational identity is not equal for all at-risk youth and is moderated by other characteristics, knowledge about the moderating characteristics can be of help when designing interventions that are tailored to the specific characteristics of a student or subgroup of students, and to adapt teaching and mentoring methods for at-risk youth in order to foster their vocational identity. It may mean, for example, that someone with strong personal resilience is not hindered by having debts from acquiring a certain level of vocational identity, whereas someone without such strong personal resilience may be hindered by it. In this example, the relationship between personal resilience and vocational identity is moderated by having debts, implying the extra importance of stimulating personal resilience of at-risk youth who are in debt.

Given the proven relationship between resilience and vocational identity, Chapter 3 examined the question to what extent individual characteristics of at-risk youth can moderate the strength of the relationship between personal and social resilience, on the one hand, and the three components of vocational identity, on the other hand. Those individual characteristics that in Chapter 2 showed a main effect with one or more of the

components of vocational identity were included. This second study used the data collected from the questionnaire from the first study.

The results showed that higher personal resilience and higher social resilience coincided with a higher vocational identity in all cases, regardless of the individual characteristic. Yet the strength of the relationships did differ between various groups of at-risk youth. The relationships between resilience and one or more of the components of vocational identity were stronger for males than for females, for younger subgroups of at-risk youth compared to older subgroups, and for those with experiences in the judicial system. For example, the relationship between personal resilience and vocational self-efficacy was weaker for females than for males. That means that possessing more or less personal resilience was less relevant for females with respect to their level of vocational self-efficacy. For males this relationship was stronger: The level of vocational self-efficacy was lower for males with lower personal resilience and higher for males with higher personal resilience. Stimulating personal resilience may especially contribute to stronger vocational self-efficacy in males.

Stronger relationships were also found for at-risk youth who reported being less agreeable, conscientious, neurotic, imaginative, intrinsically motivated and those with lower levels of valuing school outcome, and for the more self-sufficient at-risk youth and those with higher socioeconomic status. Most moderator effects occurred for vocational self-efficacy. Personal and social resilience showed about an equal number of moderator effects.

#### **4. School engagement and differences among at-risk youth**

Chapter 4 focused on at-risk youth' emotional school engagement, defined as the feeling a school evokes in the student. Emotional school engagement consists of two aspects: a sense of belonging at school and a sense of valuing school outcome, such as obtaining a diploma. Emotional school engagement can be understood as a malleable characteristic. This makes it an interesting characteristic in the light of our search for ways to stimulate at-risk youth' vocational identity.

Emotional school engagement is important to keep at-risk youth attending school and to increase the chance of graduation, which improves their societal opportunities. Schooling enables them to develop their vocational identity during practical courses, internships, and portfolio assignments. The longer an at-risk student attends school, the more opportunity there is to work on these tasks. Stimulating emotional school engagement is valuable, therefore, especially for at-risk youth for whom persisting in attending school is a challenge and for whom dropout is an ongoing threat.

Chapter 2 showed a significant relationship between emotional school engagement and vocational identity. Similar to the study about moderator effects for resilience, the heterogeneous group of at-risk youth can show differences in the relationship between their emotional school engagement and their vocational identity. An example may clarify this, illustrating potential different relationships between sense of belonging at school and vocational identity, depending on the degree of conscientiousness. Conscientious youth are hard workers, they work by themselves and do not need an encouraging

environment to perform well and work on their vocational identity. Less conscientious youth, in contrast, are easily distracted and need to feel comfortable to perform; in other words, they are in greater need of a sense of belonging at school. If less conscientious youth feel uncomfortable at school, then it can affect their vocational identity. In this example, the relationship between sense of belonging at school and vocational identity appears to be different for different groups of individuals. It is moderated by the degree of conscientiousness: The relationship is stronger for the less conscientious at-risk youth and, although still positive, weaker for their more conscientious peers.

The study described in Chapter 4, investigated the question to what extent individual characteristics of at-risk youth can moderate the strength of the relationships between sense of belonging at school and valuing school outcome, the two aspects of emotional school engagement, on the one hand, and the three components of vocational identity, on the other hand. The individual characteristics included in this study were those that showed a main effect on one or more of the components of vocational identity as presented in Chapter 2. Data collected from the questionnaire from the first study were used.

The results showed that the stronger the sense of belonging at school and the stronger the valuing of school goals, the stronger the components of vocational identity, regardless of the individual characteristic. Yet the strength of these relationships was different for different groups of at-risk youth. Stronger relationships were found between emotional school engagement and one or more of the components of vocational identity for younger subgroups compared to older subgroups, for at-risk youth with experiences in the judicial system, and for those who were less satisfied about their addictive behavior with respect to drugs, alcohol, smoking, gaming, and gambling. The relationship was also stronger for more self-sufficient at-risk youth and for those with higher socioeconomic status. Finally, the relationship was stronger for at-risk youth with lower scores on all other characteristics, such as personality traits and motivation. These results mean, for example, that encouraging both aspects of emotional school engagement may contribute to the vocational self-image and vocational self-efficacy of the less agreeable at-risk youth and that encouraging valuing school outcome can further the vocational self-efficacy of at-risk youth who are less intrinsically motivated.

Only one moderator effect was found for vocational future image; most moderator effects concerned vocational self-efficacy. Additionally, more moderator effects were found for valuing school outcome than for sense of belonging at school.

## **5. Mentoring at-risk youth**

Chapter 5 concentrated on mentoring at-risk youth. Vocational identity, resilience, emotional school engagement are all factors of interest that may contribute to improving the chance of at-risk youth achieving a sustainable and independent position in society. An accessible place to address these matters is school, such as the schools for senior secondary vocational education or a preparatory program, such as the rebound program. A mentor could take up this task, as part of the role to guide and support at-risk youth in school and in life. Mentoring is a key element of the programs under study



and is organized in one-to-one mentor-student sessions. Mentoring sessions provide a good opportunity to focus on at-risk youth' vocational identity.

The study presented in Chapter 5 was conducted at the schools for senior secondary vocational education and at the rebound program, applying convenience sampling, involving only at-risk students. This study examined mentor qualities that are perceived as most valuable by at-risk students and their mentors. A qualitative study was designed for this purpose with interviews with mentors and students. At-risk students may have other perceptions and preferences than students in regular education and attuning to at-risk students' values and needs is essential. To avoid a one-sided emphasis from the students' viewpoint, the evaluative perspectives of mentors were included too. A mismatch of perceptions between at-risk students and mentors could frustrate mentoring practice.

Various mentor qualities have been examined in previous studies. They were categorized into three clusters: mentor tasks, that is, actions, behavior, and means of support of the mentor; relationships between mentor and student, that is, the way in which mentor and student interact; and mentor characteristics, that is, qualities of a mentor. Sensitizing concepts relating to these clusters were deduced from the literature and used to analyze the data.

Semi-structured interviews were performed on the basis of a topic list, making it possible for respondents to bring in their own issues. Topics for at-risk students related to perceptions of and experiences with the mentor and the mentoring process, and for mentors to the evaluation of the goals and the implementation of the mentoring process in the educational program. In total, 31 at-risk students and 24 mentors participated. Data were coded and analyzed in iterative rounds. In the final coding scheme, the *mentor tasks* cluster consisted of six categories, the *relationships between mentor and student* cluster consisted of five categories, and the *mentor characteristics* cluster consisted of three categories. To validate the quality of data-analysis, an external audit was conducted afterwards focusing on visibility, comprehensibility, and acceptability of the decisions taken. The audit report confirmed the quality of the data-analysis and did not contain any recommendations for improvement.

The results of this qualitative study showed that mentor tasks consist of guiding students, adopting a pedagogical approach, stimulating motivation for learning and school, and providing academic and informational support. Tasks and approach in guidance were mentioned most often by mentors; academic support was mentioned most often by students. With regard to relationships between mentor and student, both mentors and students valued respect, equality, autonomy, and bonding. The role of the mentor should entail authority but not authoritarian behavior. Neither should the role swing into overfamiliar behavior. Mentor characteristics included showing empathy, genuine care, and trust. The results showed a tension between emotional closeness and professional distance which the mentor has to navigate. Mentoring is a kind of tightrope walking, which calls for emotional responsiveness. Emotional responsiveness is suggested as a new comprehensive concept of being a good mentor.

## 6. Conclusions, discussion and implications

The aim of this research project was to provide knowledge about and insights into the vocational identity of at-risk youth, with two sub-goals. The first sub-goal was to discover what characteristics of at-risk youth relate to their vocational identity. That concerned (a) relationships between malleable individual characteristics and vocational identity as well as (b) relationships between resilience and emotional school engagement on the one hand, and vocational identity on the other hand, possibly moderated by individual characteristics. The second sub-goal was to find out what mentor qualities were perceived as most valuable by at-risk students and their mentors.

The corresponding **research questions** can now be answered. With respect to the first sub-goal, first, many significant relationships with varying strengths were found between individual characteristics and the three components of vocational identity: the main effects. Malleable characteristics were found to explain additional variance in scores on vocational identity. Second, the relationships between resilience and emotional school engagement, on the one hand, and vocational identity, on the other hand, varied substantially for different subgroups of at-risk youth. These differences occur due to moderator effects. With respect to the second sub-goal, students and mentors appeared to express a large variety of, at times contradictory, perceptions and preferences about mentoring. The results of the four studies reflect the heterogeneity of at-risk youth. It is concluded that the results do not apply evenly for the group of at-risk youth as a whole. The crux is that at-risk youth need careful individual attention and individual customization if one is to effectively foster their vocational identity and its three components in educational and social interventions and during mentoring sessions.

**Vocational future image** showed some different results compared to vocational self-image and vocational self-efficacy. That may mean that the importance of the three components for building the construct of vocational identity varies. With respect to vocational future image, it may be helpful to consider at-risk youth' work orientation: Do they expect to operate in a stable career role or one in which they can grow, and is their motivational orientation for work intrinsically or extrinsically driven? Combining the four possible answers instead of using the overall aspect of vocational future image may shed light on this topic and may help at-risk youth to better understand their orientation toward work. A complicating factor can be imagination, the trait of being open-minded and open to new experiences. It can help youth to explore future careers freely, but may result in unrealistic future expectations, in terms of money and status. The clash between idealism and realism also emerged in the interview study where mentors felt an urge to stress the limits of the capabilities of their at-risk students, protecting them from pitfalls and avoiding false expectations.

**Self-agency** is a central concept in many theories of vocational identity. Workers need to have the ability to adjust to rapid and radical changes in working circumstances. This kind of internal compass has gained in importance because nowadays volatile labor markets confront individuals with multiple career transitions. Yet these theories are

mostly tested among student populations at universities, and these students generally possess the qualities and flexibility to explore and benefit from career alternatives. It is questionable, however, to what extent it is realistic to expect this level of self-agency from at-risk youth. Individuals who run into personal and social barriers experience less control and choices in their work. They lack work-*volition*, which reflects how individuals estimate their ability to make career choices despite constraints. These constraints might interfere with the self-agency and volition of at-risk youth.

These considerations have led to some suggestions to refine theories of vocational identity to meet the specific demands of at-risk youth originating from their vulnerability. First, these theories need to reconsider the concepts of self-agency and volition and give more attention to career decision-making for at-risk youth who do not exhibit the supposed levels of self-agency and volition. At-risk youth may well need intensive guidance, advice and support in selecting and making career choices, during schooling, during the transition period from school to work, and during their first job. Second, theories of vocational identity should take account of the potential contribution of emotional school engagement to the development of vocational identity of at-risk youth. Higher emotional school engagement implies attending school for a longer period and reducing the risk of dropout. During that period at school all kinds of activities can stimulate vocational identity, supported by the guidance of the mentor. Third, refined theories of vocational identity should pay attention to the potential contribution of resilience of at-risk youth. Higher resilience is valuable as it may directly strengthen at-risk youth and indirectly foster their vocational identity.

**Three practical implications** emerged from this research. The most important implication is to adapt programming, teaching, and mentoring, customizing to differences between and needs of individual at-risk youth. For this it is essential that professionals in the program, and the mentors in particular, really know the students. Getting to know their students should ideally start with extensive intakes and be continued throughout the program. Students who appear to possess a low level of personal or social resilience should follow interventions that stimulate resilience. This is mainly recommended for male and younger at-risk youth and for those who have been sentenced. Concerning emotional school engagement, the main factor to pay attention to is valuing school outcome. Attempts to increase feelings of school engagement are particularly valuable for the at-risk youth who are young, have been sentenced, and are less intrinsically motivated.

Customization is also vital in mentoring in programs for at-risk youth, which leads to the second implication about teacher education. The required mentor qualities may receive too little attention in teacher education. To guide at-risk youth adequately, given the precarious nature of this task for this target group, student teachers should be better prepared for this role. Mentor qualities could be assessed during application procedures for teachers planning to work in programs for at-risk youth, instead of assigning the role of mentor by default. Where an individual teacher lacks the necessary mentor qualities, further training is recommended. Supervision and collegial consultation may also further

mentors' professional development, both during induction programs and later on when they are working as mentors.

The third recommendation concerns the question of whether a broad or targeted education is more suitable for the at-risk youth of the educational level of the programs studied. Targeted education is directed toward preparing for a *specific* occupation; this would potentially mainly benefit someone's vocational self-efficacy. A broad education provides a *general* occupational foundation and employees receive further in-company training. A broad education makes employees more flexible, which is an advantage in changing job markets. To have at-risk youth learn a profession and at the same time support their flexibility in moving around labor markets, a combined track for this target group might be preferable with an emphasis on general skills and some electives to specialize in. During their education, mentors need to engage at-risk youth in the self-reflection that can help them to shape their careers.

Some limitations emerged from our research which led to **suggestions for future research**. First, the groups of at-risk youth were considered as one group because they all have a vulnerable school career with a risk of dropout. This may raise questions whether implications can be formulated that apply to them all. Future research is recommended to investigate what personal and social obstacles hinder to develop a strong vocational identity and how these obstacles relate to other individual characteristics.

Second, the sample of at-risk youth included in both the quantitative and the qualitative studies was satisfying. Nonetheless, it is assumed that the weakest groups among them, which potentially would most benefit from strengthening their vocational identity, might not have been included in the sample, simply because they are very hard to track: They are the young people that did not attend the two schools for senior secondary vocational education or the rebound program, nor visit the municipal youth helpdesk. The conclusions may or may not be applicable to them. Future research should therefore target this group in order to examine their vocational identity and how this could be enhanced to improve their chances in society.

Third, in addition to the self-report questionnaire, it is recommended that more objective indicators also be included to assess the vocational identity of at-risk youth, such as being on time at school or the internship company, number and content of conflicts experienced, frequency of handing in schoolwork on time, etcetera. Similar indicators and questions could be used for mentors and supervisors. In so doing, a more complete picture could be created of the vocational identity of at-risk youth.

Fourth, research on working mechanisms could contribute to deepening insights into the vocational identity of at-risk youth. Such research could focus on several elements of the programs, such as the proportion of practical and theoretical training, as well as on those who implement the program, such as mentors. Because of their central role in the programs, mentors could be considered working mechanisms themselves. Effects of their guiding approach, the extent to which they are emotionally responsive, and specialized tracks in mentoring, for example directed at younger men, could be investigated. These kinds of questions require quasi-experimental designs, conducted in a carefully created

intervention in which various aspects are varied systematically and are examined longitudinally.

The fifth and final recommendation for future research concerns an initiative on mentoring. In the programs studied mentors were important in fostering the vocational identity of at-risk youth and can be seen as the anchor. It may be assumed that this crucial role does not stop the moment the students leave school, graduated or not. Support will probably still be necessary and the former students will appreciate discussing their first experiences in their new environment, be it continuing education, or work, or looking around for what to do next. For that reason, an experiment with extended mentoring might be set up. This is customization in optima forma, and mentors are expected to keep very precise notes of all actions, decisions, and events they undertake with and for the benefit of their former student. The municipality is suggested to fund such an initiative, as prolonged mentoring of at-risk youth may result in fewer claims for social assistance.

The studies presented in this dissertation have shown that fostering the vocational identity of at-risk youth can be improved when their different individual characteristics are taken into account and when preferences of at-risk youth and their mentors concerning mentor qualities are addressed during mentoring sessions. Tuning in to these differences and needs implies customization in programming and mentoring. This dissertation has contributed to efforts to reconnect with at-risk youth and keep them on track at school and work, resulting in better future prospects and an independent and sustainable position in society.





# Samenvatting

## 1. Introductie

Het verstevigen van de maatschappelijke positie van risicjongeren staat al lange tijd op de agenda. Het is een lastige kwestie, omdat problemen moeilijk op te lossen zijn. Toch is het nodig energie te steken in het zoeken naar mogelijkheden, opdat risicjongeren betere kansen hebben om mee te doen in de samenleving en onafhankelijk te worden. Risicjongeren worden gedefinieerd als laat-adolescenten en jongvolwassenen –grootweg tussen 15 en 25 jaar oud– zonder startkwalificatie en met het risico op voortijdige schooluitval. Degenen die wel naar school gaan, volgen vaak onderwijs op een laag niveau. Als ongekwalificeerde of laaggekwalificeerde werknemers, zelfs met diploma, lopen ze een groter risico op werkloosheid. Velen van hen lopen tegen meerdere persoonlijke of sociale problemen aan: ze hebben schulden, ontberen sociale steun, hebben op jonge leeftijd de zorg voor kinderen, of groeien op in gebroken gezinnen of in een criminele omgeving. Deze problemen plaatsen risicjongeren in een overlevingsmodus, leiden hun aandacht af van school en kunnen zelfs verhinderen dat zij naar school gaan.

Door de complexiteit en hardnekkigheid van de problemen van risicjongeren is het moeilijk hun kansen op economische en maatschappelijke onafhankelijkheid te vergroten. Het hebben van werk kan substantieel bijdragen aan dat doel. Om te stimuleren dat risicjongeren een baan zoeken, vinden en behouden, en om hun loopbaan gedurende hun werkzame leven vorm te geven, is het belangrijk dat zij een sterke beroepsidentiteit ontwikkelen. Beroepsidentiteit wordt gedefinieerd als je bewust zijn van de eigen capaciteiten, ambities en waarden ten aanzien van werk. Het is een veelzijdig concept dat volgens de definitie in deze dissertatie uit drie componenten bestaat: beroepszelfbeeld, beroepstoeekomstbeeld en beroepself-efficacy<sup>5</sup>. Mensen met een sterk beroepszelfbeeld kennen hun beroepsbekwaamheden, mogelijkheden en werkinteresses. Mensen met een helder beroepstoeekomstbeeld zijn zich bewust van hun werkambities en werkdoelen. Beroepself-efficacy geeft de mate weer waarin mensen geloven succesvol werkwaarden en –gewoonten uit te kunnen voeren. De drie componenten worden uitgedrukt in drie kernvragen waarmee individuen zichzelf als arbeidskracht kunnen definiëren:

- Wie ben ik? Besef van beroepsbekwaamheden, mogelijkheden en werkinteresses (beroepszelfbeeld)
- Wie wil ik zijn? Besef van werkambities en werkdoelen (beroepstoeekomstbeeld)
- Ben ik in staat daar te komen? Ingeschatte mate van succes waarin werkwaarden en –gewoonten worden uitgevoerd die nodig zijn om de ambities te realiseren (beroepself-efficacy).

Hoewel een sterke beroepsidentiteit voor iedereen relevant is, is deze voor risicjongeren extra belangrijk omdat zij kan helpen tegenwicht te bieden aan hun

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<sup>5</sup> De term self-efficacy wordt onvertaald gelaten onder verwijzing naar de definitie: "[...] judgments how well one can execute courses of action required to deal with prospective situations" (Bandura, 1982, p.122).

problematiek. Om een sterke beroepsidentiteit te ontwikkelen is het nodig dat risicojongeren leren welk werk ze willen en kunnen doen en hoe ze dergelijke toekomstige posities kunnen verwerven. Zodoende kan een sterke beroepsidentiteit risicojongeren ondersteunen aan hun precare omstandigheden te ontsnappen en biedt deze hun betere perspectieven op passend werk en een passende positie in de samenleving.

Dit onderzoeksproject beoogt kennis en inzichten op te leveren over de beroepsidentiteit van risicojongeren. Dit doel valt uiteen in **twee subdoelen**. Het **eerste subdoel** is na te gaan hoe meerdere kenmerken van risicojongeren gerelateerd zijn aan hun beroepsidentiteit. Daarbij gaat speciale aandacht uit naar veranderbare kenmerken met het oog op aangrijpingspunten voor de praktijk in onderwijs en sociaal werk. Een voor de hand liggende gelegenheid om aandacht te schenken aan dergelijke kenmerken is tijdens een-op-een mentorbijeenkomsten tussen een mentor en student. Omdat mentorschap een belangrijk element vormt van opleidingen en programma's voor risicojongeren, is het essentieel dat mentorkwaliteiten tegemoet komen aan percepties van studenten en hun mentoren. Het **tweede subdoel** is daarom te ontdekken welke mentorkwaliteiten als meest waardevol worden ervaren door studenten en hun mentoren. Die kwaliteiten kunnen worden toegepast in een-op-een mentorbijeenkomsten om een geschikte ambiance en voorwaarden te creëren om niet-schoolse onderwerpen, zoals beroepsidentiteit, te bespreken. Er zijn vier studies uitgevoerd om dit tweeledige doel te bereiken.

Het eerste subdoel slaat op de *mate* waarin relaties tussen individuele kenmerken en beroepsidentiteit blijken te bestaan. Om dit te onderzoeken zijn kwantitatieve methoden toegepast in drie cross-sectionele vragenlijststudies. Het tweede subdoel vergt een kwalitatieve methodologische benadering om *percepties* van zowel studenten als mentoren over mentorkwaliteiten te verkennen. Om dit te onderzoeken is een diepgaande interviewstudie uitgevoerd.

Vier instellingen zijn benaderd om te participeren in deze studies, omdat zij toegewijd zijn aan het creëren en verbeteren van kansen voor risicojongeren. De eerste twee instellingen zijn de grootste scholen voor middelbaar beroepsonderwijs (mbo) in de regio Rotterdam. Zij bieden vier onderwijsniveaus, waarvan de Entree-opleiding het laagste niveau is (zie Bijlage A voor een overzicht van het Nederlandse onderwijssysteem). De Entree-opleiding gaat vooraf aan de basisopleiding die opleidt tot de officieel vereiste startkwalificatie voor jeugdigen tot 23 jaar om te arbeidsmarkt te betreden; voor jongvolwassenen tussen 23 en 27 jaar wordt de basisopleiding aanbevolen. Entree-opleidingen zijn verplicht alle studenten onder de 23 jaar te accepteren, ongeacht hun vooropleiding of gebrek daaraan. De studentpopulatie die naar een Entree-opleiding gaat, is zeer divers en schooluitval is een permanente dreiging. In de studies van dit onderzoeksproject participeren van deze twee mbo-instellingen alleen studenten van de Entree-opleiding.

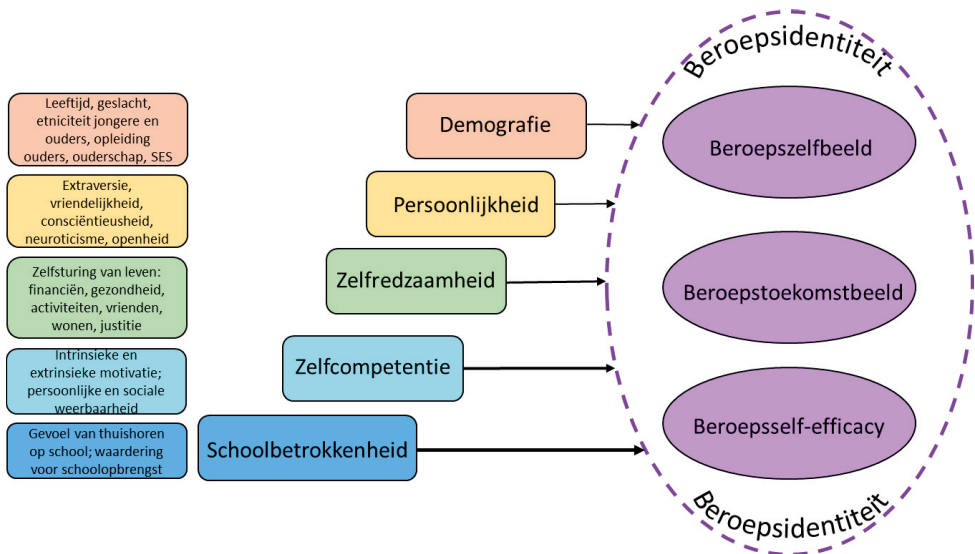
De derde instelling is een Terugkeerprogramma voor voormalig voortijdig schoolverlaters die al enige tijd uit het onderwijs zijn, meestal door serieuze problemen die het moeilijk maken naar school te gaan. Deze voormalige schooluitvallers willen weer naar school en om dat mogelijk te maken krijgen zij intensieve steun in het



Terugkeerprogramma om hun leven op het goede spoor te krijgen. Tegelijkertijd helpt het programma hen om opnieuw te wennen aan de dagelijkse routine van naar school gaan, houden aan afspraken en schoolopdrachten maken. De vierde instelling is het gemeentelijke Informatieloket voor jongeren, een hulpdienst die jeugdigen en jongvolwassenen helpt en adviseert met kwesties variërend van dakloosheid tot het aanvragen van een uitkering. Deze risicjongeren gaan niet naar school, een cursus of programma, en hebben ook geen baan. Velen van hen worden teruggestuurd naar school, ofwel naar een speciaal programma zoals het Terugkeerprogramma, ofwel naar regulier onderwijs aan een mbo, zoals de Entree-opleiding.

## 2. Individuele kenmerken van risicjongeren

Hoofdstuk 2 beschrijft de eerste studie die verkent welke individuele kenmerken van risicjongeren gerelateerd zijn aan de drie componenten van beroepsidentiteit, dat wil zeggen, beroepszelfbeeld, beroepstoekomstbeeld en beroepself-efficacy. In deze verkenning zijn meerdere kenmerken opgenomen, geïnspireerd door eerdere studies, hoewel hun resultaten veelal waren verkregen onder andere populaties dan risicjongeren en een gefragmenteerd beeld lieten zien wat betreft de kenmerken. Ten eerste is de relatie onderzocht tussen individuele kenmerken van risicjongeren en de drie componenten van beroepsidentiteit. Ten tweede, om inzicht te verkrijgen in mogelijke verbeteringen voor de praktijk, is speciale aandacht geschonken aan die kenmerken die opgepakt kunnen worden door professionals in het onderwijs en sociaal werk.



Figuur Sa.1. Conceptueel model van de studie

De studie is uitgevoerd op basis van een ontwikkeld conceptueel model (zie Figuur Sa.1). Dit model drukt de veronderstelde volgorde uit van de invloed die de kenmerken

hebben. Sommige kenmerken oefenen hun invloed uit voorafgaande aan alle andere, zoals geslacht en etniciteit. Deze krijg je bij de geboorte en zijn iemands meest nabije kenmerken. Andere kenmerken volgen, van minder tot minst nabij, gegroepeerd in vijf clusters.

In het conceptueel model vertegenwoordigt de afstand van de pijlen tot de componenten van beroepsidentiteit (de ovale vorm) de volgorde van potentiële invloed van de kenmerken op beroepsidentiteit: hoe korter de afstand, hoe eerder het kenmerk invloed kan hebben uitgeoefend op beroepsidentiteit. Het meest nabije cluster bestaat uit demografische kenmerken, te weten leeftijd, geslacht, etniciteit van participanten en hun ouders, ouderschap van participanten en sociaaleconomische status (eerste en bovenste tekstblok). Het tweede cluster bevat de Big-5 persoonlijkheidstrekken, namelijk extraversie, vriendelijkheid, consciëntieusheid, neuroticisme en openheid (tweede tekstblok). Zij worden verondersteld om invloed uit te oefenen op beroepsidentiteit na de demografische kenmerken en voor de kenmerken van het derde cluster, dat bestaat uit zelfredzaamheidskenmerken (derde tekstblok). Dit cluster omvat aspecten om zelf het leven te sturen: geld, dagelijkse activiteiten, wonen, de sfeer thuis, gezondheid, gevoelens, vrienden, verslaving (aan roken, alcohol, drugs, gokken of gamen) en contact met politie of justitie. Het vierde cluster is gedefinieerd als zelfcompetentie met kenmerken die geacht worden beroepsidentiteit te beïnvloeden na de drie voorafgaande clusters (vierde tekstblok). Zelfcompetentie kenmerken zijn intrinsieke en extrinsieke motivatie, en persoonlijke en sociale weerbaarheid. Het vijfde en laatste cluster bevat kenmerken van schoolbetrokkenheid, te weten gevoel van thuishoren op school en waardering voor schoolopbrengst (vijfde en onderste tekstblok). Zij worden verondersteld hun invloed pas te gaan uitoefenen vanaf het moment dat kleuters naar school gaan.

Uitgaande van dit model zijn multivariate regressieanalyses uitgevoerd waarin de clusters bloksgewijs in het model zijn opgenomen. Eerst is geanalyseerd hoeveel het meest nabije cluster van demografische kenmerken bijdraagt aan de proportie verklaarde variantie in elk van de drie componenten van beroepsidentiteit. Vervolgens zijn de volgende clusters één voor één toegevoegd in de analyses in hun volgorde van veronderstelde nabijheid, om te bepalen in welke mate elk van die clusters de proportie verklaarde variantie verandert. Zodoende wordt duidelijk hoeveel proportie variantie extra kan worden verklaard door de minder nabije kenmerken bovenop de proportie variantie die al is verklaard door meer nabije kenmerken.

In het conceptuele model is niet alleen de lengte van de pijlen tot de ovale vorm van beroepsidentiteit verschillend, maar ook hun dikte. Dikte van de pijlen representeert veranderbaarheid; hoe dikker de pijl, hoe meer kansen om de betreffende kenmerken te veranderen. Het model laat zien dat de minst nabije clusters, dus die van zelfcompetentie en schoolbetrokkenheid, de meest veranderbare kenmerken bevatten. Het doel van de studie is de relatie tussen veranderbare kenmerken en beroepsidentiteit te onderzoeken. Als de analyses met bloksgewijze opname aangeven dat deze clusters nog steeds additionele proporties variantie van beroepsidentiteit kunnen verklaren, dan betekent dat dat deze veranderbare kenmerken kansen bieden die onderwijsprofessionals kunnen aanwenden in interventies om de beroepsidentiteit van risicojongeren te bevorderen.

Teneinde de stem, opinies en ideeën van risicjongeren zelf te horen, is opzettelijk gekozen voor een zelfrapportage vragenlijst als methode van dataverzameling. Deze is gebaseerd op andere vragenlijsten die zijn aangepast aan het doel en de doelgroep van deze studie. De vragenlijst is gevalideerd door professionals en vervolgens getest onder leden van de doelgroep. De vragenlijst is opgenomen als bijlage B. De constructen die met meerdere items zijn gemeten laten een goede fit zien in een bevestigende factoranalyse (confirmatory factor analysis) met de items als categorale indicatoren van latente trekken. De validiteit van het meetinstrument is daarmee bevestigd. Voor de dataverzameling is een passende steekproef van 996 risicjongeren gebruikt.

Uit de eerste analysestap komen veel significante hoofdeffecten naar voren van individuele kenmerken met een of meer van de componenten van beroepsidentiteit. De tweede analysestap, de analyses met bloksgewijze opname, laat zien dat ongeveer 40% van de variantie van zowel beroepszelfbeeld als van beroepsself-efficacy en ongeveer 13% van de variantie van beroepstoekomstbeeld wordt verklaard door de kenmerken met significante hoofdeffecten. Van het cluster met persoonlijkheidstrekken verklaren vriendelijkheid en consciëntieusheid de grootste proporties variantie voor alle drie de componenten van beroepsidentiteit. Daarna volgen de zelfcompetentiekenmerken: intrinsieke motivatie en persoonlijke en sociale weerbaarheid verklaren samen circa 12% additionele variantie van beroepszelfbeeld; extrinsieke motivatie en sociale weerbaarheid verklaren circa 3% van beroepstoekomstbeeld; en intrinsieke motivatie en persoonlijke weerbaarheid verklaren circa 10% additionele variantie van beroepsself-efficacy. Ten slotte blijkt van het schoolbetrokkenheidcluster waardering voor schoolopbrengst bescheiden additionele variantie te verklaren in de scores op beroepstoekomstbeeld en beroepsself-efficacy.

Vooral intrinsieke en extrinsieke motivatie, persoonlijke en sociale weerbaarheid en waardering voor schoolopbrengst komen in deze studie naar voren als veranderbare kenmerken die veelbelovend lijken om beroepsidentiteit te bevorderen.

### **3. Weerbaarheid en verschillen tussen risicjongeren**

Hoofdstuk 3 richt zich op de weerbaarheid van risicjongeren, het vermogen om uitdagingen het hoofd te bieden en ernaar te handelen. Hoewel het voor iedereen belangrijk is weerbaar te zijn, is het essentieel voor risicjongeren vanwege de obstakels waarmee ze geconfronteerd worden. Persoonlijke weerbaarheid stelt risicjongeren in staat zelfstandig hun problemen op te lossen en beslissingen te nemen over belangrijke kwesties in het leven, zoals opleiding, werk en geld. Sociale weerbaarheid houdt in dat risicjongeren een netwerk van personen hebben bij wie ze terecht kunnen bij problemen en die ze daadwerkelijk om hulp kunnen vragen als dat nodig is.

Weerbaarheid is geen vaststaand feit; het is veranderbaar en kan worden versterkt. Zoals bleek uit Hoofdstuk 2, is sprake van een significante relatie tussen persoonlijke en sociale weerbaarheid en de drie componenten van beroepsidentiteit. Deze relatie is veelbelovend want zij legitimeert te onderzoeken of stimulans van weerbaarheid helpt om beroepsidentiteit te bevorderen. Door de heterogeniteit van de populatie van risicjongeren is de relatie echter misschien niet eenduidig. Risicjongeren verschillen

in individuele kenmerken. Die verschillen kunnen tot uitdrukking komen in verschillende sterkten van de relaties tussen weerbaarheid en beroepsidentiteit. In dat geval is sprake van een moderatie-effect, dat wil zeggen dat de relatie is gewijzigd. Als de relatie tussen weerbaarheid en beroepsidentiteit inderdaad niet gelijk is voor alle risicjongeren en wordt gewijzigd of gemodereerd door andere kenmerken, kan kennis over de modererende kenmerken helpen bij het ontwerpen van interventies die zijn afgestemd op de specifieke kenmerken van een student of subgroep studenten, en om lessen en mentormethoden aan te passen aan risicjongeren om hun beroepsidentiteit te bevorderen. Het kan bijvoorbeeld betekenen, dat iemand met een sterke persoonlijke weerbaarheid niet gehinderd wordt door schulden om een bepaald niveau van beroepsidentiteit te verkrijgen, terwijl een andere zonder dergelijke sterke persoonlijke weerbaarheid wel gehinderd wordt door schulden. In dit voorbeeld wordt de relatie tussen persoonlijke weerbaarheid en beroepsidentiteit gemodereerd door het hebben van schulden, wat impliceert dat het extra belangrijk is persoonlijke weerbaarheid te stimuleren onder risicjongeren met schulden.

Uitgaande van de bewezen relatie tussen weerbaarheid en beroepsidentiteit, gaat Hoofdstuk 3 in op de onderzoeksvraag in welke mate individuele kenmerken van risicjongeren de sterkte van relaties tussen persoonlijke en sociale weerbaarheid aan de ene kant, en de drie componenten van beroepsidentiteit aan de andere kant, kunnen modereren. Alleen de individuele kenmerken uit Hoofdstuk 2 met een hoofdeffect op een of meer van de componenten van beroepsidentiteit worden betrokken. Deze tweede studie gebruikt de data die zijn verzameld met de vragenlijst uit de eerste studie.

De resultaten laten zien dat hogere persoonlijke weerbaarheid en hogere sociale weerbaarheid in alle gevallen samengaat met een hogere beroepsidentiteit, ongeacht het individuele kenmerk. Maar de sterkte van de relaties verschilt voor verschillende groepen risicjongeren. De relaties tussen weerbaarheid en een of meer van de drie componenten van beroepsidentiteit zijn sterker voor mannen dan voor vrouwen, voor jongere subgroepen risicjongeren vergeleken met oudere subgroepen en voor degenen die met justitie in aanraking zijn geweest. De relatie tussen persoonlijke weerbaarheid en beroepsself-efficacy is bijvoorbeeld zwakker voor vrouwen dan voor mannen. Dat betekent dat over meer of minder persoonlijke weerbaarheid beschikken minder relevant is voor vrouwen met betrekking tot hun beroepsself-efficacy. Voor mannen is deze relatie sterker: het niveau van beroepsself-efficacy is lager voor mannen met lage persoonlijke weerbaarheid en hoger voor mannen met hoge persoonlijke weerbaarheid. Stimuleren van persoonlijke weerbaarheid kan vooral bijdragen aan sterkere beroepsself-efficacy voor mannen.

Sterkere relaties zijn ook gevonden voor risicjongeren die zichzelf inschalen als minder vriendelijk, consciëntieus, neurotisch, open en intrinsiek gemotiveerd, die minder waardering uitdrukken voor schoolopbrengst, en voor de meer zelfredzame risicjongeren en degenen met een hogere sociaaleconomische status. De meeste moderator-effecten treden op voor beroepsself-efficacy. Persoonlijke en sociale weerbaarheid hebben ongeveer hetzelfde aantal moderator-effecten.



#### 4. Schoolbetrokkenheid en verschillen tussen risicjongeren

Hoofdstuk 4 legt zich toe op de emotionele schoolbetrokkenheid van risicjongeren, gedefinieerd als het gevoel dat een school oproept in de student. Emotionele schoolbetrokkenheid bestaat uit twee aspecten: een gevoel van thuishoren op school en een gevoel van waardering voor schoolopbrengst, zoals het behalen van een diploma. Emotionele schoolbetrokkenheid kan gezien worden als een veranderbaar kenmerk. Dit maakt het een interessant kenmerk in het licht van de zoektocht naar manieren om de beroepsidentiteit van risicjongeren te stimuleren.

Emotionele schoolbetrokkenheid is belangrijk om risicjongeren naar school te blijven laten gaan en hun kans op diplomering te vergroten, wat hun maatschappelijke kansen verbetert. Een opleiding stelt hen in staat hun beroepsidentiteit te ontwikkelen tijdens praktijklessen, stages en portfolio-opdrachten. Hoe langer een risicostudent naar school gaat, des te meer gelegenheid er is om aan deze taken te werken. Het stimuleren van emotionele schoolbetrokkenheid is daarom vooral waardevol voor risicjongeren voor wie het moeilijk is om vol te houden naar school te gaan en voor wie schooluitval een permanente dreiging is.

Hoofdstuk 2 toonde een significante relatie aan tussen emotionele schoolbetrokkenheid en beroepsidentiteit. Vergelijkbaar met de studie over moderatoreffecten met weerbaarheid, kunnen zich voor de heterogene groep risicjongeren verschillen voordoen in de relaties tussen hun emotionele schoolbetrokkenheid en hun beroepsidentiteit. Een voorbeeld kan dit verhelderen. Het illustreert potentieel verschillende relaties tussen gevoel van thuishoren op school en beroepsidentiteit, afhankelijk van de mate van consciëntieusheid. Consciëntieuzere jongeren zijn harde werkers, zij werken uit zichzelf en hebben geen aanmoediging van buitenaf nodig om te presteren en aan hun beroepsidentiteit te werken. Minder consciëntieuze jongeren daarentegen, zijn makkelijk afgeleid en hebben het nodig zich prettig te voelen om te kunnen presteren; met andere woorden, zij hebben er meer behoefte aan zich thuis te voelen op school. Als minder consciëntieuze jongeren zich ongemakkelijk voelen op school kan dat hun beroepsidentiteit beïnvloeden. In dit voorbeeld blijkt de relatie tussen gevoel van thuishoren op school en beroepsidentiteit verschillend te zijn voor verschillende groepen van individuen. De relatie wordt gemodereerd door de mate van consciëntieusheid: de relatie is sterker voor de minder consciëntieuze risicjongeren en, hoewel nog steeds positief, zwakker voor hun consciëntieuzere leeftijdgenoten.

In Hoofdstuk 4 wordt de studie behandeld naar de vraag in welke mate individuele kenmerken van risicjongeren de sterkte van de relaties tussen gevoel van thuishoren op school en waardering voor schoolopbrengst, de twee aspecten van emotionele schoolbetrokkenheid aan de ene kant, en de drie componenten van beroepsidentiteit aan de andere kant, kunnen modereren. De individuele kenmerken opgenomen in deze studie zijn degenen die een hoofdeffect laten zien op een of meer van de componenten van beroepsidentiteit zoals gepresenteerd in Hoofdstuk 2. De verzamelde data van de vragenlijst uit de eerste studie zijn gebruikt.

De resultaten tonen dat hoe sterker het gevoel van thuishoren op school en hoe sterker de waardering voor schoolopbrengst, des te sterker de componenten van beroepsidentiteit, ongeacht het individuele kenmerk. Toch is de sterkte van deze relaties verschillend voor verschillende groepen risicjongeren. Er worden sterkere relaties gevonden tussen emotionele schoolbetrokkenheid en een of meer van de componenten van beroepsidentiteit voor jongere subgroepen vergeleken met oudere subgroepen, voor risicjongeren die met justitie in aanraking zijn geweest en voor degenen die minder tevreden zijn over hun verslavend gedrag met betrekking tot drugs, alcohol, roken, gokken en gamen. De relatie is ook sterker voor meer zelfredzame risicjongeren en degenen met een hogere sociaaleconomische status. Ten slotte is de relatie sterker voor de risicjongeren met lagere scores op alle andere kenmerken, zoals persoonlijkheidstrekken en motivatie. Deze resultaten betekenen, bijvoorbeeld, dat het aanmoedigen van beide aspecten van emotionele schoolbetrokkenheid positief kan bijdragen aan het beroepszelfbeeld en de beroepself-efficacy van minder vriendelijke risicjongeren en dat het aanmoedigen van de waardering voor schoolopbrengst de beroepself-efficacy van minder intrinsiek gemotiveerde risicjongeren kan bevorderen.

Voor beroepstoekomstbeeld is slechts één moderatoreffect gevonden, de meeste moderatoreffecten betreffen beroepself-efficacy. Voor waardering voor schoolopbrengst zijn meer moderatoreffecten gevonden dan voor gevoel van thuishoren op school.

## **5. Mentorschap van risicjongeren**

Hoofdstuk 5 concentreert zich op het mentorschap van risicjongeren. Beroepsidentiteit, weerbaarheid, emotionele schoolbetrokkenheid zijn alle belangrijke factoren die kunnen bijdragen aan het verhogen van de kansen voor risicjongeren op een duurzame en zelfstandige positie in de samenleving. Een toegankelijke plek om deze onderwerpen te bespreken is school, zoals de Entree-opleiding op mbo-scholen of een voorbereidend programma, zoals het Terugkeerprogramma. Een mentor kan deze taak op zich nemen, als onderdeel van de rol om risicjongeren op school en in hun leven te begeleiden en ondersteunen. Mentorschap is een sleutelement van de programma's in dit onderzoeksproject en vindt plaats in een-op-een mentorbijeenkomsten. Mentorbijeenkomsten bieden een goede gelegenheid voor de focus op beroepsidentiteit.

Dit hoofdstuk beschrijft de studie die is uitgevoerd op de Entree-opleiding van de mbo-scholen en op het Terugkeerprogramma. Er is gebruik gemaakt van een gelegenheidssteekproef waarin alleen risicostudenten zijn betrokken. Deze studie onderzoekt mentorkwaliteiten die worden ervaren als meest waardevol door risicostudenten en hun mentoren. Voor dit doel is een kwalitatief onderzoek opgezet met interviews met mentoren en studenten. Risicostudenten kunnen andere percepties en voorkeuren hebben dan studenten in het regulier onderwijs en aanpassen aan de waarden en behoeften van risicostudenten is essentieel. Om een eenzijdige nadruk vanuit het studentperspectief te vermijden, zijn ook de evaluatieve perspectieven van mentoren betrokken. Een mismatch van percepties tussen risicostudenten en mentoren zou de mentorpraktijk kunnen frustreren.

Verscheidene mentorkwaliteiten uit eerdere studies zijn onderzocht. Deze zijn gecategoriseerd in drie clusters: mentortaken, dat wil zeggen acties, gedrag en vormen van ondersteuning door de mentor; relaties tussen mentor en student, dat wil zeggen de manier waarop mentor en student met elkaar omgaan; en mentorkarakteristieken, dat wil zeggen kenmerken van een mentor. Richtinggevende begrippen, gerelateerd aan deze clusters, zijn afgeleid uit de literatuur en gebruikt om de data te analyseren.

Aan de hand van een topiclijst zijn semigestructureerde interviews afgenomen bij 31 risicostudenten en 24 mentoren. Topics voor risicostudenten hadden betrekking op percepties van en ervaringen met de mentor en het mentorproces en voor mentoren op de evaluatie van de doelen en de implementatie van het mentorproces in het onderwijsprogramma. Aanvullend konden respondenten eigen onderwerpen inbrengen. Data zijn gecodeerd en geanalyseerd in iteratieve rondes. In het definitieve codeerschema bestaat het *mentortaken*-cluster uit zes categorieën, het cluster van de *relaties tussen mentor en student* uit vijf categorieën en het *mentorkarakteristieken*-cluster uit drie categorieën. Om de kwaliteit van de data-analyse te valideren, is na afloop een externe audit uitgevoerd gericht op de zichtbaarheid, begrijpelijkheid en aanvaardbaarheid van de genomen beslissingen. Het audit rapport bevestigt de kwaliteit van de data-analyses en bevat geen aanbevelingen voor verbetering.

De resultaten van deze kwalitatieve studie laten zien dat mentortaken eruit bestaan dat zij studenten begeleiden, hen pedagogisch benaderen, het motiveren voor leren en school stimuleren, en academische en informatie-ondersteuning bieden. Taken en benadering in begeleiding worden het vaakst genoemd door mentoren; academische ondersteuning wordt het vaakst genoemd door studenten. Wat betreft relaties tussen mentor en student, hebben zowel mentoren als studenten waardering voor respect, gelijkheid, autonomie en een goede band. De rol van de mentor moet gezagvol maar niet autoritair zijn. Ook moet de rol niet doorslaan in populair gedrag. Mentor-karakteristieken betreffen het laten zien van empathie, oprechte zorg en vertrouwen. De resultaten tonen een spanning aan tussen emotionele nabijheid en professionele distantie waartussen de mentor moet navigeren. Mentorschap is een soort koordansen dat vraagt om emotionele responsiviteit. Emotionele responsiviteit wordt voorgesteld als een nieuw alomvattend concept voor een goede mentor.

## 6. Conclusies, discussie en implicaties

Het doel van dit onderzoeksproject is kennis over en inzichten in de beroepsidentiteit van risicojongeren te verschaffen, met twee subdoelen. Het eerste subdoel is te achterhalen welke kenmerken van risicojongeren gerelateerd zijn aan hun beroepsidentiteit. Dat betreft zowel (a) relaties tussen veranderbare individuele kenmerken en beroepsidentiteit als (b) relaties tussen weerbaarheid en emotionele schoolbetrokkenheid aan de ene kant en beroepsidentiteit aan de andere kant, mogelijk gemodereerd door individuele kenmerken. Het tweede subdoel is uit te vinden welke mentorkwaliteiten als meest waardevol worden ervaren door risicostudenten en hun mentoren.

De bijbehorende **onderzoeksvragen** kunnen nu beantwoord worden. Wat betreft het eerste subdoel zijn, ten eerste, veel significante relaties met verschillende sterkten gevonden tussen individuele kenmerken en de drie componenten van beroepsidentiteit, de hoofdeffecten. Ten tweede blijken de relaties tussen weerbaarheid en emotionele schoolbetrokkenheid aan de ene kant en beroepsidentiteit aan de andere kant substantieel te variëren voor verschillende subgroepen risicostudenten. Dit betreft de zogenaamde moderatoreffecten. Wat betreft het tweede subdoel blijken studenten en mentoren een grote variatie aan, soms tegenstrijdige, percepties en voorkeuren over mentorschap uit te drukken. De resultaten van de vier studies weerspiegelen de heterogeniteit van risicjongeren. De conclusie luidt dat de resultaten niet gelijk opgaan voor de groep risicjongeren als een geheel. De crux is dat risicjongeren zorgvuldige individuele aandacht en individueel maatwerk nodig hebben als we hun beroepsidentiteit en de drie componenten effectief willen bevorderen in onderwijs- en sociale interventies en tijdens mentorbijeenkomsten.

**Beroepstoekomstbeeld** laat enkele afwijkende resultaten zien vergeleken met beroepszelfbeeld en beroepself-efficacy. Dat kan betekenen dat het belang van de drie componenten waarop het construct van beroepsidentiteit is gebouwd varieert. Voor beroepstoekomstbeeld zou het kunnen helpen om de werkoriëntatie van risicjongeren in ogenschouw te nemen: verwachten zij te gaan werken in een stabiele baan of in een baan waarin ze kunnen groeien, en is hun werkmotivatie intrinsiek of extrinsiek georiënteerd? Het combineren van de vier mogelijke antwoorden op deze twee vragen in plaats van het toepassen van beroepstoekomstbeeld als één aspect, kan licht werpen op deze kwestie en kan risicjongeren helpen hun werkoriëntatie beter te begrijpen. Openheid kan een complicerende factor zijn, de persoonlijkheidstrek van open-minded zijn en openstaan voor nieuwe ervaringen. Dit kan helpen om vrijelijk toekomstige loopbanen te verkennen, maar kan uitmonden in onrealistische toekomstverwachtingen, in termen van geld en status. Het conflict tussen idealisme en realisme komt ook naar voren in de interviewstudie waaruit blijkt dat mentoren een noodzaak voelen om hun risicostudenten te wijzen op de grenzen van hun mogelijkheden, om ze te beschermen tegen valkuilen en om valse verwachtingen te vermijden.

**Self-agency** is een centraal concept in veel theorieën over beroepsidentiteit. Arbeidskrachten moeten zich kunnen aanpassen aan snelle en radicale veranderingen in werkomstandigheden. Een dergelijk intern kompas is belangrijker geworden omdat de huidige wisselvallige arbeidsmarkten individuen confronteren met meerdere loopbaan-transities. Maar deze theorieën worden doorgaans getest onder studentpopulaties op universiteiten en deze studenten beschikken in het algemeen over de kwaliteiten en flexibiliteit om loopbaanalternatieven te exploreren en die te benutten. Het kan echter betwijfeld worden in hoeverre het realistisch is zo'n niveau van self-agency te verwachten van risicjongeren. Individuen die tegen persoonlijke en sociale hordes aanlopen ervaren minder controle en keuzes in hun werk. Ze missen werk-*wilskracht*, die weergeeft hoe

individuele hun vermogen inschatten om ondanks beperkingen loopbaankeuzes te maken. Deze beperkingen kunnen de self-agency en wilskracht van risicojongeren verstoren.

Deze overwegingen leiden tot enkele suggesties om theorieën over beroepsidentiteit te verfijnen om tegemoet te komen aan de behoeften van risicojongeren voortkomend uit hun kwetsbaarheid. Ten eerste moeten deze theorieën de concepten self-agency en wilskracht heroverwegen en meer aandacht schenken aan loopbaankeuze voor risicojongeren die de veronderstelde niveaus van self-agency en wilskracht niet tonen. Risicojongeren hebben mogelijk intensieve begeleiding, advies en steun nodig bij het selecteren en maken van loopbaankeuzes, tijdens de opleiding, tijdens de transitieperiode van school naar werk en tijdens hun eerste baan. Ten tweede zouden beroepsidentiteit-theorieën rekening moeten houden met de potentiële bijdrage van emotionele schoolbetrokkenheid aan de ontwikkeling van beroepsidentiteit van risicojongeren. Meer emotionele schoolbetrokkenheid betekent langer naar school gaan en een lager risico op schooluitval. Tijdens die schoolperiode kunnen allerlei activiteiten hun beroepsidentiteit stimuleren, ondersteund door de begeleiding van de mentor. Ten derde zouden verfijnde beroepsidentiteit-theorieën aandacht moeten besteden aan de potentiële bijdrage van weerbaarheid van risicojongeren. Meer weerbaarheid is voor risicojongeren waardevol in direct versterkende zin en indirect om hun beroepsidentiteit te bevorderen.

Uit dit onderzoeksproject komen **drie praktische implicaties** naar voren. De meest belangrijke implicatie is om programmering, lesgeven en mentorschap aan te passen, afgestemd op verschillen tussen en behoeften van individuele risicojongeren. Hiervoor is het essentieel dat professionals in het programma, en mentoren in het bijzonder, hun studenten echt kennen. Je studenten leren kennen start ideaal gesproken met uitvoerige intakes en kan voortgezet worden tijdens het gehele programma. Studenten die minder persoonlijk of sociaal weerbaar blijken te zijn, zouden interventies moeten volgen die hen weerbaarder maken. Dit wordt vooral aanbevolen voor mannelijke en jongere risicojongeren en voor degenen met een strafblad. Van emotionele schoolbetrokkenheid is waardering voor schoolopbrengst de belangrijkste factor om aandacht aan te schenken. Pogingen om gevoelens van schoolbetrokkenheid aan te moedigen, zijn vooral zinvol voor de risicojongeren die jong zijn, een strafblad hebben en minder intrinsiek gemotiveerd zijn.

Maatwerk is ook essentieel voor het mentorschap in programma's voor risicojongeren, wat leidt tot de tweede implicatie, voor lerarenopleidingen. De verlangde mentorkwaliteiten krijgen mogelijk te weinig aandacht in lerarenopleidingen. Om risicojongeren adequaat te begeleiden en gegeven de precaire aard van deze taak voor deze doelgroep, zouden student-leraren beter op deze rol moeten worden voorbereid. Mentorkwaliteiten zouden kunnen worden getoetst tijdens sollicitatieprocedures voor leraren die in programma's voor risicojongeren willen werken, in plaats van de mentorrol standaard toe te wijzen. Indien een individuele leraar de noodzakelijke mentorkwaliteiten mist, is verdere opleiding aanbevolen. Supervisie en collegiale consultatie kunnen de

professionele ontwikkeling van mentoren ook ondersteunen, zowel tijdens inductieprogramma's als later tijdens hun werk als mentor.

De derde aanbeveling betreft de vraag of een brede of gerichte opleiding geschikter is voor risicojongeren op het onderwijsniveau van de bestudeerde programma's. Gericht of smal opleiden is erop gericht risicostudenten voor te bereiden op een *specifiek* beroep; dit zou mogelijk vooral iemands beroepself-efficacy ten goede komen. Een brede opleiding geeft een *algemene* beroepsmatige basis waarna werknemers verder worden geschoold in het bedrijf. Een brede opleiding maakt werknemers flexibeler, wat een voordeel is in veranderende arbeidsmarkten. Om risicojongeren een beroep te laten leren en hen gelijktijdig flexibel te kunnen laten bewegen op de arbeidsmarkt, zou een gecombineerd spoor voor deze doelgroep te prefereren zijn, met de nadruk op algemene vaardigheden en een paar keuzevakken om zich te specialiseren. Tijdens hun opleiding is het nodig dat mentoren risicojongeren activeren tot zelfreflectie die hen kan helpen hun loopbaan vorm te geven.

Het onderzoeksproject laat enkele beperkingen zien die leiden tot **suggesties voor toekomstig onderzoek**. Ten eerste zijn de verschillende groepen als één groep van risicojongeren beschouwd, omdat zij allen een kwetsbare schoolloopbaan hebben met een risico op voortijdige schooluitval. Dat kan vragen oproepen of implicaties zijn te formuleren die op hen allen van toepassing zijn. Toekomstig onderzoek wordt aanbevolen om na te gaan welke persoonlijke of sociale obstakels de ontwikkeling van een sterke beroepsidentiteit belemmeren en hoe deze obstakels zich verhouden tot andere individuele kenmerken.

De tweede suggestie betreft de steekproef van risicojongeren; deze was in de kwantitatieve en kwalitatieve studies bevredigend. Niettemin wordt aangenomen dat de zwakste groep onder hen, die potentieel het meest baat zou hebben van een sterkere beroepsidentiteit, misschien niet in de steekproef is opgenomen, simpelweg omdat ze erg moeilijk te traceren zijn: zij zijn de jonge mensen die niet naar de Entree-opleiding of het Terugkeerprogramma gaan, en die ook niet het Informatieloket bezoeken. De conclusies kunnen wel of niet op hen van toepassing zijn. Toekomstig onderzoek zou zich daarom moeten richten op deze groep om hun beroepsidentiteit te onderzoeken en hoe deze kan worden vergroot om hun kansen in de samenleving te verbeteren.

Ten derde wordt aanbevolen om ter aanvulling op de zelfrapportage vragenlijst ook meer objectieve indicatoren op te nemen om de beroepsidentiteit van risicojongeren te meten, zoals op tijd op school of stage komen, aantal en inhoud van de meegemaakte conflicten, frequentie van tijdig inleveren van schoolwerk enzovoorts. Vergelijkbare indicatoren en vragen kunnen worden gebruikt voor mentoren en stagebegeleiders. Zodoende kan een completer beeld ontstaan van de beroepsidentiteit van risicojongeren.

Ten vierde kan onderzoek naar werkzame mechanismen bijdragen aan meer inzicht in de beroepsidentiteit van risicojongeren. Dergelijk onderzoek kan zich richten op verschillende elementen van de programma's, zoals het aandeel praktijk- en theorietraining en op degenen die het programma uitvoeren, zoals mentoren. Vanwege de centrale rol in de programma's kunnen mentoren zelf als werkzame mechanismen



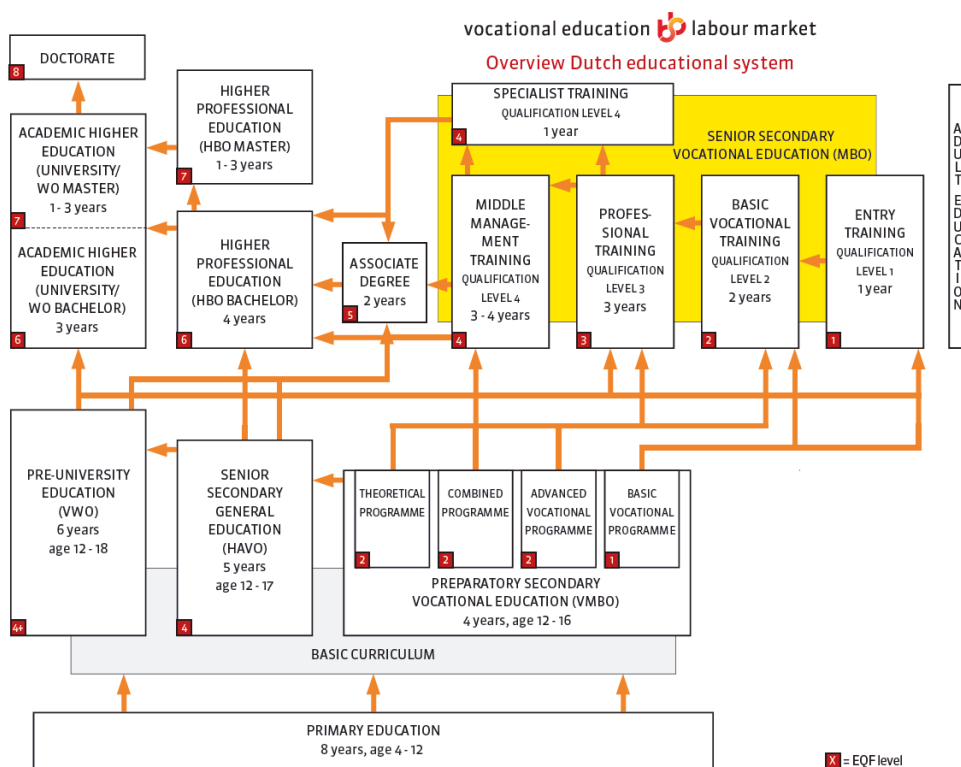
worden beschouwd. Effecten van hun begeleidende aanpak, de mate waarin zij emotioneel responsief zijn en specialisaties in mentorschap, bijvoorbeeld gericht op jongere mannen, kunnen worden onderzocht. Dergelijke vragen verlangen quasi-experimenteel onderzoek, uitgevoerd in een zorgvuldig ontworpen interventie waarin verschillende aspecten systematisch worden gevarieerd en longitudinaal worden bestudeerd.

De vijfde en laatste aanbeveling voor toekomstig onderzoek betreft een initiatief voor mentorschap. In de bestudeerde programma's zijn mentoren belangrijk om de beroepsidentiteit van risicojongeren te bevorderen; zij kunnen gezien worden als het anker. Het mag worden aangenomen dat deze cruciale rol niet ophoudt op het moment dat de studenten de school verlaten, al dan niet met diploma. Steun zal waarschijnlijk nog steeds noodzakelijk zijn en de voormalig studenten zullen het waarderen hun eerste ervaringen in hun nieuwe omgeving, of het nu een vervolgopleiding, werk of rondkijken wat nu te doen is, te bespreken. Voor dat doel zou een experiment met verlengd mentorschap kunnen worden opgezet. Dit is maatwerk in optima forma waarin mentoren verwacht worden precies alle acties, beslissingen en gebeurtenissen die ze met en ten behoeve van hun voormalig student ondernemen, bij te houden. De gemeente wordt voorgesteld een dergelijk initiatief te financieren, omdat voortgezet mentorschap kan resulteren in minder uitkeringsaanvragen door risicojongeren.

De studies die in deze dissertatie zijn gepresenteerd laten zien dat het bevorderen van de beroepsidentiteit van risicojongeren kan worden verbeterd als rekening wordt gehouden met hun verschillende individuele kenmerken en als voorkeuren van risicojongeren en hun mentoren over mentorkwaliteiten aandacht krijgen tijdens mentorbijeenkomsten. Afstemming op deze verschillen en behoeften betekent maatwerk in programmering en mentorschap. Deze dissertatie heeft bijgedragen aan pogingen om risicojongeren op het spoor te brengen en te houden van school en werk, wat uitmondt in betere toekomstperspectieven en een zelfstandige en duurzame positie in de samenleving.

## Appendices

## A. Overview Dutch education system



Retrieved from <https://www.s-bb.nl/education/dutch-educational-system>

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## B. Questionnaire of the study on vocational identity among at-risk youth

This questionnaire has been administered in the Netherlands. Items were translated from Dutch into English for the purpose of the articles.

### **Demographic background and personal characteristics**

#### **Age**

#### **Gender**

#### **Living conditions**

Who are you living with

#### **Ethnicity self/father/mother**

What is the native country of you/your father/your mother

#### **Education father/mother**

What kind of school did your father/your mother attend

#### **SES-following news**

I read about Dutch news in newspapers occasionally

I read about foreign news in newspapers occasionally

I watch the news at TV occasionally

I listen to news on the radio occasionally

#### **Police**

Have you ever been in contact with police or judiciary

Is there a case pending now

#### **Judiciary**

Have you ever been sentenced

### **Scales and items**

#### **Extraversion**

People feel cheered up by me

I am talkative

I talk to a lot of different people at parties

I am quiet (R)

#### **Agreeableness**

I like to help others

I sympathize with others' feelings

I am kind to almost everyone

#### **Conscientiousness**

I am easily distracted (R)

I persevere until a task is finished

I like to be organized

I stick to agreements

#### **Neuroticism**

Sometimes I feel happy, sometimes I feel sad

I feel blue sometimes

#### **Imagination**

I have an active imagination

I come up with new ideas

I am curious

I am inventive

**Self-sufficiency**

How satisfied are you about

- ... your money
- ... what you do during daytime
- ... your housing facilities
- ... how things are at home
- ... how healthy you are
- ... how you feel
- ... your friends

**Addiction**

How satisfied are you about the way you deal with

- ... smoking
- ... alcohol
- ... drugs
- ... gambling
- ... gaming

**Intrinsic motivation**

I do my best because

- ... I enjoy that
- ... I feel that is important
- ... it makes me feel proud

**Extrinsic motivation**

I do my best

- ... because others want me to
- ... so others will like me
- ... because I'll get in trouble if I don't

**Personal Resilience**

I create my own life

I am sure what to do to solve my problems

I am sure I

- ... can handle my problems myself
- ... come up with solutions for my problems
- ... can well care for myself
- ... can take important decisions about my life
- ... can take important decisions about learning
- ... can take important decisions about my work
- ... can take important decisions about housing
- ... can take important decisions about my money

**Social resilience**

I have a good friend

I have someone to talk to if there's trouble

Someone is really there for me if I need so

I ask for help if I need to

I know whom I can ask for help

I can depend on my family

I can depend on my friends

My family helps me

**Sense of Belonging at school**

School is okay for me  
I like going to school  
I think it is important to go to school  
I prefer being somewhere other than at school (R)  
I prefer going to school over working

**Valuing school outcome**

I really wish to graduate  
A degree is important to find a job  
I'm sure that I will finish a training  
I feel up like a training  
I think I would really learn a lot during a training

**Vocational Self-Image**

I really wish to know what I'm good at  
I know my strengths  
I know my weak points  
I know what I'm good at  
I know what I'm not good at  
I know what I can handle  
I know my limits

**Vocational Future Image**

I keep coming up with new ideas about work  
I am really looking for what I think is important in work  
I want to discover what kind of work I can do

**Vocational Self-Efficacy**

Later on at my job  
... I'll be on time  
... I'll work independently  
... I'll do a good job  
... I'll finish my work in time  
... I'll use my time effectively  
... I'll stick to the rules  
... I'll stick to agreements



C. Relatedness of individual characteristics to vocational self-image, vocational future image and vocational self-efficacy; in regression coefficients (se) and in correlations

Individual characteristic	Regression coefficients			Correlations		
	Vocational self-image <sup>a</sup>	Vocational future image	Vocational self-efficacy	Vocational self-image	Vocational future image	Vocational self-efficacy
Gender <sup>b</sup> (M=0, F=1)	.111*** (.041)		.212*** (.037)	.096**		.193***
Age <sup>b</sup>	.019*** (.008)		.013** (.006)			.080*
Education mother <sup>b</sup>						
Ethnicity father Dutch <sup>b</sup>	-.106*** (.044)	.141** (.064)	-.084** (.042)	-.084*	-.126**	-.069*
Ethnicity mother Dutch <sup>b</sup>	-.103*** (.044)	-.196*** (.061)	-.100*** (.041)	-.085*	-.077*	-.083*
Living with father <sup>b</sup>		.156*** (.059)			-.110***	
Living with caregiver <sup>b</sup>		.557*** (.178)			.088**	
Living with sister <sup>b</sup>		.146** (.063)			.104**	
Living with child <sup>b</sup>		-.213*** (.089)			.077*	
SES-Following news <sup>b</sup>	.160*** (.067)		.170*** (.061)	.088**	-.080*	.092**
Extraversion	-.310*** (.063)		-.242*** (.058)	-.152**		-.144**
Agreeableness	.129*** (.028)	.082** (.039)	.081*** (.026)	.386***	.232***	.325***
Conscientiousness	.366*** (.031)	.186*** (.045)	.388*** (.027)	.536***	.329***	.623***
Neuroticism	.372*** (.032)		.389*** (.029)	.607***	.290***	.734***
Imagination	-.041** (.019)	.055** (.026)		-.127**		-.127**
Self-sufficiency	.221*** (.031)	.257*** (.042)	.177*** (.029)	.519***	.365***	.403***
Addiction	.164*** (.029)			.277***	.128**	.137***
Contact with police <sup>b</sup>		-.069*** (.026)	.040*** (.017)		-.118**	.150***
Juvenile measure <sup>b</sup>			.155*** (.038)			-.137***
Community penalty <sup>b</sup>						-.066*
Detention <sup>b</sup>			-.110*** (.045)			-.081*
Judicial measure <sup>b</sup>			-.205*** (.061)			-.112***
No sentence no measure <sup>b</sup>			-.236*** (.074)			-.106**
Extrinsic motivation		.154*** (.028)	.114*** (.038)		.210***	.100**
Intrinsic motivation	.384*** (.027)	.115*** (.041)	.391*** (.024)	.579***		.645***
Personal Resilience	.568*** (.030)	.205*** (.048)	.477*** (.029)	.623***	.252***	.626***
Social Resilience	.319*** (.026)	.168*** (.038)	.208*** (.025)	.479***	.225***	.403***
Sense of belonging	.131*** (.025)	.087*** (.034)	.139*** (.022)	.283***	.227***	.334***
Valuing of school	.289*** (.029)	.224*** (.039)	.290*** (.025)	.439***	.342***	.495***

<sup>a</sup> For vocational self-image main effects per characteristic were analyzed multilevel, since location level showed significant variance. As in subsequent analyses with clusters of variables, the ML structure for vocational self-image disappeared due to more missings, all further analyses were conducted unilevel.

<sup>b</sup> Variables showing correlations between observed scores (pmcc, standardized). Correlations between observed scores are attenuated by measurement error, and therefore have lower levels than those stemming from the structural equation model. All other variables measured by Likert scales with correlations according to CFA.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .



D. Effects of clusters of variables on vocational self-image, in regression coefficients (se) and in beta-coefficients for final model

Cluster	Variables	Model 1a	Model 2b	Model 3b	Model 4b	Model 5b	Beta <sup>a</sup> Model 5b
Demographic	Intercept	4.150 (.157)	1.924 (.209)	1.289 (.210)	.627 (.184)	.550 (.189)	
	Gender (M=0, F=1)	.104* (.044)	.038 (.043)				
	Age	-.007 (.006)					
	Ethnicity father Dutch	-.062 (.064)					
	Ethnicity mother Dutch	-.069 (.062)	-.054 (.043)				
	Living with child	.103 (.073)					
Personality	SES-following news	-.240*** (.065)	-.033 (.062)				
	Extraversion		.035 (.031)				
	Agreeableness		.198*** (.038)	.204*** (.035)	.143*** (.035)	.133*** (.035)	.141
	Conscientiousness		.232*** (.038)	.250*** (.035)	.090* (.036)	.113*** (.036)	.119
	Neuroticism		-.051*** (.020)	.000 (.020)			
	Imagination		.114** (.036)	.116*** (.031)	.062* (.030)	.063* (.030)	.071
Self-sufficiency	Self-sufficiency			.143*** (.027)	.021 (.028)		
Self-competence	Intrinsic motivation				.111** (.034)	.114*** (.035)	.133
	Personal resilience				.326*** (.039)	.305*** (.038)	.312
	Social resilience				.094** (.030)	.111*** (.028)	.145
School engagement	Sense of belonging					-.043 (.026)	-.064
	Valuing					.058 (.032)	.074
	<i>F</i> ( <i>df</i> 1; <i>df</i> 2)	4.563 (6, 738)	21.142 (8, 640)	44.178 (5, 711)	55.806 (7, 607)	48.988 (8, 580)	
	<i>p</i>	.000	.000	.000	.000	.000	
	Durbin-Watson	2.030	2.009	2.018	2.031	2.041	
	<i>N</i>	745	649	717	615	589	
	<i>R</i> <sup>2</sup>	.036	.209	.237	.392	.403	
	Adj. <i>R</i> <sup>2</sup>	.028	.199	.232	.385	.395	
	<i>R</i> <sup>2</sup> -change		.188	.031	.122	.004	
	<i>F</i> -change ( <i>df</i> 1; <i>df</i> 2)		30.372 (5, 640)	28.546 (1, 711)	40.516 (3, 607)	2.024 (2, 580)	
	<i>p F</i> -change		.000	.000	.000	.133	

<sup>a</sup> Standardized regression coefficients.

\*  $p < .05$ . \*\*  $p < .01$ . \*\*\*  $p < .001$ .

E. Effects of clusters of variables on vocational future image, in regression coefficients (se) and in beta-coefficients for final model

Cluster	Variables	Model 1a	Model 2b	Model 3b	Model 4b	Model 5c	Beta <sup>a</sup> Model 5c
Demographic	Intercept	3.553 (.042)	2.154 (.239)	2.469 (.238)	1.557 (.322)	1.543 (.251)	
	Ethnicity father Dutch	-.025 (.086)					
	Ethnicity mother Dutch	-.171* (.083)	-.243*** (.062)	-.182** (.061)	-.161* (.067)	-.243*** (.062)	-.143
	Living with father	.124* (.063)	.158* (.063)	.141* (.062)	.114 (.067)		
	Living with caregiver	.577*** (.175)	.580** (.185)	.568** (.197)	.524* (.208)	.401* (.180)	.080
	Living with sister	.061 (.067)					
Personality	Living with child	-.194* (.091)	-.243* (.095)	-.277** (.097)	-.328** (.103)	-.324*** (.097)	-.120
	Extraversion		.013 (.043)				
	Agreeableness		.074 (.051)	.106* (.049)	.076 (.058)		
Self-sufficiency	Neuroticism		.050 (.027)				
	Imagination		.252*** (.050)	.263*** (.047)	.184*** (.052)	.217*** (.045)	.176
	Addiction			-.074** (.026)	-.062* (.028)		
Self-competence	Extrinsic motivation				.119*** (.034)	.124*** (.031)	.146
	Intrinsic motivation				.043 (.054)		
	Personal resilience				.114 (.061)		
	Social resilience				.070 (.046)	.094* (.040)	.090
School engagement	Sense of belonging					.130** (.041)	.119
	Valuing						
	<i>F</i> ( <i>df</i> 1; <i>df</i> 2)	5.525 (6, 820)	10.466 (8, 706)	12.114 (7, 720)	8.715 (11, 598)	14.717 (7, 686)	
	<i>p</i>	.000	.000	.000	.000	.000	
	Durbin-Watson	1.992	1.880	2.048	1.952	1.949	
	<i>N</i>	827	715	728	610	694	
	<i>R</i> <sup>2</sup>	.039	.106	.105	.138	.131	
	Adj. <i>R</i> <sup>2</sup>	.032	.096	.097	.122	.122	
	<i>R</i> <sup>2</sup> -change		.062	.010	.033	.013	
	<i>F</i> -change ( <i>df</i> 1, <i>df</i> 2)		12.185 (4, 706)	7.918 (1, 720)	5.695 (4, 598)	9.997 (1, 686)	
	<i>p F</i> -change		.000	.005	.000	.002	

<sup>a</sup> Standardized regression coefficients.

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

F. Effects of clusters of variables on vocational self-efficacy, in regression coefficients (se) and in beta-coefficients for final model

Cluster	Variables	Model 1a	Model 2b	Model 3b	Model 4b	Model 5b	Beta <sup>a</sup> Model 5b
Demographic	Intercept	4.193 (.146)	2.278 (.170)	2.222 (.168)	1.421 (.162)	1.292 (.166)	
	Gender (M=0, F=1)	.199*** (.040)	.113*** (.035)	.110** (.035)	.116*** (.034)	.127*** (.034)	.120
	Age	.006 (.006)					
	Ethnicity father Dutch	-.043 (.059)					
	Ethnicity mother Dutch	-.077 (.057)					
	Living with child	.075 (.066)	-.040 (.037)				
Personality	SES-following news	-.236*** (.060)	-.073 (.053)				
	Extraversion		.009 (.026)				
	Agreeableness		.215*** (.033)	.256*** (.030)	.159*** (.031)	.163*** (.031)	.185
	Conscientiousness		.279*** (.031)	.277*** (.031)	.151*** (.033)	.158*** (.032)	.178
Self-sufficiency	Imagination		.032 (.031)				
	Addiction			.015 (.016)			
	Contact police			-.048 (.049)			
	Community penalty			.027 (.057)			
	Detention			-.025 (.063)			
	Judicial measure			-.094 (.079)			
Self-competence	No sentence			-.073 (.058)			
	Intrinsic motivation				.165*** (.030)	.160*** (.031)	.203
	Personal resilience				.246*** (.035)	.211*** (.034)	.227
	Social resilience				-.008 (.025)		
School engagement	Sense of belonging					-.042 (.024)	-.067
	Valuing					.081** (.029)	.110
	<i>F</i> ( <i>df</i> 1; <i>df</i> 2)	9.091 (6, 754)	34.766 (7, 658)	30.861 (9, 720)	65.962 (6, 646)	58.253 (7, 626)	
	<i>p</i>	.000	.000	.000	.000	.000	
	Durbin-Watson	2.063	2.060	2.037	2.107	2.158	
	<i>N</i>	761	666	730	653	634	
	<i>R</i> <sup>2</sup>	.067	.270	.278	.380	.394	
	Adj. <i>R</i> <sup>2</sup>	.060	.262	.269	.374	.388	
	<i>R</i> <sup>2</sup> -change		.218	.005	.106	.008	
	<i>F</i> -change ( <i>df</i> 1; <i>df</i> 2)		49.104 (4, 658)	837 (6, 720)	36.805 (3, 646)	3.920 (2, 626)	
	<i>p F</i> -change		.000	.541	.000	.020	

<sup>a</sup> Standardized regression coefficients.

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

G. Relatedness of individual characteristics to vocational self-image, vocational future image and vocational self-efficacy; in regression coefficients (se) and in explained variance (percentage)

Individual characteristic	Vocational self-image <sup>a</sup>		Vocational future image		Vocational self-efficacy	
	Regression coefficients	Explained variance	Regression coefficients	Explained variance	Regression coefficients	Explained variance
Gender <sup>b</sup>	.111** (.041)	.0092			.212*** (.037)	.0372
Age <sup>b</sup>	.019* (.008)				.013* (.006)	.0064
Ethnicity father Dutch <sup>b</sup>	-.106* (.044)	.0071	.141* (.064)	.0059	-.084* (.042)	.0048
Ethnicity mother Dutch <sup>b</sup>	-.103* (.044)	.0072	-.196** (.061)	.0121	-.100* (.041)	.0069
Living with father <sup>b</sup>			.156** (.059)	.0077		
Living with caregiver <sup>b</sup>			.557** (.178)	.0108		
Living with sister <sup>b</sup>			.146* (.063)	.0059		
Living with child <sup>b</sup>	.160* (.067)	.0077	-.213* (.089)	.0064	.170** (.061)	.0085
SES-Following news <sup>b</sup>	-.310*** (.063)	.0222			-.242*** (.058)	.0204
Extraversion	.129*** (.028)	.0234	.082* (.039)	.0538	.081** (.026)	.0119
Agreeableness	.366*** (.031)	.1347	.186*** (.045)	.1082	.388*** (.027)	.1892
Conscientiousness	.372*** (.032)	.1318			.389*** (.029)	.1806
Neuroticism	-.041* (.019)	.0059	.055* (.026)	.0055		
Imagination	.221*** (.031)	.0548	.257*** (.042)	.1332	.177*** (.029)	.0428
Self-sufficiency	.164*** (.029)	.0384				
Addiction			-.069** (.026)	.0139	.040* (.017)	.0064
Contact with police <sup>b</sup>					.155*** (.038)	.0188
Community penalty <sup>b</sup>					-.110* (.045)	.0066
Detention <sup>b</sup>					-.205*** (.061)	.0125
Judicial measure <sup>b</sup>					-.236** (.074)	.0112
No sentence, no measure <sup>b</sup>					.114** (.038)	.0100
Extrinsic motivation			.154*** (.028)	.0441		
Intrinsic motivation	.384*** (.027)	.1892	.115** (.041)	.0847	.391*** (.024)	.2323
Personal resilience	.568*** (.030)	.3192	.205*** (.048)	.0635	.477*** (.029)	.2621
Social resilience	.319*** (.026)	.1552	.168*** (.038)	.0506	.208*** (.025)	.0790
Sense of belonging	.131*** (.025)	.0369	.087* (.034)	.0515	.139*** (.022)	.0445
Valuing school outcome	.289*** (.029)	.1096	.224*** (.039)	.1170	.290*** (.025)	.1399

<sup>a</sup> For vocational self-image, main effects per individual characteristic were analyzed multilevel, since site level showed significant variance. All percentages of explained variance were analyzed unilevel.

<sup>b</sup> Variables showing correlations between observed scores (pmcc, standardized). Correlations between observed scores are attenuated by measurement error, and therefore have lower levels than those stemming from the structural equation model. All other variables measured by Likert scales with correlations following best fitting CFA model.

\* $p < .05$ . \*\* $p < .01$ . \*\*\* $p < .001$ .

H. Moderator effects of personal resilience and social resilience on vocational self-image, vocational future image and vocational self-efficacy with individual characteristics that have shown main effects (significant effects reported only)

Individual Characteristics	Vocational Self-image			Vocational Future Image			Vocational Self-efficacy		
	Personal resilience	Social resilience		Personal resilience	Social resilience		Personal resilience	Social resilience	
	Dev	Z	Size	Dev	Z	Size	Dev	Z	Size
Gender									
Age									
Ethnicity/father									
Ethnicity/mother									
Ses-following news									
Extraversion									
Agreeableness									
Conscientiousness									
Neuroticism									
Imagination									
Self-sufficiency									
Addiction									
Contact police									
Community penalty									
Detention									
No sanction/measure									
Intrinsic motivation									
Sense of belonging									
Valuing of school									
Personal resilience									

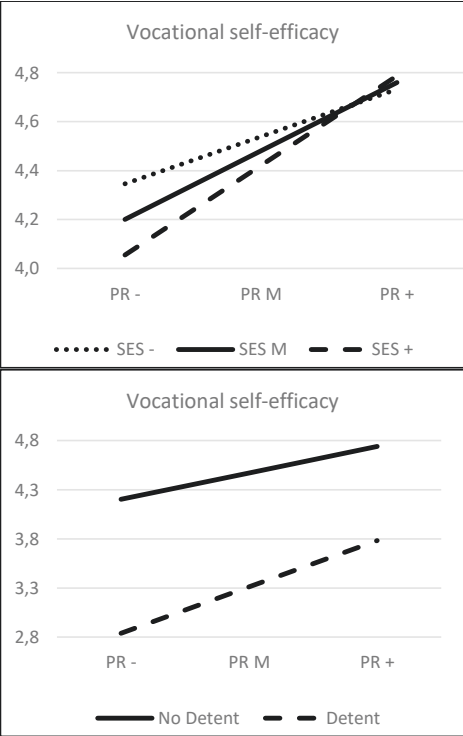
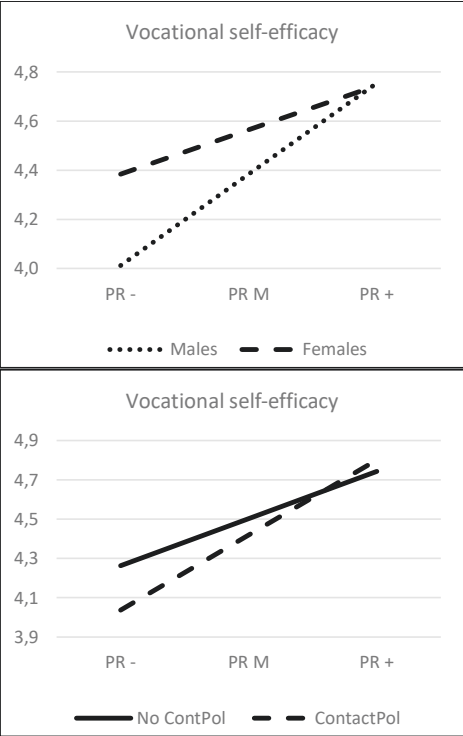
Note. Dev = Deviance score. Z = Wald-Z-scores. Size = Effect-size in percentage of explained variance.

I. Plots of moderator effects of personal resilience and social resilience on vocational self-image, vocational future image and vocational self-efficacy with individual characteristics (significant effects above one percent of explained variance reported only)

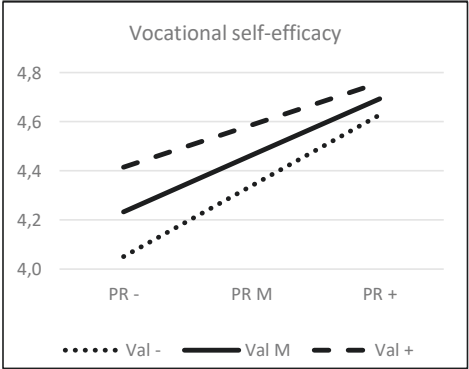
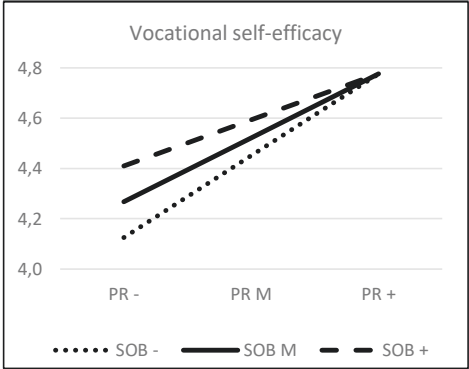
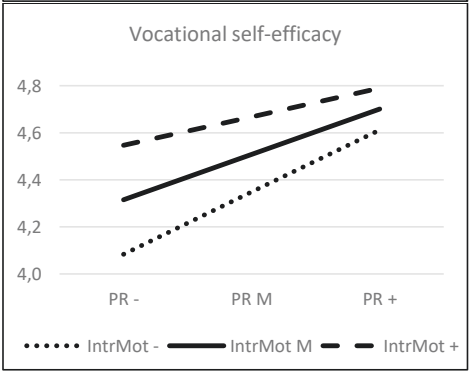
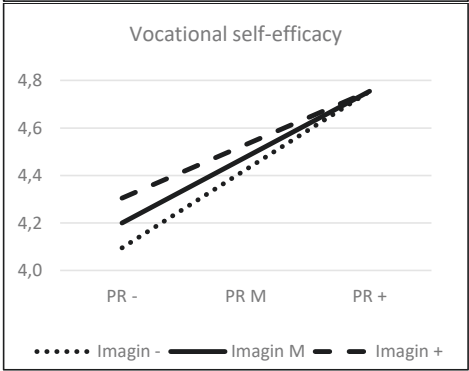
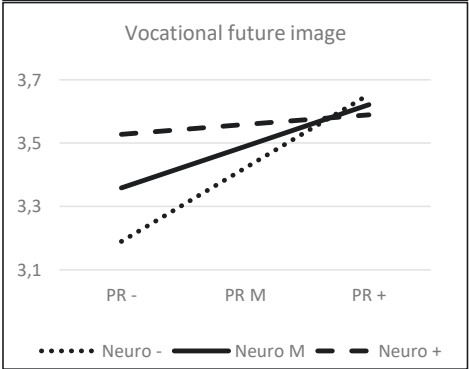
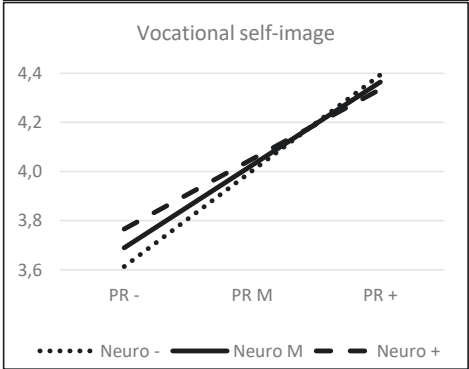
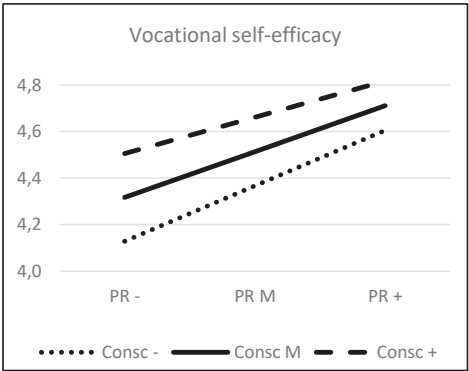
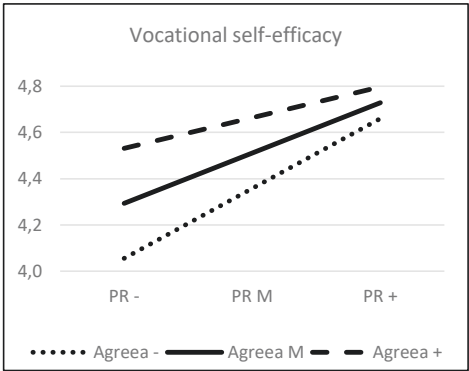
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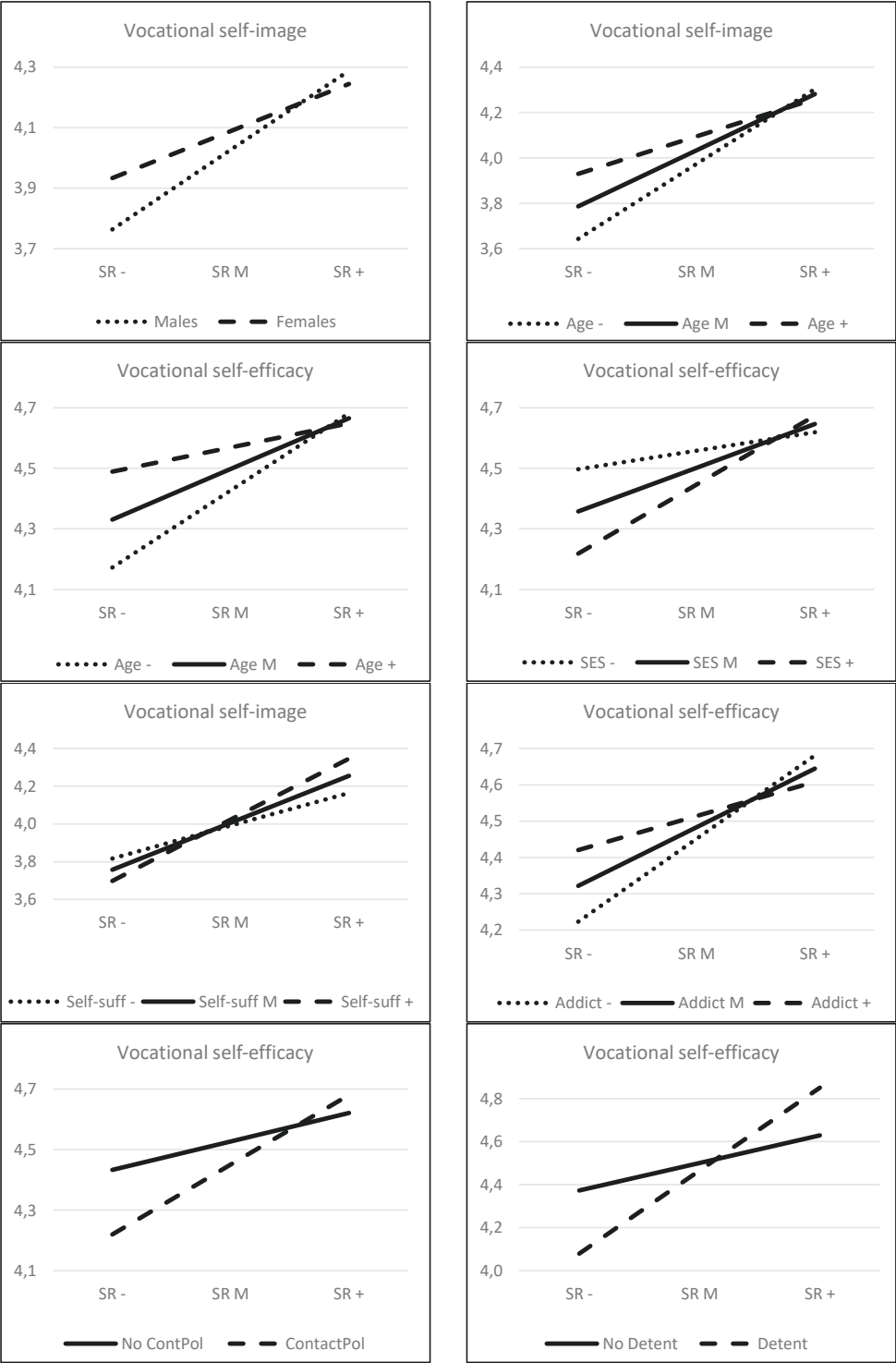
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SR	Social resilience
SES	Socioeconomic status
Self-suff	Self-sufficiency
Addict	Addiction
ContactPol	Police contact
No ContPol	No police contact
Detent	Detention

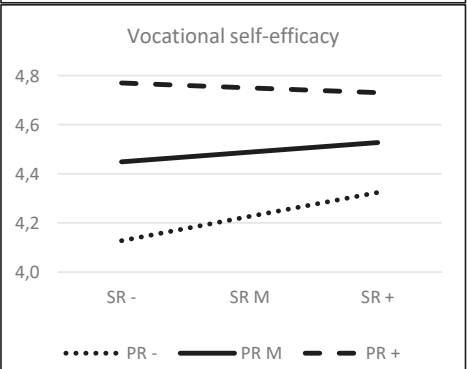
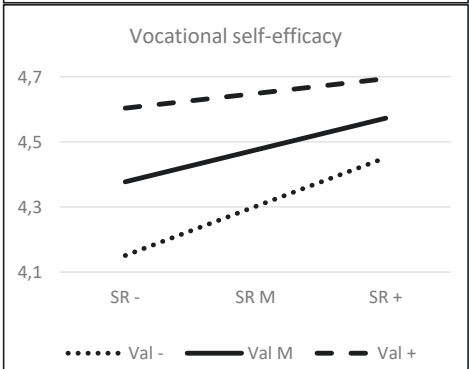
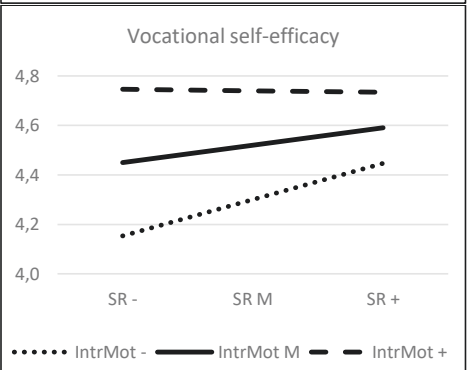
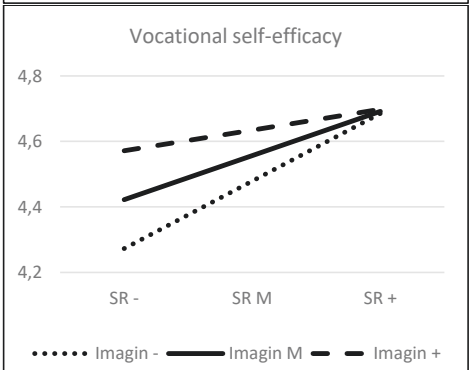
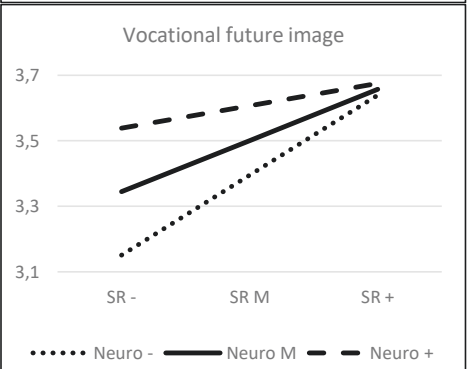
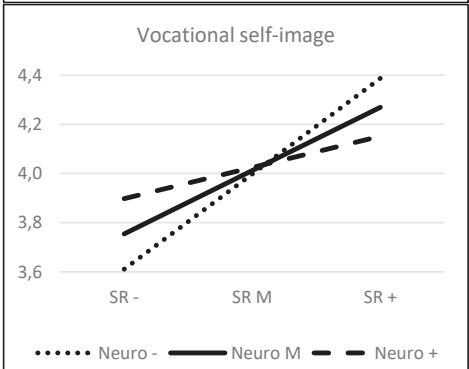
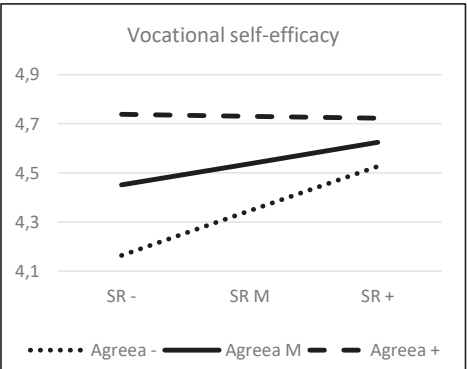
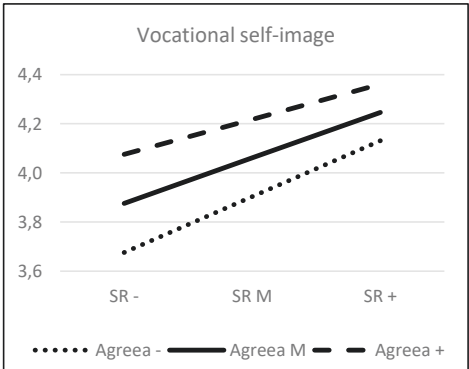
No Detent	No detention
Agreea	Agreeableness
Consc	Conscientiousness
Neuro	Neuroticism
Imagin	Imagination
IntrMot	Intrinsic motivation
SOB	Sense of belonging
Val	Valuing school outcome











J. Moderator effects of valuing school outcome and sense of belonging on vocational self-image, vocational future image and vocational self-efficacy with all individual characteristics that have shown main effects (significant effects reported only)

	Vocational Self-image						Vocational Future Image						Vocational Self-efficacy					
	Valuing school outcome			Sense of belonging			Valuing school outcome			Sense of belonging			Valuing school outcome			Sense of belonging		
	Dev. <sup>a</sup>	Z	Size	Dev.	Z	Size	Dev.	Z	Size	Dev.	Z	Size	Dev.	Z	Size	Dev.	Z	Size
Age	13.975	-3.56	1.90										37.388	-5.88	4.65			
Ethnicity of father				7.437	-2.71	1.23												
Ethnicity of mother	4.434	-2.117	.65	8.144	-2.84	1.22				5.626	-2.39	.76						
Living with father										8.974	-3.00	1.07						
Living with sister																		
9Living with child																		
SES-following news	5.121	2.28	.32				6.829	-2.62	.79				29.915	5.53	4.23	12.978	3.63	1.40
Extraversion																		
Agreeableness	8.093	-2.87	1.05	9.689	-3.09	1.16							4.964	-2.25	1.18			
Conscientiousness	4.012	-2.02	.37				4.073	-2.02	.47	4.226	-2.06	.46	29.613	-5.54	4.00	11.332	-3.40	1.26
Neuroticism	21.894	-4.67	2.79	8.413	-2.91	1.14	4.938	-2.24	.64				16.592	-4.06	1.89			
Imagination	4.858	-2.19	.99	4.328	-2.09	.31							9.363	-3.13	1.56	3.922	-1.97	.72
Self-sufficiency	13.387	3.68	1.57															
Addiction							5.537	-2.33	.78				17.791	-4.29	2.31	3.920	-1.96	.34
Community penalty													11.372	3.38	1.15			
Detention													11.886	3.44	1.92			
Judicial measure													4.549	2.13	.38			
Intrinsic motivation																		
Personal resilience	16.317	-4.03	1.86				4.812	-2.20	.47	4.677	-2.18	.61	16.257	-4.11	1.85			
Social resilience							3.797	-1.98	.47	6.670	-2.61	.91	27.555	-5.40	4.21	20.972	-4.67	2.64
Sense of belonging <sup>a</sup>										5.725	-2.39	.77	15.400	-3.96	2.37	7.680	-2.77	.73
Valuing													7.377	2.74	1.15	6.872	2.61	.75

Note. Dev. = Deviance score. Z = Wald-Z-scores. Size = Effect-size in percentage of explained variance.

<sup>a</sup> Due to ML-structure differences, effect sizes of resp. Valuing x Sense of Belonging (2 levels) and Sense of Belonging x Valuing (1 level) diverge

Publications and presentations

Curriculum Vitae

Dankwoord

ICLON PhD Dissertation series

## **Publications and Presentations**

### **Journal articles**

Keijzer, R., Admiraal, W., van der Rijst, R., & van Schooten, E. (2020). Vocational identity of at-risk emerging adults and its relationship with individual characteristics. *International Journal for Educational and Vocational Guidance*, 20(2), 375-410. doi.10.1007/s10775-019-09409-z

Keijzer, R., van Schooten, E., van der Rijst, R., & Admiraal, W. (in press). Individual characteristics of students in vocational education moderating the relationship between school engagement and vocational identity. *European Journal of Psychology of Education*. doi.10.1007/s10212-021-00580-y

### **Manuscripts under review for publication**

Keijzer, R., van der Rijst, R., van Schooten, E., & Admiraal, W. (submitted). Individual differences among at-risk students changing the relationship between resilience and vocational identity.

### **Manuscripts submitted for publication**

Keijzer, R., van der Rijst, R., van Schooten, E., & Admiraal, W. (submitted). Towards emotional responsive mentoring of at-risk students in last-resort programs.

### **Symposia, individual paper and poster presentations and round table sessions**

Keijzer, R. (2012). Research proposal. Presentation at Symposium of the Design Science Research Group, Rotterdam, the Netherlands.

Keijzer, R. (2012). Voucher for doctoral research. Presentation at Zadkine Research Market, Rotterdam, the Netherlands.

Keijzer, R. (2013). Professional identity of young adults. Roundtable presentation at the EAPRIL (European Association for Practitioner Research on Improving Learning), Bienne, Switzerland.

Keijzer, R. & Admiraal, W.F. (2014). How to Bring At-Risk Students Back to School? Roundtable presentation at the ICO International Fall School, Blankenberghe, Belgium.

Keijzer, R., van Schooten, E., & Admiraal, W.F. (2015). Effectiviteit van sociale programma's gericht op werk of vervolgstudie voor risicojongeren op mbo-1 niveau [Effectiveness of social programs aimed at work or continuing education for at-risk youth at lower senior secondary vocational education] Key note at the annual conference of ecbo [expertise center vocational education], Utrecht, the Netherlands.

Keijzer, R., van der Rijst, R., & Admiraal, W.F. (2015). *Mentor in Mind: Sustainable input for at-risk students*. Present & discuss sessions at the EAPRIL (European Association for Practitioner Research on Improving Learning), Luxembourg, Luxembourg.

Keijzer, R., van der Rijst, R., van Schooten, E., & Admiraal, W.F. (2021). *Mijn mentor gaat er diep op in. Zij is niet alleen mentor, maar ook begeleider, zus, moeder voor mij. [My mentor goes into it deeply. She is not only a mentor, but also a counselor, sister, mother to me]* Poster presentation at the Onderwijs Research Dagen (ORD) at the annual meeting of the Flemish Educational Research Association and the Dutch Educational Research Association, Utrecht, the Netherlands.



## Curriculum Vitae

Rineke Keijzer-Groot was born in Purmerend, the Netherlands, on October 3, 1959. She completed her secondary education at the Sint Michael College in Zaandijk.

She studied Business Communications at the University of Applied Sciences Utrecht. In 1987 she started the part-time study Psychology at the University of Amsterdam. She took courses in cognitive, social and developmental psychology and methodology and graduated as a general psychologist in 1999. Her master's thesis was entitled 'Word learning in a new language', published as an article in 2002. From 2003-2005 she attended the part time study Public and Non-profit Management at TiasNimbas Business School at Tilburg University. She finished her first year cum laude with a thesis entitled 'The flight path of De Meeuw'.

She was employed as a communication expert in publishing, advertising and market research domains, worked as an independent psychological market researcher, was employed as a researcher at a welfare organization and was board manager of five primary schools. She worked independently as an advisor, researcher, project- and interim-manager in the public and non-profit domain. In 2009 she started working at Rotterdam University of Applied Sciences as a lecturer, coordinator and researcher. She carried out her PhD supported by a voucher from her employer. Currently, Rineke still works at Rotterdam University of Applied Sciences, as a lecturer and coordinator of the graduation program at the master's degree Urban Education of the Social Work Institute, and as a researcher at the knowledge center Talent Development.

## Dankwoord

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Via de Hogeschool Rotterdam kwam ik in contact met het Dual PhD Centre in Den Haag. Helaas kon ik de laatste jaren weinig deelnemen aan de promovendi-lunches en andere activiteiten, omdat zij samenvielen met mijn onderwijsdag. De goede gesprekken met Adriaan in 't Groen, Marc Dechesne, Johannes Tromp, Pieter Slaman en Dineke Tigelaar en met mede-promovendi hebben mij de nodige inspiratie gegeven, waarvoor dank.

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lijstje meteen te vergeten. Wilfried, ik heb mij steeds enorm op mijn gemak en gesteund gevoeld, ook in tijden dat het even niet zo lekker ging. Heel veel dank voor alle opgewektheid, de grappen, je niet-aflatende betrokkenheid en kritische blik, het vertrouwen dat je uitsprak, je onmetelijk snelle manier van reageren en alle stimulerende sessies op het ICLON waar ik zonder uitzondering met meer energie uitkwam dan ik erin ging.

Na mijn eerste ontmoeting met jou, Erik, omschreef ik jou thuis als een 'Amsterdamse praatjesmaker', nog steeds best raak getypeerd vind ikzelf. Gelukkig had ik al een levenslange training achter de rug van mijn drie ook redelijk van de tongriem gesneden broers en kon ik wel tegen een stootje. Iets met een klein hartje, geloof ik. Je oprechte interesse, grote betrokkenheid en begaanheid met 'je kandidaat' waren altijd voelbaar. Daarbij hadden we helendal nogal wel zo tamelijk om heel veel dingen heel veel lol. Dank. Fin.

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