Chapter 1
Introduction

Nowadays, having a diploma is almost a necessary condition for having access to any job. Therefore, good education is essential for the future of each and every adolescent. Society has a major interest in well educated adolescents, to enhance the prosperity of a country. Unemployed people cost society a lot because of unemployment benefits, but also because unemployment leads to an increased risk for delinquency and health problems, which in addition lead to major expenses for society. In the Netherlands full-time education is compulsory for adolescents up to the age of 16. Partial education is compulsory up to the age of 18. In October 2005 the National Council of Education advised to extend compulsory education up to the age of 23 for youngsters who did not achieve a so-called starter-qualification, which is the presupposed minimum level of competency development required for entering the job market. Some local initiatives to implement this advice already have been initiated. In Rotterdam adolescents are forced to follow an educational program up to 23 years. In Amsterdam, adolescents under the age of 23 do not receive unemployment benefits, unless they go back to school, or are prepared to enrol in an on-the-job-training program. The project is so successful that a discussion was started to consider applying the project to adolescents up to the age of 27. These examples illustrate the importance that the government and local authorities assign to a qualified population. Schools hope to contribute to the development of competencies which adolescents need to be successful in modern society. Secondary vocational education is one of the places where students should be prepared for the challenges entailed in the modern knowledge society. This knowledge society requires schools to adapt their traditional knowledge transmission goals to new learning goals, such as learning to cooperate, learning to handle their emotions, and learning to use information sources adequately.

Secondary vocational education: Aim, problems and challenges

The aim of secondary vocational schools is to bridge the gap between formal learning in school and practice, between working and learning in order to realize an optimal form of knowledge circulation (Ministry of Education, Culture and Science, 2005). Legislation for this type of schools was established in 1996 [Education and Vocational Training Act]. This act emphasized the value of the implementation of a nationwide qualification structure aimed at the development of curricula that are mainly vocationally oriented (Rozendaal, 2002). The value of having an important practical component in the curriculum is emphasized in this act (Slaats, 1999). This act highlighted the development of a new educational and instructional approach that prepares students for the wide range of requirements being set by employers. In that sense, the function of education has shifted from knowledge transmission to teaching students how to use knowledge as a tool and how to self-regulate their learning process.

Apart from emphasizing the practical component of learning in secondary vocational schools, the Ministry of Education, Culture and Science (2005) has recently recognized the importance of social skills and coping with emotions as
important for personal development. In the labour market such skills are highly valued. The labour market is asking for employees who are emotionally stable, who are able to manage their own careers, are able to cooperate, communicate in teams, and cope with changes and conflicts.

Problems in secondary vocational schools

Secondary vocational education has to cope with severe problems; high drop-out rates (Batenburg, 1998), motivation problems and maladaptive social behaviour (Neuvel, 2004). Approximately 40% of students starting a study program in secondary vocational education do not finish their study program (School Inspectorate, 2002). However, several of these students start a new study program at the same school or at another school. The number of students that actually leave school without a diploma is not exactly known, but estimations vary between 12 and 25%. Research has shown that a lack of motivation is often the reason for students to quit school. Voncken, Van der Kuip, Moerkamp and Felix (2000) assessed ‘push and pull factors’ for students to quit their study program in secondary vocational education. The three reasons that were mentioned most frequently by students all referred to a lack of motivation, namely ‘the study program is not interesting’, ‘I do not like to go to school any more’, and ‘the study program lacks the connection with the job’.

A part of the explanation for these problems in secondary vocational education can possibly be found in background factors. The background of the students in secondary vocational education often is not very favourable for completing a successful educational and professional career. Many students have an immigrant background, an educational history with little successes, and parents with a low education level (Angenent, 1997; van den Dool & Janssen, 1994). Several researchers have shown the relationship between economic deprivation and problem behaviour (Bradley & Corwyn, 2002). Especially immigrant families have on average a lower social economic background than national families. Due to a relatively high rate of unemployment, immigrant families in the Netherlands have to cope more with poverty (Dijkman, 1996). Moreover, the problem is reciprocal. The reason why more immigrant students are enrolled in this type of schools is also a consequence of culturally dependent career courses. Some immigrant students already enter the Dutch educational system with a lower educational level mainly due to language difficulties and the selective Dutch educational system determines that they only have access to the lower sections of vocational education.

Another part of the explanation might be found in the developmental phase of the students in secondary vocational education. Most of these students are in their late adolescence and several researchers have shown maladaptive social behaviour (MSB) peaks in this phase (e.g. Moffitt, 1993; Compas, Hinden & Gerhardt, 1995; Maughan & Rutter, 1998).

However, these factors can not provide a satisfactory explanation about why specific students show specific types of MSB at school. The aim of this thesis is to measure and explain the occurrence of maladaptive social behaviour in secondary vocational education, in order to find starting points for educational practices to cope and prevent MSB in the future.
The Dutch Educational System

Figure 1 represents a broad image of the Dutch educational system, which is divided into three sections: primary, secondary and tertiary education. School starts with primary education, which lasts eight years and starts for children at the age of four (voluntarily) or five (compulsory) and ends at the age of 12.

At the end of primary school children are advised as to which type of secondary education they should pursue. Based on this advice they continue with pre-vocational education, senior general secondary education, or pre-university education. Approximately 60 percent of the children go to pre-vocational education. Pre-vocational education, which is the lowest level, lasts four years and leads on to secondary vocational education. Senior general education is a five-year program and leads on to higher professional education. The duration of a pre-university study program is six years and leads on to university. Important to note is that only a pre-university diploma gives direct access to university, but there are alternative routes to get there. Pre-vocational education has four levels and the highest level gives access to senior general secondary education, from which students can enter pre-university education. Students in the two highest levels of secondary vocational education may continue studies in higher professional education and from there they may move on to university. However these are very long winding and complex routes and not many students take these. The complexity is due to the selective nature of the Dutch educational system. The students’ study program is basically determined at the age of eleven or twelve, when they receive the recommendation about their future education. As a result of language problems, students with an immigrant background often have had a learning delay in primary school. This implies that at the time they were tested their ethno cultural background resulted in a low advice. This selectivity seems particularly detrimental for immigrant children. As compared to national students, they start their school careers with limited national language proficiency and limited competencies in other skill domains relevant for success in primary school. In recent years they started catching up, however due to the selectivity of the school system they continue their school career at secondary levels; levels that may reflect their actual levels of performance but not necessarily their
potential level or competency. It will cost these students a lot of willpower to undo the negative effects of the selectivity of the system.

Structure of secondary vocational schools in the Netherlands

Most of the students in secondary vocational schools are between 16 and 21 years old. Secondary vocational school begins for most students, after they completed a pre-vocational school. Senior vocational school is divided into four levels. At the first level students are trained to become assistants (6 to 12 months). At the second level they follow two to three year courses for basic vocational training. At the third level students are enrolled in professional training and at the fourth level they participate in middle-management training (3 to 4 years) or in a specialized training course (1 to 2 years). Apart from the distinction of levels, the distinction in study type is important to understand the trajectories that students follow. In vocational schools a distinction is made between theoretical vocational training and theoretical apprenticeship training. In the former type students spend at least 60 percent of their time at the working place while in the latter type they spend between 20 to 60 percent of their time at the workplace. In the present study we mainly focused on students enrolled in the second type of program.

Most students finishing secondary vocational school prefer to enter the labour market and do not proceed with further studies (for further information on secondary vocational education in the Netherlands, see Euridice database on education, 2003 website). Approximately 470.000 youngsters in the Netherlands choose a vocational education program (website Department of Education, Culture and Science), which is the highest percentage of all students. The second largest proportion consists of students in higher professional education.

Maladaptive Social Behaviour in Education

We define Maladaptive Social Behaviour as behaviour that is undesirable or inappropriate, given the norms of the context the behaviour is exposed in. Beside the social economic status, ethnic origin, intellectual capacities and the developmental stage of students, research has identified several other factors that are associated with maladaptive social behaviour, for example gender, parenting styles, self esteem, peer influences and school achievement. However, these studies can not provide a sufficient explanation for the reasons why students show specific types of MSB at school. Traditional research focused on identifying personal or environmental characteristics that are related to general maladaptive social behaviour. So far, neither the measurement nor the explanation of MSB took into account the interaction process with the context in which it occurred.

Self-Regulation

This thesis is written from the perspective of motivational self-regulation theories. In these theories the causes for maladaptive social behaviour are neither sought in individual variables nor in environmental circumstances, but in the
interaction process between these two. This interaction process is the process of 'self-regulation'. Self-regulation refers to the strategic use of one’s cognitive, motivational and volitional strategies to reach one’s goals (Boekaerts, 2006). It is assumed that students aim to achieve both school and personal goals, such as tranquility goals, entertainment goals and belongingness goals. When students feel they cannot attain their personal goals, or when important goals are thwarted, they may feel frustration. If students do not have access to adequate self-regulation skills at this point, they may react with maladaptive social behaviour. Furthermore, students may decide to pursue personal goals instead of school goals and use maladaptive social behaviour as a way to attain these goals. For example, students may provoke other students to have fun, or decide not to participate in a lesson to feel relaxed. Whether or not students can achieve their goals at school is to a large extent depending on their perception of the learning environment. When students perceive the lessons as interesting, the teacher as supportive and their peers as friendly, they will feel less frustration in achieving their learning goals and feel less challenged to pursue their personal goals instead by showing maladaptive social behaviour (e.g., chat, disturb others, play truant). Hence, when assessing maladaptive social behaviour it is important to take into account students’ perceptions of the environment.

School Context

What characteristics of the environment could influence students’ MSB at school? Schools can differ on several dimensions, for example school climate (e.g., size, organization, student composition, available resources, organization, rules, activities), class climate (e.g., course content, type of instruction, task characteristics), and the social climate (relationship with teachers and peers, e.g., fairness of teachers, interaction with teachers and fellow students, emotional and instructional support from teachers and fellow students). From the perspective of motivational self-regulation these school characteristics influence students’ goal choice and are a major cause of goal (dis)satisfaction. This assumption implies that students learn best when their goals are congruent with the learning goals that the school/teacher sets for them. In other words a ‘good’ school is a school where students can fulfil both the curricular goals set by the school and their personal goals. So far, little research is available on the relationship between school characteristics and goal choice, or between students’ goals and MSB. However, research has identified several school features that influence students’ achievement (e.g., Smyth, 1999), emotional well-being (e.g., Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan & MacIver, 1993; Roeser, Eccles & Sameroff, 1998), and behaviour (e.g., McEvoy & Welker, 2000; Battistisch & Hom, 1997; Smyth, 1999).

McEvoy & Welker (2000) concluded in their review that “effective schools share common characteristics, including student perceptions of high expectations for achievement, effective administrative leadership, a shared mission among teachers and staff, a commitment to appropriate assessments, students’ sense of efficacy with respect to learning, and student perceptions of a safe environment in which to learn.” (p. 6). This statement shows that important characteristics of a ‘good school’ concern school, class and student characteristics. It is likely that all these features need to be in harmony to make an effective school. However, the aim in McEvoy and Welker’s review was restricted to the identification of separate school features that are
commonly related to student achievement or delinquent behaviour. They did not investigate schools as a whole. Some other researchers investigated schools as one complete context. For example, Battistich & Hom (1997) found that less delinquent behaviour was reported when schools were perceived as caring communities. De Koning & Boekaerts (2003) examined school characteristics of secondary vocational schools varying in size. They found that schools of medium size were able to provide the best environment for their students, because they were able to create an intimate climate and at the same time, had the organizational advantages of being a larger school (financial resources, flexibility). Eccles and colleagues (Eccles, Midgley, Wigfield, Buchanan, Reuman, Flanagan & MacIver, 1993; Roeser, Eccles & Sameroff, 1998) focused on the fit between the student and school. They concluded that when students moved to high school the fit between school life and the students’ needs becomes less adequate, which is reflected in a decreased sense of wellbeing, and a decline in motivation and academic achievement. When students enter adolescence they value social goals increasingly to the expense of academic goals. Yet, high school usually provides a less secure social environment and an increased focus on academic achievement (Hofer & Peetsma, 2005).

Social School Context

As social goals (e.g., being accepted, being popular) become increasingly important in adolescence, the social climate in secondary vocational schools deserves specific attention. At school, possibilities to fulfil social goals are numerous through interaction with teachers and peers. Hence, it is assumed that positive relationships and interaction with teachers and peers will help students to fulfil their social goals, and will consequently lead to less goal frustration and less MSB. Yet, research concerning the influence of peers on adolescents’ achievement, wellbeing and behaviour show ambiguous results, depending on the adolescents personal characteristics (e.g., social skills, traits, goals, self-concept) and the peer’s reaction, expectations and characteristics. Nowadays it is assumed that an adolescent shows similar behaviour as his or her friends (Ryan, 2000). This may be due to shared characteristics (e.g., shared interests), but may also be caused by the need for belongingness. Belongingness (e.g., feeling accepted, welcome) is assumed to be a basic psychological need (Deci & Ryan, 1985), which will make students more open to adapt goals set by their peers. Hence, we expect that when peers at school value social tranquility, or entertainment goals as more salient than learning goals, and choose to pursue these personal goals (e.g., by exposing MSB) the adolescent in question will be tempted to do so as well in order to satisfy these goals.

In a recent publication, Boekaerts and Hijzen (2006) reported that belongingness goals had an ambiguous effect on students’ engagement in the classroom. Some students who reported belongingness goals as salient, showed more on task behaviour, whereas other students reported more off-task behaviour. This may imply that students expect to achieve belongingness in different ways (e.g., through adaptive and maladaptive social behaviour). This hypothesis is supported by research: Eccles and Wigfield (2002) reported that on-task behaviour (i.e., complying with what the teacher wants you to do) was found to be positively related to teacher acceptance, but negatively to peer acceptance. In addition, Rose, Swenson & Walle (2004) found a positive relationship between aggressive behaviour and popularity of adolescents, and Bru (in press) found that oppositional behaviour in class was
predicted by students’ beliefs that going against school norms would increase peer-status. In contrast, several researchers reported that MSB was associated with a lower social status (O’Moore & Kirkham, 2001; Wentzel & Erdley, 1993; Wentzel, 1994).

Results on the relationship between teacher characteristics and students’ achievement, wellbeing and behaviour are less controversial. A positive relationship and interaction with teachers is associated with positive wellbeing, achievement and less MSB. Wentzel (2002) found in her study that high teacher expectations of student achievement were associated with increased preference for academic goals and higher interest in the course. Wentzel (1994) also reported that teachers’ promotion of social goals was associated with more prosocial behaviour. Teachers’ social support was found to have a decreasing effect on MSB (Bru, Murberg & Stephens, 2001; Wentzel, 1994; Ryan & Patrick, 2001).

In summary, characteristics of the school and classroom environment, and of the social school context have been found to influence students’ achievement, wellbeing and MSB. However, as far as we know, no research is available assessing the relationship between, on the one hand, the specific types of MSB that students expose in the educational context and, on the other hand, a wide range of school context variables. To understand why students misbehave at school, it is important to assess specific behaviours in close relation to their perception of the school context, instead of assessing general MSB with general context characteristics. A more situation specific assessment will help us to understand why MSB occurs, and to implement the right interventions.

The Present Study

A new instrument

The first aim of this study is to develop a new questionnaire to measure maladaptive social behaviour in the context of secondary vocational education. In line with traditional research, existing instruments to measure maladaptive social behaviour assess general behaviours, without considering the context. For example, a frequently used and extensively validated instrument is the Youth Self Report (Achenbach, 1991; Verhulst, Van der Ende & Koot, 1997). This instrument is very useful when the aim is to identify adolescents who are at risk. However it is less useful to assess students’ misbehaviour at school in close connection with their conception of the antecedents of that behaviour. Therefore, our aim is to develop a reliable and valid instrument, consisting of items that cover a wide range of concrete examples of maladaptive social behaviour that clearly refer to school context.

MSB and school context variables

The second aim of this study is to gain insight in contextual factors that can predict different types of maladaptive social behaviour of students in secondary vocational education. Students’ perception of school climate, and especially their perception of the social school climate are expected to predict MSB at school. We assume that these features are important sources that can influence students’ goal
choice and goal achievement. Hence, we hypothesize that school context variables will influence students’ goal frustration and MSB. For example, when students perceive their study program as useful, experience a pleasant relationship with their peers at school, and perceive adequate emotional and instructional support from their teachers, their school goals have a good chance to be fulfilled and students will refrain from directing their behaviour to pursuing wellbeing goals. In such an (ideal) situation school goals and personal goals are not in conflict.

**Design**

The research described in this thesis was part of a longitudinal study assessing the motivational self-regulation of students in secondary vocational education in the Netherlands. Beside the present study, two other projects were conducted simultaneously. One study focused on the relationship between students’ goals, goal-frustration, and school climate (De Koning & Boekaerts, 2005). One study focused on the relationship between students’ quality of cooperative learning, their goals and perceptions of the school environment (e.g., Hijzen, Boekaerts & Vedder, 2006).

In this thesis we describe the construction and validation of an instrument to measure maladaptive social behaviour of students in secondary vocational education, and the predictors of this behaviour. In this longitudinal study, a random sample of students of several secondary vocational schools in the Netherlands participated. Beside information of their maladaptive social behaviour, students were asked to report their goal preferences, perception of school climate, perception of social support, coping strategies, and the quality of their cooperative learning processes. Three data waves were conducted: The first wave of data-collection took place from January till May of 2002. The second wave took place from October 2002 till January 2003, and the third wave started in April and ended in June 2003. The first data wave was used for the development and internal validation of the new instrument. Data of the second and third data-wave and additional data were used to assess internal and external validity of this instrument. Data of the second data-wave were also used to identify relevant predictors for maladaptive social behaviour.

Our research questions are:

1. Can maladaptive social behaviour of students in secondary vocational education in the Netherlands reliably be measured with a self-report questionnaire? What are the psychometric qualities of this instrument?
2. What is the external validity of this instrument?
3. Are there differences in the frequency of reported maladaptive social behaviour of students in secondary vocational education with respect to gender, ethnicity and educational level of their parents?
4. What is the relationship between specific school context variables and maladaptive social behaviour of students in secondary vocational education?
The Structure of this Thesis

In Chapter 2 a review is given of available empirical research on maladaptive social behaviour of students at school. The aim was to gain insight into the operationalizations of maladaptive social behaviour that have been used in the literature available, assessment instruments that are relevant to our purpose, and relevant findings with respect to maladaptive social behaviour in a school context. In Chapter 3 the construction of a new instrument to measure students’ MSB is described. Several pilots are conducted to optimize and determine the internal structure of the questionnaire, and data of the second wave are used to assess if this structure can be confirmed. In the following chapter (Chapter 4) the assessment of convergent and discriminant validity of the instrument is described. Three studies are presented: In the first study, data of the second and third wave are compared to investigate the stability of the scales of the instrument. In the second study, student reports on the new instruments are compared to student reports on the Youth Self Report (Achenbach, 1991; Verhulst, Van der Ende & Koot, 1997) to investigate similarity of the scales. In the third study, student and teacher reports on the new instrument are compared to assess similarity of these two different agents on the same behaviour. The association between background variables, school context variables and maladaptive social behaviour is investigated in chapter 5. The gender specificity of maladaptive social behaviour is taken into account by conducting the analyses separately for boys and girls. In the final chapter (chapter 6) the main findings and conclusion of the four studies are presented and discussed. Recommendations for future research and educational practice are given. Limitations of the presented studies are also discussed.
References


12


