Summary

The aim of this thesis was twofold: firstly to create a reliable and valid new instrument to measure maladaptive social behaviour (MSB) of students in secondary vocational education, and secondly to assess which school context variables could predict maladaptive social behaviour.

The following four research questions were formulated:

1. Can the maladaptive social behaviour of students in secondary vocational education be measured reliably 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?

This study had a longitudinal design. Three data-waves were conducted between December 2001 and July 2003; one halfway the students first year, a second halfway their second year and the third at the end of their second year. Students of eleven secondary vocational schools from different places in the Netherlands, of different study programs and course levels participated voluntarily. At the first data-wave 1800 students participated, at the second data-wave 931, and at the third data-wave 642. Students completed questionnaires about the frequency of maladaptive social behaviour, their perception of the school context (school climate and social support) and feelings of school identification and school alienation.

In Chapter 2 we present a review study on 220 empirical studies concerning the maladaptive social behaviour of adolescent students, and specifically their maladaptive social behaviour at school. We defined MSB as behaviour that, according to a majority of the reference group in a certain context, is undesirable or inappropriate. Most studies assessed general problem behaviour and/or substance use. General problem behaviour included damaging behaviours, theft, violent behaviours, carrying weapons, social problems (bullying, peer problems), authority conflicts (opposition, rule breaking, lying, running away), hyperactive behaviour (impulsiveness), substance abuse and internalizing behaviour (anxiety, depression, somatization, withdrawal, inhibition, embarrassment). We came across several instruments that were designed to assess (parts of) general problem behaviour. Most frequently used were self-report instruments, for example the Youth Self-Report (Achenbach, 1991), the Delinquency scale of the National Youth Survey (NYS; Elliott, Huizinga and Ageton, 1985), and the Diagnostic Interview Schedule for Children (DISC; Costello, Edelbrock, Dulcan, Kalas & Klaric, 1984).
We found 49 studies that assessed MSB at school. Several of these studies assessed trespassing of school rules. We did not come across instruments assessing a wide range of MSB at school. Variables concerning the individual (e.g., gender, ethnicity, self-esteem) were frequently assessed. Family related variables were relatively frequently assessed in studies concerning general MSB (outside school). School related variables (e.g., performance, commitment) were relatively frequently assessed in the studies concerning MSB at school, and they were important predictors for school related MSB. We concluded that valid situation-specific instruments should be developed to assess the interaction process between features of the environment, personal characteristics and MSB.

In Chapter 3 the first research question was answered. The construction of a new instrument to measure a wide range of maladaptive social behaviour at school was described: The Questionnaire for Maladaptive Social Behaviour (QMSB). To formulate statements for the QMSB, we conducted a review on relevant literature and existing instruments, carried out observations at a school, and held interviews with students and school staff. Three pilot studies were conducted during the first data-wave to determine the internal structure of the questionnaire. During this process, items were added, rephrased and removed. Finally, 49 items comprising five categories (using PCA with varimax rotation) of MSB were found to provide a structure with satisfying psychometric properties: Maladaptive Behaviour toward Schoolwork and Rules, Delinquent Behaviour, Unfriendly Behaviour, Withdrawn Behaviour, and Impolite Behaviour. Confirmatory Factor Analyses were executed on data of the second and third data-wave to assess the robustness of the determined structure, for the whole sample and separately for boys and girls. Fit indices showed sufficient results for all samples with respect to the five category structure of the questionnaire. Because we noticed that the five categories were highly intercorrelated, we assessed the usefulness of a competitive model with one overall category for MSB. Although this model provided a satisfactory fit index, we gave preference to the five category model because it had a better fit and was also more useful for practice. We theorized that a model that takes different types of MSB into account provides the best opportunities for a detailed description and understanding of the way school climate variables affect MSB in respective subgroups. Detailed information is essential to comprehend the prevalence of MSB and to prevent MSB at school. Our results show that different features of school climate affect different types of MSB and that these results are gender specific.

In Chapter 4 the second research question is addressed. We assessed the convergent and discriminant validity of the instrument by conducting three studies. First, a test-retest study was conducted to assess the stability of the constructs. Second, the five categories of the QMSB were compared with constructs of the Youth Self Report (Achenbach, 1991), and finally the five constructs of the QMSB were compared with the teacher version of the QMSB. We hypothesized that the four criteria on convergent and discriminant validity as set by Campbell and Fiske (1959) would be confirmed. These criteria imply that relations between comparable or equivalent constructs are stronger than the relationships with dissimilar constructs. Also, we expected
that the patterns of the interrelationships between the scales of the different methods would be comparable. Summarizing the results from the three conducted studies we concluded that generally, convergent validity for the QMSB was obtained. Evidence for convergent validity for the separate scales was found in each study for MSB toward Schoolwork and Rules, Unfriendly Behaviour and Withdrawn Behaviour. Evidence for convergent validity for Delinquent and Impolite Behaviour was found in the first study only.

Discriminant validity was partly found. In two studies the correlation coefficients on the validity diagonal were higher than the other correlation coefficients in heterotrait-heteromethod triangles. This indicates that equivalent constructs are indeed more similar than different constructs. The patterns of the heterotrait-heteromethod and heterotrait-monomethod triangles were compared in the first and third study; the patterns showed moderate to good comparability thus offering some support for discriminant validity. One criterion set by Campbell and Fiske could not be met in any of the studies, namely that the correlations on the validity diagonal should be higher than the correlations between different traits, due to the high intercorrelations of the constructs of the QMSB. This suggests a common MSB-trait. The existence and usefulness of an overall constructs of MSB was assessed in the previous chapter. Best fit indices were found for the model with the five categories of behaviour. In addition, we argued that the more detailed five factor model would provide better insight into the context variables that affect MSB in different sub groups, thus helping researchers and teachers to design appropriate interventions.

In Chapter 5 results on the third and fourth research questions were presented. Boys reported more MSB toward Schoolwork and Rules, Delinquent, Unfriendly, Withdrawn, and Impolite Behaviour than girls. This is consistent with what other researchers found; boys report more MSB than girls. When controlled for gender, no differences in reported MSB were found between students with a different ethnic origin, or educational level of their parents.

Because of the major differences in MSB between boys and girls, we decided to assess the influence of school context characteristics on MSB separately for these subgroups. We found that school context features explained more variance in the sample of boys than in the female sample. Boys’ feelings of School Alienation (i.e., the feeling that they do not feel at home, want to change their study program) was the most important predictor for their MSB; it predicted each type of MSB. For girls, the perception of competitiveness at school was an important predictor. Girls, who perceived that the reward structure at school depended on ‘being the best’, showed more MSB toward Schoolwork and Rules, Unfriendly Behaviour, and feelings of School Alienation. Furthermore, School Alienation moderated the relationship between Competitiveness on the one hand and Delinquent and Impolite Behaviour on the other. Compared to the perception of school climate, students’ perception of the availability of social support made hardly any contribution to the explanation of MSB, School Identification and School Alienation.