

**THE ABILITY TO BOUNCE BEYOND:  
THE CONTRIBUTION OF THE SCHOOL  
ENVIRONMENT TO THE RESILIENCE OF DUTCH  
URBAN MIDDLE-ADOLESCENTS FROM A LOW  
SOCIO-ECONOMIC BACKGROUND**

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THE CONTRIBUTION OF THE SCHOOL ENVIRONMENT TO THE  
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A LOW SOCIO-ECONOMIC BACKGROUND

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## SUMMARY

Pupils from a low SES differ in their development within the same school context. It is argued that *the mechanisms* through which education and the school environment as a whole can contribute to the successful development of children from a low SES should be identified and mapped. Therefore a focus on the mechanisms that lead to children with a low SES *succeeding*, in addition to discussing the reasons for these children not succeeding is proposed.

The present research is drawn upon bio-ecological and symbolic interactionist theories of human development in an effort to understand resilience as involving person-context transactions. Specifically, the resilience of adolescents in the school context is studied as a joint function of personal characteristics and social contextual affordances that either promote or thwart the development of person-level, resilient-enhancing characteristics.

The study employed inductive as well as deductive methods for knowledge development. Firstly, the concept of “resilience” was defined and operationalized in a Resilience Questionnaire (VVL). This questionnaire was validated on 399 middle-adolescents from five Educational Opportunity Schools in the Netherlands. Secondly, the inductive “Grounded Theory” method was followed with 21 middle-adolescents from three of the five Educational Opportunity Schools.

In answer to the main question “*How does the school environment contribute to the resilience of middle-adolescent students?*”, the school environment can contribute to resilience through facilitating *safety* and *good education*. Resilient and Not-Resilient middle-adolescents differ in their dependence on the school environment for their access to these resilience-enhancing circumstances and factors. In relation to the first sub question, “*What are resilient middle-adolescents’ perceptions of the contribution of the school environment to their resilience?*”, the school environment contributes to the resilience of resilient middle-adolescents by challenging them (e.g with high expectations) and by offering opportunities to create constructive relationships with

adults and fellow students in the school environment (e.g through informal conversations and through keeping order in the classroom). In answer to the second and third sub questions, “*What are the perceptions of not-resilient middle-adolescents of the contribution of the school environment to their state of resilience?*” and “*How can the comparison between these two perceptions be explained?*”, Not-Resilient middle-adolescents identify and utilise the services and potentially protective factors in the school environment less of their own accord than Resilient middle-adolescents do. The school environment can contribute to the resilience of Not-Resilient middle-adolescents by facilitating *an overview, insight* and *positive future expectations* in a very direct, controlling manner: An *overview* over risks for one’s own development and the presence of potential resources to assist one’s own development; *insight* into his or her own abilities to deal with possible risks; and *positive future expectations* on the improvement of a situation after a problem or risk has occurred.

In summary, the daily situations in the school environment offer enough tools to contribute to the resilience of resilient and not-resilient middle-adolescents. These should, however, be recognised by both the middle-adolescent and the adults in the school environment as opportunities for development, which should subsequently be grasped in order to learn to deal with these challenges constructively.

### **KEY WORDS**

Resilience

Adolescence

Disadvantaged students

Secondary Education

School Environment

Resilience Questionnaire

Symbolic Interactionism

Grounded Theory

Effective learning environments

Positive Psychology

The content of this thesis was translated from Dutch to English. I hope the strong meaning of the adolescents’ words is kept and honoured in English.

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### List of abbreviations

SES	Socio Economic Status
Ministerie van OC& W	Ministerie van Onderwijs Cultuur en Wetenschappen/ <i>Department of Education, Culture and Science</i>
VMBO	Vorbereidend Middelbaar Beroepsonderwijs/ <i>Preparatory Secondary Vocational Education Schools</i>
PO	Primair Onderwijs/ <i>Primary Education</i>
VO	Voortgezet Onderwijs/ <i>Secondary Education</i>
VVL	Veerkracht Vragenlijst/ <i>Resilience Questionnaire</i>
NPV-J	Nederlandse Persoonlijkheidsvragenlijst voor Jongeren/ <i>Dutch Personality Questionnaire for Youngsters</i>

## 1 AN INTRODUCTION TO THE STUDY

### 1.1 ORIENTATION

In schools, many adolescents develop successfully against the odds. This thesis discusses the relationship between the school context and successful development despite hardships. Resilience will be explored theoretically from different perspectives, and in depth for a specific age group, i.e. middle-adolescence. The normative terms “successful development” and “odds” are explored and grounded within a theoretical framework. The exploration of these terms implies an investigation of the resilience construct, since this construct has not been unambiguously defined by authors. The construct consists of conditions, assumptions, norms, expectations and psychological theories within a specific context. Normative patterns of development within normative surroundings form the basis for judging middle-adolescent development as successful (Masten, 1994). The emphasis in the present study is on the successful development of middle-adolescents within the surroundings of their school. The school context offers a frame of reference for assessing the development and possibly offers opportunities for positively influencing this development (Reynolds, 1994). Thereby it is assumed that successful development is not just evident in the obtaining of good grades, but is visible in various forms of behaviour of middle-adolescents.

The main question that guides the focus in this study is:

*How does the school environment contribute to the resilience of middle-adolescent students?*

The terms used in this research question will be specified before the background and rationale of the study are described:

- Contribution: The dynamic term “contribution” is used instead of “effect”, as rather than measuring the causal influence in a statistical way, the relationship between school environment and middle-adolescents’ resilience is explored in terms of dynamic, reciprocal interactions.

- School environment: The term “school environment” refers to all possible aspects of the immediate environment constituted by the school as a system in which the middle-adolescent is interactively participating. These aspects may include teachers, the school buildings, as well as lunch breaks and extramural activities. No pre-determined description of this term is postulated beforehand, because the school environment is studied from the viewpoint of the middle-adolescents: It is the middle-adolescents’ description of the term “school environment” that is the focus of the study.
- Resilience: Before constructing the term “resilience” in a detail in Chapter Two, the term is used to denote the ability to develop successfully in the face of adversity.
- Successful development: Before explaining the frame of reference used in this thesis for successful development in detail in Chapter Two, the term is used to denote well adapted, competent behaviour.
- Middle-adolescent: A 14- or 15-year old girl or boy. The middle-adolescence stage is the focus of the study for three reasons. Firstly, in The Netherlands most early school-leaving (i.e. leaving school without basic qualifications, as defined by the Dutch government) occurs around the age of 15-17 and around one third of these youngsters leave school before the age of 16, the age limit for compulsory education in The Netherlands (Spiering, Van der Wolf, Van Limbeek & Wisselink, 1994; Dekkers, 2003). Hypothetically speaking, something happens to those youngsters prior to this drop-out that either does not prevent them from dropping out or otherwise encourages them to drop out. Secondly, an ability to reflect has to be developed before youngsters are able to reflect on their perceptions of the school context. This ability usually develops around the age of 11 (Piaget’s stage of formal operations, Kaplan, 2004). Thirdly, in this phase of middle-adolescence the youngsters have already gone through the first adaptive stage in the developmental transition from primary to secondary school. Hypothetically speaking, their perception of the school context will by now be less clouded by their experience of this transition (which is not the focus of our study). Throughout the thesis the term middle-adolescent and youngster will be used interchangeably.

## 1.2 BACKGROUND AND RATIONALE

### 1.2.1 SOCIETAL BACKGROUND

The Dutch educational system is struggling with the fact that many students do not succeed in developing their talents. In particular, students from socio-economically deprived families of both immigrant and “Dutch”<sup>2</sup> origin tend to leave school earlier, drop out more often and complete their educational career at a lower level than student groups from a higher social economic status. Furthermore, these students start their professional career in jobs with less attractive career paths (Peschar & Wesselingh, 1995). In the 1960s, 70s and 80s, before there was a large group of immigrant students in the Netherlands, the specific group which was relatively deprived in relation to other groups of students consisted primarily of children whose parents were "manual workers" (Van der Wolf, 1984; Karsten & Slegers, 2005).

For a number of decades an Educational Priority Policy has existed in The Netherlands in order to reduce the relative gap, formulated as the inequality of opportunities between specific groups in society in respect of others (Peschar & Wesselingh, 1995). The Educational Priority Policy is founded on the belief that students from a low SES background have fewer opportunities or experience more difficulties in school than students from a high SES background. Since the 1970s attempts have been made to compensate students with a low SES for their potential educational disadvantage through additional funding. In the 1970s and ‘80s government allocated additional teachers or government funding to a school when a pupil’s father was a manual worker with no formal education, was self-employed with a low educational background or was unemployed. This pupil was counted as two children (weighting factor 2, Van der Wolf, 1984; Peschar & Wesselingh, 1995). Since the 1980s, in addition to the focus on gender as a form of social inequality, more and more attention has been spent on ethnic origin as an important form of social inequality (Van der Wolf, 1984; Peschar & Wesselingh, 1995; *Ministerie van Onderwijs Cultuur & Wetenschappen / Department of Education, Culture & Science, (OC&W), 2000; Bosker, 2005*). In secondary education the Educational Priority Policy has, over the last number of years, focused on immigrant pupils with a low

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<sup>2</sup> The terms *immigrant* and *Dutch* mainly refer to the parents’ status. Their children, who are the students in our study, are generally born in the Netherlands and therefore all “Dutch” themselves.



SES, the so-called *cumi-leerlingen* or cultural minority pupils. It is clear from the way in which the additional funding was invested that the focus of the Educational Priority Policy was on helping the individual pupil improve *his* level of educational *disadvantage*. The additional activities primarily took place outside of regular lessons (*Tweede Kamer / Upper Chamber, 1997-1998*).

The Educational Priority Policy did not produce the desired results. Nationally, the *Rekenkamer* (Netherlands Court of Audit, *Tweede Kamer / Upper Chamber, 1997-1998*) criticised the use of the extra financial means and the lack of transparency of the effects of this additional financial support. The way in which the extra money was spent, e.g. additional lessons, homework help, contact with parents, assisting teachers and adapting lessons, did not demonstrate a strong association with any increase in performance of those pupils for whom the additional money was intended (*Tweede Kamer / Upper Chamber, 1997-1998*).

Based on the above findings the Dutch government decided to intensify the Educational Priority Policy and make the intended outcomes more transparent starting in 2000 (*Ministerie van OC&W / Department of Education, Culture & Science, 2000*). One modification to the Education Priority Policy has been the *Onderwijskansenbeleid* or Educational Opportunities Policy, which was initiated in 2000 (*Ministerie van OC&W / Department of Education, Culture & Science, 2000*). The “Educational Opportunities Policy” is an Educational Priority Policy which is focused on the school environment rather than on individual students, as was the case in the Education Priority Policy. Measures within the policy are directed at the quality of schools (*Utrechts plan van aanpak Onderwijskansen PO en VO / The Utrecht Approach to Educational Opportunities in Primary and Secondary Education, 2003*). The policy consists of additional financial funds and is directed at schools which have a large number of pupils who, in terms of educational performance, are falling behind in comparison with the national average. The current weighting factor in primary education for a native Dutch child with a low social economic status is 1.25 and the weighting factor for a child from an immigrant background with a low social economic status is 1.9. Secondary education only receives additional facilities for immigrant pupils and therefore not for native Dutch pupils with a low social-economic status. During the introduction of the policy in 2000, the initial nationally

applied criteria for a school to be considered for additional financial support were that the school was attended by more than 40% of pupils from cultural minorities, that the school was situated in one of the four large cities (Amsterdam, Rotterdam, The Hague, Utrecht) and that the school was performing poorly (*Ministerie van OC&W / Department of Education, Culture & Science, 2000*). The schools were given a free choice of where to invest the money (Bosker, 2005).

A particular trend has become apparent since the introduction of the Education Priority Policy and the Educational Opportunities Policy. In secondary education it has been argued over the last number of years that native Dutch children from disadvantaged backgrounds have been excluded from additional support because of the emphasis on pupils from immigrant backgrounds (Ledoux, 2001; Smit, personal communication, June, 2004). It appears that native Dutch pupils with a 1.25 status at primary school take a backwards step in the first two years of secondary education in terms of results, whereas results from other pupils stay the same. Furthermore, teachers often judge the social and emotional functioning of the group of native Dutch pupils falling behind as weak. Similarly, not all immigrant pupils experience obstacles in their education, and some immigrant pupils with possible educational deficits are automatically excluded from the weighting policy. Examples of this group are Surinamese students who have been in the Dutch education system for longer than four years (Ledoux, 2001).

In summary, the evaluation of the Education Priority and the Educational Opportunities policy leads to the conclusion that a focus on cultural minorities alone does not contribute sufficiently to the successful development of disadvantaged pupils. Currently, it still seems unclear which aspects of a low SES background are related to educational deficits and a limited social-emotional development. In addition, it remains unclear at this moment which exact measures could contribute to good quality schools and how education may additionally contribute to the development of the talents of all disadvantaged pupils. Ledoux (2001) argues that it is not just those pupils who are evidently at risk (the drop-outs, truants, pupils with large language deficits) who should be subject to a specific policy, but all pupils who have to overcome additional problems. This therefore also includes pupils with few opportunities at all levels of secondary education, as well as native Dutch children.

According to Ledoux, in order to do this, schools need to acquire insight into *the mechanisms* that are related to an inequality in opportunities or the utilisation of opportunities.

Since 2004 (after the present research was started) a new weighting policy has been proposed in which, in addition to a factual assessment of the pupil's language deficit, social-economic background would continue to form the basis of the weighting policy, whereas ethnicity no longer would (Bosker, 2005). This new policy was not considered in the present research.

The present study is an attempt to identify and map *the mechanisms* through which education and the school environment as a whole can contribute to the successful development of children from a low SES, irrespective of their cultural status. Therefore a focus on the mechanisms that lead to children with a low SES *succeeding*, in addition to discussing the reasons for these children not succeeding is proposed.

### **1.2.2 PARADIGMATIC BACKGROUND**

The focus on the contribution to successful development by the school environment follows a salutogenic paradigm<sup>3</sup>, which is an answer to the pathogenic paradigm (Antonovsky, 1979). "Salutogenic" is a word derived from the Latin word "Salus", meaning health and well-being. After decades of research into the potential causes of developmental or psychological problems, for a number of years researchers within the salutogenic paradigm have been asking what the causes of success and successful development are. Within this paradigm illness and health are seen as two locations on the same continuum instead of as dichotomous variables. The salutogenic research question then becomes (Antonovsky, 1996, p. 14): "*How can we understand the movement of people towards the direction of the health- end of the continuum?*". The research focus within this paradigm is on "salutary factors": factors that promote health and strength in individuals in order to manage stress and tensions in their lives and to grow from these, or in spite of them (Antonovsky, 1996).

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<sup>3</sup> The consequences of this assumption for alternative medicine and behavioural sciences are not further discussed in this thesis. This paradigm is only mentioned to help characterise the health and pathology continuum.

The focus on “salutary factors” is different from the focus on reducing risk factors in order to facilitate healthy development. The focus on salutary factors is recognisable in the field of “Positive Psychology” (Seligman & Csikszentmihaly, 2000). Positive subjective experiences, positive individual characteristics and positive institutions (e.g. school environment) are central within Positive Psychology research into improving quality of life and the prevention of pathology. Positive Psychology acknowledges the value of understanding the causes of problems and of ways to “cure” problems. Positive Psychology is therefore not aiming at offering an alternative for a pathology-based way of thinking but wants to add to the research by explaining which factors lead to health (Seligman & Csikszentmihaly, 2000).

In Malka Margalit’s words (2003, p. 82):

*“The paradigm shift from the reductionist problem-oriented approach underlying the deficit models to the comprehensive empowering and nurturing strengths models is becoming a prevalent theme across academic disciplines and the helping professions. It should be clearly stated that empowering models do not deny deficiencies and difficulties; however, such are examined within a wider multidimensional and dynamic perspective”.*

The field of Positive Psychology and the significance of this field to the research presented here are discussed further in Chapter 2 (section 2.3.4.1). The research paradigm of ‘pragmatism’, which combines both postpositivistic and interpretavistic views on reality guides the present study in ontological, epistemological and methodological ways. This research paradigm is explained and discussed in Chapter 3.

### **1.2.3 SCIENTIFIC BACKGROUND**

#### **1.2.3.1 Research in the Netherlands**

The factor that seems to be of constant influence on the development of differences in the learning capacity of children appears to be the parental environment in terms of SES. This influence also appears to be difficult to change through interventions (Karsten & Slegers, 2005). Dutch research into the academic success of youngsters

from a low SES (Luykx, 1988; Klatter-Folmer, 1996; Ledoux, 1996; 1997, Crul, 1994, 2000; Van der Veen, 2001; Van der Veen & Meijnen, 2001) can be placed within the salutogenic paradigm. The above-mentioned Dutch studies have up to now been primarily focused on the contribution of factors to successful academic careers for youngsters from an immigrant background, and in particular the successful academy pathways of Turkish and Moroccan pupils. Often these studies explore the positive influence of family and individual factors on school success (Crul, 1994, 2000; Van der Veen 2001; Van der Veen & Meijnen, 2001) or the central role of primary school as a positive influence (Overmaat & Ledoux, 2001).

Although Luykx (1988) found that her research into the successful development of Turkish and Moroccan girls did not point to a positive influence of school factors (the negative impact of school factors appeared to be greater and the girls seemed to develop in a positive way despite the school), she still highlighted a number of school factors which, according to the girls, had been a positive influence on their development. The girls highlighted the intensive guidance by teachers in the transfer from primary to secondary education, the mixed *brugklassysteem* (bridge class system, the first year of secondary education, forming a bridge to different types of secondary education), which allowed the choice of a specific educational pathway to be postponed. They also highlighted the approach taken by the school leadership in promoting a school environment which allowed the girls to feel more at home amongst the majority of Dutch pupils. Klatter-Folmer (1996) found in her research that the characteristics of the schools attended by pupils in terms of the composition of the school population, teacher expectations and the effectiveness of the education were not significantly associated with the success of Turkish pupils (Klatter-Folmer, 1996). However, Klatter-Folmer (1996) adds as a comment to these results that these characteristics could have provided a contribution to individual differences in school success.

The comment made by Klatter-Folmer in her research results acquires additional significance when differences in the development of competence of children within the same school context are considered. There are differences in competent development observable in children between schools. These are partly based on their SES, and partly on the quality of the school. However, there are also differences

evident in competent development within schools in children from the same low SES. These differences do not appear to be attributable to the quality of schools or the children's low SES. Both of these variables do not appear to be able to explain the variance in full. The unexplained variance apparent in the development of children from the same low SES within the same school appears to be the result of an interaction between the children and their school environment.

The impetus for the present research is the observation of individual differences in the development of competence in pupils from a low SES within the same school context. This observation leads to the question of how some of these pupils are able to benefit from the conspicuous presence of factors and characteristics in the school context, whereas other pupils from the same low SES do not flourish in the same school environment. The present study seeks to clarify the mechanisms that lead to successful development in the context of a low SES, as well as those mechanisms that lead to unsuccessful development in the context of a low SES. A broad definition of competent development is central to this, rather than a definition which is based on the acquisition of good school results. This broader definition is explained in more detail and supported in Chapter 2.

### **1.2.3.2 Research on resilience**

The origin of research into "resilience" is the fascination with the unexplained variance between children in their functioning when risk factors are present. According to Masten, Best and Garmezy (1990), resilient behaviour may be viewed as comprising three types of behaviour which reflect successful responses to differing environmental demands: (i) Basic success in spite of being a member of a group with high-risk status; (ii) Continued or sustained success under apparent stressful conditions; (iii) Successful performance in spite of an apparent intense conflict or trauma.

Zimmerman and Arunkumar (1994) state that more effort is required to understand how social institutions can contribute to, or hinder youths' resilience. They suggest that research should focus on the role schools may play in developing resilient youths through enhancing protective factors such as social skills, problem solving skills and self-esteem. Bartelt (1994) asks, in relation to the recommendations such as those

above by Zimmerman and Arunkumar, what the significance is to a youngster of a school promoting resilience, when what is being offered within the school environment does not link-in to the stressors experienced in the family and home environment. Bartelt (1994, p. 107) therefore proposes a focus on resilient systems: *“systems that link school, community, and student performance in a functional relationship”*.

Over the course of the last 50 years research into resilience has evolved from a phenomenological, descriptive tradition into a tradition which attempts to understand the process of successful development in the presence of risk factors. Initially, the study of resilience centred on notions of “traits”. Gradually, the field has evolved to the point at which consideration of person-environment transactions is at the heart of the resilience phenomenon. Today, consistent with the basic tenets of positive psychology, many researchers assume that every person has the inner capacity to lead a meaningful and fulfilling life, and to develop and grow through adverse life experiences, or even because of experiences like those. A youngster does not just develop successfully through the presence of certain “traits”, but also by making use of these “traits”, within the individual as well as within his environment. The reasons why some youngsters use these “traits” and others do not have been considered and explored in various ways (Richardson, 2002).

The observed evolution within resilience research towards a focus on person-environment transactions and on a universal, internal capacity to successful development means the resilience perspective is the chosen perspective for answering the research question in the present research. Chapter 2 discusses how resilience of middle-adolescents from a low SES may be considered and explored according to various trends within resilience research, as well as how resilience is defined as a concept in this study.

### **1.3 AIM OF THE STUDY**

The aim of the present study is to gain insight into how school environments contribute to the resilience of urban middle-adolescents from a low SES background. The present study intends to contribute to knowledge on increasing the fit between the

school environment and the needs of middle-adolescents from a low SES background to develop successfully. The present study will be a distinct contribution to existing knowledge derived from earlier studies due to the focus on the perception of middle-adolescents themselves on relevant environmental factors. In addition, this focus could contribute to an asset-based approach or, more specifically, to the asset-access-mapping process (Bouwer, 2005), as it is being developed in educational thinking today.

Three sub-questions<sup>4</sup> are proposed in order to fulfil these aims:

- (i) What are resilient middle-adolescents' perceptions of the contribution of the school environment to their resilience?
- (ii) What are the perceptions of middle-adolescents, who are not defined as being resilient, of the contribution of the school environment to their state of resilience?
- (iii) How can the comparison between these two perceptions be explained?

#### **1.4 STUDY ASSUMPTIONS**

The main assumption of the study is that children do not necessarily succumb to hardship or risk factors. Some literature on resilience is presented in order to substantiate this assumption. Resilience is a relatively recent orientation in psychological, sociological and educational research. Within the theoretical frame that arises from the literature review there is reason to assume a possible positive influence from schools on resilience-building in middle-adolescents. In the present study it is assumed that this influence is not objectively measurable. It is suggested that the influence should be described as that perceived by the middle-adolescents themselves. The interest in the content and nature of the perceived influence of the school environment is founded on the assumption that the middle-adolescents' perception of the influence will be different from adults' perception and from the results of effective-school research. This last study assumption relates to the differences between resilient and not-resilient adolescents. In this respect, it is assumed that the

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<sup>4</sup> The main research question is: "What is the contribution of the school environment to the resilience of middle-adolescent students?"



difference between the successful and less successful development in these groups is influenced by and/or reflected in their different perception, and/or utilisation of useful assets in their school, as well as by a fit or misfit between the middle-adolescents' developmental needs and their access to the available assets.

## **1.5 THEORETICAL FRAMEWORK**

### **1.5.1 INTRODUCTION**

The theoretical assumption in the Educational Priority and Educational Opportunity policy has been that the variance in school environments explains part of the variance in pupils' performance and development. It is thereby assumed that when the school environment is changed, pupils' performance and development will change as well. This assumption is supported by research which has focused on the quality of schools and comparisons between them (see: Rutter, Maughan, Mortimore, & Ouston, 1979; Rutter, 1981; Van der Wolf, 1984; Mortimore, Sammons, Stoll, Lewis & Ecob, 1988). A summary conclusion of these studies focussing on on variance between schools is that the variance in pupils' development in different school contexts is explicable through school factors. The present study is focused on the variance within school, where the fit or misfit between individuals and the environment is explored.

The aim of the present research is to explain how school factors as well as other aspects in addition to school factors play a role in creating pupils' successful development. Therefore, a link is sought within developmental psychology theories concerning children's and adolescents' development in various contexts. One of the frequently used theories in research into child and adolescent development is Bronfenbrenner's ecological model (1979, 1992). The model was refined at a later stage as the bio-ecological model (Bronfenbrenner & Ceci, 1994; Bronfenbrenner, 2001), which better fits the purpose of this study.

### **1.5.2 ECOLOGICAL MODEL**

In the ecological model, Bronfenbrenner posits the interaction of five environmental systems within one large system. These are the microsystem, the mesosystem, the exosystem, the macrosystem and the chronosystem. The microsystem is characterised by those individuals and events most proximal in one's life, involved in continual

face-to-face contact, with each person reciprocally influencing other(s). Examples of the microsystem include the family, school and peer groups. The mesosystem refers to the relationships between microsystems. The exosystem refers to external influences on systems in which the person actively participates. External influences include systems such as the education system, health services or the parents' place of work. The macrosystem refers to the attitudes, beliefs, values and ideologies inherent to the systems of a particular society and culture. Finally, there is the chronosystem, which refers to the developmental time frames that cross through the interactions within the systems and the influence on and of individual development. An example of the chronosystem is the development of a child's life within the development of a family or a classroom setting as a system (Swart & Pettipher, 2005).

### **1.5.3 BIO-ECOLOGICAL MODEL**

Although the urban middle-adolescent with a low SES in the school context can be positioned in and studied with the help of Bronfenbrenner's previous *ecological* model (Bronfenbrenner, 1979; 1992), his position in the ecological model can be seen as being "reactive": the middle-adolescent develops "under the influence" of factors in a variety of contexts (e.g. the school context). Summarising various publications regarding the *bio-ecological model* (Bronfenbrenner en Ceci, 1994; Bronfenbrenner, 2001; Leseman, 2005; Swart & Pettipher, 2005), the middle-adolescent does not just react to factors in his environment, he also has his own demands on his environment (e.g. the school environment). Middle-adolescents both shape and influence their environment through their demand and the specific characteristics of their demand. They influence how the environment reacts to themselves. The way in which middle-adolescents' demand is shaped in the environment plays more of a role here than the specific content of the demand. It is more the relationship between the middle-adolescents and their environment in which they posit their demands that matters, than the middle-adolescents' active demands. In addition to shaping the environment and provoking a response from the environment, demand characteristics are expressed in selective patterns of attention, expression and responses by middle-adolescents in their environment. These expressions are partly attributable to hereditary predispositions to specific characteristics, as well as to previous experiences of the individual with his environment.

A core theme within the bio-ecological perspective is the “activated genetic potential”. The reasoning behind the “genetic potential” theme is that genes are indeed expressed in behaviour, however, an individual only “allows” genes to be expressed in interaction with his environment.

According to the bio-ecological model the realisation of genetic potential for an individual’s competent development demands mediating mechanisms binding the internal (nature) with the external (nurture). These mechanisms are effective proximal interaction processes in the form of interactions between the individual and his environment. Only those genetic potentials belonging to an individual for which there are the necessary environmental opportunities, in terms of the needs for certain competences, will be realised.

According to the bio-ecological model effective proximal interaction processes are characterised by activities which demand initiatives from the middle-adolescent; activities which lie just above the threshold of what a middle-adolescent is already able to achieve (zone of proximal development, Vygotsky, 1978 cited in Bronfenbrenner en Ceci, 1994) and where the daily interaction of the middle-adolescent with his environment is both mutual and reciprocal (Bronfenbrenner & Ceci, 1994). This reciprocal interaction with people, objects and symbols in the direct surroundings should increase in complexity for competent development. The presence of certain aids in the environment for shaping the proximal processes, such as the availability of books, sports facilities and financial means, influence the outcome of competences. In addition to the presence of these aids, stability, in terms of the occurrence of proximal processes on a regular basis and over long periods of time, is important for the degree of effectiveness of the proximal processes.

According to the bio-ecological model increasing the effective interaction processes between the middle-adolescent and his environment allows an increase of the extent to which genetic opportunities are realised. In addition, it is possible to steer the substance of those genetic potentials realised towards the desired competences by increasing the effective interaction processes. Both effects lead to a more successful development of competence than when the middle-adolescent does not experience any increase in the effective interaction processes.

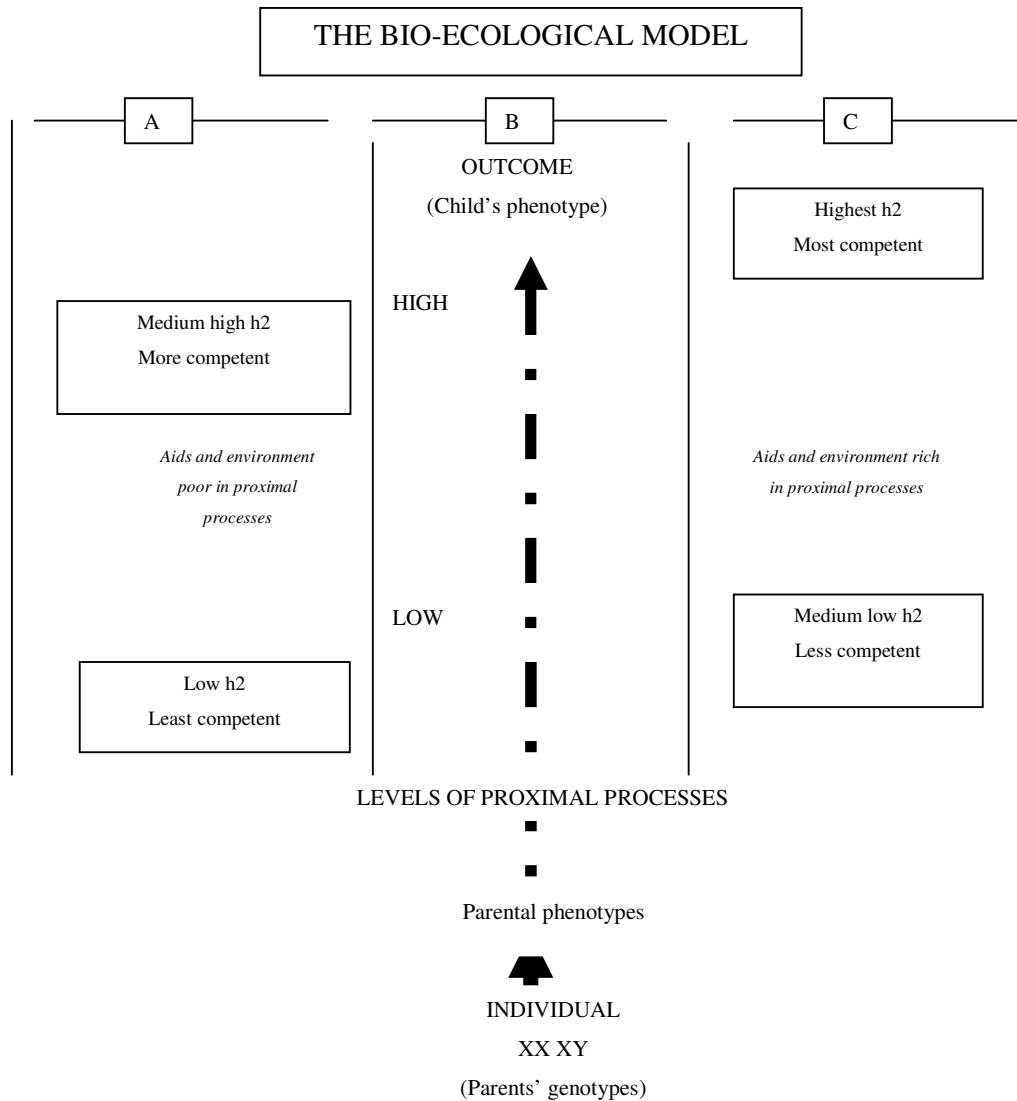
## 1.5.4 THE BIO-ECOLOGICAL MODEL AND EDUCATIONAL OPPORTUNITIES POLICY

### 1.5.4.1 Summary

In order to illustrate the above-mentioned bio-ecological perspective on competent development, Figure 1.1 graphically represents the bio-ecological model, interpreted in relation to middle-adolescents from a low SES background within the school context. The schematic representation demonstrates from the bottom upwards, how the presence of genetic potential (genotypes) is activated (transformed) in an individuals' form of expression (phenotype) through a bio-social trajectory of interactive processes between the individual and his environment. Leseman (2005) refers to a probabilistic view of the development of talent. The input and early direction of interaction processes originate from the genetic potential the middle-adolescent has inherited from his parents. However, the activation of the potential genetic potencies occurs through interaction processes.

The different sections A, B and C in the graphical representation of the bio-ecological perspective on competent development are to be interpreted as follows: section A represents a middle-adolescent in an environment (for instance, the family context) with a low SES, which has a dearth of effective interaction processes. When the quality of effective proximal interaction processes increases, for instance through an increase in the quality of these processes in the family or through the presence of these high-quality processes in another context, such as school (Section B), then the level of the activated genetic potential for competent development increases significantly ( $h^2$ =the coefficient of genetic variance). Section C represents a middle-adolescent in an environment (for instance, the family context) with a high SES, which has a wealth of effective interaction processes. The activated genetic potential for competent development also increases for these middle-adolescents when the quality of effective proximal interaction processes increase.

Fig. 1.1 The bio-ecological model for competent development as outcome (Bronfenbrenner & Ceci, 1994, p. 580-581).



The core of the schematic is that when the quality of proximal interaction processes is low, then the present genetic potentials do not evolve into competent development. When the quality of the proximal processes increases, the competent development of an individual will also increase as a result of the genetic potentials being realised by the interaction processes.

According to the schematic the quality of proximal interaction processes has more influence on the development of middle-adolescents than the level of SES in the environment in which the processes arise. Therefore, according to the model, the

differences in development outcome between an environment with a low SES and an environment with a high SES are significantly smaller than those differences which may be associated with a low versus high quality of proximal processes.

The interrupted vertical column in the graphical representation emphasises that the influence of genes and environment on human development are never fully distinct, as described in terms of demand characteristics.

#### **1.5.4.2 Discussion**

Up to this point the Educational Opportunities Policy could contribute to the development of competence in middle-adolescents from a low SES background by increasing the quality of effective proximal processes in the school environment. However, there are still a number of sticking points regarding the mechanism of the effect of school environment: the Matthew Effect and the occurrence of effective proximal interaction processes.

##### *The Matthew Effect*

The impact of an increase in the quality of proximal interaction processes is greater in an environment with a high SES, which has a wealth of effective proximal interaction processes, than an environment that is low in SES, which has a dearth in effective proximal interaction processes. This effect is also referred to as the Matthew Effect (Van der Leij, 2005) and is related to the relative disadvantage of some groups in respect of others described in section 1.2.1: When all youngsters receive good education with high-quality interaction processes, then those who are growing up in a high SES environment will profit more from the high-quality interaction processes in the school environment than those growing up in a low SES environment *provided* (author's italics) that the high SES has a wealth of high-quality interaction processes. Taking this reasoning further, those youngsters growing up in a low SES environment which is rich in high-quality interaction processes should profit more from good education with high-quality interaction processes than youngsters growing up in a low SES environment, which is poor in high-quality interaction processes. They perhaps should also profit more than youngsters growing up in a high SES environment which has a dearth of high-quality interaction processes.

### *Establishing effective proximal interaction processes*

As genetic potential is realised through proximal interaction processes between middle-adolescents and their environment, an individual unconsciously selects which genetic potentials are realised within him through his selective patterns. Therefore the middle-adolescent unconsciously controls which characteristics are established in his behaviour, including within the school environment. On the basis of the bio-ecological model it may be assumed that middle-adolescents differ in their access to effective proximal processes within the school environment because of selective patterns of attention and responses, which arise through genetic predispositions and prior experience. Leseman (2005) has remarked in this context that if, social-culturally speaking, there is unequal *access to* learning experiences shaping talent, that the ideal meritocracy (equal opportunities for equal aptitude), which is a highly characteristic aspiration of Dutch education, becomes problematical. Following this argument, an identical school environment for middle-adolescents with different experiences in other microsystems will have a different significance, as a result of their difference in *access to* effective proximal interaction processes in the school processes and therefore as a result of educational experiences.

According to the differences in successful development of middle-adolescents in the same school environment, middle-adolescents appear to have different levels of access to effective proximal interaction processes in the school environment. Those from a low SES background who do have access to and are able to benefit from effective proximal interaction processes with their environment are referred to in this study as resilient.

One could assume, based on the bio-ecological model, that resilient middle-adolescents generate different demands and different demand characteristics to their environment than not-resilient middle-adolescents. In other words, in order to create effective proximal interaction processes, they require different approaches from the school environment.

The “bio” aspect, in terms of a disposition of an individual and the individual’s demands on the environment, has received little attention within resilience research (Chapter 2). In this respect the individual’s perception of problems or risks influences

the inclination to seek support. Furthermore, the recognition and evaluation of certain factors as supportive determines the experience of support and use of support. Individuals who experience a given type of support as negative will reject this support and therefore experience less support (Tusaie and Dyer, 2004). It may be concluded from Bartelt's (1994) suggestion that the relationship between what a youngster is offered in terms of resilience promoting factors in a school environment and the stressors that both he and his family experience are of influence on the significance of this school environment to the youngster: the *significance* of certain factors in one of these microsystems (e.g. the school) as promoting resilience is associated with the pupil's experiences in another microsystem (e.g. the family).

In addition to the influence of a pupil's experiences in another microsystem, research into the differences in "fit" between the school environment and different middle-adolescents requires the acknowledgement of biological differences, which perhaps explain a proportion of the variance between levels of pupils' success. However, the ambition within education of allowing schools to be places where every child and youngster with differing characters and characteristics is able to develop successfully, means that researchers need to look beyond predisposition and limits on this predisposition.

A focus on the relationship between middle-adolescents and their school environment in terms of proximal interaction processes offers an insight into the differences between pupils, and thereby offers the opportunity for schools to attempt to meet the differences between pupils. Additional insights will be acquired through studying how the benefits of effective proximal interaction processes are inhibited by middle-adolescents who do not develop successfully in the presence of risks factors. Why do these active, constructive and fruitful interactions between the school environment and the middle-adolescents fail to appear?

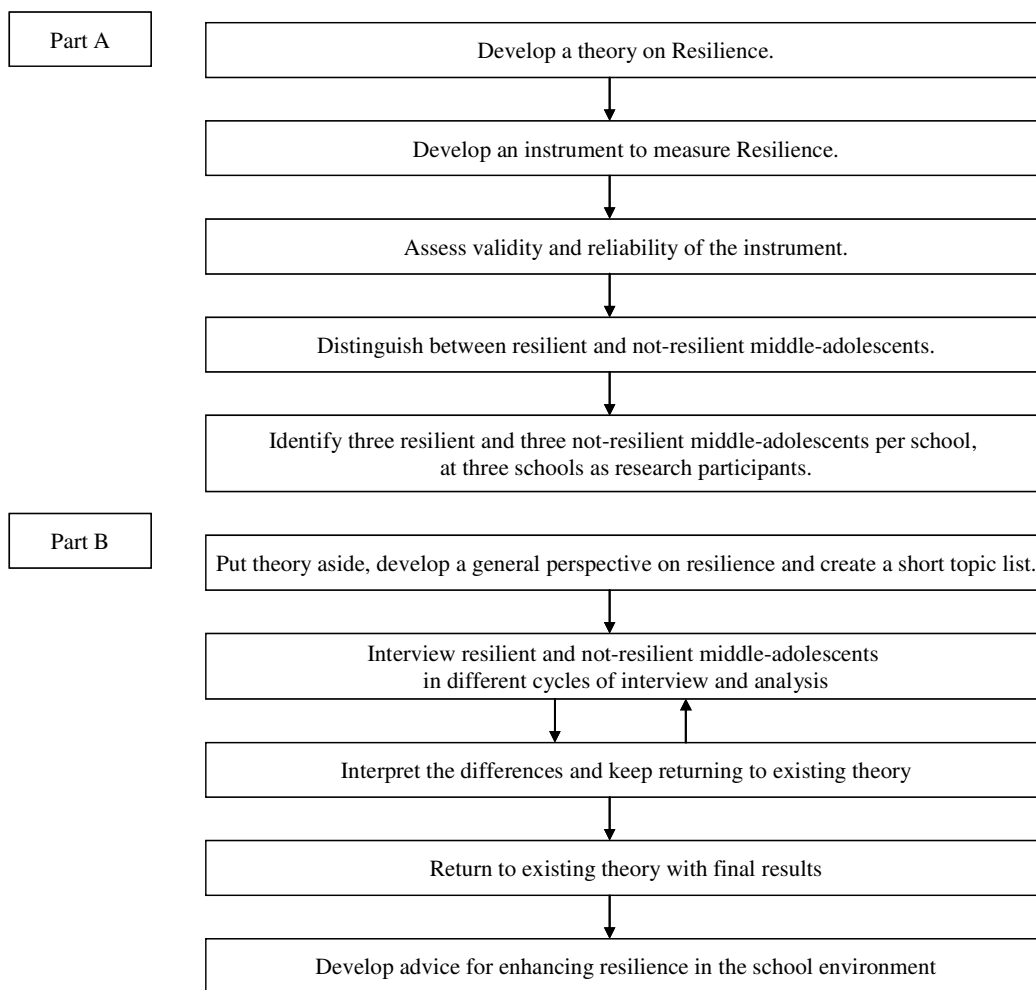
The bio-ecological perspective on competence development of middle-adolescents in the school environment is discussed in further detail in Chapter 6 when qualitative findings are interpreted.



## 1.6 STUDY DESIGN

The present study consists of two sections: A and B. Part A is a quantitative, instrumental study into identifying resilient and not-resilient middle-adolescents reliably. Part B is a qualitative study into the perception of resilient and not-resilient middle-adolescents of the contribution of the school environment to their resilience. Figure 1.2 visually presents the study design.

*Fig. 1.2 Study design*



A “bottom-up” approach was adopted for Part B of the study. The central focus is on the urban middle-adolescent with a low SES attending Educational Opportunities schools. Within this approach, which is explained in detail in Chapter 3, concepts such as school, risk, positive development and protective factors are defined from the perspective of the middle-adolescent.

## 1.7 DESCRIPTION OF THE STRUCTURE OF THE THESIS

The importance of an insight into the perceptions of middle-adolescents with a low SES of their development in relation to the school environment is sketched in **Chapter 1** against the background of the current “Education Opportunity Policy” in the Netherlands. The resilience theme is conceptualised as a perspective from which the development of middle-adolescents with a low SES is viewed in the school environment.

In **Chapter 2** those factors are explained which, according to various orientations within the resilience framework, are of influence on the successful development of adolescents despite the presence of high-risk environments. Subsequently, models are discussed relating to the mechanisms of resilience. Finally, different views are discussed on what is known about the (conscious or unconscious) control of middle-adolescents over the formation of successful or less successful development in the presence of a high-risk environment.

The research methodology employed in the study is discussed in **Chapter 3**. Central to this chapter is the description of the methods of nomological-instrumental research and “Grounded Theory” and a description of the research design and process.

**Chapter 4** presents the results from the quantitative Part A of the study. In this nomological-instrumental study the resilient and not-resilient behaviour of middle-adolescents is studied in relation to resilient personality characteristics in different contexts. The Veerkracht Vragenlijst (VVL, Resilience Questionnaire) is validated according to the Nederlandse PersoonlijkheidsVragenlijst voor Jongeren (NPV-J, Dutch Personality Questionnaire for Young People). Subsequently, scores on the VVL are analysed.

**Chapter 5** presents the results from the qualitative Part B of the study. Chapter 5 contains a description of qualitative data as well as logbook entries. Firstly, the definitive coding scheme used for the definitive analyses are explained in terms of the developed theory. Subsequently, there is a description and discussion of the results from the definitive analyses.

**Chapter 6** presents a summary of the qualitative findings. These findings are discussed in relation to relevant literature and interpreted from the bio-ecological perspective. The qualitative findings are integrated with the quantitative findings, critical comments on the research design are made as well as recommendations for educational practice and research. Chapter 6 concludes with a short summary of the whole research.

## 2 TOWARDS A BIO-ECOLOGICAL DEFINITION OF RESILIENCE

### 2.1 INTRODUCTION

*Resilience* is an everyday, general term meaning elasticity and stretch, which according to the Oxford American English dictionary (ODE, 2005) refers to “*the ability to recoil or spring back into shape after bending, stretching or being compressed*”. For humans this term refers to “*the ability to withstand or recover quickly from difficult conditions*” according to the ODE. A resilient individual is someone with resilience and a great capacity for recovery and energy.

Studies taking a resilience-approach attempt to understand how successful development occurs and how this is established despite the presence of risk factors (Werner & Smith, 1992; Garmezy, Masten & Tellegen, 1984; Garmezy, 1991; Benard, 1993; Rutter, 1993; Gordon & Wang, 1994; Masten, 1994; Rigsby, 1994; Luthar, Cicchetti, & Becker, 2000; Henderson & Millstein, 2003; Luthar, 2003; Olsson, Bond, Burns, Vella-Brodrick & Sawyer, 2003; Tusaie & Dryer, 2004). In Chapter 1 of this thesis the focus on the reasons for individuals’ success rather than individuals’ failure was contextualised within the fields of salutogenesis and positive psychology (section 1.2.2).

Firstly, in this chapter the concept of resilience as successful development of urban middle-adolescents from a low SES background will be explained.

Secondly, various definitions of and approaches to resilience will be compared as trends in resilience research. A distinction will be made between three approaches. These approaches are distinguishable on the basis of their orientation to the nature of the “resilience” construct. The approaches differ in their focus on the role of the individual in establishing resilience. Therefore, these approaches have different significance to answering the research question in this thesis.

The discussion of the various approaches to resilience research is concluded with the statement that previous research into resilience has not fully captured individual

differences in activities in identifying, evaluating and making use of existing protective factors within themselves and their environment. Therefore, these approaches have not fully captured the mechanisms which lead to the associated differences in successful development of individuals.

At the end of the chapter the definition of resilience of middle-adolescents, as used in the present research, will be presented, which will incorporate a bio-ecological interpretation of the resilience concept. Following this bio-ecological definition of resilience, existing forms of assessing resilience will be discussed.

## **2.2 SUCCESSFUL DEVELOPMENT**

### **2.2.1 ORIENTATION**

In resilience literature a distinction can be made between studies which focus on educational resilience, reflected in the focus on academic success in the face of a low SES background as a resilient outcome, and studies which focus on resilience in a broader sense, as reflected in the focus on fulfilment of various developmental tasks in the face of a low SES background as a resilient outcome. In this paragraph these two orientations will be discussed after a description of the risk of a low SES background.

### **2.2.2 THE RISK OF A LOW SES BACKGROUND**

Dutch and international authors (Garmezy et al., 1984; Garmezy, 1991; Van Heek, 1972; Schoon, Parsons & Sacker, 2004; Karsten & Slegers, 2005) have described the positive relationship between low socio-economic status and disruption to adolescent development in the context of school. Low socio-economic status has been defined by the majority of authors as a measure of a combination of low family income, low levels of parental education, low parental job status and few household possessions (Peng, 1994). For youngsters with a low SES there are fewer means available at home, there are often fewer opportunities present in the neighbourhood where these pupils live. This means that they are exposed to negative influences more frequently than those pupils from a high socio-economic background (Peng, 1994).

### **2.2.3 RESILIENCE AS ACADEMIC SUCCESS IN THE FACE OF A LOW SES BACKGROUND**

As low SES is associated with interference in school performance, adolescent resilience is defined in some international studies as an outcome: high school results in spite of a low SES background. For instance, Martin and Marsh (2006) define resilience as A-level success. Waxman, Huang and Wang (1997) define resilience as A-level success in combination with high levels of motivation. Connell, Spencer and Aber (1994) as well as Gutman, Sameroff and Eccles (2002) define resilience as A-level success in combination with high attendance rates. In relation to these definitions of resilience, Martin & Marsh (2006, p. 267) have defined academically resilient students as: “...*those who sustain high levels of achievement motivation and performance despite the presence of stressful events and conditions that place them at risk of doing poorly in school and ultimately dropping out of school*”

Crosnoe and Elder (2004) use a different description of resilience. They propose that youngsters growing up with high degrees of risk, such as family problems, would probably not be as successful at school as those youngsters growing up in a family which functions better. However, these pupils do display resilience when they perform better than expectations based on the risks present. Academically resilient students could then be defined as those who perform better than expectations based on the risk present. Crosnoe and Elder’s nuance is in agreement with resilience described by Masten (1994, p.7-8) as “*Basic success in spite of being a member of a group with high-risk status*”.

In studies, such as those by Smokowski, Reynolds en Bezruczko (1999) and Gordon Rouse (2001) adolescents are identified as resilient when they are able to keep up with the class level despite having a low SES background in comparison with those who are unable to keep up and who drop out.

### **2.2.4 RESILIENCE AS FULFILMENT OF VARIOUS DEVELOPMENTAL TASKS IN THE FACE OF A LOW SES BACKGROUND**

Summarising the views of various authors on identifying resilience in youngsters (Masten, 1994; Rigsby, 1994; Tusaie & Dyer, 2004; Olsson et al., 2003), resilience should be regarded as a non-static, developmentally appropriate feature that

youngsters do not simply have or lack. Children may be more resilient or less resilient at different points in their lives depending on the interaction and accumulation of individual and environmental factors (Masten, 1994). In middle-adolescence and young adulthood, resilience may be measured by accomplishments higher than the norm in respect of a more independent relationship with parents and/or increasing self-directedness in high school despite of the presence of risk factors (Masten, 1994). Focussing on constructive outcomes in just one area disregards many middle-adolescents who might be dealing constructively with adversities in another area of their development. Acting resiliently in the family might lead to temporarily less than A-grade success in school. Functioning well under high stress might be associated with temporarily distressing emotions (Olsson et al., 2003).

Therefore, a broader definition of adolescent success in the school environment has been described by Wang, Haertal & Walberg (1994, p. 46) which represents the definitions used by other authors such as Morrison, Brown, D’Incau, Larson O’Farrell and Furlong (2006). Their definition of resilience is:

*“The heightened likelihood of success in school and in other life accomplishments, despite environmental adversities brought about by early traits, conditions, and experiences”.*

In relation to success in life accomplishments, Masten (1994) argues that, in developmental psychology, success and life accomplishments are judged according to psychosocial milestones called *developmental tasks*, which have been defined by various authors for the development of youngsters into adulthood (e.g. Erickson, 1963; 1968; Havighurst, 1974). This argument leads to a definition of resilience as fulfilment of developmental tasks despite high-risk environments. Similar to Masten’s statement, the School Mental Health Project of the University of California (University of California Los Angeles (UCLA), 1999, p. 5) proposes a synthesis of outcomes within which to frame their research on resilience and barriers to learning (Figure 2.1).

*Fig. 2.1 Developmental tasks in the context of late twentieth-century US society (UCLA, 1999, p. 5)*

<p><i>Academics</i> Including such outcomes as school engagement, motivation and ability to work and relate at school; motivation for self-learning and enhancement of literacy; feelings of academic competence.</p> <p><i>Healthy and safe behaviour</i> Including the ability to make good decisions about diet, hygiene, health care, involvement in activities; ability to solve interpersonal problems and resolve conflicts; ability to delay gratification and resist impulses and inappropriate social pressures.</p> <p><i>Social-emotional functioning</i> Including such outcomes as the ability to relate socially and in working relationships with others encompassing cultural competencies and understanding behavioural norms; ability to handle and reduce stress; ability to express and manage feelings; positive feelings about self and others; feelings of social-emotional competence and connection with significant others; a resilient temperament.</p> <p><i>Communication –verbal and nonverbal</i> Basic language skills and the ability to read and interpret social cues and understand the perspectives of others.</p> <p><i>Character/Values</i> Personal, social and civic responsibility; integrity; self-regulation; sense of purpose; feelings of hope for the future.</p> <p><i>Self-direction</i> Ability to make and follow through on good decisions for oneself; feelings of autonomy/self-determination.</p> <p><i>Vocational and or adult roles</i> Knowledge, skills and attitudes for acquiring and maintaining employment, initiating and maintaining employment, initiating and maintaining intimate adult relationships, and providing effective parenting.</p> <p><i>Recreational and Enrichment Pursuits</i> Ability to engage in activities for enhancing quality of life and creativity and for reducing stress.</p>
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Figure 2.1 illustrates which developmental tasks can be identified for youngsters in a western society in the late twentieth and early twenty-first century society.

## **2.2.5 DISCUSSION**

In this study, successful development is seen as a normative construct wherein the synthesis of values, attitudes and beliefs in a society is decisive for the specific content of the construct. The normative frame, which grounds the notion of successful development in the present study, is made explicit because of this construct normativity. Successful fulfilment of developmental tasks as mentioned in Figure 2.1 is the most important indication of success for urban middle-adolescents with a low SES status in the present study. It is assumed that the school environment *can* contribute to fulfilling these developmental tasks and therefore can also contribute to the successful development of urban middle-adolescents with a low SES status. At the



same time the school environment, as a dynamic system in which youngsters, peers, teachers and others interact with each other, offers a framework for assessing the development of middle-adolescents as successful based on the developmental tasks defined above (Reynolds, 1994). The various ways in which researchers have studied the phenomenon of successful development in the presence of risk factors and the most appropriate way of studying the mechanisms which lead to successful development of middle-adolescents with a low SES are discussed in the next paragraphs.

## **2.3 DIFFERENT RESEARCH APPROACHES INTO RESILIENCE**

### **2.3.1 ORIENTATION**

The question as to *how* successful development occurs in the presence of risk factors is answered differently within various waves in resilience research. The following distinction will be employed in this thesis based on an interpretation of three waves distinguished by Richardson (2002) in combination with an additional review of the literature: “The Phenomenological wave”, “The Operational wave” and The Energetic wave”.

As a result of the bio-ecological perspective, it was assumed in Chapter 1 that middle-adolescents from a low SES background differ in the extent of their success in development due to different levels of access to effective interaction process in the school environment. In order to ascertain which wave in resilience research is best able to answer the research question presented in this study, the three different waves will be compared and discussed.

### **2.3.2 THE PHENOMENOLOGICAL WAVE IN RESILIENCE RESEARCH**

#### **2.3.2.1 Orientation**

In the *phenomenological* wave the accent is on identifying resilient individuals (Richardson, 2002; Margalit, 2003). For the phenomenological wave, favourable outcomes, such as the completion of the developmental tasks summarised in Figure 2.1 in combination with the presence of objectively measurable risk factors, are “evidence” for the existence of resilience. The central question is: which features are characteristic for individuals who are developing successfully in the presence of risk

factors in contrast to those individuals who are not? It explores which personality, family and other factors are related to favourable results. This line of attack offers an extensive, yet non-exhaustive summary of personal and environmental characteristics which are related to successful development in individuals, despite the presence of high-risk conditions. These characteristics are distinguished in this discussion as characteristics of the individual and family, and characteristics outside of the family, such as the school.

### **2.3.2.2 Characteristics of the individual and family**

Richardson (2002), as well as Garmezy (1991) Masten (1994) and Doll and Lyon (1998), provides overviews of various longitudinal studies which formed the initial impulse to identifying characteristics associated with resilience. The first and most frequently cited longitudinal study is that by Werner and Smith (Werner, 1989; Werner & Smith, 1977; 1982; 1992; 2001). From 1955 they investigated the entire birth cohort of children in a multi-ethnic population with low to medium socio-economic status on the Hawaiian island of Kauai. The study was intended to identify factors predictive of developmental problems for the entire birth cohort. The study was broadened and extended at a later stage to identify factors which were predictive of adaptation problems for the same birth cohort, such as mental health problems, school problems and delinquency of adolescents and adults at a later age. They studied risk factors such as chronic poverty, low parental education, parental psychopathology, the presence of genetic disorders and problems during birth. Poverty appeared to be related to an increase in delinquency and criminal activities in youngsters. Low parental education appeared to be related to lower intelligence in the youngsters. Marriage or family problems appeared to be co-related with school and learning problems. Finally, ineffective parenting appeared to be associated with an increased risk of physical and mental health problems. Accumulation of the above-mentioned risk factors led to problems in development and in adult life in the majority of the population studied. However, almost a third of the population studied developed well in the presence of the above risk factors. These individuals did not experience those problems that two-thirds of their peers experienced in the same conditions. It was initially thought that these individuals were immune or resistant to stressors. The term “stress-resistant” was used to describe individuals who experienced successful development in the presence of conditions which research had

demonstrated were high-risk. However, additional research demonstrated that these individuals were not resistant to stress. Some of the individuals studied did experience evident stress or problems with their circumstances. Despite the stress experienced, these individuals appeared to develop positively. They were “resilient”. They were able to bounce back after experiencing problems. The question was posed about what assisted these individuals in “continuing and developing successfully”, despite the considerable stress experienced. The “resilient” section of the population studied possessed personality characteristics and factors in their environment which researchers associated with their positive development: good intellectual capacities, even temperament, social competence, high expectations, goals and a warm, consistent relationship with parents or carers.

A second longitudinal study, the New Castle Thousand Family Survey (Kolvin, Miller, Fleeting & Kolvin, 1988) focused on risk factors such as marital problems in the family, parental illness, poor child care and house care, social dependence, large families in small houses and poor maternal parental skills. Kolvin and colleagues discovered the same relationships between combinations of the above risk factors and problems in later life as Werner and Smith did. They concluded that those individuals not demonstrating any problematical development, despite the presence of some risk factors, had received an effective upbringing, full of affection.

Both of these studies and other longitudinal studies from the same period (see for instance Glueck & Glueck, 1950; Long & Vaillant, 1984; Elder, 1974; Sameroff, Seifer, Baldwin & Baldwin, 1993) identified personality factors (e.g. tolerance for negative affect, self-efficacy, self esteem, foundational sense of self, internal locus of control, sense of humor and hopefulness) and a warm relationship with parents or carers (family factors) as affording protection against risk factors such as urban poverty, chronic poverty, low parental education, low parental job status, social dependence, psychopathology or parental emotional problems.

In addition to longitudinal studies which in the first instance have led to the identification of the resilience construct there have been many non-longitudinal studies directed at factors associated with successful development in individuals, despite the presence of the above risk factors (for an overview see, for instance,

Constantine, Benard & Diaz, 1999; Wolin & Wolin, 1993; Doll & Lyon, 1998; Masten & Coatsworth, 1998; Olsson et al., 2003). These studies have confirmed and supplemented the above-mentioned personality characteristics and have confirmed a warm, responsive relationship with at least one parent as an environmental resilience factor.

### **2.3.2.3 Friends and the school environment**

In addition to an extension of those personality and family factors which are related to successful development despite the presence of various combinations of risk factors, the identification of resilience factors in the environment has expanded over the years into other contexts than the individual, family and relatives. Both the community and school context appear to play a large role for especially those children whose family contexts contain risk factors. This increased ecological approach demonstrates how protective factors have an influence in one context on the impact of risk factors from another context. Various studies (see, for instance, Werner, 1989) have demonstrated that children with a high-risk family background develop competently by either having strong interests outside the family or by strong relationships with trusted adults outside the family. Other studies (Fergusson & Lynskey, 1996; Hetherington & Elmore, 2003) have demonstrated that positive friendships with peers contribute to the resilience of children and youngsters from high-risk family backgrounds (e.g. depressed parents, marriage conflicts and divorce).

Research of youngsters into factors associated with the development of psychiatric disorders have shown that factors in the child, his family and school, such as teachers and other adults at school, reduce the risk of psychiatric disorders (Doll & Lyon, 1998). Beardslee and Podorefsky (1988) found that resilient children whose parents had depression were greatly involved in school and extra-curricular activities. Hetherington and Elmore (2003) found that the school environment could increase resilience in children from families with marital problems and divorce. The above findings have led to a focus on the possibility of changing the environment in order to stimulate individual resilience. The school environment has received particular attention (Doll & Lyon, 1998). Garmezy (1991, p. 424-425) for instance proposes that: *“Schools serve as a critical support system for children seeking to escape the disabling consequences of poor environments”*.

#### **2.3.2.4 Overview of risk and resilience factors**

The above studies may be summarised in an overview of “risk” and “protective” factors associated with resilience at the individual, familial and environmental levels. This overview is presented in Appendix 1 and 2.

For each new study the same essential factors recur as risk and protective factors. Risk factors may be best understood as related social problems. For instance, the risk factor "poverty" is related to problems in individual development, as poverty is mainly associated with different "social problems", such as financial dependence on government assistance, large families in small residences, disorganised family circumstances or poor living conditions through lack of financial means. The influence of a risk factor is evident whenever this is long-lasting, rather than acute and short-lived, whenever children and youngsters are powerless against the actions of factors which have a negative influence on their environment. The influence of risk factors increases exponentially when multiple concurrent risk factors are present. Resilience factors also work cumulatively. Children growing up in the presence of various risk factors need multiple resilience factors, both in themselves and their environment, in order to develop successfully (Doll & Lyon, 1998).

#### **2.3.2.5 Discussion**

In summary, in relation to resilience research, it may be argued that urban middle-adolescents with a low SES may experience potential disruption to their development when risk factors associated with a low SES accumulate, and when the protective factors either are not present or not present sufficiently to establish successful development. The phenomenological wave in resilience research has demonstrated that youngsters who develop successfully in the presence of risk factors are active at school and in extra-curricular activities. Furthermore, it appears that the school environment is able to offer protection against risk factors through the presence of trusted adults and through opportunities for developing positive friendships. However, the phenomenological approach does not offer a solution for understanding and explaining the *differences* in development of middle-adolescents with a low SES in the same school context, which was the study objective stated in Chapter 1. Why are some urban middle-adolescents from a low SES background active at school and in extra-curricular activities and others not? Why do some youngsters develop

relationship bonds with adults in the school environment and others not? Why do some youngsters have friendships against risks and others not? In order to investigate the mechanisms for establishing successful development and the lack of successful development, the “Operational wave” to resilience research is discussed in the next paragraph.

### **2.3.3 THE OPERATIONAL WAVE IN RESILIENCE RESEARCH**

#### **2.3.3.1 Orientation**

Research in the “Operational wave” is directed towards the question of *how* the ability to develop successfully in the presence of risk factors is established. Within this wave the focus is on processes and mechanisms which strengthen or limit individuals’ stress responses. Resilience is viewed here as a linear or curvilinear process which an individual experiences in interactions with life circumstances that are detrimental or beneficial. It appears to be less relevant within this approach whether an individual or his environment has all the resilience characteristics referred to in Appendix 2. For instance, Masten and Coatsworth (1998) found that resilient children do not have specific characteristics, but that the normal, basic and human protection mechanisms are still intact in these children. They propose that successful development under high-risk conditions occurs when the fundamental systems which normally stimulate successful development are active despite the high-risk conditions.

A number of models have evolved concerning factors involved in establishing successful development in the presence of risk factors. The models will be described in the following discussion as the:

- 1) Compensation model
- 2) Protection model
- 3) Challenge model
- 4) Resiliency model

The models form four ways of explaining how risk and protective factors work in a particular context to lead to successful development.

#### **2.3.3.2 Compensation model**

The compensation model describes resilience as the outcome of a process in which a protective factor and the risk factor do not interact with each other, but both have an

independent influence on the individual (Hollister-Wagner & Foshee, 2001; Fergus & Horwood, 2003; Fergus & Zimmerman, 2005). An example of compensatory action is when a youngster is neglected by his parents, but has a strong bond with a teacher. The effect of parental neglect will potentially continue to interfere with the youngster's self-confidence, however, the good bond with the teacher will contribute to self-confidence. This means that the ultimate outcome for self-confidence will be higher than would have been the case if the youngster had not established a good bond with the teacher. Figure 2.2 presents a visual schematic of the compensation model.

*Figure 2.2. The Compensation model, Fergus & Zimmerman, 2005, p. 402.*

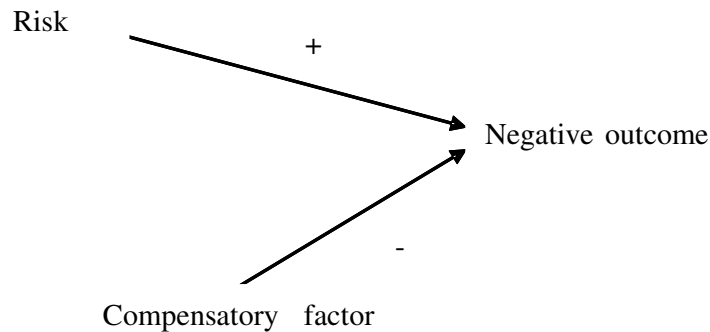


Figure 2.2 shows that the impact of the risk factor on the outcome is less negative through the presence of the compensatory factor. The greater the levels of compensatory factors present in relation to the risk factor, the more positive the outcome.

### **2.3.3.3 Protection model**

In the protection model the protective factor does directly interact with the risk factor in the resilience process. A factor is only defined as a protective factor once it is more than just the opposite of a risk factor (Hollister-Wagner et al., 2001; Fergus and Horwood, 2003; Fergus & Zimmerman, 2005). The protection model may be illustrated using an example of a girl growing up in a neighbourhood with a lot of violence and active gang recruitment on the streets. The girl attends a school with strict rules and active supervision on the school playing fields. In this way the presence of the risk factor (a lot of violence in the neighbourhood) has less of an

effect on the outcome of her development, as the protective factors (stricter rules and supervision at school) directly intervene in the extent of exposure to the risk factor. Figure 2.3 presents a visual schematic of the protection model.

*Figure 2.3 The Protection Model, Fergus & Zimmerman, 2005, p. 402*

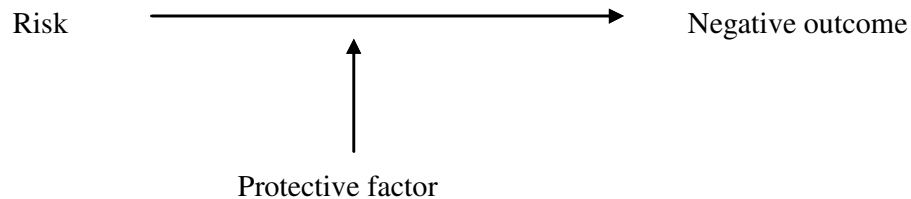
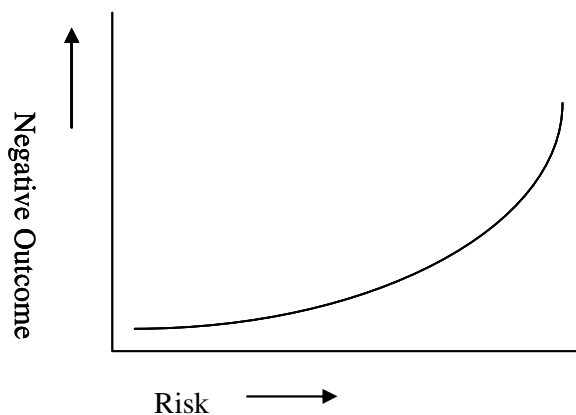


Figure 2.3 shows that the negative outcome, which could have been caused by the risk factor, becomes less negative through the protective factor reducing the presence of this risk factor.

#### **2.3.3.4 Challenge model**

The challenge model does not presuppose a linear process in the interaction between the protective and risk factors as the previous models. Rather, this model postulates a curvilinear relationship (Fergus & Zimmerman, 2005) Figure 2.4 presents a visual schematic of the challenge model.

*Figure 2.4 The Challenge Model, Fergus & Zimmerman, 2005, p. 402*



The curve in the challenge model in Figure 2.4 presents how exposure to very low levels or high levels of risk factors is related to negative outcomes, while the average



level of exposure to risk factors is related to less negative, or even positive outcomes. The notion in this model is that individuals who are exposed to a limited level of risk are confronted with sufficient levels of the risk factor in order to learn how to deal with the risk factor, whilst the actual level of the risk factor is not enough to become a problem. Overcoming one of the risk factors prepares the individual, as it were, for overcoming other risk factors. In the challenge model risk and protective factors are considered to be the same variable. Whether a factor is a risk or offers protection is determined by the level of exposure to the factor. This approach is similar to the idea of inoculation: inoculation with low levels of the pathogen results in the child becoming resistant to childhood diseases.

#### **2.3.3.5 Applicability of the Compensation, Protective and Challenge models**

Results of studies into the applicability of the various models in different contexts and under different conditions have demonstrated that whether the effect of a factor is protective, compensatory or challenging differs by the kind of risk factor identified, by the protective/challenging or compensatory factor investigated and by the characteristics of the individual investigated, such as age and gender.

For instance, Hollister-Wagner and colleagues (2001) found confirmation for both the protection model as well as the challenge model whenever risk factors for women consisted of *exposure to physical violence* and the protective factor consisted of *religion; self-confidence; proximity of an adult; relational capacities; constructive communication skills and constructive anger responses*. A limited level of exposure to physical violence did not lead to an increase in physical violence inflicted by these women. However, this was the case above a certain level of exposure. Hollister-Wagner and colleagues believed that these findings confirmed the challenge model. Furthermore, they also discovered that for each increase in the number of protective factors, the relationship between exposure to physical violence and physical aggression by these women reduced in strength. Hollister-Wagner and colleagues believed that these findings confirmed the protection model. However, none of these models appeared to apply to men in the same context: only the main effect of exposure to violence and an increase in aggression were apparent.

It can be concluded from the findings of Hollister-Wagner et al. (2001) that it is not just the accumulative effect of risk factors that is of influence in creating problems (as proposed in the discussion regarding the phenomenological approach), but that also the individual's characteristics such as gender, could be an influence on the effect of potential protective or resilience-promoting factors.

The research by Zimmerman, Bingenheimer and Notaro (2002) is relevant in connection with the central theme of this research. They investigated 770 adolescents and asked them about "natural mentors" in their lives. They related the existence of these natural mentors to the negative influence of contemporaries (e.g. friends with behavioural problems, behaviour of friends in the school environment and attitude of friends to school). From the total number of respondents 8% indicated they had a natural mentor (e.g. aunt, uncle, cousin or grandparent, parents' friends) and approximately 10% of this group indicated that the natural mentor in their lives was a teacher, coach or carer. Zimmerman and colleagues (2002) did find support for the compensation model, but not for the protection model in the context of when the risk factor was a *negative influence of friends' behavioural problems to one's own behaviour* and the protective factor was *the presence of a natural mentor*. In terms of the compensation model adolescents who indicated they had a natural mentor demonstrated fewer problem behaviours (such as the use of soft drugs or delinquent behaviour) than those who did not identify a natural mentor in their lives, even when they also highlighted that they had friends who exhibited a lot of problem behaviour. According to these results the presence of a natural mentor mediates the effects of the negative influence of contemporaries on individual behaviour. The protection model was not supported as the increase of the risk factor "friends with problem behaviours" led to an identical increase in the respondents' problem behaviour, regardless of whether they reported having natural mentors. Both the compensation and protection model are supported in Zimmerman et al.'s study (2002) regarding *the influence of friends in relation to a negative attitude towards school* as a risk factor and *the presence of a natural mentor* as a protective factor. Natural mentors do not only have a direct effect on the reduction of problem behaviour and increasing positive attitudes towards school; they also have an indirect effect by helping adolescents avoid friends who might have a potential negative influence on their behaviour.

Gomez and McLaren (2006) found confirmation for all models whenever the risk factor consisted of *an avoidance coping style* and the protective factor consisted of the *experience of parental support*. In respect of the compensation model the results demonstrated that an avoidant coping style predicted anxiety and depression, and that the experience of parental support had an independent negative effect on the occurrence of both problems. In respect of the challenge model, a limited amount of avoidant coping behaviour barely led to an increase in anxiety and depression, whereas a great deal of avoidant coping behaviour did indeed lead to an increase in comparison. In respect of the protection model, a great extent of maternal support provided a larger buffer against the negative effects of an avoidant coping style, in comparison with small levels of maternal support.

Although the adolescents in Gomez and McLaren's study had an avoidant coping style (considered by most authors as an ineffective coping style), this risk factor for anxiety and depression did not lead to negative outcomes. The parents of these resilient adolescents with an ineffective coping style appeared to act as protective and compensatory factors. The avoidant coping style of the adolescents was an individual risk factor, however, the environment, in the shape of parents, formed protection and compensation which enabled resilience to be identified in the adolescents' behaviour.

The findings on the applicability of the models point to the transactional nature of resilience: resilience is an expression of the interaction between individuals and the environment. The characteristics of an individual or the environment do not act in isolation as an indication of resilience.

#### **2.3.3.6 Resiliency model**

It may be concluded from the above that different individuals within the same context are able or unable to profit in different ways from different factors. These findings highlight a growing recognition within the resilience research tradition of the influence of the individual on the effect of various environmental factors.

Richardson, Neiger, Jensen and Kumpfer (1990) developed a model to describe the occurrence of resilient development based on the conscious and unconscious choices an individual makes in dealing with certain high-risk and disruptive events. The

individual plays a directive role within this model. Figure 2.5 presents a visual schematic of the Resiliency model.

Fig. 2.5, *The Resiliency Model* (Richardson, et al. 1990, in Richardson, 2002, p. 311)

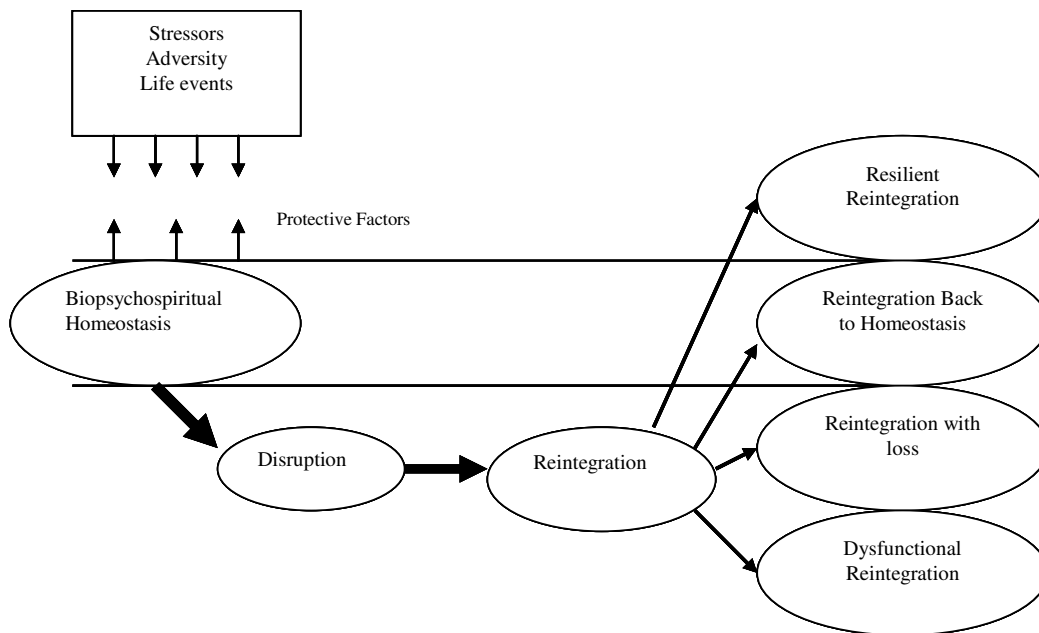


Figure 2.5 indicates that individuals differ in their responses to situations and circumstances experienced as challenging or disruptive. These responses may be seen as the result of interactions by the individual with taxing factors in the environment. According to the model above by Richardson et al. (1990) there are four ways in which individuals may reintegrate within their daily activities after having experienced a disruptive or difficult event or set of circumstances: dysfunctional reintegration, reintegration with loss, reintegration to a comfort zone and reintegration with resilience. Richardson et al. (1990) describe this as a linear process in which individuals make either a conscious or unconscious choice into what the outcome of the difficult experience will be. Reintegration with resilience is characterised by a process of dealing with the experience of difficult circumstances that is expressed as successful developmental growth within the individual. According to Richardson (2002), people are inclined to remain in the comfort zone which they were in prior to

the confrontation with the difficult circumstances. People will reject opportunities and support for growth in their desire for invariance. Reintegration to a comfort zone (stagnation) is characterised by overcoming the difficult circumstances and the sentiment of “just getting on with things”. Reintegration with loss is characterised by the loss or reduction of resilient characteristics such as motivation, hope, lust for life or capacity for endurance. In dysfunctional reintegration there are additional problems within reintegration, such as alcohol or drug abuse. According to the model, successful development is development that constitutes of repetitive processes of reintegration with resilience.

#### **2.3.3.7 Discussion**

In the first instance, it may be concluded from the various models that insights into the occurrence of resilient behaviour may only be garnered by exploring the whole context in which the individual is actively and consciously interacting with his environment. According to the Resiliency Model, middle-adolescents have a choice in the way in which they reintegrate following experiences of difficult circumstances. The way in which a middle-adolescent reintegrates after these experiences is greatly influenced by the type of disruptive event and the so-called protective factors within the middle-adolescent and his environment, as was apparent in studies into the applicability of the Protection, Compensation and Challenge Model.

Secondly, the Resiliency Model acknowledges that the individual’s role is both guiding and directive. Middle-adolescents appear to select the extent to which they will employ help. Middle-adolescents may be inclined to maintain invariance and thereby reject help, or they may be inclined to change or even grow and develop and thereby make use of help and support.

Thirdly, the Resiliency Model provides an insight into the process of successful development in the middle-adolescent. According to the Resiliency Model the growth, which is characteristic of resilient development, is not (purely) an improvement of circumstances in terms of overcoming challenges and improving circumstances. According to the model, resilient development in middle-adolescents is characterised by growth in personal development through experiencing challenges. Resilient personality characteristics are established and expanded through a constructive

interaction with the experience of stress or challenges with the aid of protective environmental factors. The middle-adolescent is therefore able to handle these types of challenges more easily in the future. The new or expanded resilient personality characteristics will enable him to experience similar events in the future as less difficult and will provide space for newer, taxing challenges. Therefore, real growth occurs when there is the opportunity for transfer of new or expanded resilient personality characteristics to other situations. A continuous development takes place through an individual coming across successive events he has not previously experienced. Richardson (2002, p. 311) refers to these experiences as “*non-protected events*”. Each challenge therefore offers an opportunity to learn.

Resilience as a set of characteristics or factors as was the central notion in the Phenomenological Wave has changed in the Operational Wave into the idea of resilience as a potential and skill which is enhanced through constructive interactions with difficult experiences. The activation of existing protective, compensatory or challenging factors arises through intervention, involvement or direction of the individual.

In summary, in respect of resilience research, it may be argued that urban middle-adolescents with a low SES can develop successfully through a process of repeated resilient reintegration after the experience of difficult circumstances. Middle-adolescents need to identify and use protective factors in their school environment in order to experience successful interactions with high-risk situations. Following Margalit’s statement (2003, p. 82), research into the resilience of urban middle-adolescents from a low SES background “*should identify the complex interactions and processes among internal and external (risk and protective) factors involved in that process*” (of repeated resilient reintegration).

Insights have been garnered with the help of the Resiliency Model into the questions which were posed within the discussion of the Phenomenological approach in section 2.3.2.5. The differences between middle-adolescents from the same low SES background in the same school context are, according to the Resiliency Model, partly the result of their differences in choices of growth and development, and partly of differences in identifying and using protective factors in the school environment.

The Resiliency Model (Richardson et al., 1990) is an appropriate model in a bio-ecological interpretation of the resilience concept as presented in this study. The development of characteristics, according to the Resiliency Model, through active interactions by middle-adolescents and their environment, whereby a middle-adolescent has a choice about a specific way of reintegration following the experience of difficult circumstances, agrees with the bio-ecological perspective: characteristics in the phenotype of the middle-adolescent arise through proximal interaction processes with the environment, and the middle-adolescent's disposition influences which proximal interaction processes he is actively involved in. This in turn influences which phenotypical characteristics are established. According to the bio-ecological perspective the reason for a given form of reintegration after the experience of a difficult event is not just the choice of the middle-adolescent. In the system (e.g. the school system) in which the middle-adolescent is active the presence and inclusion of co-participants in the system are also of importance. In addition, the middle-adolescent's demand characteristics also play an important role, along with those of the co-participants, in establishing middle-adolescents' behaviour, by eliciting reactions and actions from the co-participants.

What remains to be answered in the research question is an insight into how one urban (resilient) middle-adolescent with a low SES is disposed to respond actively in effective proximal interaction processes in the school environment or to respond in ways which lead to successful development, whilst other (not-resilient) middle-adolescents are either not active in these processes or are unable to profit from these processes in the school environment. The Energetic approach to resilience research will now be discussed for more insight into the remaining question.

### **2.3.4 THE ENERGETIC WAVE IN RESILIENCE RESEARCH**

#### **2.3.4.1 Overview**

Research within the Energetic Wave is focused on the analysis of motivational energy in individuals and groups who are functioning under difficult circumstances. The most important line of attack in this approach is to obtain an insight into the subjective experiences of individuals which lead to the activation of personal sources. The

Energetic Wave is directed at the question: “What drives people to behave resiliently?” In other words, what motivates people to choose growth and development and to evaluate, identify and use sources within themselves and their environment for competent development in the presence of risk factors? Within the Energetic Wave resilience is viewed as a universal energy which is activated in different ways in different people. The subjective experience of situations as being motivational is central to this approach. The post-modern nature of this approach means that there are no objectively observable protective factors. Factors in the individual and his environment have a protective action when an individual identifies these as being protective and makes use of them (Richardson, 2002; Margalit, 2003).

Margalit (2003) believes there is an agreement between the Energetic Wave in resilience research and Positive Psychology. In Positive Psychology, amongst others, Seligman and Csikszentmihalyi (2000) speak of learned optimism in contrast to learned helplessness. According to positive psychology, each individual may be taught to identify factors and characteristics within themselves and their environment as protective or simply activating. It is the role of researchers within the Energetic Wave to resilience research to identify energy sources, which provide energy for exhibiting resilience. Themes such as spirituality and belief are seen in this third approach as potential sources from which people can draw energy in order to develop fully in the presence of risk factors (Richardson, 2002; Margalit, 2003).

Recent experiences or experiences in the past may also form energy sources. Within the Energetic Wave of resilience research proximal developmental influences are defined as recent experiences of “sources” in people’s lives (Margalit, 2003). Margalit (2003) highlights success or failure on a school test or the experience of social support by a contemporary as examples of proximal developmental influences in the school context. According to Margalit (2003) distal influences are important experiences from the individual’s own personal past which influence and colour recent experiences.

#### **2.3.4.2 Discussion**

It can be argued from the description of distal influences that a kind of ongoing cycle may be presupposed: middle-adolescents create experiences which colour new



experiences, based on their personality and previous experiences and their disposition (will and opportunity). According to the Energetic Wave, poor school performance will provide little energy for obtaining good school results in subsequent situations, whereas, in contrast, good school performances will do the opposite. Negative experiences with teachers provide little energy for establishing positive relationships with teachers in the future, whereas positive experiences have the opposite effect

In relation to promoting resilience in the school environment, Rigsby (1994, p. 89) has stated that:

*“Although there is still a lot left unknown about the way people can become (more) resilient, resilience can be described as “the response to a complex set of interactions involving person, social context and opportunities”. The concept of resilience is useful for educational theorising and policy only if it is conceived as developing in such a multilevel set of causal structures and processes”.*

In order to understand the concept of resilience, Rigsby (1994, p. 92) draws a comparison with Bourdieu’s (1977; 1984) concept of the “habitus” and refers to Buchman’s (1989 p. 32) definition of habitus as: *“an acquired system of dispositions, skills, knowledge, habits, worldviews and representations”*. Rigsby (p. 92) concludes that *“the habitus is the dynamically constituted self that behaves in interaction with a social context. This self reflects the cumulation of one’s experience through time”*.

Rigsby’s view on resilience, with his emphasis on disposition and the significance of experiences, can be seen as equivalent to the Energetic Wave of resilience research. This view implies that the successful development of urban middle-adolescents from a low socio-economic background in the school context, which we label as “resilient”, represents the actual expression of dispositions, skills, knowledge, habits, world-views and representations of this adolescent who is interacting in an environment full of opportunities. According to the Energetic Wave, experiences within the school context which have given resilient middle-adolescents energy to behave with resilience may be identified. This means, according to Richardson et al.’s (1990) Resiliency Model, that it is possible to distinguish between experiences which have encouraged resilient middle-adolescents to identify and make use of help from their

environment whenever they experience difficult circumstances. From the bio-ecological perspective they require, in the first instance, disposition (will and opportunity) to choose growth (resilient reintegration) in their development, based on which they are able to choose effective proximal interaction processes in their school environment.

This means, for the present study into the contribution of the school environment into resilience in urban middle-adolescents from a low SES background, that within this Energetic Wave of research into resilience, there should be a search for the subjective experiences of middle-adolescents in their school environment that have led to success in interacting with difficult experiences.

## **2.4 A BIO-ECOLOGICAL INTERPRETATION OF RESILIENCE**

### **2.4.1 SUMMARY**

In summary, in respect of the significance of the three waves of resilience research for the bio-ecological interpretation of the resilience concept presented here, it may be stated that resilient personality characteristics of middle-adolescents are related to successful development of these youngsters in the presence of high-risk situations. The personality characteristics are expressed in resilient behaviour through effective proximal interaction processes with the environment by the middle-adolescent. The presence of protective factors in the environment of the middle-adolescent is of less significance than the effective proximal interaction processes between these protective factors and the middle-adolescent. Effective proximal interaction processes arise on the basis of a combination of the availability of these processes in the school environment and the middle-adolescent's disposition to notice and make use of this opportunity. The disposition, as expressed in selective attention patterns, expressions and responses by the middle-adolescent to his environment arises, in part, through certain inherited characteristics and developmental areas, but also through previous experiences both in and outside school.

As argued in Chapter 1, one could assume that resilient middle-adolescents pose different demands and different demand-characteristics on their environment than non-resilient middle-adolescents. In other words, they both demand different ways of

approach from the school environment for their successful development. This research is therefore directed at the way in which the school environment contributes to resilience according to resilient middle-adolescents, in comparison with the way in which the school environment either does contribute to resilience (as personally experienced) or does not stimulate or even hinders not-resilient middle-adolescents in exhibiting resilience when experiencing difficult circumstances. The mechanisms which may or may not contribute to resilience are central to what follows in this thesis.

#### **2.4.2 A BIO-ECOLOGICAL DEFINITION OF RESILIENCE**

Based on the bio-ecological interpretation of resilience as presented in Paragraph 2.4, in this study, resilience of middle-adolescents is defined as:

*A resilient middle-adolescent has the disposition to identify and use resilience qualities in himself and/or identify and use resilience qualities in a specific context whenever he is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as continuous learning (growth and renewal of resilience characteristics) and an increasingly flexible approach to challenging circumstances.*

Once the nature of resilience as described above is taken into consideration the question then becomes how resilience or lack of resilience can be identified in urban middle-adolescents with a low SES? The following discussion considers the modes of identifying resilience as distinguished in the resilience literature.

#### **2.4.3 ASSESSING RESILIENCE FROM A BIO-ECOLOGICAL PERSPECTIVE**

Tusaie and Dyer (2004) found that the studying of resilience has lacked empirical instruments due to the diversity of definitions (as shown in Chapter 2) as well as the tendency to use qualitative studies for this complex phenomenon. The complexity of the resilience construct, where someone's disposition interacts with the environment resulting in behaviour that represents constructive outcomes, leads to a diversity in choices of measurements in order to assess resilience. Generally, existing instruments and studies focus on (i) assessment of resilient personality characteristics, e.g. *Adult*

*resiliency scale* (Jew, 1991), *Resilience Scale* (Wagnild & Young, 1993), *Resilience Subscales Inventory* (Armstrong, 1998), *Adolescent Resiliency Belief System* (Jew & Green, 1995 in Doll, Jew & Green, 1998); (ii) assessment of protective context factors, e.g. *Resilience Youth & Development Module* (Benard, 2002); or (iii) assessment of successful outcomes, e.g. Waxman Huang & Wang (1997), Jackson & Martin (1998) and Gordon Rouse (2001).

#### **2.4.4 DISCUSSION**

The objection made in the present study to assessment of resilient personality factors and/or resilient context factors as an indication of resilience is that it is not the presence of those factors that elicits resilient behaviour and constructive outcomes. Rather, it is the awareness and utilisation of these factors by the individual that contribute to resilient behaviour. The objection made in the present study to a focus on successful outcomes is that in most studies focusing on adolescents in the school context, successful outcomes are defined operationally in terms of academic success despite risk factors (Waxman, Huang & Wang, 1997, Gordon Rouse, 2001). Since the focus in the present study is not merely on academic success despite an urban, low SES status but on successful development as framed in Figure 2.1, focusing on academic success as indicator of resilience is not an option. In summary, none of the existing scales and operationalisations capture the process of resilience that unites both the identification and utilisation of internal and external assets and the growth and learning resulting from these actions. Quoting Gordon and Song's words (1994, p. 30) for the point being made: "*What seems to be missing from this viewpoint is concern with processual analyses of the multiple and interacting forces by which behaviour of almost any kind is more likely to be explained*".

#### **2.5 LOOKING AHEAD**

The objective of the present research is to provide an insight into the extent and manner in which the school context contributes to successful development of urban middle-adolescents with a low socio-economic status. The research is based on the definition of resilience provided in section 2.4.2. The following chapter discusses how this definition is related to existing paradigms and how the research methods for the study were chosen based on these paradigms.

### 3 METHODOLOGY

#### 3.1 INTRODUCTION

The purpose of this study is to gain an insight into how school environments contribute to the resilience of Dutch urban middle-adolescents from a low SES background. The unexplained variance in the development of middle-adolescents within urban schools with high numbers of middle-adolescents with a low SES cannot be explained on the basis of research results within resilience theories that “merely” centralise the presence of external risk (low SES in combination with living in a city) and protective factors (all possible factors within the school context). In order to explain the variance, the perception of the presence and usability of specific protective factors should be explored by middle-adolescents themselves (See Chapter 1 and 2 for the rationale behind this proposal).

In particular, in the present study the relationship between the perception of resilient middle-adolescents of their school environment and the presence and usability of protective factors are explored in contrast to the perception of not-resilient middle-adolescents of the same school environment.

In Chapter 2 various findings from three research waves within resilience research were unified in a bio-ecological definition of resilience of middle-adolescents (section 2.4.2):

*A resilient middle-adolescent has the disposition to identify and use resilience qualities in himself and/or identify and use resilience qualities in a specific context whenever he is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as continuous learning (growth and renewal of resilience characteristics) and an increasingly flexible approach to challenging circumstances.*

This definition forms the basis in the research presented for identifying and researching resilience of middle-adolescents in the school environment.

In the following section paradigms and assumptions are discussed which form the context for a systematic, conscious and grounded research into the relationship between school context and resilience.

## **3.2 THEORETICAL APPROACHES AND ASSUMPTIONS**

### **3.2.1 INTRODUCTION**

The assumptions underlying the research question (section 1.4) are repeated here in order to describe the methodological considerations which have guided the design and conduct of this study:

1. Children do not necessarily succumb to hardship or risk factors.
2. Schools have a potentially positive influence on resilience-building in middle-adolescents.
3. The influence of the school on resilience-building is not objectively measurable.
4. The influence of the school on resilience-building can best be described as that perceived by the middle-adolescents themselves.
5. Middle-adolescents' perception of the influence will be different from adults' perception or from the results of effective school research.
6. The difference between successful and less successful development in resilient and not-resilient middle-adolescents is influenced by and/or reflected in their different perception, and/or utilisation of beneficial assets in their school and by a fit or misfit between the middle-adolescent's developmental needs and his/her access to the available assets.

These assumptions reflect presuppositions concerning the existence of reality (ontology) and the way in which reality can be known (epistemology) and investigated (methodology) (Tashakkori & Teddlie, 1998; Smit, 2001).

Guba and Lincoln (1994, p. 105) define paradigms as: “*The basic belief system or worldview that guides the investigation, not only in choices of method but in ontologically and epistemologically fundamental ways*”. In the following section

there will be a discussion and justification of how the fundamental view of reality shapes the present study.

### **3.2.2 THEORETICAL APPROACHES AND ASSUMPTIONS**

The initial paradigmatic approach concerns assumption 1 (section 3.2.1) that middle-adolescents are not necessarily hampered in their (school) development by having an urban, low social economic background. The theoretical approach which may be linked to this assumption is that from salutogenic and positive psychology: researching factors and processes which lead to successful development. This paradigmatic approach was discussed in Chapter 2 in terms of resilience. Within resilience literature, a potential positive contribution of the school environment to resilience of middle-adolescents with a low SES background is recognized (assumption 2).

Based on the bio-ecological perspective presented in Chapter 1 and the literature overview presented in Chapter 2, the theoretical assumption was presented that differences in levels of successful development of middle-adolescents in the same school environment is an outcome of different interactions between these middle-adolescents and their school environment.

The theoretical assumptions 3 to 6 reflect the presuppositions that the same school environment may be experienced in different ways by different middle-adolescents. The significance middle-adolescents attach to their school environment may be both an expression of, as well as a contribution to resilience. The assumption here is that middle-adolescents' experience of their environment is at least a component of resilience. It was argued in Chapters 1 and 2 that it was exactly this component of experience that has remained underexplored in research into resilience. This experience therefore is central to the present research.

Summarising the above assumptions, the existence of a subjective reality is presupposed in the present study. In the first instance this concerns the subjective reality of the middle-adolescents who are central to this study. Selective patterns of attention ensure that one youngster may notice factors within the school context, whereas another does not. Whether certain factors in the school environment have a

resilience-promoting effect in youngsters is dependent on the interaction between the youngsters and their environment. Whether adolescents actually make use of factors in their school environment (provided these are identified by the adolescents) is, according to Richardson et al.'s (1990) Resiliency Model, dependent on a conscious or unconscious choice of certain types of re-integration. Secondly, a subjective reality is also presupposed for other “actors” in the adolescents’ school environment. Whether other actors in the school environment are able and willing to offer help and therefore act as resilience-promoting factors depends on their experiences of, for instance, the adolescents' requests for help, as well as the way in which adolescents express this request. In summary, it can be stated that the present study has at its basis an interpretative view of reality (Miles & Huberman, 1994; Smit, 2001).

The definition of resilience of middle-adolescents as presented in Paragraph 3.1 reflects a post-positivistic view on researching this reality (Tashakkori & Teddlie, 2003). The definition presupposes reasonably stable relationships between the perception of middle-adolescents of their school environment and the presence and usability of protective factors. Additionally, a contrast is presupposed between the content of these relationships between resilient and not-resilient middle-adolescents. The post-positivistic view maintains that there is an assumption that some scientific, reasonably stable relationships exist in social phenomena. Post-positivists acknowledge that these relationships can be partly discovered through non-perfect methods. They further acknowledge that the likelihood of causality of certain phenomena is not absolute and will change over time.

The following sections will discuss what the consequences are for the present study of these views on reality and on researching this reality.

### **3.3 RESEARCHING A SUBJECTIVE REALITY**

#### **3.3.1 RESEARCH AS AN INTER-SUBJECTIVE DEVELOPMENT OF KNOWLEDGE**

In the present study it is argued that a subjective social reality may be explored in multiple ways and that all methods have inter-subjective knowledge development as their goal. Inter-subjective knowledge presupposes that study results are independent of the researcher and would therefore also have been achieved by other researchers following the same steps in the research process (Everaert & Van Peet, 2006). The



inter-subjective term according to the author of the present study acknowledges that knowledge about social reality is not objective. The inter-subjective knowledge that is developed on the basis of this study is distinct from opinions and ideas, in that it has been brought about in a systematic, analytical and insightful way.

### 3.3.2 REQUIREMENTS FOR THE DEVELOPMENT OF INTER-SUBJECTIVE KNOWLEDGE

Everaert and Van Peet (2006, p.11, 24-25) propose that *defeasibility* is the central requirement which (inter-subjective) knowledge has to satisfy. “*If somebody is not able to assess knowledge obtained for correctness, then we cannot arrive at (inter-subjective) knowledge*”. Defeasibility concerns knowledge that has come about through research. An existing theory could, for instance, be sharpened-up by exposing it to “negative cases”. An existing theory is not incorrect because somebody *believes* it to be incorrect. Invalidating a theory should be carried out in a systematic and analytical way. The task of researchers is – for each study - to create the opportunity to research further whether existing knowledge is still defensible or adapt it on the basis of new data from other or similar situations. In addition to defeasibility Everaert and Van Peet (2006) also draw a distinction between *precision* and *justification* as guidelines for research to arrive at inter-subjective knowledge. *Precision* concerns the results of research, which need to be precise both in reporting the domain of the phenomena the study focuses on, as well as the arguments proffered about these phenomena. *Justification* concerns the requirement that both the results and procedures followed are made public, to allow them to be assessed by others.

This thesis follows the guidelines for defeasibility, precision and justification of choices made in the research, of results derived from the research and of the way in which the results are interpreted. Precision has been striven for in providing the domain which the results relate to (the relationship between middle-adolescents from an urban and low SES background and their school environment) and justification has been sought through making explicit those assumptions which form the basis of the research. The theoretical assumptions described in the previous section determine in what way the relationship between the school environment and middle-adolescents is explored in this research. This means that for this study the interpretative view of reality prescribes how the chosen methods are to be developed and adapted and how

the data, which are delivered by the methods used, are to be interpreted (Tashakkori & Teddlie, 1998; Bogdan & Biklen, 2003). Further precision and justification of the procedures will be described in the following sections through the choices made in the present study for research methods. In subsequent sections “knowledge” should be taken to mean “inter-subjective knowledge”.

### **3.3.3 METHODS BY WHICH INTER-SUBJECTIVE KNOWLEDGE CAN BE OBTAINED**

It is argued in this study that the choice of research method for certain aspects of subjective reality should be based on considerations of which methods are most appropriate for the research. Although some authors are of the opinion that certain views of reality prescribe certain methods, the majority of authors appear to agree that within social sciences there is definitely no evidence of an objective reality which is the same for everybody. All research within social sciences is directed at recognising and explaining patterns of human behaviour, and sometimes at making predictions based on these patterns (Bauer, Gaskell and Allum, 2000). Researchers themselves are part of the reality they are investigating, and investigate this reality with instruments (Everaert & Van Peet, 2006). Patterns in human behaviour in reality may be investigated through, for instance, questionnaires, interviews or experiments. When using questionnaires, for instance, the questionnaire is the instrument; when observing or conducting interviews the researcher is the instrument. When the researcher is the instrument, as is the case for most qualitative studies, it may be expected that different researchers could arrive at different research results. In the present study it is argued that even when the researcher is the research instrument there should be a *striving* towards a development of inter-subjective knowledge by making those steps the researcher has to take as explicit as possible.

There are two global ways in which knowledge can be developed: inductive and deductive knowledge development (McMillan & Schumacher, 2001; Everaert & Van Peet, 2006). Inductive knowledge is where a researcher attempts to explain his observations based on a suitable theory or model, which may be either developed or searched for based on these observations. In this way a theory is developed and/or searched for which is “grounded” in the data: Grounded Theory. Deductive knowledge development arises where a researcher makes predictions from an existing theory or model and investigates whether these are feasible and significant to reality

or where the researcher uses these theories to understand reality. The starting point for deductive knowledge development is the theory; for inductive theory the data are the starting point. It may appear to be paradoxical that both forms of knowledge development can be combined in a study: for instance, how could knowledge development within a study start with both theory and data? McMillan and Schumacher (2001) however believe that when both forms of knowledge development are combined in a study, that the study then becomes more effective.

### 3.3.4 COMBINING INDUCTIVE AND DEDUCTIVE LOGIC

Tashakkori en Teddlie (2003, p. 24-25) locate the use of both inductive and deductive logic to develop knowledge within a “Research Cycle”. Figure 3.1 presents a schematic of the ‘Research Cycle’.

*Figure 3.1 The Research Cycle, Tashakkori & Teddlie, 2003, p. 25*

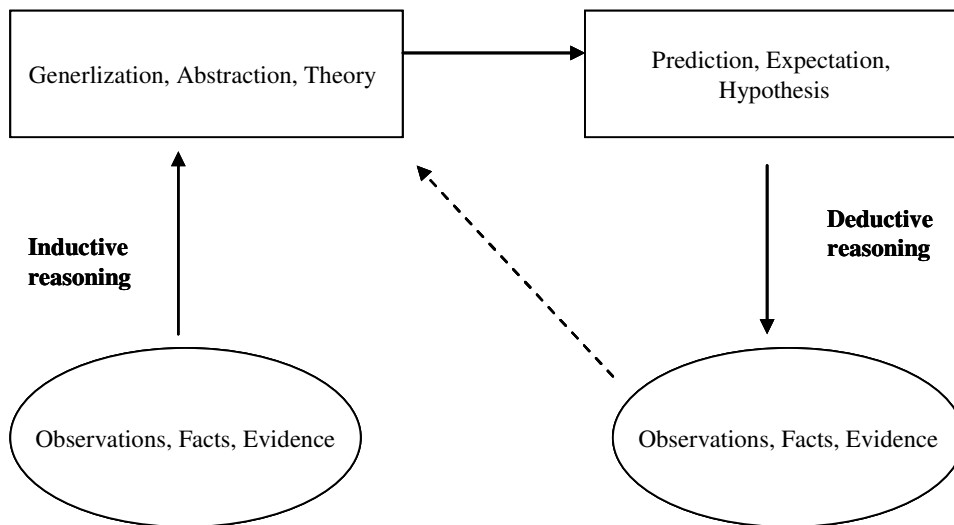


Figure 3.1 describes how a research cycle moves from “grounded” results (such as facts and observations) via inductive logic to general inferences (abstract generalisations, or theory), then from those general inferences (or theory) through deductive logic to tentative hypotheses or predictions of particular events/outcomes (Tashakkori & Teddlie, 2003). Research may commence at any point in the cycle. Tashakkori and Teddlie (2003) refer to those researchers who accept that they have a choice between inductive and deductive logic to arrive at knowledge development

during the course of a study as “pragmatists”. Pragmatists are resistant to the imposed choice between (post)positivism and interpretivism and appreciate both views. Following Tashakkori and Teddlie’s (2003) argument the research view at the basis of the present study may be described as a pragmatic view. This view maintains that the starting points for the present study are: that there are scientific relationships between social phenomena within a subjective external reality; that the causality of these relationships cannot be explained fully; that values play a role in the interpretation of the results of research and that these need to be made explicit within a theoretical framework. The goal of the present research is generating inter-subjective knowledge. Therefore, use is made of both inductive as well as deductive logic.

### **3.4 METHODS BY WHICH INTER-SUBJECTIVE KNOWLEDGE IS OBTAINED IN THE PRESENT STUDY**

#### **3.4.1 A COMBINATION OF INDUCTIVE AND DEDUCTIVE LOGIC**

This study employs both inductive as well as deductive methods for knowledge development. In summary, in the present study the concept of “resilience” was defined firstly. Following the inventory of the resilience literature it became apparent which factors (internal and external) were central to the contribution to resilience and how the factors interact. Furthermore, the effect of these factors appeared to depend on individual and contextual factors. The transactional nature of resilience was identified in the literature. The identified role of middle-adolescents’ disposition and experiencing of situations in the occurrence of resilience led to the decision to follow the inductive “Grounded Theory” method in order to develop a theory of the relationship between the school environment and resilience.

Various authors are of the opinion that a literature review should not precede a Grounded Theory study (Cutcliffe, 2000). They believe that the less a researcher knows about a given topic, the more the theory will develop from the data (grounded) instead of from the literature. The present study follows Cutcliffe’s (2000) view that a literature review should precede data collection in order to develop and clarify concepts and to discover where there are “knowledge gaps” in literature. Grounded Theory can be used without a literature review when concepts are clear and when the knowledge gaps in literature are already identified.

Several considerations led to the choice for the use of deductive logic in this study:

- The acknowledgement of the results of previous resilience research (such as personality characteristics which are associated with resilient behaviour and the various models relating to resilience);
- The desire to contribute to existing knowledge about resilience;
- The importance that is attached in this study to providing an insight into the way participants were selected;
- The desire to contribute to the development of instruments for identifying resilience from a bio-ecological perspective.

In terms of Tashakkori and Teddlie's (2003) Research Cycle the present study starts with deductive logic: Generalization, abstraction and theory lead to predictions, hypotheses and expectations (Chapter 2). These predictions, hypotheses and expectations are investigated (Chapter 4). Then, following Maso's (1987) proposal, the deductively developed knowledge is 'set aside'. Then, through inductive logic, an inductive theory is developed (Chapter 5). Eventually, the deductive and inductive theories are combined in order to create inter-subjective knowledge (Chapter 6).

The next paragraph discusses the use of both qualitative and quantitative methods in the present study and the implications for validity and reliability of the study.

### **3.4.2 CHARACTERISTICS OF QUANTITATIVE AND QUALITATIVE METHODS**

Quantitative research is largely directed at the extent to which social phenomena have certain properties, states and characteristics and the extent to which agreements, differences and causal relationships can be found amongst these features. Using these objectives, the starting point for quantitative research are then mostly theoretically or empirically based criteria, which are used to identify the phenomena under consideration. The emphasis for quantitative research is on reinforcing existing theories, whereas for qualitative research the emphasis is more on generating new theories. Therefore quantitative methods are much more suitable for deductive knowledge development, whereas qualitative methods are highly suitable for inductive knowledge development (Maso, 1987; Bogdan & Biklen, 2003; Everaert & Van Peet, 2006).

For quantitative research the goals include testing, predicting, assessing and generalising. Therefore sample sizes are often large for quantitative research and chosen at random. Often control groups are used. In order to demonstrate effects and associations, as many variables as possible outside the experimental variable are held constant in quantitative research (Bogdan & Biklen, 2003). Sample sizes are often small for qualitative research, and representativeness is not the primary consideration. Analysis methods within qualitative research are often inductive and comparative. One is looking for characteristic patterns and interesting features in the data (e.g. transcribed interviews). In comparative methods these patterns and features become visible by comparing data drawn from various sources (e.g. interview participants) (Bogdan & Biklen, 2003; Everaert & Van Peet, 2006).

Examples of quantitative methods include experiments, questionnaires, structured interviews, quasi-experiments and structured observations (Bogdan & Biklen, 2003, Everaert & Van Peet, 2006). Examples of qualitative methods include observations, participative observations, document analysis and open interviews (Bogdan & Biklen, 2003; Everaert & Van Peet, 2006).

In accordance with Bogdan and Biklen (2003) the view is represented in this study that qualitative methods are neither better nor worse forms of research than quantitative methods. The most appropriate methods are determined for the research question. Quantitative methods are highly appropriate in order to develop an instrument to identify resilience and subsequently be able to distinguish between resilient and not-resilient groups of middle-adolescents at various schools. Similarly, qualitative methods are the most appropriate for understanding and studying the mechanisms which contribute to resilience from the perspective of the level of significance attached by resilient and not-resilient middle-adolescents themselves.

### **3.4.3 THE USE OF QUANTITATIVE AND QUALITATIVE METHODS IN THE PRESENT STUDY**

A questionnaire was developed on the basis of existing theoretical assumptions which were explored in an empirical, analytical manner. The exploration of the structure and validity of the questionnaire investigated the theoretical assumptions regarding

defeasibility. The relationship between the school environment and resilience was studied through open-ended interviews. The development and investigation of the questionnaire forms Part A of the study. The qualitative research forms part B of the study. The use of both qualitative and quantitative methods to answer the research question locates this study within the tradition of mixed-method research designs (Tashakkori and Teddlie, 1998)

Using a quantitative scale correlated with outcome measures specific to successful development of middle-adolescents combined with a qualitative process to address the individualised dynamics of resilience is identified by Tusaie and Dyer (2004, p. 6) as “*The clearest descriptions and measurements of resilience*”. In the next paragraph the implications of using quantitative and qualitative measures are discussed.

#### **3.4.4 IMPLICATIONS OF USING QUANTITATIVE AND QUALITATIVE METHODS FOR THE QUALITY OF THE STUDY**

##### **3.4.4.1 Orientation**

The present study adopts the view that quantitative and qualitative methods equally share the objective posed for the development of inter-subjective knowledge and the requirements of defeasibility, precision and justification which are imposed on this knowledge. There are similar, as well as differing measures for judging the quality of research and the manner in which defeasibility, precision and justification can be achieved for quantitative and qualitative methods. The terms referring to defeasibility, precision and justification have already been explained. How quantitative and qualitative research fulfils the requirements for reliability, validity and external validity will be discussed below.

##### **3.4.4.2 Reliability**

Reliability refers to the influence of coincidental factors on results: the smaller the influence of coincidental factors, the more reliable the results (Everaert & Van Peet, 2006). In quantitative research the extent to which coincidental factors determine the results is investigated using statistical analyses. In qualitative research, the researcher as a research instrument is part of the reliability of the results. In qualitative methods, such as interviews, reliability has an impact on the question whether the information the researcher has gathered in interviews is acceptable (given what is already known

about a given individual or event) and whether the data that the researcher has collated from interviews have also been heard by others present (Everaert & Van Peet, 2006).

#### **3.4.4.3 Validity**

The extent of validity refers to the level to which an instrument measures what it is intended to measure (Everaert & Van Peet, 2006). In quantitative research, particularly in research involving questionnaires, various forms of validity can be distinguished, including “content validity”, “criterion validity” and “construct validity” (DeVellis, 1991). Content validity refers to the extent to which a specific collection of items in a questionnaire are representative of a certain domain. In theory a scale within a questionnaire has content validity if the items of the scale contain a random sample of items which are representative of a specific domain (DeVellis, 1991). Criterion validity refers to the correlation between an instrument and an external variable (DeVellis, 1991; Everaert & Van Peet, 2006). Construct validity refers to the extent of agreement between a construct which is believed to be measured and the construct that is actually being measured (DeVellis, 1991; Everaert & Van Peet, 2006). In qualitative research validity is defined as the extent to which the data accurately describe the social world. The implication of the fact that in inductive, qualitative research the researcher is the research instrument means that the researcher is able to undertake multiple “validity checks” in an interview by providing brief summaries of his interpretation of what the participant has said.

#### **3.4.4.4 External validity**

External validity refers to generalisability. In quantitative research generalisability refers to the applicability of results from a sample to a different population than that from which the sample was drawn. In qualitative research there are few attempts at generalisability (Everaert & Van Peet, 2006). Generalisability of results determined in qualitative research may however be extended through a multi-site research design. Miles and Huberman (1984, p. 37) believe that: *“Multiple-site studies are especially appealing because they can purposively sample, and thereby make claims about, a larger universe of people, settings and events, or processes than can single-site studies”*. Purposeful sampling is described by Cresswell (2002) as “maximal variation sampling”: a way of sampling where the researcher selects cases which agree on



specific points and differ on other aspects. The following sections describe how the research was undertaken and the results obtained. Thereby it is discussed how reliability and validity can be achieved in quantitative and qualitative research and how the design of the present study aims at reliability and validity.

### **3.5 DEDUCTIVE LOGIC: PART A OF THE STUDY**

#### **3.5.1 INTRODUCTION**

It was decided to develop a new questionnaire based on the finding that no existing instrument could identify resilient and not-resilient middle-adolescents in accordance with the proposed definition of resilience of middle-adolescents in the present study (Chapter 2, Paragraph 2.4.2). There are, in general, five steps to test construction (Van Peet, 2003):

- i) A systematic description of the domains which the test relates to (this step is important for achieving precision and content validity as discussed previously);
- ii) The development of items for each domain;
- iii) Testing of items with a reasonably large sample which is as representative as possible of the population for which the test is intended;
- iv) The analysis of the results and potential re-writing and improvement of items;
- v) Testing the revised version with a large, new representative sample under standardised conditions.

The present study covers the first four steps of test construction. The deductive, quantitative part of the study may be viewed as the initial building blocks in instrument development. In the present study the inductive, qualitative research has a supplementary role in providing insights which may be used to improve items and thereby improve the instrument's validity and reliability.

### **3.5.2 PROCEDURE OF TEST CONSTRUCTION**

#### **3.5.2.1 The domains which the test relates to**

The Veerkracht Vragenlijst (VVL, Resilience Questionnaire) relates to resilience (as defined from a bio-ecological perspective) of middle-adolescents who attend schools in The Netherlands.

#### **3.5.2.2 Item development per domain**

The most important disadvantages for using the quantitative methods, such as a structured questionnaire as in part A of the present study, are that selection of participants in this way is entirely dependent on the middle-adolescent understanding of the items and on the middle-adolescents responding in a non-judgmental (unbiased) way to the questions in the questionnaire. These disadvantages of structured questionnaires can be limited as much as possible by presenting the questions in recognisable situations (preventing a lack of understanding of the questions), by posing questions both positively as well as negatively (preventing acquiescence bias) and by preventing as much as possible giving an impression of social desirability for the answers (preventing social desirability bias) (Anderson, 1997; Bogdan & Biklen, 2003).

Based on the bio-ecological definition of resilience of middle-adolescents who attend schools in The Netherlands<sup>5</sup>, in the present study it is argued that the focus of the instrument should be on interaction between middle-adolescents and their environment when confronted with difficult and challenging circumstances. Resilient interaction should be described in terms of various forms of constructive behavior of the middle-adolescent in dealing with various difficult and challenging circumstances. Not-resilient interaction should be described in various forms of not-constructive

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<sup>5</sup> *A resilient middle-adolescent has the disposition to identify and use resilience qualities in himself and/or identify and use resilience qualities in a specific context whenever he is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as continuous learning (growth and renewal of resilience characteristics) and an increasingly flexible approach to challenging circumstances.*

behavior in dealing with the same circumstances. Resilient and not-resilient behavior and difficult and challenging circumstances should be recognisably described within the context of the intra-personal level, family level, school level and peer level. Based on the considerations about limiting various forms of bias and about the focus on behaviour in the face of challenging circumstances, the VVL was developed (Translated in English, Appendix 3).

The 33 items of the VVL are formulated as combined statements along a Likert-scale with 5 response categories. The statements consist of:

- i. A challenging circumstance on the intra-personal level, the family level, the school level or the peer level.
- ii. Behavior that represents either resilience (*eliciting sustained constructive outcomes that include continuous growth and renewal and flexibly negotiating the situation*) or not-resilience (*a lack of resilience associated with a lack of sustained constructive outcomes or contributing to destructive outcomes*).

Five examples of these items are:

- i. A challenging circumstance on the school-level ↔ resilient behavior:  
*(16) If a teacher is angry with me then I will try to concentrate more on my schoolwork.*
- ii. A challenging circumstance on the intra-personal level ↔ not-resilient behavior:  
*(13) If I have to make a difficult decision then I tend to wait too long so that the opportunity to make the decision is lost.*
- iii. A challenging circumstance on the family level ↔ resilient behavior:  
*(6) If I feel bad about problems at home then I go and talk to someone about it.*
- iv. A challenging circumstance on the peer level ↔ not-resilient behavior:  
*(21) If my friends want me to do something that I would rather not do, I will go along with their plan anyway.*
- v. A challenging circumstance on the school-level ↔ not-resilient behaviour:  
*(28) If a teacher gets angry with me at school, then I also get angry and the situation worsens.*

### **3.5.2.3 Selecting the sample: School Sites and Respondents**

#### *School Sites*

The school sites in this study were recruited through opportunity sampling. A selection of five Educational Opportunity Schools were chosen as part of the collaborative partnerships between schools in *Voorbereidend Middelbaar Beroepsonderwijs* (Preparatory Secondary Vocational Education Schools - VMBO Schools) in and around the province Utrecht in the Netherlands. Collaborative partnerships are regional partnerships of schools distributed across various areas in the Netherlands. The Collaborative partnership in Utrecht consists of 25 VMBO schools. Between 2000 and 2006 eight schools from the 25 VMBO schools from the Utrecht region participated in the Educational Opportunities Policy. As described in Chapter 1, the Educational Opportunities Policy attempts to support schools with high levels of struggling students through additional financial means based on the high population of pupils with a low SES background within the school. As stated in section 1.2.1 the emphasis within the national Educational Opportunities plan is on disadvantaged students from immigrant backgrounds who are not performing well at school. Utrecht has decided to expand this group and to involve schools with many disadvantaged “Dutch” students who are performing poorly within the Educational Opportunities plan as well (*Utrechts plan van aanpak Onderwijskansen PO en VO / The Utrecht Approach to Educational Opportunities in Primary and Secondary Education, 2003*).

#### *Respondents*

All middle-adolescents in the third year of the five selected Educational Opportunity Schools were selected to participate in the study (Approximately 500 students).

### **3.5.2.4 Analysis**

The analysis of results of the instrument research in this study took place through Principal Component Analysis, Reliability Analysis, Validity Analysis and Descriptive analysis.

#### *Item analysis using Principal Component Analysis*

The VVL was validated as an instrument to identify resilience as defined in this study by exploring the component structure through Principal Component Analysis (Marradi, 1981). When the component structure is in agreement with the theoretical

presuppositions about resilience, then there is evidence for construct validity (DeVellis, 1991; De Heus, Van der Leeden & Gazendam, 2003; Van Peet, 2003; Everaert & Van Peet, 2006);

#### *Reliability Analysis*

Internal consistency (Cronbach's alpha) was used to analyse the extent to which the items correlate with each other. The greater the internal consistency, the stronger the items are correlated in a component.

#### *Validity Analysis*

The VVL was further validated through studying the association between the components in the VVL and other variables which are related to the construct of resilience based on theory. These associations were explored for their positive, negative or neutral association with resilience. The extent to which empirical correlations agree with the theoretically based predicted patterns of correlation provided evidence to some extent of how well the VVL "behaves" in respect of resilience. This "evidence" is referred to as construct validity (McIver & Carmines, 1981; Bryman & Cramer, 1990; DeVellis, 1991; De Heus et al., 2003; Everaert & Van Peet, 2006). For this construct validation, the *Nederlandse Persoonlijkheidsvragenlijst voor Jongeren* (Dutch Young Person's Personality Questionnaire, NPV-J, Luteijn, Van Dijk & Van der Ploeg, 1989) was chosen. The reasons for this choice will now be discussed.

#### *The NPV-J*

As the phenomenological wave in resilience research has shown, personality factors are a significant influence on an individual's resilience. Studies have shown perseverance, sociability, humour and creativity to be a few of the many personality traits that correlate with resilience (see Appendix 2). Therefore, in this study personality traits functioned as construct validity of the VVL in measuring resilient interaction. Assessment of personality traits took place through five variables in the Dutch Young Person's Personality Questionnaire (NPV-J, Luteijn et al., 1989) measuring affect: inadequacy, perseverance, social inadequacy, recalcitrance and dominance. The NPV-J consists of 105 items rated along a 3-point Likert-scale. Data

gathered through the NPV-J and VVL were combined and analysed and the results were used to study the internal structure of the VVL questionnaire.

The NPV-J was validated with 1256 Dutch children with mean age of 13.5 and a standard deviation of 1.8. All scales of the NPV-J are reliable with  $\alpha$  varying from 0.70 (dominance) to 0.87 (inadequacy). Internal consistency of the Inadequacy Scale and the Perseverance Scale are good; the Social Inadequacy and Recalcitrance Scales have reasonable internal consistency and the internal consistency of the Dominance Scale is moderate. Construct validity of the scales is good (Evers, 2002). The following description of the NPV-J scales is based on the revised guide to the questionnaire by Luteijn, Van Dijk & Van der Ploeg (2005).

Inadequacy is assessed using a subset of 28 items of the NPV-J. In terms of content these items describe vague sensations of anxiety, depressed mood, non-specific physical symptoms and a sense of inferiority. Examples of these items are: “I am often scared of the dark”, “Very often I am sad”, “I quickly get a headache, when I feel worried” and “I often think that I am worthless”. Children who score relatively high on the Inadequacy scale are often characterised by the following characteristics: pre-occupied, hypersensitive, prickly and inclined to sulk. They often feel negative towards themselves and others, express performance and test anxiety, are able to work less well independently and have poor concentration for work, feel less at ease at school and with their fellow pupils and have more symptoms of childhood neuroses, such as nail-biting and bed-wetting. The desire to continue to further and higher education is also lower for these high-scorers in comparison with low-scorers.

The perseverance scale consists of 25 items. These items refer, in terms of content, to a positive task summary, being well-adjusted to the demands of (school) work, wanting to meet high expectations and wanting to keep to agreements. Examples of these items are: “I always do my best”, “I want to finish my work before I enjoy myself”, “I really believe everybody needs to do their best”, “I think you should always be home at the agreed time”. Children who score high on the Perseverance scale are often characterised by the following characteristics: conscientious, calm, obedient, at ease, less easily distractable and focused on performance. They often have positive attitudes to (school) work and have a positive approach to work.

The Social Inadequacy scale consists of 13 items. These items refer to avoiding social contacts or feeling socially inadequate in these environments. Examples of these items are: “It bothers me visiting people I do not know”, “I only feel good around people I know”, “I get shy when people look at me”, “I become nervous if I have to visit places where there are large numbers of people”. Children who score relatively high on Social Inadequacy are often inhibited in social contacts, do not say very much, are shy and clumsy and associate with others who have a tendency towards isolation. They often struggle a lot with performance and test anxiety and are less socially competent. The desire to continue to further and higher education is also lower for these high-scorers in comparison with low-scorers.

The Recalcitrance Scale consists of 24 items. In terms of content these items refer to being resistant to others, distrust of others and wanting to solve issues alone. Examples of these items are “I believe everybody should look after themselves”, “I can solve my own problems”, “I believe that a lot of people try to mislead you”, “When you really need your friends, they often leave you in the lurch”. High-scorers on the Recalcitrance scale are often lazy, egotistical, greedy and hostile. They are often less satisfied about school, go to school reluctantly, have a less than optimal relationship with teachers and do not feel at ease at school and with fellow pupils. They have a lower work tempo and poorer concentration for work at school.

The Dominance scale consists of 15 items. These items refer to wanting “to be the boss” and having faith in oneself. Examples of these items are: “I like telling others what they need to do”, “I am easily able to make people laugh”, “I often make decisions when in groups”, “There are many things that I do better than others”. The authors of the guide comment that dominance in children (and young people) is probably more sensitive to context than for adults. Children scoring relatively high on the Dominance scale are often characterised by the following properties: not shy, self-assured, decisive, not easily influenced and honest. The authors of the guide have not discovered any results in respect of dominance relating to school (work).

*Considerations concerning the anticipated relationship between scales of the VVL and NPV-J*

The NPV-J was chosen for studying the construct validity of the VVL, as the NPV-J contains both a “perseverance” scale, which is frequently described as a resilient personality characteristic, as well as scales representing personality characteristics which contrast theoretically with resilient personality characteristics, such as “having a negative attitude towards asking for and providing help” (described as recalcitrance in the NPV-J) or “inability to enter into and maintain relationships with others” (social inadequacy). Five hypotheses were formulated as to how the NPV-J personality scores and the VVL scales would relate to one another:

- i. There will be a positive correlation between behavior that represents resilience as measured by the VVL and Perseverance as measured by the NPV-J
- ii. There will be a positive correlation between behavior that represents not-resilience as measured by the VVL and Inadequacy as measured by the NPV-J.
- iii. There will be a positive correlation between behavior that represents not-resilience as measured by the VVL and Social Inadequacy as measured by the NPV-J.
- iv. There will be a positive correlation between behavior that represents not-resilience as measured by the VVL and Recalcitrance as measured by the NPV-J.
- v. There will be no or negative correlations between behavior that represents resilience and Inadequacy, Social Inadequacy, Recalcitrance and Dominance.

The results of analysis are discussed in Chapter 4.

## **3.6 INDUCTIVE LOGIC: PART B OF THE STUDY**

### **3.6.1 INTRODUCTION**

It was decided to develop a new Grounded Theory based on the findings that middle-adolescents’ disposition and experiencing of situations is central to the occurrence of resilience. The basis of the Grounded Theory method is continuous comparisons using examples and counter-examples within an inductive theory. Glaser and Strauss (1967) define Grounded Theory as theory that is “discovered” in the data. This definition may be viewed as a reaction to the “too great an emphasis” within deductive methods for verifying existing theories and “the too little emphasis” at discovering which



concepts and hypotheses are relevant to the field being researched. Glaser and Strauss (1967) propose continuous comparison as a method for “discovering” a Grounded Theory.

The method of continuous comparison maintains that coding and analysing interview data co-occur in a systematic cyclical way. Incidents are coded in the interview data, and categorised as much as possible. New incidents and categories from new interviews are continuously compared to existing categories. Through connecting categories on a more abstract level, a theory is developed. This theory is refined further by comparing the theory to new cases from new interviews. In the end, the theory becomes less susceptible to change whenever new data are compared with the theory. Then the developed theory can be written down.

In the next paragraphs, the way in which Grounded Theory is used in this study is discussed. Various authors, such as Bryman (2004), believe that the non-standardised procedures in inductive qualitative research afford the researcher the opportunity to adapt the research plan when new, unexpected findings arise. According to Bryman this opportunity allows the research to be fluid and flexible. Bryman believes that the researcher’s openness allows new and unexpected findings to be uncovered in behaviour and in the context of symbolic systems. This is also referred to as serendipity: finding something you were not looking for.

In relation to the fluid and flexible character of (inductive) qualitative research, the initially developed ideas about the way in which Ground Theory would be used in the present study are discussed in the next paragraphs. The actual process, choices in the process and results of the process of Grounded Theory are discussed and explained in Chapter 5.

### **3.6.2 PROCEDURE OF GROUNDED THEORY**

#### **3.6.2.1 Purposeful sampling of schools**

A selection of three of the five schools was made in order to realise the open, in-depth interviews for qualitative research. For this study, the three School Sites were selected on the basis of their agreement of percentage of urban middle-adolescents with low

SES and maximum variation of cultural diversity of pupils. The level of applicability of the results of the qualitative research in Part B of the study was extended as much as possible by using this form of “purposeful sampling”. In order to achieve a culturally diverse group of respondents from a low social economic background the following schools were selected: one educational opportunity school with more than 60% immigrant pupils (School 3); one educational opportunity school with more than 60% native Dutch pupils (School 2); and one “mixed” educational opportunity school (School 5). By choosing three schools for the in-depth interviews the remaining two of the five schools were excluded from participating in the in-depth interviews.

### **3.6.2.2 Purposeful sampling of participants**

Participants in Part B of the study were purposefully selected for in-depth interviews on the basis of their VVL scores and volunteering to participate. The initial plan was to select three resilient and three not-resilient middle-adolescents per school. This would imply a total sum of 18 participants for Part B of the study. Middle-adolescents were identified as Resilient by their high scores on the “Resilience” scale from the VVL. Middle-adolescents were identified as Not-Resilient by their low scores on the “Resilience” scale from the VVL. In choosing a purposeful sampling method to inform the selection of participants, the present study distinguishes itself from studies that use theoretical sampling instead of purposeful sampling (Glaser en Strauss; 1967; Cutcliffe, 2000).

Theoretical sampling in Grounded Theory refers to participants being selected prior to the research on a theoretical basis arising during interviews with participants (Glaser and Strauss, 1967). Therefore selecting participants according to theoretical sampling is an integral part of the Grounded Theory process. Prior to the first interview the researcher has no theory as yet leading to theoretical selection of participants. In the first phase of theoretical sampling the researcher only has a general idea about the topic and study (Cutcliffe, 2000). Other researchers do not distinguish between theoretical and purposeful sampling but are, for instance, of the opinion that if the researcher is able to describe the method of sampling in sufficient detail, the risk of confusion regarding the sampling is minimalised. Additionally, "significant individuals" should be selected, and a good informant is one who has the knowledge and experience required by the researcher, and has the opportunity to reflect and

express himself. The participant should have enough time to be interviewed and should want to participate in the study. Furthermore, researchers should select participants who have the most experience of the topic to be studied (Cutcliffe, 2000).

In this study purposeful sampling was used to select participants for the research who were identified as resilient or not-resilient. Resilience is a concept that does not enjoy a unidimensional definition, as discussed in the introduction of the study in section 1.1, as it consists of circumstances, assumptions, norms, expectations and psychological theories within a specific context. In this study, due to the complexity, normativity and context dependence of the resilience concept and the psychological theories which are fundamental to the definition of resilience employed here, more significance was attached to clarifying the selection criteria for participants than to the advantages of theoretical sampling, such as developing a theory arising entirely from the interview data.

### **3.6.2.3 Research Cycles: Interviews and Analysis**

#### *Interviews*

Open interviews were chosen in the present study to investigate the participants' perceptions of the contribution of their school environment to their resilience. There are various limitations to using interviews as a data collection method. The method can be considered as being intellectualised: it demands the capacity of reflection, as well as verbal ability from participants. In addition, the method is also cognitive: thoughts and experiences are central and actual behaviour remains out of consideration (Kvale, 1996). Recognition of these limitations has led to choices discussed in Chapter 1. For instance, the age of participants was chosen between 14-15 years as according to psychological theories the capacity to reflect has mainly developed at this age. The emphasis within this study on the significance of the school environment to middle-adolescents is another consideration that led to the choice of interviews as a data-collection method. One of the assumptions described in the study is that it is exactly the significance, as expressed in thoughts and descriptions of experiences and perceptions that is of influence on the contribution of the school environment to their resilience. As perception is central to the present study the cognitive nature of the interviews was not seen as a particular problem.

In the present study it is assumed that the researcher and the researched had a subject-subject relationship in the inductive part of the research (Miles & Huberman, 1994). The reality of the participants was interpreted by the researcher. The researcher and “researched” together explored the significance that the participants attributed to the environment which is central to the study. The traditional concept of cause and effect is replaced in the social interaction between researcher and participants by the concept of “mutual shaping” (Lincoln & Guba, 1985). Therefore, in respect of the subject-subject relationship in this study, the term participants is used instead of respondents whenever the middle-adolescents are intended.

The researcher undertook a two-day course in “qualitative interviewing” in order to strengthen the researcher’s reliability as a research instrument. The central themes in this course were listening, openness in summarising, follow-up questions, non-verbal behaviour, use of voice and concluding discussions. The course offered many opportunities to practise attendees’ own themes.

For reasons of reliability, such as richness, comprehensiveness and authenticity of the data and creating a relationship of trust, the choice was made to not impose any restrictions on the duration of the interview. Furthermore, for reasons of reliability, the opportunity to hold interviews outside the school context was preferred. The expectation was that participants would be able to answer more authentically in the absence of fellow pupils or others in the school environment. It was also expected that talking about the school environment outside of the school environment would create a greater distance between the participant and school environment, which could lead to an increase in the participant's reflexivity. When a participant is seated within the environment about which he has been asked to talk it may be more difficult for him to view this environment “at a distance”. Consequently the locations outside the school environment were more controllable for the researcher than rooms within the school. This offered the opportunity for putting participants at ease and to take time for the interview without the pressure of a strict school timetable and pressures within the school corridors.

Attention was paid to the participants understanding the neutral role of the researcher due to her independence from the school for the reliability of the data. The interviews were recorded with the participants' approval in order to improve reliability of the qualitative research. In addition, extensive field notes and a reflective logbook were maintained.

During and after each interview the researcher presented her interpretations of the data from the interview to the participant in order to improve validity. In respect of the precise definition of the domain relating to the results from the qualitative interviews, each interview was commenced by demarcation the meaning of the term "school" by the participant. Justification was achieved by maintaining logbooks and completely transcribing the interviews. Generalisability was achieved by comparing the insights obtained within a given school context to insights obtained from the two other schools.

Although the intention was to conduct the interviews in an open manner a topic list was drawn-up as a secondary plan. This topic list is included in Appendix 4, translated in English. Various themes were explored during the interview, e.g. difficult circumstances, dealing with setbacks, support for middle-adolescents within different contexts and the role of the school in the middle-adolescent's life. The decision to include a topic list was made as the group of participants was small in relation to the level of work intensity. With a small sample size a high quality of content is required in each interview in order to answer the research question. The sample consisted of 14-16 year old middle-adolescents. Middle-adolescence is a developmental phase in which children form their own identity and are sometimes truculent or simply embarrassed. The topic list served to direct the interview, but only in the event that the participant said nothing or too little.

### *Analysis*

The initial plan was to distribute 18 interviews over four research cycles. The data from the various research cycles would not be distinguished during the analysis. The various cycles would be able to enrich each other through the use of "sensitising concepts" which would be used in the analysis of all data. For instance, the insights obtained during the third cycle could lead to a new coding of the data and the data

from the first cycle could enrich the “sensitising concepts” obtained in the third cycle. The central question at the end of each cycle of data collection and analysis would be: “What do I need to know more about after these interview rounds?” This could lead to a *confirmation or negation* of certain aspects, following further *exploration* of certain aspects or following clarification of certain aspects. The “sensitising concepts” would have no directing effect on subsequent interviews. The function of “sensitising concepts” would be expressed in the themes which led the researcher to ask follow-up questions. The follow-up would only consist of the question “Could you tell me more about that?”.

Initially, the patterns and mechanisms which lead to resilience and not-resilience of middle-adolescents would be explored at the same school (3 case studies). Secondly, the patterns and mechanisms which contribute to resilience and not-resilience of middle-adolescents would be explored at the different schools (Multiple site study: Miles & Huberman, 1984). This allowed a theory to be developed that was of more general application to the contribution of *school environment* to *the resilience* of urban middle-adolescents from a low SES background.

#### **3.6.2.4 Literature controls during various research cycles**

There are differences of opinion between authors within Grounded Theory about the use of “literature controls” during various research cycles. The question is: “At what stage does a researcher start shaping and allowing his ideas to be expanded through the existing literature?”

Cutcliffe (2000) compares various points in her article: Stern (1980), Stern and Allen (1984) and Strauss and Corbin (1994) are of the opinion that (new) literature should be consulted at the stage of concept development. The theory arising will then be continually refined, as it becomes less and less subject to changes as new incidents in the data are compared with the theory. Glaser (1978) proposes that researchers should not use any (new) literature until the theory has arisen from the data, in other words, after the event.

Maso (1987) is of a differing opinion to Glaser (1978, cited in Cutcliffe, 2000). He states that during the data collection and analysis phase the results should be linked to

the existing literature (such as theoretical insights), provided this exists. According to Maso, where there is a theory regarding the topic it is rarely possible to link results to theory *retrospectively*, as concepts and relationships in results and theory do not often agree, and since the depth and extent of analyses differ. For these reasons Maso proposes that it is preferable for there to be a continuous interchange of data collection, analysis and relating this to potential theoretical insights.

As previously stated in this study the combination of inductive and deductive knowledge development is valued. Comparisons of theory developed inductively and existing theories were therefore planned prior to a complete theory being developed and all data collected. Prior to the first two research cycles, that knowledge that had been garnered during the deductive Part A of the study would be “put to one side” (Maso, 1987). After the first two research cycles the researcher could make comparisons between the developing theory and relevant literature. The contents and results of the four research cycles are discussed in Chapter 5.

### **3.7 ETHICAL CONSIDERATIONS**

Ethics is an important consideration in any field work. In social research ethics starts with respect for the social context and the processes and individuals in the social context. In the first instance this means an awareness of and adopting a critical attitude towards the researcher’s own assumptions concerning the context. Secondly, it implies that the researcher is allowed access to a certain context where individuals give their trust to the researcher. In this study the participating schools granted the researcher access to research their daily events and routines. These events and routines could contain both positive and negative aspects. Therefore nothing in what the researcher observed and experienced in the different school contexts and discussions with participants was related to anybody other than supervisor and co-supervisor of the study.

As participants were minors their parents were asked to provide consent to allow their child to participate in the study (Letter of Consent translated in English, Appendix 5). Prior to and during the completion of questionnaires the participants were free to refuse participation and not hand in their questionnaire or hand this in anonymously.

Participants were also free to state that they did not want to participate in the interviews once they handed in their questionnaires. The questionnaires which had been completed anonymously were used for investigating the VVL. Participants who had completed the questionnaires anonymously were obviously excluded from participation in the interviews.

The identity of the participants and schools was protected by using codes to refer to them in the quantitative and qualitative analyses in the thesis. In the quantitative database participants' names were not linked to questionnaire scores and instead each respondent was provided with a number. Each participant had a code in the qualitative database. These codes consisted of a school number, position of the participant in the series of interviews, code for Resilient or Not-Resilient, participants' gender and the research cycle the participant was interviewed in.

The participants were protected further by not allowing anybody in or outside of the school to inspect the questionnaires or interviews. A participant would be able to indicate at any point during the interviews whether they wanted to stop talking. When a given topic would be experienced as taxing or difficult, then as much time as possible would be made available to concentrate on those difficult experiences. The participants were provided with the researcher's contact details and were able to get in touch at any time if necessary.

### **3.8 LOOKING AHEAD**

The results of the quantitative study are presented in the following chapter and information is provided about how the participants were identified for the qualitative study.



## **4 DEDUCTIVE LOGIC: RESEARCH PART A**

### **4.1 PROCEDURE**

#### **4.1.1 RECRUITING THE SCHOOLS**

Five schools were required for part A of the study (investigating the VVL and identifying resilient and not-resilient middle-adolescents as reliably as possible). The schools were informed about this study in person during a meeting of the collaborative partnerships between VMBO-schools in and around the province Utrecht in the Netherlands in May 2004. The value of the research in relation to obtaining insights and information about the opportunities for increasing resilience of middle-adolescents in the school environment was emphasised during the meeting in order to motivate schools to participate in the study. Five of the 25 schools present (20%) expressed an interest in participating. All five schools were participating in the Educational Opportunities Policy. As at the time of the meeting and recruitment of schools there were six schools from the Collaborative partnership participating in the Educational Opportunities Policy, there was also an attempt to recruit the sixth school to participate in the study. However, the sixth school had no time for the research and refused participation in the study. The five schools which did eventually wish to participate in the study consisted of three poorly performing schools with 40% or more disadvantaged immigrant pupils within a large city, one poorly performing school with 40% or more disadvantaged “Dutch” pupils within a large city and one poorly performing school with both disadvantaged immigrant and “Dutch” pupils.

#### **4.1.2 RECRUITING RESPONDENTS**

An attempt was made to recruit as many middle-adolescents as possible for Part A of the study. Therefore in September 2004 all middle-adolescents from year three from the five schools were approached. Recruitment of participants took place through an information meeting organised by the researcher once the internal heads of the schools had been informed about the resilience theme through a brochure and personal contact. The researcher visited all third years at all five schools (N = approximately 500). The students received information about the study in class, including information about the questionnaires to be completed and the interviews with a select number of pupils. In accordance with Hunter & Chandler’s findings

(1999), who found that for adolescents resilience particularly referred to “being insular, disconnected, self-reliant, self-protective with no one to depend on or trust but themselves”, the “resilience” theme was explicitly not mentioned in the meeting with the pupils. The researcher emphasised that the study was interested in the pupils’ ideas about their school, the things they enjoyed/found pleasant, things they struggled with and how they approached those issues that they found difficult. The pupils received a letter to take home informing parents/carers about the study. An example of the letter translated in English is included in Appendix 5. The final letter sent to parents was signed by the student co-ordinators for each school. Parents were able to respond to the letter from the student co-ordinator (who was known to the parents) and object to their child participating in the study. No objections were raised by parents.

#### **4.1.3 DATA COLLECTION**

The VVL items were presented at the same time as the *Nederlandse Persoonlijkheidsvragenlijst voor Jongeren* (Dutch Young Person’s Personality Questionnaire, NPV-J, Luteijn, et al., 1989). The data collection for investigating the questionnaire took place in October 2004. Experienced psychologists, pedagogues and teachers distributed the self-developed Resilience Questionnaire (VVL) and the Dutch Young Persons’ Questionnaire (NPV-J used to validate the VVL) during school time in October 2004. A mentor or other known teacher was present during the testing. The questionnaires were distributed to all third years at the same time in order to prevent mutual discussion between pupils about the questionnaire.

The results of the VVL were subjected to Principal Component Analysis, Reliability Analysis, Validity Analysis and Descriptive analysis.

#### **4.1.4 DESCRIPTION OF THE SAMPLE**

Participants in this study are characterised by coming from a low Social Economic Status background. On completion of the VVL and NPV-J there were no questions concerning parents’ origins or the participant’s country of origin. However, the composition of the population of pupils per school leads to an estimate that approximately 60% of participants had immigrant parents and approximately 40% “Dutch” parents. The total group can be considered as representative of other middle-

adolescents with a low Social Economic Status background living in the suburbs of large cities in the Netherlands.

Table 4.1 demonstrates the number of boys and girls returning the questionnaires (N=399) per school and the number who recorded their gender (N=391).

*Table 4.1 Sample distribution: Participants, School Site and Gender*

		School Sites					Total
		School Site 1	School Site 2	School Site 3	School Site 4	School Site 5	
Gender	Boys	60	24	20	45	34	183
	Girls	39	29	49	61	30	208
Valid Total		99	53	69	106	64	391
Missing (unidentified School Site and/or Gender)							8
Total							399

In total 399 pupils returned the questionnaires, 183 boys and 208 girls. Eight pupils did not record their gender.

Table 4.2 demonstrates the average age of the participants per school at the time of completing the questionnaires (October 2004).

*Table 4.2 Mean ages of Participants per School Site*

	N	Mean	SD
School Site 1	97	14.9	0.8
School Site 2	53	14.7	0.7
School Site 3	63	14.9	0.7
School Site 4	103	14.9	0.7
School Site 5	58	14.9	0.8

Valid Total	374		
Missing	25		
Total	399		

There were no significant differences in average age per individual or school. The 25 questionnaires where the name or date of birth had been omitted were usable for the research into the internal structure of the questionnaire and reliability and validity of the scales. However, participants whose names had been omitted from the questionnaires were excluded from the interviews in Part B of the study.

## 4.2 RESULTS AND FINDINGS: QUALITY OF THE VVL

### 4.2.1 INTERNAL STRUCTURE, RELIABILITY AND CONTENT VALIDITY OF THE VVL

#### 4.2.1.1 Internal Structure

Principal Components Analysis (PCA) with varimax rotation of the 33 items of the VVL resulted in three components of which two are readily interpretable. Table 4.3 shows the results of the PCA. The distribution of items across the various components is based on a factor loading criterion greater than 0.40 on one of the components in conjunction with loadings less than 0.30 on other components (De Heus et al., 2003). These criteria led to seven VVL items dropping out of the analysis (3, 4, 12, 14, 19, 22, 27) and a critical appraisal of item 29, which is discussed in section 4.2.1.2.

*Table 4.3 Factor Loadings, Eigenvalues of Components, Number of Items per Component and Cronbach's Alpha.*

Component	I	II	III
Item no.	Loading	Loading	Loading
1	<u>0.52</u>	-0.04	0.03
5	<u>0.48</u>	-0.17	0.17
6	<u>0.55</u>	0.20	0.12
8	<u>0.44</u>	0.15	-0.01
10	<u>0.42</u>	-0.04	0.13
16	<u>0.55</u>	0.01	-0.24

20	<u><b>0.66</b></u>	-0.03	0.19
23	<u><b>0.52</b></u>	-0.09	0.06
26	<u><b>0.64</b></u>	-0.12	-0.07
29	<u>0.38</u>	0.19	0.10
30	<u><b>0.55</b></u>	-0.12	-0.02
32	<u><b>0.55</b></u>	-0.16	0.05
2	0.07	<u><b>0.55</b></u>	0.10
9	-0.02	<u><b>0.63</b></u>	-0.11
11	0.20	<u><b>0.59</b></u>	0.03
13	-0.20	<u><b>0.43</b></u>	0.25
15	-0.24	<u><b>0.42</b></u>	0.13
17	-0.17	<u><b>0.44</b></u>	-0.08
18	-0.02	<u><b>0.51</b></u>	0.17
21	-0.03	<u><b>0.41</b></u>	-0.01
24	-0.19	<u><b>0.60</b></u>	0.08
31	-0.18	<u><b>0.45</b></u>	0.34
7	0.16	-0.10	<u><b>0.70</b></u>
25	0.19	0.19	<u><b>0.41</b></u>
28	-0.33	0.27	<u><b>0.49</b></u>
33	0.18	0.04	<u><b>0.50</b></u>
Eigenvalues	%		
variance explained	4.85	3.53	1.80
	14.7%	10.7%	5.5%
Total % variance explained			30.8%
Number of items	12	10	4
Reliability $\alpha$	0.77	0.72	0.40

*Factor loadings smaller than 0.40, except item 29, have been deleted from the matrix (items 3, 4, 12, 14, 19, 22, 27).*

In Table 4.3 factor loadings greater or equal to 0.40 in combination with loadings less than or equal to 0.30 have been underlined and printed in bold. Other loadings just

below 0.40 which are of some interest to the component in terms of content have been underlined (De Heus et al., 2003). For clarity those items loading on multiple or no single component with loadings equivalent or greater than 0.40 have not been included in Table 4.3.

#### 4.2.1.2 Reliability and content validity

The three components together explain 30.8% of the variance in the test scores from participants in the study. The question of whether this is a lot, sufficient or not enough depends on the internal meaning of the components. More variance can be accounted for by deriving more components, however, that is only explicitly meaningful if these components have internal meaning (De Heus et al, 2003).

##### *Component 1*

Component 1 (see Table 4.4) explained 14.7% of the variance in the VVL test scores from participants in the study. The reliability of Component 1 (based on inter-items correlation, Cronbach's alpha) was 0.77 with the items represented in Table 4.4. According to De Heus et al. (2003) this level of alpha is reasonable to compare groups (the objective for part A of the study). Reliability of Component 1 was not increased by removing one or more items. Item 29 was retained in Component 1.

*Table 4.4 Items in Component 1 and their factor loadings*

Items	Factor loadings on component 1
1. If I have to make a difficult decision then I talk to someone at home who can give me advice.	.52
5. If someone tells me something I do not understand then I ask them what they mean.	.48
6. If I feel bad about problems at home then I go and talk to someone about it.	.55
8. If I really want something and my parents won't pay for it then I work really hard until I have enough money for it.	.44
10. If I feel unhappy about problems at school then there is always someone at school who will help me.	.42
16) If a teacher is angry with me then I will try to	.55

concentrate more on my schoolwork.	
20. If I have to make a difficult decision than I will consider all the options and choose the best one.	.66
23. I try to help make the best of things when there are problems at home.	.52
26. I apologise when my parents are angry with me and they are right.	.64
29. If I have an argument with my friend then I will try any way I can to sort things out.	.38
30. If I get a lot of poor marks for a particular subject I will find someone who can help me with my homework for that subject.	.55
32. If my friends want to do something I know will cause problems then I won't participate.	.55

The 12 items in Component 1 describe three forms of interaction between middle-adolescents and their environment:

- 1) Interaction that is characterised by *identifying and using* help in their environment when circumstances are experienced as being difficult: item 1, 5, 6 en 30;
- 2) Interaction that is characterised by *identifying help* in their environment when circumstances are experienced as being difficult: item 10;
- 3) Interaction that is not characterised by searching for help in their environment, but by a *pro-active or constructive reaction* when circumstances are experienced as being difficult: item 8, 16, 20, 23, 26, 29 and 32.

When compared, there is strong association between the content of Component 1 and the definition of resilience based on resilience theory<sup>6</sup>. The identification and use of help from the environment is described in items 1, 5, 6, 10 and 30 in Component 1 as

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<sup>6</sup> A resilient middle-adolescent has the disposition to identify and use resilience qualities (assets) in himself and/or identify and use resilience qualities in a specific context whenever he/she is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as continuous learning (growth and renewal of resilience characteristics), and an increasingly flexible approach to challenging circumstances.

in the definition of resilience of middle-adolescents. The self-identification of resilient characteristics inside oneself is not explicitly described by the items, however, items 8, 16, 20, 23, 29 and 32 do describe interaction that leads to growth. Although not all elements of the definition are represented in Component 1, such as an increasingly flexible approach to challenging circumstances, there is sufficient agreement between the contents of Component 1 with the definition of resilient middle-adolescents in order to speak of content validity for Component 1, and to interpret Component 1 as “Resilient behaviour”.

### *Component 2*

Component 2 (see Table 4.5) explained 10.7% of the variance in the VVL test scores from participants in the study. The reliability of Component 2 (based on inter-items correlation, Cronbach’s alpha) was 0.72 with the items represented in Table 4.5. According to De Heus et al. (2003) this level of alpha is reasonable to compare groups (the objective for part A of the study). Reliability of Component 2 was not increased by removing one or more items.

*Table 4.5 Items in Component 2 and their factor loadings*

Items	Factor loadings on component 2
2. If I have had an argument at home, I don’t do anything for the rest of the day.	.55
9. I am really unpleasant to my family, if I have had an argument with my friend.	.63
11. If I’m feeling melancholy, I continue to feel like this for days.	.59
13. If I have to make a difficult decision then I tend to wait too long so that the opportunity to make the decision is lost.	.43
15. If I get a lot of bad marks for a subject then I stop learning that subject.	.42
17. I stop going to school if there are problems at home.	.44
18. If I really want something and my parents won’t pay then I’ll argue with my parents.	.51



21. If my friends want me to do something that I would rather not do, I will go along with their plan anyway	.41
24. If I'm feeling anxious about problems at school then I won't go the next day.	.60
31. If I'm feeling anxious about problems at school then I'm really unpleasant to the teachers.	.45

The 11 items in Component 2 describe three forms of interaction between middle-adolescents and their environment:

- 1) Interaction that is characterised by actively stopping and giving-up when circumstances are experienced as being difficult: item 2, 15, 17 and 24;
- 2) Interaction that is characterised by inactivity and a lack of constructive action when circumstances are experienced as being difficult: item 11, 13, and 21;
- 3) Interaction that is characterised by aggressive responses when circumstances are experienced as being difficult: item 9, 18, and 31.

Comparison of the contents of Component 2 with the definition of resilience of middle-adolescents<sup>7</sup> shows that those items in Component 2 describe behaviour that is not covered by this definition. Items in Component 2 do not describe identification and making use of help in the environment. Furthermore, the items do not describe behaviour that could lead to growth and competent development. Although the items in Component 2 by definition do not describe the opposite of resilient behaviour it may be posited that these items describe not-resilient to an extent which supports the content validity of Component 2. Therefore, Component 2 will be interpreted as “Not-Resilient behaviour”.

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<sup>7</sup> A resilient middle-adolescent has the disposition to identify and use resilience qualities (assets) in himself and/or identify and use resilience qualities in a specific context whenever he/she is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as continuous learning (growth and renewal of resilience characteristics), and an increasingly flexible approach to challenging circumstances.

### Component 3

Component 3 (see Table 4.6) accounted for 5.5% of the variance in the VVL test scores from participants in the study. The reliability of Component 3 (based on inter-items correlation, Cronbach's alpha) was 0.40 with the items represented in Table 4.6. According to De Heus et al. (2003) this level of alpha is poor to compare groups (the objective for part A of the study). The items in Component 3 are more easily interpretable once item 28 (see Table 4.6) has been removed. The reliability of Component 3 is slightly increased to 0.41 once item 28 was removed (*If a teacher gets angry with me at school, then I also get angry and the situation worsens*).

Table 4.6 Items in Component 3 and their factor loadings

Items	Loadings
7. If I've had a rotten day at school then I will go and do something I enjoy in the evening.	.70
25. I have had difficult experiences in the past which I have reacted well to.	.41
33. I still keep going even if things are against me.	.50
<i>Item to be removed: 28. If a teacher gets angry with me at school, then I also get angry and the situation worsens.</i>	<u>.49</u>

The remaining three items in Component 3 describe two forms of interaction between middle-adolescents and their environment and one type of self-evaluation:

- 1) Interaction that is characterised by flexibility and the ability to let negative feelings go: item 7.
- 2) Interaction that is characterised by the ability to endure negative emotions and a capacity to persist: item 33;
- 3) Self-evaluation by the middle-adolescents that is characterised by recognising qualities within themselves: item 25.

Comparison of the contents of Component 3 with the definition of resilience of middle-adolescents<sup>8</sup> shows that those items in Component 3 describe behaviour that is

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<sup>8</sup> A resilient middle-adolescent has the disposition to identify and use resilience qualities (assets) in himself and/or identify and use resilience qualities in a specific context whenever he/she is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as

covered by this definition. For instance, items 25 and 33 describe the identification of resilience qualities within oneself. Item 7 describes a flexible approach by the middle-adolescent in dealing with challenging circumstances.

Component 3 will not be used in the validation of the VVL due to the poor reliability. Additionally, Component 3 will also not be used in identifying groups of resilient and not-resilient middle-adolescents. Part B of this study is partially concerned with the further development of the VVL and will therefore be able to provide an insight into the development of new items for Component 3. These insights will be discussed in Chapter 6. Component 3 will be ignored for the discussion of the validity of the items in the VVL that follows.

#### **4.2.1.3 Construct validity of the VVL**

##### *Correlation between the NPV-J and VVL scales*

The average scores on Components 1 and 2 were correlated with the average scores on the NPV-J scales in order to study the construct validity of various components of the VVL. The squared correlation is an indication of the proportion of variance that is explained in the linear association between two variables (Cohen, 1988). In order to demonstrate the relationship between resilience as described by the VVL and resilient and not-resilient personality characteristics as measured by the NPV-J, the correlations between the VVL components and NPV-J scales should be high, but not *too* high. The components and scales can be said to be measuring the same phenomenon where correlations are too high, whereas they should preferably be measuring different aspects of the same phenomenon. Cohen (1988) proposes the following norms for correlations between two variables:

- 0.10 = small;
- 0.30 = medium;
- 0.50 = large.

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*continuous learning (growth and renewal of resilience characteristics), and an increasingly flexible approach to challenging circumstances.*

Table 4.7 shows the correlation matrix between the two reliable VVL components and the NPV-J scales. The correlations are referred to in terms of the VVL components comprising resilient and not-resilient behaviour.

*Table 4.7 Correlation matrix of Components in the VVL and the Scales of the NPV-J.*

	Resilient Behaviour	Not-resilient Behaviour
Inadequacy	-0.07	0.48**
Perseverance	0.53**	-0.28**
Social Inadequacy	0.07	0.19**
Recalcitrance	-0.10	0.14**
Dominance	-0.12*	0.16**

\*Significant at p = 0.05 level

\*\*Significant at p = 0.01 level

### *Resilient Behaviour*

#### *Resilient Behaviour and Perseverance*

Table 4.7 shows a positive correlation (0.53) between “Resilient Behaviour” as measured by the VVL and “Perseverance” as measured by the NPV-J. This correlation may be defined as “large” according to Cohen (1988) and implies that “Resilient Behaviour” is associated with a positive approach to work, good adaptation to the demands of (school) work, willingness to respond to high expectations and keeping to agreements.

An additional literature study into the relationship between perseverance and resilience in the resilience literature demonstrates that within resilience research a trend can be identified for referring to personality characteristics such as “perseverance” as aspects of and contributions towards resilience (Kobasa, Maddi & Kahn, 1982; Farber, Schwartz, Schaper, Moonen & McDaniel, 2000; Rush, Schoel & Barnard, 1995; Florian, Mikulincer & Taubman, 1995; Beasley, Thompson & Davidson, 2002; Greef & Van Der Merwe, 2003; Maddi, 2005). Kobasa and colleagues (1982) define the perseverance construct as a collection of personality characteristics which function as a source of resistance when encountering stressful conditions. According to these researchers within this trend perseverance comprises characteristics such as involvement, challenge and control. Involvement refers to the

extent to which an individual has an awareness of his/her own significance, that of others, of activities and an awareness of the purpose of life. The control element refers to the level to which an individual is aware of his/her own autonomy and an awareness of the ability to direct his/her life course. The challenge element concerns the extent to which an individual realises that change is an inherent part of life, as well as being an opportunity for growth. Therefore, the challenge element is referred to as the individual's willingness to change things which appear to be a threat. According to these authors, individuals who persevere view change as a positive opportunity for development. The underlying causal mechanism that relates perseverance to mental and physical well-being in the presence of stressful conditions appears to be the fact that it reduces the level of threat assessed and increases the expectation of successful coping.

Therefore a significant correlation between "Resilient Behaviour" and "Perseverance" suggests that "Resilient Behaviour" as measured by the VVL is related to resilience in middle-adolescents. This reinforces the construct validity of the "Resilient Behaviour" component as an indicator of resilience.

*Resilient Behaviour and Inadequacy, Social Inadequacy, Recalcitrance and Dominance*

The correlations between "Resilient Behaviour" and Inadequacy (-0.07), Recalcitrance (-0.10) and Dominance (-0.12) characteristics, as measured by the NPV-J, are small and are all but one (Dominance) not significantly negative. The negative direction of the correlations, although not significant, does support the statement that the "Resilient Behaviour" component does measure something, albeit in the opposite direction to Inadequacy, Recalcitrance and Dominance. This means that the "Resilient Behaviour" component measures something that is opposite to generalised anxiety, low mood, generalised physical symptoms and feelings of inadequacy (Inadequacy), as well as opposite to being argumentative, distrusting others and solving problems alone (Recalcitrance), and "wanting to be the boss" and "trust in oneself" (Dominance).

The correlation between “Resilient Behaviour” and Social Inadequacy (0.07) is positive, but small. Therefore Resilient Behaviour does not appear to be associated with avoiding or feeling insecure in social interactions (Social Inadequacy).

The way in which the “Resilient Behaviour” component is negatively associated or not associated with Inadequacy, Social Inadequacy, Recalcitrance and Dominance is interpreted here as support for the construct validity of “Resilient Behaviour” as an indicator of resilience. A more extensive discussion of the characteristics which Resilient Behaviour is associated with or not associated with will follow in the discussion of the positive correlation between the “Not-Resilient Behaviour” component and these characteristics.

#### *Not-Resilient Behaviour*

##### *Not-Resilient Behaviour and Perseverance*

The significant negative correlation between “Not-Resilient behaviour” and “Perseverance” (-0.28) is small according to Cohen’s criteria. The negative correlation indicates that “Not-Resilient Behaviour”, as measured by the VVL, is measuring something that contrasts with the Perseverance characteristic. This means that “Resilient Behaviour” is measuring a characteristic which is opposite to having a positive approach to work, good adaptation to the demands of (school) work, responding to high expectations and keeping to agreements. This negative correlation is therefore indicative of a certain amount of construct validity of the “Not-Resilient Behaviour” component in measuring a construct opposite to “Resilient Behaviour”.

##### *Not-Resilient Behaviour and Inadequacy*

The significant correlation between “Not-Resilient Behaviour” and “Inadequacy” (0.46) is “medium” according to Cohen’s criteria. The positive correlation indicates that “Not-Resilient Behaviour”, as measured by the VVL, is related to generalised anxiety, low mood, generalised physical symptoms and feelings of inferiority. In the resilience literature characteristics such as self-confidence, optimism and positive temperament are referred to as resilience characteristics (Constantine et al., 1999, Wolin & Wolin, 1993; Doll & Lyon, 1998, Masten & Coatsworth, 1998, Olsson et al., 2003). These characteristics could be interpreted as being opposite to “Inadequacy” as measured by the NPV-J.

In some studies, young people have been identified as resilient because they did not display any anti-social behaviour despite the presence of risk factors. However, these young people did appear to display signs of depression and a strong sense of inadequacy (Rutter, 1993). It can be concluded from Rutter's discussion (1993) that externalised problem behaviour is not the sole indicator of (temporary) lack or insufficiency of resilience; internalised problem behaviour may also be an expression of this.

As Michael Rutter (1993, p. 627) states:

*“We need to appreciate that people may suffer in a range of different ways and that it is important that our measures accommodate this diversity”.*

The correlation between “Not-Resilient Behaviour” and Inadequacy indicates that the “Not-Resilient Behaviour” component of the VVL takes into consideration the expression of internalised problems as an indicator of (temporary) lack or insufficiency of resilience. However, additional information is required (for instance, through Part B of the study) to provide more insight into the relationship between resilient behaviour and feelings of adequacy or inadequacy.

#### *Not-Resilient Behaviour and Social Inadequacy*

The significant correlation between “Not-Resilient behaviour” and “Social Inadequacy” (0.19) is “small” according to Cohen's criteria. The positive correlation indicates that “Not-Resilient Behaviour” as measured by the VVL is related to the avoidance of or sense of inadequacy in social interactions. Social relationships are important for the development of resilience in Richardson et al.'s model (1990) and other resilience literature (refer to the list of resilience characteristics in Appendix 2). It may be argued that the ability to make use of help, which is of importance to resilience in Richardson et al.'s model (1990), is increased whenever an individual is able to enter into and maintain social relationships. It follows from this reasoning that the significant positive correlation between “Not-Resilient Behaviour” and “Social Inadequacy” is therefore indicative of a certain amount of construct validity of the “Not-Resilient Behaviour” component in measuring a “not-resilience” construct.

#### *Not-Resilient Behaviour and Recalcitrance*

The significant correlation between “Not-Resilient Behaviour” and “Recalcitrance” (0.14) as measured in the NPV-J indicates that “Not-Resilient Behaviour”, as measured by the VVL, is related to being argumentative with others, distrust of others and wanting to solve problems alone. This association is illustrated by Richardson et al.’s (1990) resilience model. It may be argued that a negative, distrustful approach to seeking and providing support may inhibit the development of resilience. If resilience characteristics are not in sufficient presence to manage difficult circumstances constructively, then the lack of ability to ask for support may inhibit the development of resilience characteristics, as the development of these characteristics is a result of a constructive approach to difficult experiences according to Richardson et al. (1990). It follows from this reasoning that the significant positive correlation between “Not-Resilient Behaviour” and “Recalcitrance” is therefore indicative of a certain amount of construct validity of the “Non-Resilient Behaviour” component in measuring a “not-resilience” construct.

#### *Not-Resilient Behaviour and Dominance*

The positive correlation between “Not-Resilient behaviour” and “Dominance” (0.16) is “small” according to Cohen’s criteria. The positive correlation indicates that “Not-Resilient behaviour”, as measured by the VVL, is related to “wanting to be the boss” and “trust in one’s own ability”. This relationship is currently difficult to illustrate using the resilience literature. Further research (Part B of the study) should provide additional information, which will be able to illustrate or falsify this relationship.

#### **4.2.2 THE “RESILIENCE” SCALE**

The data collated in part A of this study were used to identify resilient and not-resilient middle-adolescents as participants for part B. These data were used to calculate the participants’ scores on the “Resilient Behaviour” and “Not-Resilient Behaviour” components.

There is a possibility that middle-adolescents will score high on both “Resilient Behaviour” and “Not-Resilient Behaviour”. This combination would not be indicative of resilience. Rutter (1994) concluded on the basis of research that every good study



into resilience should assume the presence of positive, as well as the absence of negative characteristics when identifying resilience. Therefore, this means for the validation of the VVL as a practical tool for identifying resilient and not-resilient middle-adolescents (until the third component is developed further), that middle-adolescents with high scores on “Resilient Behaviour” in combination with low scores on “Not-Resilient Behaviour” may be identified as resilient middle-adolescents. Middle-adolescents with a low score on “Resilience Behaviour” and a high score on “Not-Resilient Behaviour” may be considered as being not-resilient. This balance of scores for components 1 and 2 should be revised and meaningfully combined with Component 3 once this has been developed further.

For the rest of the study the participants’ scores for “Not-Resilient Behaviour” were reverse-scored. The items from “Resilient Behaviour” and the reverse-scored items from “Not-Resilient Behaviour” together formed the “Resilience Scale”.

The reliability (Cronbach’s alpha) of the “Resilience Scale” was 0.77 with 23 items. This level of reliability is reasonable for comparable groups. The “Resilience Scale” may be used for comparing two groups, such as resilient and not-resilient middle-adolescents.

Once the data had been reverse-scored an average high score on the “Resilience Scale” would mean that the respondent had been identified as resilient, whereas a low score would mean that the respondent was not-resilient. The norms for high and low scores are discussed in section 4.4

Currently, the VVL is only usable as an instrument for identifying resilient and not-resilient participants for the qualitative part B of this study. Chapters 5 and 6 will explore how the school environment may contribute to middle-adolescent resilience. The qualitative study, which is intended to answer this question, may deliver information for studying the validity of the VVL further and for improving the VVL through formulating more items. The formulation of additional items for the VVL and in particular for the third component should improve the VVL as an instrument for identifying resilient and not-resilient middle-adolescents. Future studies could be directed at improving the reliability and validity of the VVL.

For practical reasons the VVL was not developed any further prior to selecting participants for this study. The selection of participants served as the first indication of resilience and not-resilience. The in-depth interviews were intended to obtain more insight into the resilience concept.

### **4.3 RESULTS AND FINDINGS: THE VVL SCORES**

#### **4.3.1 SCORES FOR “RESILIENT BEHAVIOUR”, “NOT-RESILIENT BEHAVIOUR” AND “RESILIENCE”**

Table 4.8 demonstrates the results of the two-way ANOVA per row, where the independent variables were Gender and School, and the dependent variables the mean scores on “Resilient Behaviour”, mean scores for “Not-Resilient Behaviour” and the mean scores on “Resilience”.

#### **4.3.2 RESILIENT BEHAVIOUR**

In Table 4.8 it can be seen for “Resilient Behaviour” that there is a main effect for “Gender” for the “Resilient Behaviour” scores. Girls score significantly higher on Resilient Behaviour ( $M=3.66 / SD = 0.63$ ) than boys ( $M=3.32 / SD = 0.69$ ) at a significance level of  $p = 0.001$ .

In Table 4.8 it can also be seen that there is no main effect for “School Site” for the “Resilient Behaviour” scores. Therefore, no significant differences were found between the scores on these components between different schools.

In addition, the table indicates that there is no interaction between “Gender” and “School Site”. This finding means that the difference in scores between boys and girls on the “Resilient Behaviour” component is a general difference and is not influenced by the school environment.

*Table 4.8 Mean Scores and differences on Resilient Behaviour, Not-Resilient Behaviour and Resilience (means and standard deviations) (M/SD) per Gender and School Site.*

	Gender		Total	Schools					Total	F-Value		
	Boys	Girls		School Site 1	School Site 2	School Site 3	School Site 4	School Site 5		Gender	School	Gender * School
Resilient Behaviour	3.32 (0.69)	3.66 (0.63)	3.50 (0.68)	3.46 (0.61)	3.28 (0.74)	3.55 (0.66)	3.58 (0.74)	3.57 (0.62)	3.50 (0.68)	19.34***	1,88	0,55
Not-Resilient Behaviour	1.91 (0.61)	1.99 (0.59)	1.96 (0.60)	2.01 (0.62)	2.01 (0.51)	1.86 (0.56)	1.97 (0.66)	1.91 (0.56)	1.96 (0.60)	1.83	1,01	0,30
Resilience	3.65 (0.53)	3.80 (0.48)	3.73 (0.51)	3.69 (0.48)	3.61 (0.46)	3.78 (0.46)	3.76 (0.59)	3.80 (0.49)	3.73 (0.51)	6.41**	1,26	0,92

\*Significant at p = 0.05

\*\*Significant at p = 0.01

\*\*\* Significant at p = 0.001

### 4.3.3 NOT-RESILIENT BEHAVIOUR

In Table 4.8 it can be seen that there is no main effect for “Gender” for the “Not-Resilient Behaviour” scores and no main effect for “School Site” on the “Not-Resilient Behaviour” scores. The scores between boys and girls do not differ significantly, and neither do the scores between different school environments. Furthermore, there was no interaction between “Gender” and “School Site” and the “Not-Resilient Behaviour” scores.

### 4.3.4 RESILIENCE

In Table 4.8 it can be seen that there is a main effect for “Gender” for the “Resilience” scores. Girls score significantly higher on “Resilience” ( $M=3.80 / SD = 0.48$ ) than boys ( $M=3.65 / SD = 0.53$ ) at a significance level of  $p = 0.01$ .

In Table 4.8 it can also be seen that there is no main effect for “School Site” for the “Resilience” scores. Therefore, no significant differences were found between the scores on these components between different schools.

In addition, the table indicates that there is no interaction between “Gender” and “School Site”. This finding means that the difference in scores between boys and girls on the “Resilience” Scale is a general difference and is not influenced by the school environment.

### 4.3.5 INTERPRETATION OF DIFFERENCES

As demonstrated above girls score significantly higher on the “Resilient Behaviour” component and the “Resilience” scale. As described in section 4.2.1.2, the “Resilient Behaviour” component refers to *the identification and use of support in the environment and a pro-active, constructive response to difficult circumstances*. It may be argued from the higher scores by girls on this component that boys are perhaps somewhat less inclined to this type of behaviour than girls. This difference could also explain the higher scores by girls on the “Resilience” scale. However, it is not possible to speculate from the differences found between girls and boys between their mean scores on “Resilient Behaviour” and “Resilience” about the reasons for this difference. It is possible that Part B of the study will provide more insights into the

reasons for this or may produce insights into the behaviour of boys (and girls) that could be characterised as resilient, but which is not described as such by the VVL. In any case, an equal number of boys and girls will be identified as participants for Part B, irrespective of the level of their scores on “Resilience”. Theoretical sampling during Part B should lead to identifying more boys or girls, depending on the question at that stage in the research cycle.

#### **4.4 CONCLUSION: IDENTIFICATION OF PARTICIPANTS FOR PART B**

The scores on the “Resilience” scale were ordered from high to low *per school* and divided into quartiles in order to identify participants for Part B of this study. Participants with scores in the highest quartile were identified as resilient. Participants with scores in the lowest quartile were identified as not-resilient. Per school, three resilient participants were selected from the highest quartile and three not-resilient participants were selected from the lowest quartile. This selection process was based on voluntary participation, as well as an equal number of boys and girls across the entire sample, and the greatest diversity of school classes possible.

## **5 INDUCTIVE LOGIC: RESEARCH PART B**

### **5.1 INTRODUCTION**

This chapter presents the research process and the research results of the qualitative research part B. Research part B aimed to inductively develop a theory about the relationship between the school environment and the resilience of urban middle-adolescents with a low SES background. In Chapter 4 it was discussed how the participants for the qualitative research part B were identified as resilient and not-resilient. In this chapter, the procedure of conducting the interviews is described, the participants are briefly introduced and the research process and results are discussed.

### **5.2 CONDUCTING THE INTERVIEWS**

In order to plan the interviews during school-time the care co-ordinators for the schools created a roster for the interviews which was sent to the teachers who were to be teaching the students concerned at planned time points. This ensured that the pupils had a valid reason for being absent from class and also allowed a check to be made whether the pupil concerned was either at school or at the interview. The guideline for the maximum duration of the interview and the total time the pupil was allowed to be absent from school was two hours.

All interviews were conducted out of school with the exception of a single participant. The exception for the single participant arose due to confusion concerning the location of the community house where the interview was to take place. In order to complete the interview within the time available the researcher decided to conduct the interview at school. The pupil co-ordinator for the school made his office available for an unlimited amount of time.

All the other interviews took place outside school in three different community centres which were close to the school. Conditions in the community centres were easily controllable by the researcher. There were no disruptions to the interviews by others within the community centre with the exception of a single episode. There were no differences between the community centres in terms of organisation and facilities.

The organisation of the interview rooms consisted of a table with a number of chairs around it. The participants were offered tea, coffee or a soft drink.

It was noted that in the third research cycle, where more not-resilient pupils from School Site 3 had been planned for interviewing than in the first two cycles, that pupils did not turn up for the interview although they had volunteered to participate. This had not been an issue in the first two research cycles. The pupil co-ordinator of the school concerned revealed when questioned that the school was participating in a longitudinal study in addition to the study presented here, where participating pupils received 10 Euro. It appeared therefore that voluntary participation in this study was of no interest to these students. After consultation and deliberation of the consequences it was decided to pay each participant 10 Euro retrospectively for their participation in the study and to encourage those who had been selected for the planned interviews with 10 Euro. After the introduction of the 10 Euro payment all planned interviews, with the exception of one, could take place. A participant of the same gender and from the same school was chosen to replace the participant who was unable to take part in the interview. This participant's VVL score was approximately equivalent to the participant who had not appeared for interview.

### **5.3 THE PARTICIPANTS**

The description of the participants takes place according to:

- i) The code of the participant in the interviews;
- ii) The score on the Resilience Scale;
- iii) The specific school grade of the participant;
- iv) The identification of the participant as resilient or not-resilient;
- v) The gender of the participant;
- vi) The age of the participant at the time of the interview;
- vii) The research cycle in which the interview with the participant concerned took place.

Table 5.1 shows the description of the participants of the qualitative research.

*Table 5.1 Description of the participants of the qualitative research according to The code of the participant in the interviews, The score on the Resilience Scale, School grade, Identification as Resilient or Not-Resilient, Gender of the participant, Age at the administration of the interview<sup>9</sup> and the Research Cycle in which the interview took place.*

<b>School Site 2</b>						
<b>Code in the interviews</b>	<b>Score Resilience</b>	<b>Class</b>	<b>Identification R/NR</b>	<b>Gender</b>	<b>Age at time interview</b>	<b>Research Cycle</b>
301-S2-C1-M-R	4,78	B	R	M	15,4	Cycle 1
326-S2-C4-F-R	4,30	C	R	F	15,5	Cycle 4
327-S2-C1,C2/3-M-NR	2,77	C	NR	M	16,3 / 16,8	Cycle 1 Cycle 2/3
330-S2-C1-F-R	4,35	C	R	F	15,2	Cycle 1
331-S2-C4-F-NR	2,96	C	NR	F	15,11	Cycle 4
332-S2-C1-M-NR	2,87	C	NR	M	15,10	Cycle 1
341-S2-C4-F-NR	2,78	C	NR	F	15,4	Cycle 4
349-S2-C4-M-NR	2,87	A	NR	M	15,9	Cycle 4
<b>School Site 3</b>						
<b>Code in the interviews</b>	<b>Score Resilience</b>	<b>Class</b>	<b>Identification R/NR</b>	<b>Gender</b>	<b>Age at time interview</b>	<b>Research Cycle</b>
479-S3-C3-F-NR	2,87	D	NR	F	16,0	Cycle 3
482-S3-C3-F-NR	3,04	E	NR	F	16,2	Cycle 3
487-S3-C2-F-R	4,35	B	R	F	15,5	Cycle 2
488-S3-C2-F-R	4,78	D	R	F	16,2	Cycle 2
519-S3-C3-M-R	4,26	C	R	M	16,5	Cycle 3
522-S3-C1-F-R	4,70	C	R	F	16,0	Cycle 1
520-S3-C3-M-NR	2,96	C	NR	M	15,10	Cycle 3
528-S3-C3-M-NR	3,48	C	NR	M	16,0	Cycle 3
<b>School Site 5</b>						

<sup>9</sup> Sometimes the interviews took place a year after filling out the questionnaire, thus the age of the participants in the qualitative research is higher than the average of the participants in the quantitative research.



Code in the interviews	Score Resilience	Class	Identification R/NR	Gender	Age at time interview	Research Cycle
547-S5-C2-F-R	4,57	B	R	F	14,9	Cycle 2
552-S5-C2-F-R	4,61	A	R	F	15,11	Cycle 2
555-S5-C4-M-R	4,13	A	R	M	16,3	Cycle 4
573-S5-C4-F-NR	3,13	C	NR	F	16,4	Cycle 4
593-S5-C2-M-NR	2,91	C	NR	M	16,1	Cycle 2

### *Discussion of the Table*

The codes used for the participants in the discussion of the research results consist of: the number of the participant in the quantitative data file; the number of the School Site the participant comes from (S); the number of the Cycle in which the participant is interviewed (C); the gender of the participant (F/M) and the degree of resilience of the participant (Resilient/ Not-Resilient).

The interviews have been divided across School Sites and research cycles as follows below:

Cycle 1: four participants from School environment 2 and one participant from School environment 3;

Cycle 2: two participants from School environment 3 and three participants from School environment 5;

Cycle 3: five participants from School environment 3.

Cycle 4: two participants from School environment 5 and four participants from School environment 2.

This distribution of interviews across the schools has methodological and practical reasons.

### *Methodological rationale*

#### *Cycle 1: The development of a general idea about resilience*

The methodological reasons were, in the first instance, that the researcher wanted to get a general idea of resilience by measuring how resilient and not-resilient middle-adolescents describe the same school environment and grant meaning to this

environment. By starting Cycle 1 with interviewing four participants from School environment 2, of which two were resilient and two were not-resilient participants, an initial general idea could be developed about the differences between resilient and not-resilient middle-adolescents within the same school environment. The fifth interview in Cycle 1 with a participant from School environment 3 served to verify the developed ideas about resilience in School environment 2 with another school environment.

*Cycle 2: verifying the general idea*

In Cycle 2 the researcher wanted to gain more insight into the way in which different school environments contribute to resilience. For this purpose two interviews with resilient participants from School environment 3 were planned; two interviews with resilient participants from School environment 5 and an interview with a not-resilient participant from School environment 5.

*Cycle 3: deepening*

After Cycles 1 and 2, the summer vacation followed. In the summer vacation the researcher developed a general theory on the differences between resilient and not-resilient participants and on the way in which different school environments contribute to resilience. This theory served as a sensitising concept in the interviews that followed. In Cycle 3 the researcher wanted to deepen the developed ideas. The central question was how the differences between resilient and not-resilient participants were related to differences in their experience of a contribution of their school environment to their successful development. Therefore, four not-resilient participants from School environment 3 were interviewed in Cycle 3 and one resilient participant from the same school environment.

*Cycle 4: verifying deepening*

In cycle 4, the researcher wanted to verify the ideas, which had been developed during the deepening in school environment 3, in other school environments. For this reason two interviews with participants from School environment 5 and four interviews with participants from School environment 2 were conducted.

*Practical reasons*

The researcher would have preferred to have interviewed several participants from School environment 5 to verify the deepening. However, because of practical reasons, such as the approaching exams of the participants, the choice was made to limit the number of participants from School environment 5.

One participant (327-S2-C1,C2/3-M-NR) was interviewed twice: the first time in Cycle 1, the second time between Cycle 2 and Cycle 3, because the participant had by then left school prematurely. Participant 327-S2-C1,C2/3-M-NR was the only participant who had left school prematurely.

In total, nine boys (M) and 12 girls (F) participated in the interviews. In total, 10 resilient (R) and 11 not-resilient (NR) middle-adolescents were interviewed.

## **5.4 PROCEDURE**

### **5.4.1 INTRODUCTION**

The procedure of Grounded Theory in the present study can be divided into three processes which took place simultaneously: the development of themes and categories, the development of hypotheses on the relationship between themes and categories and the development of the concept of resilience. For this purpose, the interviews were recorded in their entirety on cassette tapes and were transcribed literally. During the three processes, coding of interview data, writing logbook notes, returning to literature and refining the research method were utilised.

#### *Development of themes and categories*

The coding of the interview data initially occurred in an open manner. The interviews in the first two cycles were printed, repeatedly reread and divided into themes the participants spoke about. On the basis of the themes found, categories were developed into which the themes were placed.

#### *Development of hypotheses on the relationship between themes and categories*

After the first two research cycles, an assessment was made of how the categories in the interview data of the participants were related and a provisional theory was developed. This theory functioned as a sensitising concept in the third research cycle.

The structure of the interviews remained open, whereby the sensitising concepts were used to follow up on themes raised by the participants.

#### *Development of the resilience concept*

On the basis of constant comparison during all research cycles between the content of the categories for resilient and not-resilient participants, differences and similarities between the groups were identified. A portion of the similarities and differences between resilient and not-resilient middle-adolescents was found *within the different school sites* by comparing resilient and not-resilient participants with each other per school site. Other differences and similarities were found by grouping and comparing resilient and not-resilient participants above school level. For the closer research of these similarities and differences in the fourth research cycle, feedback was derived from literature about symbolic interactionism. This feedback provided sensitising concepts for the fourth research cycle, which led to a final coding system for the entire qualitative data set. In the presentation of the results of the final analysis (paragraph 5.4), as many examples as possible will be provided per discussed theme of resilient and not-resilient participants of each school site. However, in some cases a finding has been made on an “above school level”, and a specific theme can not be illustrated with the use of participants from *each* school site. In these cases, a short comment will be added to the presentation of the results.

The different processes that took place during the procedure of Grounded Theory in the present study will be illustrated in the following paragraphs using logbook notes and process outcomes in the form of themes, categories and codes.

## **5.4.2 DEVELOPMENT OF THEMES, CATEGORIES AND CODES**

### **5.4.2.1 Context description**

#### *Logbook*

The question “What do middle-adolescents talk about with regard to the concept “school”?” was central in the context description. Naming the themes during the open coding occurred as much in the language of the participants themselves as possible. This way, an abundance of themes followed. Some themes which were established in this “open way” are presented in logbook notes:

Logbook 25-05-2005:

First ordering of themes so far:

Participant 301

School in general; The theoretic subjects; Difference Theoretic Subjects and Subjects you use your hands with; The pupils; The class; Subjects you use your hands with; Green (as a subject at school); School really not fun, because...; Problems.

Participant 332

School general; Fellow pupils; Teachers (that go crazy, nice teachers, teachers who get calmer); Classmates; Other classes; Subjects; Arguing; Fun in class; Working with your hands; Future.

### *Outcomes*

After the first two interviews, the earlier discussed themes were divided in very general categories, which formed sensitising concepts for the new interviews. The following interviews in Cycle 1 and 2 were still coded openly as well. Examples of themes that were brought up are:

Passing school; How are things going for me at school?; Shitty times; Feeling at home; The Teachers (“are crazy”); School counsellor; Contact with teachers, The teachers, “Cool teacher”; The children, Aggressiveness; Trouble; Used to be bullied; Arguing; Influence of the class; What is the use of going to school?; Dealing with work pressure; About oneself as a pupil in the school; Future; Skipping school; Parents.

Whether the themes addressed during the interviews fitted within the developed general categories, was constantly reviewed. When they did not fit, new categories were formed. This is how the following categories were developed after the interview and analysis cycles 1 and 2.

School; Subjects; Pupils; Class; Teachers; Activities; School team, Friends, School accomplishments, Future and Parents.

These categories were then, on a more abstract level, subdivided into final categories in regard to the context that middle-adolescents speak about in relation to “school”. The categories are presented in Figure 5.1 by means of an explanation of the codes they received for the definite analysis process:

Figure 5.1 Codes Context Description School, Background and Future

Context description: school, background and future		
SC_BS_ACT: The description of the school environment in terms of the people in this context (Actors).	AG_BS_GEZ: The description of the background of the participant in terms of his home environment.	TOEK_BS: The description of the participant's image and hope for the future.
SC_BS_SF: The description of the school environment in terms of the atmosphere in the school.	AG_BS_FAM: The description of the background of the participant in terms of his family, outside the home environment.	
SC_BS_ORG: The description of the school environment in terms of organisation of the school.	AG_BS_OMG: The description of the background of the participant in terms of his environment outside the school.	
SC_BS_GEB: The description of the school environment in terms of the events that take place within the school environment.	AG_BS_GESCH: The description of the background of the participant in terms of his history.	
SC_BET: The meaning the participant grants to the school environment.		

It turned out that both resilient and not-resilient participants at all school sites spoke about their school in terms of a description of the people who are present at the school environment, the atmosphere in the school environment, the way in which the school environment is organised, such as the established rules and extracurricular activities, the events that take place in the school environment and in terms of the meaning they grant to the school and the people, the atmosphere, the organisation and the events in the school. In regard to the relationship their background has with their description of and meaning given to school, they spoke about their home environment, their family outside their home environment (e.g. grandfathers, grandmothers, aunts and uncles), the environment in which they live and about their history (e.g. their elementary school days, the history of their parents and events in the past) which relates to the present. Furthermore, both resilient and not-resilient participants spoke about their future in relation to their description of and meaning attachment to their school environment.

Above-mentioned descriptions of and the meaning given to the contexts in which the participant engages himself form the stage against which the participant describes “circumstances experienced as challenging”.

#### **5.4.2.2 Dealing with “Circumstances experienced as challenging”**

##### *Logbook*

After the first two interviews, the researcher decided to ask more directly about the way in which the participants deal with “circumstances experienced as challenging”. The themes the participants brought up at first were still very general. When the researcher asked for “challenging circumstances”, the participants would indicate that they had no “problems”. The researcher entered the following logbook notes about these findings in an early cycle:

Logbook 25-05-05

These first two interviews were still very general. After these interviews I decided to ask more specifically for “dealing with problems”. This is delicate, because what the interviewer and the participant both think about with the concept of problems then needs to be established again. The same question arises ever again “What is it I want to know about them?”

Not only did the researcher and the participants have to agree about the concept “school” and the broader context in which “school” was mentioned, but also about the concept “circumstances experienced as challenging”. That is why the researcher decided to ask the participants about their experiences with challenging situations, to subsequently explore how the participant dealt with that. In doing so, the researcher looked at the role the school played in relation to these challenging situations. This role was explored by asking what the school had to do with the challenging circumstances, if there was something in the school that could help in dealing with the challenging circumstances or what the school could have done differently so that the participant would find some things easier (see topic list Appendix 5). The school’s role was further analysed regarding the needs of middle-adolescents for school factors which “make them stronger” when dealing with “circumstances experienced as challenging”.

*Outcomes “circumstances experienced as challenging”*

After the first two interviews, the themes previously discussed in the area of “circumstances experienced as challenging” were divided in very general categories, which served as sensitising concepts for the new interviews. Examples of themes that were brought up:

Bullying, Stressful situations, Noisiness in class, Having to achieve good school accomplishments, Dealing with teachers, Challenges to fighting, Challenges to skipping school, Dealing with yourself (e.g. insecurity and behaviour), Dealing with problems in the family situation.

These themes were subsequently, on a more abstract level, subdivided into the final categories. Although the theme “dealing with yourself” resulted in interesting insights, the interview data did not warrant maintaining a category “dealing with yourself” as a category in the final coding system. Although the problems in the family situation were strongly related to his experience of the school environment with one participant, none of the other participants spoke about a similar impact of problems in the family situation. Therefore, this theme was not identified as a separate category, but was used to verify other findings about the family background. The final categories in which the themes were divided are presented in Figure 5.2.

*Figure 5.2 Codes Behaviour and Meaning Making: “Academic Accomplishments”, “Negative Influence of Peers” and “Creation and maintenance of constructive relationships with peers and adults”.*

<b>“Academic accomplishments” (AP)</b>	<b>Negative influence of peers (PI-)</b>	<b>Creation and maintenance of constructive relationships with peers and adults in the school environment (PP)</b>
IND_BS_GEDR_AP: The description of the participant of his/her behaviour in the area of having to accomplish good academic accomplishments.	IND_BS_GEDR_PI-: The description of the participant of his/her behaviour in the area of dealing with negative influence of peers.	IND_BS_GEDR_PP: The description of the participant of his/her behaviour in the area of the creation and maintenance of constructive relationships with fellow pupils and teachers.
IND_BS_BET_AP: The description of the participant of his/her meaning attachment to having to accomplish good academic accomplishments.	IND_BS_BET_PI-: The description of the participant of his/her meaning attachment to dealing with negative influence of peers.	IND_BS_BET_PP: The description of the participant of his/her meaning attachment to the creation and maintenance of constructive relationships with fellow pupils and teachers.

Figure 5.2 shows how the “circumstances experienced as challenging” are subdivided in the behaviour and the meaning attached by the participants in the area of



“circumstances experienced as challenging”. Both resilient and not-resilient participants at each school site spoke about their behaviour in the area of school accomplishments, that is, what kind of marks they get, how they deal with homework and how they behave in class. Furthermore, they spoke about the meaning that accomplishing good school results has for them. They motivated their behaviour based on the meaning the achievement of good school results has for them.

Both resilient and not-resilient participants at each school site spoke about the presence of a negative influence of peers, such as bullying, fighting, being challenged and gossiping. They described their own behaviour in this area and they described the meaning the negative influence of peers has for their behaviour and development.

Both resilient and not-resilient participants at each school site spoke about their behaviour in relation to fellow pupils, to teachers and to other adults in the school environment and about the meaning these relationships have. They motivated their behaviour based on their meaning attachment to these relationships.

#### **5.4.2.3 Needs of middle-adolescents in the school environment**

##### *Logbook*

Analysis of the meaning attachment and the behaviour of both resilient and not-resilient participants at all school sites gave insight into their needs in the school environment. In the fourth research cycle, themes in the area of “needs of middle-adolescents in the school environment” for dealing with “circumstances experienced as challenging” were divided into very general categories that formed sensitising concepts for the interviews in the fourth research cycle. Examples of themes that were brought up are:

Good contact with teachers, Friends, Trust, Confidant pupils, Teacher and trust, Mentor and trust, Mentor/School Counsellor (school counsellor), Good teaching by teachers, Asking for help /cooperation, Feeling safe.

These themes were subsequently subdivided on a more abstract level across the final categories in regard to the needs of middle-adolescents in the school environment when dealing with “circumstances experienced as challenging”. These are the

categories *Safety* and *Good education*. It turned out that both could be divided in *needs* for safety and good education and the *experience* of safety and good education such as presented in Figure 5.3:

Figure 5.3 Codes Needs “Safety” and “Good education”

Safety	Good education
Need for safety	Need for good education
Experience of safety	Experience of good education

The needs for safety and good education could be identified with all the participants at all school sites. However, resilient and not-resilient participants differ in the ways in which they experience the fulfilment of these needs and the different school sites also differ in meeting these needs. The discussion of the results will deal with this further.

#### 5.4.3 DEVELOPMENT OF HYPOTHESES ABOUT RELATION BETWEEN THEMES AND CATEGORIES

##### *Logbook*

After the research cycles 2 and 3, no new categories were developed in the area of context description and the description of the dealing with circumstances experienced as challenging. However, more insight was gained in the relationship between the categories. As a result of the very detailed analysis of rich interviews, a first general theory was developed. This is rendered in logbook notes:

Logbook 10-4-2005

Home forms the lenses through which pupils view their environment and thus their school environment. The pupils also look at the teacher with these lenses. Pupils who experience a positive attitude from at least one of their parents in general, or with regard to them, will notice this attitude earlier with teachers than those pupils who are treated badly at home or grow up in confusing/emotionally bad circumstances. They notice more negativity in the school environment and in the attitude of teachers because they view their school environment through different lenses.

I will henceforth ask more about the home situation and the relationship with parents, and about the involvement with the school as well. Also involve (the) education (level) and the occupational status of the parents. A “sensitising concept” is that pupils, who behave in a resilient way, have at least one involved parent who asks about school and/or who gives the child the idea that he/she can achieve anything that he/she wants. The education of the parents, whether they are of Dutch origin or not or

whether they have a job does not appear to matter in this. Consider hereby also logbook involvement parents:

Logbook involvement parents

R. (pupil-coordinator of one of the schools) asks me about what pupils talk about in general. I tell him the idea occurred to me that the resilient pupils have at least one supporting parent who is involved with school. He asks me whether these parents are then also involved by appearing at parent meetings or showing up at school.

This is an interesting distinction. Teachers at school often complain about the lack of involvement, in particular that of parents of non-Dutch origin (“Many Dutch parents barge in here all the time”) because they do not appear at school and that these parents do not appear at parent meetings. However, my interviews show that the resilient non-Dutch pupils do have parents who are very involved with school by asking each day how things are going (552-S5-C2-F-R & 547-S5-C2-F-R) and by telling their son or daughter that he/she can achieve anything if he/she wants it. It is very well possible that the parents of these two pupils do not visit school a lot. Involvement of parents therefore has to be well-defined.

I will ask more about the role of the home situation and the relationship of the middle-adolescent with parents(s)/caretakers and, thereby, about involvement of the parent(s) with school. Hereby, (I will) also look for the (level of) education and the occupational status of parents. To, this way, get to know more about the relationship between supporting parents and school/resilience. In general: I need to get to know more about the concept of “resilience”. Not through theory, but as a result of what the pupils tell me.

Above-mentioned theory did not function as a hypothesis in the following interviews, but as sensitising concepts in regard to the involvement of parents in relation to the experience of the school environment by the participants. In the course of the research process, the theory developed itself further, such as is indicated in later logbook notes:

11-14-2005

Three main themes:

1. Background

The description of and meaning attachment to the home environment, the family, the neighbourhood and the environment.

In the description and meaning attachment of the participants the home environment, the family, the neighbourhood and the environment appear to be of influence on their motivation for the

accomplishment of certain school results and showing certain behaviour and for identifying and experiencing risk factors.

## 2. School

### Meaning of the school for the middle-adolescent

The attitude of the participants in regard to the school and within the school environment is influenced by their background and by school factors. The school factors appear to consist of the *actors* within the school and the *atmosphere* in the class and the school. The atmosphere in the class is influenced by the teaching style of teachers.

## 3. Individual and resilience

The middle-adolescent's description of incidents is turning out to be rich data for me for the recognition of resilient behaviour. Incidents often appear to be: a fight; friends who want you to skip school; having to deal with set-backs.

The disposition (attitude/motivation/will and opportunity) of the participants is influenced by their background in terms of parents, family and environment, and is influenced by the school environment in terms of actors, by their teaching methods and by their attitude when incidents occur. With the accomplished/created disposition, the pupil looks at the school in terms of opportunities and resources, which are offered in the school environment, but also at incidents that occur. The participants research, so to say, the system in which they find themselves in terms of opportunities (resources) and in terms of how the system could work for them and what could be damaging for them when making use of these opportunities. These resources need to be present for them to recognise and utilise them. The presence of these resources is determined by the organisation of the school in terms of pupil assistance and by the school "ethos". The school "ethos" is made visible in the way the school deals with incidents, such as a fight.

In this formed theory I do not mention the influence of personality characteristics/factors because, since in the analysis of the interviews, I'm only able to find indications for what seems like a personality factor (by using words like "I believe") still being highly influenced by background or school factors, such as the actors there. This becomes, for example, evident in the data of Participant 552-S5-C2-F-R, when she speaks about how your diploma helps guide you towards your future and what you have to do for that. In saying this, she appears to literally repeat what the school counsellor has told her. Furthermore, she repeats her parents (mother) when she says "Where there's a will, there is a way".

### *Outcome*

On the basis of above-mentioned logbook notes in regard to relations between the categories, the researcher decided to inquire more about incidents that had actually occurred, about the behaviour of the participant in the incident, about the role of other

actors in the incident, about the motivation behind the behaviour of the participant in the incident and about the outcome of the incident. This way, a clearer image of the concept of resilience was achieved.

#### **5.4.4 DEVELOPMENT OF THE CONCEPT OF RESILIENCE**

##### *Logbook*

The central questions the development of the resilience concept brought up are “How can resilience in the school environment be recognised?” and “How do resilient middle-adolescents differ from not-resilient middle-adolescents?” In the interview data were constantly looked at for similarities and differences between resilient and not-resilient participants within the mentioned categories. The following logbook notes depict this process:

26/05/05

I am at least on to something. The R-pupils and NR-pupils differ a lot in their conversations, and therefore I differentiate at least something: the differences in their stories, their interests, and especially their behaviour at school. What is the direction of the relationship? Does the resilience of the pupils influence their behaviour at school, or does the school support the resilience of the pupils?

The resilience of the middle-adolescents appeared to be more of influence on their behaviour in the school environment than the school environment supporting the resilience of the middle-adolescents. This conclusion is depicted in the following logbook notes:

27/05/2005

Until now the difference between resilient and not resilient middle-adolescents appears to be: resilient middle-adolescents have no problems, have a supporting home (the resilient middle-adolescents talk about one of their parents asking about school or motivating them to go on, 301-S2-C1-M-R; 522-S3-C1-F-R), the resilient middle-adolescents see support and social contacts everywhere (especially 522-S3-C1-F-R and maybe 330-S2-C1-F-R); and resilient middle-adolescents show easy/accommodating/active/positive behaviour for teachers (301-S2-C1-M-R, 330-S2-C1-F-R, 522-S3-C1-F-R). Not-resilient middle-adolescents have problems at home (327-S2-C1,C2/3-M-NR); help in school does not come to them (327-S2-C1,C2/3-M-NR); they show challenging behaviour to the teachers (332-S2-C1-M-NR, 327-S2-C1,C2/3-M-NR); they show challenging behaviour as a distraction from negative thoughts (327-S2-C1,C2/3-M-NR) and to make the classes and the day go by faster (332-S2-C1-M-NR, 327-S2-C1,C2/3-M-NR).

Logbook: 10-06-05

There really is a difference between the R and NR-pupils. The R-pupils enjoy school (487-S3-C2-F-R, 522-S3-C1-F-R), have fun, want to get good marks, think about the future, have stimulating parents (487-S3-C2-F-R, 488-S3-C2-F-R).

The most noticeable differences turned out to be the ways in which both groups speak about their home environment situation in relation to the way in which they speak about “school” and the way in which they speak about their behaviour, thinking and the meaning they give to persons and events at school.

About this finding, the researcher wrote the following logbook entry:

Logbook: 13-10-2005

Redefinition:

This interview has brought me to an important redefinition of resilience of pupils. This redefinition came about, among others, because Participant 327-S2-C1,C2/3-M-R could be resilient in his story. He learns of what he sees and has thought carefully about his steps. Redefinition: “I have selected pupils who *behave* resiliently or not. NOT pupils who *are* resilient or not.”

Resilient participants appeared to learn faster from circumstances they experienced as challenging than not-resilient participants. To gain more insight into the relationship between the home environment situation, their meaning attachment, their thinking and resilient and not-resilient behaviour in the school environment, these findings were compared to literature on Symbolic interactionism to direct the subsequent interviews and analyses. This literature is now summarised to show how the coding system was developed further under the influence of this literature:

### *Symbolic Interactionism*

The theory of symbolic interactionism (Mead, 1934) provides insight into the role of meaning attachment by the individual to a situation for the implementation of his actions. Interaction, that is, that whereby the individual and other objects (e.g. persons, institutions and groups) interact with each other, each on the grounds of the meaning it has for them, is central to the theory of the symbolic interaction. The theory of symbolic interaction (Mead, 1934, Blumer, 1969; Zijderveld, 1973; Arts, Hilhorst and Wester, 1985) can be regarded as a counterpart of a lot of research within

psychology and the social sciences into factors in which human behaviour is treated as a product of factors that influence people (Blumer, 1969). The theory provides insight into how a middle-adolescent selects his action, as it were, on the basis of the meaning he attributes to a situation. This attributing of meaning is derived from the social interaction he has with his fellow men.

The world, and thereby the situations in which the middle-adolescent finds himself, gets its meaning by his personal experiences of his actions and the reactions to that. In daily life, the middle-adolescent encounters ever-recurring situations, he develops solutions and actions, tries these and he gets a reaction from others. On the basis of these recurring situations and the behaviour the middle-adolescent shows, he develops “recipe knowledge” in regard to situations he finds himself in. This “recipe knowledge” provides ready-made insights, on the grounds of which he organises his own behaviour. Besides the personal experience of the middle-adolescent, according to the theory of symbolic interactionism, society also influences the worldview of the individual through so-called secondary experiences (e.g. media, stories of others about their experiences). From this point of view, the home environment and the meaning the home environment attributes to the school or to interaction processes, could be of influence on the meaning which the middle-adolescent attaches to the school and to interaction processes. This meaning could influence the establishment of interaction processes between the middle-adolescent and his school environment.

The so-called selection of an action on the basis of the meaning a situation holds for a middle-adolescent, is performed by the “self”: a feeling of identity and self-consciousness. The “self” functions thereby as the directing element. The middle-adolescent decides to use or not to use certain characteristics within himself in a certain situation on the basis of the meaning that the certain situation holds for him. The actions of a middle-adolescent in a certain situation get a “developing nature”: each action is built up, delayed, suspended, left or rejected (Blumer, 1969).

Blumer (1969) describes the consequences of the theory of symbolic interactionism when studying “social action” in social scientific research. According to Blumer (1969), when one presumes that man designs, modifies and models his environment instead of reacting to factors, one needs to approach social action as a “process of

becoming”. One needs to see the actions of people as something that is created by the acting man himself and not as something that is only awakened in him. This is why one needs to describe the environment of the action on the grounds of the way in which the acting person perceives that environment. Swanborn (1981) is of the opinion that behaviours of individuals are understood in relation to the reactions of the other and in relation to characteristics of the situation. According to Swanborn (1981), the research objective should be determining the process of meaning attachment and the behaviour attuned to that. Symbolic interactionism is a research perspective that tries to describe, interpret and explain the social reality as the product of the interaction processes that occur between people (Arts, Hilhorst & Wester, 1985).

### *Outcome*

It turned out that, on the basis of the theory of symbolic interactionism, behaviour fragments of the participants when dealing with circumstances experienced as challenging could be dissected in several actions that make up behaviour. These “behavioural fragments” could clearly be distinguished as resilient or not-resilient fragments and were named Resilience Processes and Not-Resilience Processes. The Resilience Processes contributed to learning and growth of the participants and the Not-Resilience Processes did not contribute at a much later stage, after a negative consequence. These “circumstances experienced as challenging” turned out to be developmental opportunities for both the resilient as well as the not-resilient participants. However, these were not recognised or transformed into development by both groups. In the analysis the sub actions in the Resilience and Not-Resilience Processes were subsequently interpreted and explained as the product of the interaction processes between the participants and the actors within and outside of the school environment.

Baarda, De Goede and Teunissen (2005) provide guidelines for coding processes. They recommend placing the codes of the different actions in a time sequence. This is how “code families” resulted for the description of a typical “Resilience Process” and for a typical “Not-Resilience Process”. In the interview data attention was paid to the timing and the way in which the school environment acquires a prominent place in each Resilience and Not-Resilience Process and to other contexts and actors that have a prominent place in these processes. These processes were coded as proximal



interaction processes. Because the interview data showed that in certain fragments actors inside or outside the school environment sometimes were present, but that the participant was not *active* in interaction with these actors at the moment, a distinction was made in the codes between present and active proximal interaction processes. They are named *present* when there is an “availability”, but this availability is not utilised for dealing with circumstances experienced as challenging. They are called *active* when the availability is utilised. The proximal interaction processes were analysed for content and compared with each other. The codes for analysing of the developmental opportunities are now presented. The codes in Figure 5.4 have been placed vertically in sequence of time:

Figure 5.4 Codes Developmental opportunities

Developmental opportunities		
<b>Dealing with having to attain good Academic Accomplishments (AP).</b>	<b>Dealing with negative influence of peers (PI-).</b>	<b>The creation and maintenance of constructive relationships with peers and adults (PP).</b>
OP_MOG_AP: A developmental opportunity in the area of dealing with having to accomplish good academic accomplishments.	OP_MOG_PI-: A developmental opportunity in the area of dealing with negative influence of peers.	OP_MOG_PP: A developmental opportunity in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_ACT_VERST: A disturbance takes place of the daily habits of the participant by a certain event in the area of academic accomplishments.	OP_MOG_PI-_ACT_VERST: A disturbance takes place of the daily habits of the participant by a certain event in the area of the dealing with negative influence of peers.	OP_MOG_PP_ACT_VERST: A disturbance takes place of the daily habits of the participant by a certain event in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_RIS: The participant does or doesn't identify a risk in the event in the area of academic accomplishments.	OP_MOG_PI-_RIS: The participant does or doesn't identify a risk in the event in the area of dealing with negative influence of peers.	OP_MOG_PP_RIS: The participant does or doesn't identify a risk in the event in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_REACT: The participant reacts to the event in the area of academic accomplishments.	OP_MOG_PI-_REACT: The participant reacts to the event in the area of the dealing with negative influence of peers.	OP_MOG_PP_REACT: The participant reacts to the event in the area of the creation and maintenance of constructive relationships with peers and adults.

OP_MOG_AP_ACT_MOT: The participant gives a motivation for his reaction in the area of academic accomplishments.	OP_MOG_PI_ACT_MOT: The participant gives a motivation for his reaction in the area of the dealing with negative influence of peers.	OP_MOG_PP_ACT_MOT: The participant gives a motivation for his reaction in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_ACT_UITK: The reaction to the disturbance leads to a certain outcome of the developmental opportunity in the area of academic accomplishments.	OP_MOG_PI_ACT_UITK: The reaction to the disturbance leads to a certain outcome of the developmental opportunity in the area of the dealing with negative influence of peers.	OP_MOG_PP_ACT_UITK: The reaction to the disturbance leads to a certain outcome of the developmental opportunity in the area of the creation and maintenance of constructive relationships with peers and adults.
<b>Present and active proximal processes within and outside of the school environment by developmental opportunities of the earlier mentioned themes AP, PI- and PP.</b>		
OP_MOG_AP_AANPP_SC: The presence of proximal interaction processes in the school environment when a developmental opportunity occurs in the area of academic accomplishments.	OP_MOG_PI_AANPP_SC: The presence of proximal interaction processes in the school environment when a developmental opportunity occurs in the area of negative influence of peers.	OP_MOG_PP_AANPP_SC: The presence of proximal interaction processes in the school environment when a developmental opportunity occurs in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_ACTPP_SC: The activity of proximal interaction processes in the school environment when a developmental opportunity occurs in the area of academic accomplishments.	OP_MOG_PI_ACTPP_SC: The activity of proximal interaction processes in the school environment when a developmental opportunity occurs in the area of negative influence of peers.	OP_MOG_PP_ACTPP_SC: The activity of proximal interaction processes in the school environment when a developmental opportunity occurs in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_AANPP_BSC: The presence of proximal interaction processes outside of the school environment when a developmental opportunity occurs in the area of academic accomplishments.	OP_MOG_PI_AANPP_BSC: The presence of proximal interaction processes outside of the school environment when a developmental opportunity occurs in the area of negative influence of peers.	OP_MOG_PP_AANPP_BSC: The presence of proximal interaction processes outside of the school environment when a developmental opportunity occurs in the area of the creation and maintenance of constructive relationships with peers and adults.
OP_MOG_AP_ACTPP_BSC: The activity of proximal interaction processes outside of the school environment when a developmental opportunity occurs in the area of academic accomplishments.	OP_MOG_PI_ACTPP_BSC: The activity of proximal interaction processes outside of the school environment when a developmental opportunity occurs in the area of negative influence of peers.	OP_MOG_PP_ACTPP_BSC: The activity of proximal interaction processes outside the school environment when a developmental opportunity occurs in the area of the creation and maintenance of constructive relationships with peers and adults.

The discussion of the results in paragraph 5.4 will elaborate on the Resilience and Not-Resilience processes.

The code families of Resilience and Not-Resilience Processes form hypotheses about the differences between resilient and not-resilient behaviour when dealing with circumstances experienced as challenging. After the completion of the coded system, the system was employed for the whole qualitative data set to find out whether the coded system covered everything and whether it was valid. This appeared to be the case.

Finally, the above-mentioned hypotheses on the different actions when dealing with circumstances experienced as challenging were validated in the final analysis by looking for confirming and falsifying examples with resilient and not-resilient participants. This validation took place by means of nine informative questions, which had been developed on the basis of the research cycles. These nine questions have informed the main question<sup>10</sup> and the sub questions<sup>11</sup> of the study:

- 1a. What are the needs of resilient middle-adolescents in the school environment?
- 1b. What are the needs of not-resilient middle-adolescents in the school environment?
- 2a. How can resilience in the development of middle-adolescents in the school environment be recognised?
- 2b. How can the lack of resilience or a limited degree of resilience in the development of middle-adolescents in the school environment be recognised?
- 3a. What is the nature of the effective proximal interaction processes which contribute to a competent development of resilient middle-adolescents in the school environment?
- 3b. What is the nature of the proximal interaction processes of not-resilient middle-adolescents and their school environment?

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<sup>10</sup> How does the school context contribute to the resilience or middle-adolescent pupils?

<sup>11</sup> What are resilient middle-adolescents' perceptions of the contribution of the school environment to their resilience?

What are the perceptions of middle-adolescents, not defined as resilient, of the contribution of the school environment to their state or resilience?

How can the comparison between these two perceptions be explained?

- 3c. What is the nature of the effective proximal interaction processes which contribute to a competent development of not-resilient middle-adolescents in the school environment?
- 4a. What is the relationship between the perception of the home situation and the school environment for resilient middle-adolescents?
- 4b. What is the relationship between the perception of the home situation and the school environment of not-resilient middle-adolescents?

The answers to these questions provided material for the Grounded Theory, which was developed on the basis of the final coding system. Accountability was achieved through ongoing consultations with colleagues and supervisors. The results of the analysis and the Grounded Theory, which was developed on the basis of these results, are presented and discussed in Paragraph 5.5. The transcribed interview quotes in the text have been translated from Dutch into English and have been adapted for readability, not content.

## 5.5 RESULTS

### 5.5.1 INTRODUCTION

The results of the qualitative analysis can be divided into general results and results at the school-specific level (Stake, 2006). The discussion of the results had been divided as follows:

- In paragraph 5.5.2, the general similarities and differences in the *needs* for resilience promoting factors of resilient and not-resilient participants at all school sites are discussed. Thereby it is discussed how, at the school-specific level, the presence of resilience promoting factors are *experienced* by both groups of participants at the different school sites.
- In paragraph 5.5.3, the general differences in the experience of resilient and not-resilient participants are explained on the basis of their *differences in access* to resilience promoting factors in the school environment. At the school-specific level, examples are provided of these differences in access.
- In paragraph 5.5.4 it is generally discussed how the differences in access to resilience promoting factors pose *specific requirements* to the school environment for contributing to the resilience of both resilient and not-resilient participants. Furthermore, at the school-specific level it is discussed how the specific school sites *have contributed* to the resilience of both resilient and not-resilient participants by their interaction processes.
- In paragraph 5.5.5, the differences in access are explained by discussing the *relationship between the home environment and the school environment*.

The results first discuss, per theme, the interview data of resilient participants and then the interview data of not-resilient participants.

### 5.5.2 NEEDS FOR RESILIENCE PROMOTING FACTORS IN THE SCHOOL ENVIRONMENT

#### 5.5.2.1 Introduction

The needs of resilient and not-resilient participants for resilience promoting factors in the school environment to develop themselves competently do not differ in *content*.

This content can for both groups be divided into two categories: The need for *safety* and the need for *good education*.

Resilient and not-resilient participants do differ in the *degree in which* and *the ways in which* they *have a need* for safety and good education and in the degree in which and the ways in which they *experience safety* and *good education* in their school environment.

The three school environments differ in the *ways in which* and *the degree in which* they contribute to the *experience* of *safety* of both resilient as well as not-resilient middle-adolescents.

The three school environments do not differ in *the ways in which*, but do differ in *the degree in which* they contribute to the experience of *good education*. Within the three school environments, differences can be identified in the degree in which different teachers contribute to the experience of *good education*. The differences and similarities are described and explained in this paragraph.

#### **5.5.2.2 Safety**

Resilient participants provided more examples than not-resilient participants of the way in which they *experience* safety in their school environment. Not-resilient middle-adolescents provided more examples about how they *would want* the school to contribute to safety. The following categories in which the school environment *might contribute* to safety can be distinguished according to both resilient and not-resilient participants:

- Through the attitude and the behaviour of teachers;
- Through the attitude and the behaviour of the rest of the school team;
- Through the attitude and the behaviour of fellow pupils; and
- Through the relationship between the school environment and external organisations.

##### 1) Safety and Resilient Participants

###### *School environment 2*

School environment 2 contributes to the feelings of safety of resilient participants:

- By being present immediately during a fight or a different “problematic situation”;
- Because all teachers and the janitor know all the pupils’ names;
- Because the janitor keeps a record of who is present and who is absent;
- Because the adults in the school environment keep an eye on how all the pupils are doing.

Participant 326-S2-C4-F-R:

Yes, whenever there is something going on then they get right to it. They talk about it. For instance, when you are sick and you do not report it, they will call right away. (...) And a lot of schools don't do that. ... And if you were to skip school they will know right away. (...) Yes, like the janitor, he knew everybody at school. It was insane. Each kid, who they hang out with, I thought that was just very, very smart. They know who is not there and who is there. And he just knows all the faces. (That is important) because you know where you can go. Because they know you. If there is something then you could tell what's going on to each teacher because they know you anyway. They know who you hang around with and I think that's just so smart! (...) And not just two teachers, no, everybody!

Participant 326-S2-C4-F-R also indicates *why* the attitude and the behaviour of the teachers and the janitor are so important: Then you know where you can go if you have a problem. “Being known” and “seen” is for the resilient participants in School environment 2 a resilience promoting factor because it gives them a feeling of safety.

### *School environment 3*

In the analysis of the interview data it turned out that the resilient participants from School environment 3 could describe the most different ways in which they experience *safety* in their school environment:

- By setting clear rules;
- By checking on pupils;
- By expressing trust;
- By motivating the pupils;
- By letting all pupils cooperate;
- By knowing all the pupils;
- By intensive contact with external organisations such as community centres and police.

Examples of the ways in which School environment 3 contributes to the feeling of safety of the resilient Participant 522-S3-C1-F-R are: *teachers talk about themselves, the school environment sets and maintains clear rules, the school environment checks the pupils, adults in the school environment express trust in the pupils, adults in the school environment motivate the pupils and adults in the school environment let all pupils cooperate:*

We are not just only doing our own thing, they (the teachers) also talk about what they're doing and how they feel and what they always did and what they did at home. (...) And that is how you get to know more about a person (...). You find out what it is he is thinking, what has all happened. And then you also know what his weakness is. For example, when somebody is divorced then you know "Don't talk about divorce with him. That might hurt him". You feel really safe like "You have a weakness and I have a weakness, so yes, we are not all perfect".

(...)What they want is that everybody always feels at home and that there is no gossiping about a person. And then they say during mentor hours: "Tell us what's up". "How are the marks, how is work, how are the classes, how are the teachers, are there problems?" and then you think "Not only I am doing my best, but my mentor is too!" (...) The mentor says "You can always come to me; I'm your mentor, that's what I am here for".

(...) And they are constantly around us, during the breaks... For instance, when you are at break then you will always see three, four teachers walking around and then they come to your table and then they talk. There are also janitors walking around.

(...) They (the teachers) are also befriended with everyone, also with the janitors. (...). They have rules like 'not outside the gate' and 'don't bring anyone to school' because they want to keep it safe. We don't want any fights. (...) That works too, because every time you are near the gate (...) they will ask "In which class are you, what is it you need to do?" And then you say "I am in this class and I have to go to gym". And then they really remember and they will really check. And then you can go and when you return, they will ask "Where are you coming from?"

In each class you have a pupil confidant. That is, so to say, where you can go. And that is anonymous. For instance "I have a problem, then I will go to my pupil confidant, then we will talk together..." (...) If I need a pupil confidant, then I think "It is one of my classmates, I've known her for so long, so yes, I already trust her, so yes, why would I worry about it?". (...)

But, most of the times, they are also working on "Getting along with everybody". Because, before it was really like "Moroccans here, Turks there, the boys there". (...) Everybody their own corner. And they did not think that was good and then



they made sure that we all got along with each other and such. ... They would give us assignments and they would mention names with that and with those you would cooperate. (...) The boys and girls together, different cultures together... You would think "Do I have to cooperate with you?!" But then you really learn to know each other. Then they are different than expected. And that is really going well now, because now we sit with Surinamers, boys, girls, Turks and we really sit together, having fun talking and such (...). And then are the teachers real happy, like "hey, we did it!"

*The relationship between teachers and pupils, the clear rules, the maintenance of the rules, the involvement of the school team with the pupils and the friendly relationship between teachers and others in the school team ensure a feeling of safety by Participant 522-S3-C1-F-R. One of the reasons for this is that, according to Participant 522-S3-C1-F-R, in this manner pupils note that not only they are doing their best, but the mentor and the rest of the school team are as well. Because the school team gives fellow pupils the responsibility to help each other and connects the function of "pupil confidant" to this, a safe environment arises as well. Furthermore, Participant 522-S3-C1-F-R experiences that School environment 3 organises activities which require pupils to cooperate with fellow pupils whom they would not choose to cooperate with themselves. By having pupils experience "mixed" cooperation, pupils learn to get to know fellow pupils that they would not know "at their own initiative". This results in less of a division among the pupils in groups at school and causes a feeling of safety among the middle-adolescents in School environment 3.*

The resilient Participant 519-S3-C3-M-R illustrates how School environment 3 contributes to his feeling of safety by knowing all the pupils and by intensive contact between community centres and police:

He (the pupil coordinator) also helps you with problems. Like "You can always come to see me". For example, if you had an argument. He knows us like no other; he just knows who provokes an argument and who is just the tough one; who always wants to beat up people. And if he, for example, hears my name, then he already knows what kind of person that is. If he, for example, hears: "Participant 519-S3-C3-M-R has done this, he broke something", then he knows that there has to be a reason or that it was an accident.

If someone has done something outside of the school, then he is picked up at school by the police the next day. Most of the times the pupil coordinator will be there too. (...) If something happens outside of school, then the school always finds out. (...) I know someone who was not in school for three months. He was in jail. And the school of course finds out right away, after three months. And

school has helped with that as well. (...) By talking to the police and to investigate why it happened and whether it was within the school. (...) The director of the community centre really finds out everything. Whether it is in the neighbourhood, or in the school, he finds out everything. He was here yesterday. He goes to school twice a week. See how it is going. (...) I also work in a supermarket. (...) Because I was offered it via the community centre. Many pupils from the neighbourhood were offered that. He thought "I rather have them be outside less". (...) That you notice "It is going well with them, I hope that they do not go in the wrong direction".

For Participant 519-S3-C3-M-R, being "known and seen" also ensures a feeling of safety and of feeling "at home" in School environment 3. This "feeling at home" is mentioned by most of the resilient participants in School environment 3. Apparently, school environment 3 has intensive contact with the police and the community centre in the neighbourhood of the school. The feeling that one keeps an eye on the pupils and the feeling that the school and external organisations are aware of what is happening to the pupils, contribute to the feeling of safety of the resilient Participant 519-S3-C3-M-R. Furthermore, the contact between the school environment and the community centre offers extra chances for a competent development because pupils are offered jobs. Not only do the pupils earn money this way, they learn new responsibilities and they are less "outside" in the street so that they are less exposed to potential risks.

Analysis of the interview data led to the finding that one cannot speak in unambiguous terms about the way in which a specific school environment contributes to the safety of middle-adolescents. It does show that general school factors can be identified which middle-adolescents find important to be able to develop themselves competently in the school environment. However, per person, these factors turn out to be experienced to a different degree, in different ways in different schools. The resilient Participant 487-S3-C2-F-R from School environment 3 makes a distinction between her current and her previous mentor. Her previous mentor contributed to her experience of *safety* while her current mentor doesn't. Her current mentor deals very differently with the class than her previous mentor:

My previous mentor you could simply trust. ... He would involve you in everything. And he would also listen to you. Yes, you can not do that with my current mentor, because he would laugh at you or something like that, those sorts of things.

Participant 487-S3-C2-F-R believes her current mentor “can’t be trusted”. That is why she will not tell him anything. He would laugh at her.

#### *School environment 5*

School environment 5 appears to contribute to the safety of resilient participants:

- By the way in which teachers teach;
- By the presence of school counsellors;
- By the rules that the school uses when dealing with conflicts between pupils.

An example of the way in which School environment 5 contributes to the experience of safety by the resilient Participant 547-S5-C2-F-R is by the way in which teachers teach, resulting in a good atmosphere in the class. In response to the question why things are going well at school for her she answers:

Simply, by having a good atmosphere in the class; that I can deal well with the children from my class and such. If I don't understand something that I can ask another pupil about it. (...) Yes, it depends on the class we are having. For example, when we have Dutch language class then the teacher is also very nice and then yes, if the teacher is nice, then, right away, the atmosphere in the class is also fun (...) If the teacher is, for example, angry then you can forget about it, then you are not even allowed to talk.

Because the teacher is nice, the atmosphere in the class is good and the children in the class get along better with each other than when the atmosphere is not good. If the atmosphere is good, then you can ask other pupils questions.

The resilient Participant 552-S5-C2-F-R illustrates how School environment 5 contributes to safety by the presence of a school counsellor:

That is a mentor who stimulates you and assists you with certain things, for example, if you have problems at school. Then you can go there and she will help you with it... And when you have to get your report or marks, you have to go see her. Then she will discuss the bad marks and the good marks with you and she will also stimulate you to go take extra classes, and then she will make an appointment for you. And if it goes bad at school she will call up my parents and make an appointment to talk with them. That is, so to say, a school counsellor. You could say that she helps you when you are in trouble. Yes, I also believe that my school counsellor understands me better than other teachers. ...(...) .... Yes, she listens carefully to me and she then agrees or disagrees; tells me whether I am wrong or whether I am not wrong. And then she will say “We will solve it together”. Or we will go to the person and then we will offer our apologies. Then that is solved again.

A school counsellor contributes to the experience of safety by listening, stimulating, assisting pupils in solving problems, helping pupils and by regulating the behaviour of pupils through pointing out the things that they are doing right and wrong.

The resilient Participant 552-S5-C2-F-R illustrates furthermore how School environment 5 contributes to her experience of safety by the way in which she deals with conflicts:

When a conflict happens during lunch break, you have to go to Mr. S. or Mrs. B. (...) For example, after a fight or an argument or whatever. What I like is that they come to you right away. They say "Stop it!" "That will get you nowhere". And then they say "I want to talk to you in the office". Then you have to go with her. Then we have to wait a while and then we have to come in and then we have to talk it out. She will ask you "Why are you doing this?" So, why we are fighting and what the reasons really are. (...). And then we have to talk it out.

Immediately after a conflict, middle-adolescents in School environment 5 are put together to talk out the conflict. During that, they are asked for the reasons for their behaviour. They are encouraged to reflect on their own behaviour and are encouraged to show different, alternative behaviour by having to talk about the conflict until it is resolved.

## 2) Safety and not-resilient participants

Not-resilient participants express the same *need for safety* in the school environment, but express the way in which they *experience* this safety less. They express this need for safety especially in terms of what they are missing in the school environment:

- A Positive attitude towards pupils;
- Help to pupils with homework;
- Fairness;
- Mentioning what pupils are doing right besides what they are doing wrong;
- Teachers who remain calm;
- Noticing pupils who are not present and involving them with the school.

### *School environment 2*

The not-resilient Participant 327-S2-C1,C2/3-M-NR illustrates this need after he quit school prematurely. He has not experienced the safety that the resilient Participant

326-S2-C4-F-R did experience in School environment 2. The not-resilient Participant 327-S2-C1,C2/3-M-R appears to have different or more needs than School environment 2 offers regarding safety. To the question as to what his school environment could have done to contribute to his completion of school education, he says:

If it had been a somewhat friendlier school. And somewhat more positive. More helpful. Not so stingy. (...) That they would have helped me more with things.

(...) Yes, not always so negative like "Yes, you always do that..." Also do positive things sometimes. (...) Make no distinction between kids, treat everyone the same. Pay close attention to who does what wrong instead of just punishing someone... (...)

Not becoming so angry and punish way out of proportion. That does not help anyway. (...) Not start screaming. I just think that is one of the biggest mistakes a teacher can make. Scream. (...)

And if someone does something right then you should also say, "That was right" you know. I do think you should reward someone for what he does. And not just punish (...) but also reward for what he does well. Because people do notice what they are doing wrong, but they do not notice what they are doing right. When someone is sitting quietly say: "You do that right". (...) That they won't say.

I do think teachers should be able to notice children that need their help, need someone to talk to.

The aspects that the not-resilient Participant 327327-S2-C1,C2/3-M-R missed in School environment 2 can be interpreted as a need for safety. *The offering of help, fairness, not getting angry and screaming and giving useless punishments, mentioning what someone does well and noticing children who need someone to talk to.* The not-resilient Participant 327-S2-C1,C2/3-M-R has the same need for safety as resilient participants have. He has not experienced this safety in School environment 2. Therefore, he does not believe that School environment 2 has contributed to his competent development and, thus, to his "resilience".

### *School environment 3*

The lack of a positive attitude by the teachers in School environment 3 experienced by the not-resilient Participant 479-S3-C3-F-NR contributes to her feeling of not wanting to go to school anymore lately. Her need for safety in the form of "Getting to hear

what you are doing right besides what you are doing wrong” appears not to have been fulfilled by School environment 3.

Frankly, I do not feel like school at all lately. (...) It is just not going so well at school. (...) Because they are always negative about me every time there is a report consultation. Then I think “Then I rather not go to school”.

The reason that Participant 479-S3-C3-F-NR has not felt like going to school anymore lately is because she experiences a negative attitude from the teachers towards her. Motivation to go to school is apparently related to the appreciation a pupil gets from teachers.

#### *School environment 5*

For her competent development, the not-resilient Participant 573-S5-C4-F-NR did have a need for teachers and adults in the school environment to notice that she was never present (aspect of safety) in School environment 5. However, they noticed this too late, after she had already missed too many classes to be able to pass. To the question whether the school could have done something to prevent her from having to repeat a grade she responds:

I do not know what the school could have done. Because they also only found out late themselves of course. I think that, had they thought logically, they could have found out. If I had really been sick and if I really did stay home, then you would have heard that from the voice of my mother and from the voice of my friend. Those two voices are easy to distinguish. And they were too dumb for that. Or I would call myself and you should easily be able to hear that too.

The aspects the not-resilient Participant 573-S5-C4-F-NR missed in School environment 5 can be interpreted as a need for safety. Fact is, that Resilient Participants experience it as contributing to safety that all teachers know the names of all pupils, that they know who is and who is not present and that they know how the pupils are doing. Despite, or possibly because of her own behaviour Participant 573-S5-C4-F-NR had an extra need for the school environment to notice her absence and to involve her with “school”.

#### *Summary*

An enumeration can be made of the ways in which “School” *can contribute* to the feeling of safety of middle-adolescents. Middle-adolescents experience safety in the school environment when:

- Adults in the school environment set clear rules;
- Adults in the school environment check on the pupils;
- Adults in the school environment express trust in the pupils;
- Adults in the school environment motivate the pupils;
- Adults in the school environment let all pupils cooperate;
- Adults in the school environment know all pupils by name;
- The school environment has intensive contact with external organisations, such as community centres and police;
- Adults in the school environment are positive towards pupils;
- Adults in the school environment are immediately present during a fight or a different “problematic” situation;
- Adults in the school environment keep track of who is present and who is absent;
- Absent pupils are being involved with school;
- Adults in the school environment keep an eye on how all the pupils are doing;
- Pupils are helped with homework;
- Adults in the school environment are fair towards the pupils;
- Adults in the school environment mention what pupils are doing right besides what they are doing wrong;
- Teachers remain calm when pupils misbehave;
- Teachers teach in a captivating way;
- Individual School Counsellors are present;
- The school sets clear rules for dealing with conflicts between pupils.

However, the actual *experience* of safety is partly dependent on the middle-adolescents themselves. A notion has been formed that resilient middle-adolescents *experience* safety in their school environment in more different ways and more often than not-resilient middle-adolescents. How these differences in *experience of safety* can be explained is discussed in Paragraph 5.5.3. Prior to Paragraph 5.5.3 it will be discussed how the need for good education by both resilient and not-resilient participants is worded and experienced in their school environment.

### 5.5.2.3 Good education

According to both resilient and not-resilient participants, the following categories in which the school environment *might contribute* to good education can be distinguished:

- By high expectations;
- By captivating education;
- By strict teachers;
- By clear consequences;
- By assisting;
- By helping;
- By being focused on learning.

The analysis of the interview data showed that the participants are of the opinion that the quality of education depends on the teachers. At each school, teachers could be identified who did not provide good education and teachers who did provide good education. The resilient participants showed to be less *dependent* on good education for their successful development than the not-resilient participants. For the not-resilient participants, the way in which a teacher teaches turned out to be the determining factor for their accomplishments and their behaviour. The actual *experience* of good education differs for resilient and not-resilient participants in different school environments with different teachers.

#### 1) Good education and resilient participants

##### *School environment 2*

The ways in which some teachers in School environment 2 contribute to *good education* according to resilient participants are:

- By explaining everything well;
- By knowing much themselves;
- By telling a lot about themselves;
- By providing the elbow room for finding peace during the class.

#### Participant 326-S2-C4-F-R

During the first two years we had a different teacher and then I did not understand anything. All she did was scream. And last year and this year we got a



new teacher. And she explains everything very well. And it is just very easy with her. She is very nice. She lives very much in our times, so to say. She knows how we feel. (...) She talks a lot. Not just about English, but also about what is happening in society. And how she feels about things. For example, she just had a baby and she is going to bring it to school one of these days and we are also allowed to do a lot of fun things. A while ago we played music of Jantje Smit, she does not like that at all, but still she let us do it. (...) Yes, you could say she knows everything. All teachers do, but with her it comes more to the surface I think. She, it just seems like she knows all dictionaries by memory.

Our math teacher. I think he explains well. (...) We learn a whole lot. He explains a lot verbally, in front of the and we are also allowed to watch movies in between, for finding peace within ourselves, he says. Simply, for us not to have to think about math for a while. At least that is how I see it. He says, so to say, "for fun".

Some teachers in School environment 2 contribute to the experience of *good education* and other teachers do not.

### *School environment 3*

The analysis of the interview data shows that different teachers in the same School environment 3 contribute to a different degree to the experience of *good education*. According to resilient participants, the ways in which teachers in School environment 3 contribute to *good education* are:

- By setting high expectations;
- By making clear that marks are important;
- By explaining learning materials and exercises until a pupil understands it;
- By teaching pupils to plan;
- By letting pupils work self-sufficiently;
- By teaching pupils to cooperate;
- By providing pupils with an overview of the school tasks

The resilient Participant 487-S3-C2-F-R from School environment 3 makes a distinction between her current and her previous mentor. Her previous mentor contributed to her experience of *good education*, while her current mentor doesn't:

(With my previous mentor) we were encouraged. In the second year, we could choose for BBL, KBL or TL direction<sup>12</sup>. So we, our class, went for TL because, yes, that is the highest. So then he said "You can do it and do your very best" and those sort of things.

Her previous mentor had high expectations of his mentor class and stimulated them "to achieve the highest". Her current mentor does not stimulate his class this way. Participant 487-S3-C2-F-R does not experience a contribution to good education from her current mentor.

The resilient Participant 522-S3-C1-F-R illustrates her experience of good education in School environment 3:

The marks are of course important and the level. (...) And yes, the teachers are just teachers. They try to teach you something. They try to help you, try to get your attention. (...) And if you need something, then they come to you and they explain things and if you still do not understand it then again and again and again. (..) And then they really try to teach you something. Yes, that is good. And it not like they are talking about your future all the time. They work like: "Today I want to teach you this and then tomorrow you have to learn this and in a week we have a test". And they try to let us work more self-sufficiently and to let us plan ourselves and make groups ourselves. And they try to have us be around other people and have us work alone.

Participant 522-S3-C1-F-R experiences that teachers believe that marks are important, that they want to try to teach them something, that they help her and explain to her until she understands, that they do not talk much about the future, but are involved with today. That they teach them to work self-sufficiently, teach them planning and to work with others. The experience of *learning something* contributes to the experience of good education for the participants in School environment 3.

#### *School environment 5*

According to resilient participants, the ways in which teachers in School environment 5 contribute to *good education* are:

- Because teachers teach in a captivating way.

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<sup>12</sup> Different levels in the VMBO (preparatory middle-level vocational education), mounting level of theory: Basis Beroepsgerichte Leerweg (Basic profession-oriented learning path), Kader Beroepsgerichte leerweg (Middle management-oriented learning path) and Theoretische leerweg (Theoretical learning path).

The resilient Participant 547-S5-C2-F-R from School environment 5 illustrates how good teachers in this school environment contribute to good education in contrast to other teachers in the same school environment:

It is really fun, when, if the teacher explains something, that he then also is involved with it. That you just feel like listening. Then you really enjoy the class. Then it also sticks with you. Yes, because then you will know it again during the tests. (...) I am talking about the Dutch language teacher.... For example, when he tells something, he will do it (in a) very strange tone, with a strange accent. Then you can laugh. (...) Not that he is sitting all boring in front of the class. When he talks with his hands crossed, half of the class does not listen.

It was revealed that teachers can contribute to the experience of good education by teaching in a captivating way. In School environment 5, the experience of “learning something” also contributes to the experience of good education.

## 2) Good education and not-resilient participants

Besides the need for captivating teaching and high expectations, not-resilient participants appear to have a need for strict and clear teachers. They appear more dependent than resilient participants on the skills of teachers to:

- maintain order during the classes;
- provide a clear explanation of the teaching materials;
- provide assistance in working with the teaching materials;
- connect clear consequences to not participating in the education or not doing the homework.

### *School environment 2*

The not-resilient Participant 327-S2-C1,C2/3-M-NR had too little *good education* experience to be able to obtain his diploma in School environment 2. In his expressions about the way in which this school environment could have contributed to his successful development, the needs for assistance and structure can be recognised:

They (the teachers) should provide for extra time for the homework. Or, for example, in each class, everybody has to (...) show what he has completed. And, for example, say “I think that this week you should have done this and that and this week this assignment” But they just say what you should do and on the day that it should be finished, it has to be finished whether you understand it or not...I think you should provide assistance. (...)

Participant 327-S2-C1,C2/3-M-NR has a need for clarity and structure. This need for structure is illustrative of the need of several not-resilient participants from the same school environment and from different school environments than School environment 2.

### *School environment 3*

The not-resilient Participant 479-S3-C3-F-NR from School environment 3 illustrates her need for peace and strict teachers:

(...) Well, teachers who are strict, just allow me to concentrate more. Those teachers with whom, if you open your mouth just once, you will have to get out of the class with a red card. Teachers who say "Next time you will have finished this and that and, if you have not finished it, then you will not get in".

### *School environment 5*

The not-resilient Participant 573-S5-C4-F-NR from School environment 5 illustrates how she experiences good education with a teacher in her school environment by the structure and clarity in his classes. She compares this teacher with a teacher who does not provide this structure and clarity. To the question who she thinks is a good teacher, she answers:

My math teacher. He is also the adjunct-principle. That will make you be quiet. (...) Yes. That look in his eyes tells you enough. So... (...) He really looks in a certain way. Then you think "I guess I will stop this now". (...) He just explains everything very well. And especially with math that is important. (...). When he says something, most of the time, you understand it right away. I am really not all that good in math, but when he explains it, I understand it right away.

And with the history teacher you have to ask two or three times "What is it you really mean?" Or "How is that?" Or "What am I supposed to do exactly?" And with (math) you do know. It also happens that you won't understand it, but after that, you'll understand it right away.

Not-resilient middle-adolescents appear to have more need for clarity and structure than resilient middle-adolescents. Although Participant 573-S5-C4-F-NR finds the subject of math more challenging than history, she learns more of the math classes because the math teacher explains more clearly and is clearer about what he expects of the pupils than the history teacher. His "strictness" also contributes to the

peacefulness during the class. Many not-resilient participants turn out to need this. They all indicate that they learn more with a strict teacher

### *Summary*

Summarised, all participants have a need for good education. Resilient participants experience good education when *teachers teach in a captivating way* and when *they express high expectations of the class*. Besides teaching in a captivating way and high expectations, not-resilient participants also need a lot of *structure, clarity about the teaching materials* and *strict rules*. Although the not-resilient participants appear more *dependent* on structure, clarity and strictness, these characteristics of good education also contribute to the competent development of resilient participants. The resilient Participant 522-S3-C1-F-R from School environment 3 illustrates this in her vision of a “cool” (strakke) teacher:

(...) A cool (strakke) teacher is (a teacher) with whom you really feel good and with whom you can really be yourself. (...) But it is also like “Hey, you are abiding by the rules, right?!” For example, “Not this and not that, but if you do it like this, that’s O.K, as long as it is not turning into that”. And then you start thinking “O.K., then I will really keep the rules”.

Then you think “That class was really fun!”, “Next time I better show up again”. And then never be sick (...) and then you are more often at school and then you learn better and you won’t skip school, you really feel like school.... (...) Yes, you could say it is like “I am learning something, and it is fun”.

A “cool” (strakke) teacher teaches well so that you learn something, can be trusted and sets clear rules regarding what is not, but also what is allowed. The clarity of the teacher about what is desirable and undesirable behaviour contributes to the quality of the education. Furthermore, a fun way of teaching and the experience of “learning something” contribute to the motivation to go to school.

The resilient Participant 555-S5-C4-F-NR from School environment 5 illustrates how his previous “cool” (strakke) teacher for English combined *safety* and *good education* in her teaching. His current teacher English does not make this combination and is merely strict:

The fact that we were joking around and that the teacher sometimes addressed that we had to cut it out. And the classes. Those were just much more relaxed. When you were done with your assignments then you could just talk or work on a different subject. (...) The way in which she taught. Simply in a fun way by

making jokes in between. The joy she had in teaching us. By how she was with us. She dealt much better with us than the teachers now. By laughing with us, by letting us have the freedom to make jokes, by talking, so that we enjoyed it. The atmosphere she determined, really. By watching us, how we behaved... how we treated each other, the way in which we worked. That was how she set the atmosphere in the class. For example, if we were too noisy and wouldn't work, then the atmosphere was bad. (...) By just saying "Dead silence now or otherwise you can leave and write your detention work. And then everybody was quiet. (...) And if we were joking and at the same time did work, then the atmosphere was a lot of fun. (...) And if the atmosphere was good, (if we just worked) then she would do nothing, really, then she would just let you talk, as long as you were doing your assignment. Then she would just leave you alone.

The secret of fulfilling the needs of middle-adolescents in the school environment appears to be for teachers to teach in a captivating way, to enjoy teaching, to have clear rules about what is and what is not allowed and, at the same, provide elbow room for creating good contact between teachers and pupils and allow pupils to quietly speak among themselves. Figure 5.5 presents a summary of the ways in which the school environment, according to both resilient and not-resilient participants, *might* contribute to their resilience by offering safety and good education. The figures 5.6, 5.7 and 5.8 present summaries of the ways in which the specific school environments, according to resilient and not-resilient participants, *contribute* or *do not contribute* to their resilience:

Figure 5.5 Ways in which the school environment can contribute to resilience of urban middle-adolescents with a low SES

Safety	Good education
<p>There are clear rules in the school; The school team checks on the pupils; It is recorded who is present and who is absent; There is an immediate intervention with a fight or a different “problematic situation”; The school has intensive contact with external organisations, such as community centres and police.</p> <p>The school team can be trusted and the school team expresses trust in the pupils; Pupils are known; The school team knows the names of the pupils; The school team has a positive attitude towards pupils; The adults in the school environment keep an eye on how all the pupils are doing; Teachers are fair towards pupils; Teachers mention what pupils are doing well besides what they are doing wrong;</p> <p>Teachers remain calm when pupils show wrong behaviour; Pupils have a personal school counsellor or mentor; Pupils learn to cooperate; The school team gets along well with each other; During the class, teachers offer elbow room for informal conversations between the pupils and between teachers and pupils.</p> <p>The school team motivates the pupils; The pupils are helped with homework; By teaching in a captivating way, the atmosphere in the class is good.</p>	<p>Teachers are strict, Teachers are clear; Teachers connect consequences to not participating in the education; Teachers keep order during the classes.</p> <p>Teachers and mentors have high expectations of the pupils; Teachers and mentors underline that good marks are important; Teachers teach in a captivating way.</p> <p>Pupils are assisted in doing homework and learning subject matter; Teachers offer room for asking questions about homework and subject matter; Teachers clearly explain the subject matter; Teachers offer extra time for homework; Teachers provide an overview of school tasks; During assignments, teachers regularly evaluate how the pupils are getting on and offer help towards their progress with the homework; The pupils learn to plan their work; The pupils learn to work self-sufficiently.</p>

Figure 5.6 The relationship between School Site 2 and the experience of resilience promoting factors

School Site 2		
	Safety	Good education
<b>Resilient participants experience the following resilience promoting factors:</b>	There is an immediate intervention with a fight or a different “problematic situation”; All teachers and the janitor know the names of the pupils; The janitor records who is present and who is absent; The adults in the school environment keep an eye on how all the pupils are doing.	Some teachers in School environment 2 contribute to the experience of <i>good education</i> : <ul style="list-style-type: none"> <li>- By explaining everything well;</li> <li>- By knowing much themselves;</li> <li>- By telling a lot about themselves;</li> <li>- By providing the elbow room for finding peace during the class.</li> </ul>
<b>Not-resilient participants</b>	Not-resilient participants in School environment 2 do not connect the factors mentioned by resilient participants to <i>safety</i> . They miss the following in School environment 2 to experience <i>safety</i> :  Positive attitude of teachers; Help with homework; Fairness of teachers; Teachers who mention what pupils are doing well besides what they are doing wrong; Teachers who remain calm when pupils show wrong behaviour; Teachers that notice whether a pupil needs help.	Not-resilient participants in School environment 2 have too little <i>good education</i> experience to achieve their diploma in School environment 2 or are being placed at a lower level. They missed:  Extra time for homework; Offering an overview of school tasks; Evaluation of the progress of the homework; Help with homework; Learning to plan. Clear explanation of the teaching materials; Assistance with working with the teaching materials; Order during the classes.



Figure 5.7 The relationship between School Site 3 and the experience of resilience promoting factors

School Site 3		
	Safety	Good education
<b>Resilient participants experience the following resilience promoting factors</b>	The school sets clear rules; The school offers control; The school team can be trusted; The school team expresses trust in the pupils; The school team motivates the pupils; Pupils learn to cooperate; Pupils are known; The school has intensive contact with external organisations such as community centres and police.	Teachers and mentors have high expectations of the pupils; Teachers and mentors indicate that good marks are important; Teachers explain the teaching materials until pupils understand them; Pupils learn to plan; Pupils learn to work self-sufficiently; Pupils learn to cooperate; Teachers provide pupils with an overview of the school tasks.
<b>Not-resilient participants</b>	Not-resilient participants in School environment 3 do not identify factors in the school environment that contribute to a sense of safety. Furthermore, they miss the following in School environment 3 to contribute to <i>safety</i> :  Positive attitude of teachers.	Not-resilient participants in School environment 3 experience good education in School environment 3 when:  Teachers are strict, Teachers are clear; Teachers connect consequences to not participating in the education;

Figure 5.8 The relationship between School Site 5 and the experience of resilience promoting factors

School Site 5		
	Safety	Good education
Resilient participants	By teaching in a captivating way the atmosphere in the class is good; Pupils have a personal school counsellor; There is immediate intervention with a fight or a different “problematic situations”.	Teachers teach in a captivating way.
Not-resilient participants	Not-resilient participants in School environment 5 miss the following in School environment 5 to experience <i>safety</i> :  Registration of who is and who isn’t present and being actively involved with the school.	Not-resilient participants in School environment 5 experience <i>good education</i> when:  Teachers are strict; Teachers are clear, Teachers connect consequences to not participating in education.

Concluding, it can be stated that resilient and not-resilient middle-adolescents have the same needs for the resilience promoting factors *safety* and *good education* in the school environment. However, not-resilient middle-adolescents are *more dependent* for their successful development on these resilience promoting factors than resilient middle-adolescents. It appears that resilient middle-adolescents are less dependent on their school environment, because they *experience safety* and *good education* in several ways.

“Learning something” is for both resilient and not-resilient participants in all school environments important for the experience of *safety* and *good education*. Not-resilient participants appear more dependent on their school environment for the experience of “learning something”. They appear to get *access to learning* solely when a teacher is strict and clear and provides a lot of structure. The differences between resilient and not-resilient middle-adolescents in their dependency on the school environment appear to correlate with their differences in access to resilience promoting factors in the school environment. These are discussed in the following paragraph.

### **5.5.3 DIFFERENCES IN ACCESS TO RESILIENCE PROMOTING FACTORS IN THE SCHOOL ENVIRONMENT**

#### **5.5.3.1 Introduction**

Resilient and not-resilient participants both show the same needs regarding *content* for *safety* and *good education* in the school environment. At the same time, they do not experience the presence of these factors in a school environment the same way. Not-resilient participants are more *dependent* on the presence of these factors than resilient participants for their successful development.

The needs for safety and good education prove to be “relational needs”. *Trust, fairness, getting help, being known* and *being seen* are a number of characteristics of the needs for safety of the participants in the school environment (See Paragraph 5.5.2). *Captivating classes, high expectations, structure, clarity and rules* are a number of characteristics of the needs for good education of the participants in the school environment. The relationship between a certain participant and the school

environment appears to determine whether the experience of *safety* and *good education* is established.

The comparison between the behaviour and the attaching of meaning of both groups of participants shows that they, with the meaning they attach to situations and persons, introduce different forms of behaviour in the school environment. With their behaviour, they do or they don't gain access to resilience promoting factors and thereby they do or they don't contribute to fulfilling their own needs.

In this paragraph it is discussed how the attachment of meaning and the behaviour of resilient and not-resilient participants differ. Firstly, internal resilience qualities will briefly be discussed, which appear to influence the meaning that adolescents attachment to situations and persons. Secondly, how the resilience qualities are expressed in their behaviour and how their behaviour is related to getting access to the resilience promoting factors *safety* and *good education* will be discussed.

#### **5.5.3.2 Resilience Qualities in Middle-Adolescents**

The analysis of the interview data led to identification of resilience qualities that can be divided into three “main qualities”: *Having Overview*, *Having Insight* and *Having positive future expectations*.

##### *Overview*

The resilience quality of “having an overview” relates to the degree to which a participant “oversees” the school environment in terms of *school tasks, mechanisms and patterns in behaviour of people in that environment; expectations regarding one's own behaviour; situations that may arise in the school environment; risks for one's own development that may be present in the school environment; and the presence of potential resources to assist one's own development*.

##### *Insight*

The resilience quality of “having insight” relates to the degree in which a participant has insight into his or her own actual abilities and skills to deal with situations and possible problems or risks.

### *Positive future expectations*

The resilience quality of “having positive future expectations” refers to the degree to which a participant trusts and has a “faith” in the improvement of a situation after a problem or risk has occurred, and of the benefits to be gained by making an effort to deal with a problem or risk.

The large degree in which resilient participants possess these resilience qualities provides them with a strategic approach to their school environment. This strategic approach can be distinguished from the less strategic approach of not-resilient participants as follows:

*Resilient participants “play” with their school environment. The school environment “happens” to the not-resilient participants.*

The way in which these resilience qualities are related to gaining *access* to the *experience* of *safety* and *good education* will be discussed in the following paragraph.

### **5.5.3.3 Assigning meaning to challenging events and actors based on various Resilience Qualities**

The needs for *safety* and *good education* contribute to the experience of challenging events for both resilient as well as not-resilient participants. There are factors and events in the school environment which could limit the experience of *safety* and *good education*. Resilient and not-resilient participants differ in the ways in which they attach meaning to these factors and events. Their way of giving meaning differs in the degree in which it shows *overview*, *insight* and *positive future expectations*, such as discussed in the previous paragraph.

The differences in the way they attach meaning to situations and actors in their environment prove to contribute to differences in behaviour in the area of factors and events which could limit the experience of *safety* and *good education*. This meaning attachment and behaviour are illustrated by means of challenging events in the area of:

- 1) Gaining access to *safety*:

- *Dealing with negative influence of peers: bullying and fighting;*
- *Choosing friends;*
- *Creating and maintaining constructive relationships with adults;*

2). Gaining access to good education:

- *Being present at school;*
- *Participating in the classes;*
- *Doing homework.*

1) Gaining access to safety:

*Gaining access to safety. Dealing with negative influence of peers: bullying and fighting*

As discussed in paragraph 5.5.2, trust among fellow pupils and a good relationship with fellow pupils contribute to the experience of safety in the school environment. At each school and in each class, with both resilient and not-resilient participants, arguments between fellow pupils are observed. Furthermore, both resilient and not-resilient participants notice that pupils are bullied and that pupils are provoked to fight. Both resilient and not-resilient participants indicate that they have been bullied once or have fought at times. These situations turn out to contribute to the experience of unsafeness in the school environment. Therefore, the constructive dealing with this negative influence of peers forms a challenge for both resilient and not-resilient participants.

*Dealing with bullying and fighting: Resilient participants*

Resilient participants show *overview* of the mechanisms and patterns in the behaviour of fellow pupils in regard to bullying and fighting. They show *insight into* their own opportunities and skills to deal with bullying or fighting and they have *positive future expectations* of the “gains” of their own constructive behaviour in regard to bullying or fighting.

*School environment 2*

The meaning which the resilient Participant 330-S2-C1-F-R from School environment 2 attaches to the challenge of dealing with negative influence of peers, is illustrative for the meaning of several resilient participants. She looked at her bullying experience

from a distance, with the result that she started to recognise a pattern in the bullying. By recognising the pattern, she appears to be able to ignore the bullying:

(...) Yes, I never really had a big reason for not wanting to go to school. One day they would bully me and the next day they had forgotten about it again and then it would not happen for another three weeks. (...) And then it would start again and that is how it kept going. In the course of time it has become less and less until it is normal now. (...) I started to think about it myself... In the first (class), you care what everybody thinks. But now I know everybody, I know everybody at school and I know what they are like. (...) And every now and then, something is still said about it (my appearance). But then I think: "Never mind, they have been whining to me for three years and now I don't give a shit anymore". (...) And yes, I just don't listen to it anymore; let them do it, whatever.

Participant 330-S2-C1-F-R shows having *overview* of the challenge of dealing with negative influence of peers. She sees in this challenge the mechanism of bullying: they bully me and the next day they will have forgotten about it. She now knows everybody at school and, as a result, she is able to estimate what they are like. She shows *insight* into the actual skills that she has in order to deal with the situation: by not reacting to the bullying, the bullying will slowly stop. Her *positive future expectation* is that, after a day of bullying, she will not have to deal with it for the next three weeks.

### *School environment 3*

The meaning which resilient participants from School environment 3 attach to negative influence of peers, is also illustrative for the *overview* of the mechanisms of "looking for an argument" and bullying:

Participant 488-S3-C2-F-R:

I do not pay too much attention to it, but I think in principle there is a doormat in each class. (...) Yes, those children are just teased about everything they can come up with, for example, pushing up against somebody. (...) But that happens in every school, whether you are in elementary or high school, even at work there will always be somebody who is a doormat. They are just looking for someone to blame. But I think it is also about jealousy. When one has something that the other also wants. (...) I guess there will be more reasons, but why somebody is bullying you will never know. (...) Their answer always is "I do not like that person". In principle it's always about something else. (...) I really think that they do like that person, but that they would like to be that person. That's what I think. (...) That's what I think, I do not know for sure, that's why I never bully. (...) Either I help, or I'm like "I'm not getting involved". (...) Most of the time I do not

get involved, because then it is I who did it. I don't want that to happen. Then I will be next. But if you let that person tell their story then you are already helping that person. Then you often help this person more than if you are going to get involved. Because then that person might only be bullied more.

The resilient participants give the impression that they have *overview* of the mechanisms of bullying and looking for an argument. These mechanisms can be summarised as:

Pupils look for someone to blame or someone to bully without having a clear reason for it. They have a big mouth and they act very tough, but it really isn't all that bad. If you are affected by what other pupils think of you or say about you then you will get into an argument much faster. The risk of getting into arguments is that you don't achieve anything with it and that your positive relationships with people are disturbed because of it.

The skills and opportunities they identify within themselves (*insight*) to prevent these risks are “not getting involved with arguments and not being disturbed by what other people think of you”, “focus on school”, “focus on positive relationships with people” and “support pupils who are being bullied”. Their *positive future expectations* of the gains of their efforts in dealing with negative influence of peers in the area of bullying and fighting are reaching the goals that they want to achieve in the future.

#### *School environment 5*

In the same way, the resilient participants from School environment 5 appear to have *overview* of the mechanisms of bullying and the provoking of arguments and appear to have *insight* in the ways in which they could be able to deal effectively with bullying and have *positive future expectations* of the gains of their efforts in dealing with these mechanisms in a constructive way:

Participant 555-S5-C4-M-R:

Someone who brags, bullies or whatever I do not respect (...) I think it was in the first grade when someone was being bullied. The only thing I did was not talking to him. As long as he doesn't have an audience, he will not do it anymore. The smaller the audience, the least bullying there will be. (...) I do not like fighting much. I mean, what are you going to achieve with that? That you are the



strongest or something...No, I do not like that. (...) Yes, for example, they start bullying somebody or dissing them, so that the other guy gets angry and then he will say "What's your Problem?! And yes, that is just provoking. But when there alone then they won't do that. Only if they are in a group. (...)They don't provoke me. They just know that I won't react. Yes, because they know me well and I know them. Then they won't do that sort of thing. (...) Yes, if someone doesn't react, why would you then bully someone? (...) The whole idea (for bullies and fighters) is to get attention and to get respect.

All resilient participants appear not to bully or to provoke others. The *overview* of the mechanisms of bullying and fighting seems to contribute to the resilient participants' *insight into* the right skills to ensure that they are not bullied and are not provoked to fight. Their insight appears to contribute to *positive future expectations* of the experience of safety in their school environment. Their *overview, insight and positive future expectations* appear to contribute to their access to the resilience promoting factor of *safety* in the school environment.

#### *Dealing with bullying and fighting: Not-resilient participants*

##### *School environment 2*

The meaning which the not-resilient Participant 327-S2-C1,C2/3-M-NR from School environment 2 gives to events and persons in the area of bullying and fighting is illustrative for a meaning, which shows little *overview, insight and positive future expectations*.

(...)Then (...) I was not sticking up for myself a lot. And then I knew that he wanted to hit me. And I thought "If he starts hitting me, then I will just close up again, so I have to find a solution so that he won't hit me". (...) In those days I was not doing all that well. Then I took a knife from the drawer and I put that in my bag. Then I went to school. Then he came to me (...) and then he said "Now what?" So I say "Fuck off!" Then he wanted to start hitting me and then I grabbed that knife from my bag and then I threatened him. Then he said: "If you stab me now then I will call all my friends and after school they will be standing there at the door with a 9mm". I said... that might just be a wild story, but suppose that it is really true?! So yes, I started calling right away, the whole phone list on my mobile. The only one who answered was a friend of mine. But I did not want to ask her to come. Yes, I wanted to call my stepbrother as a last resort, because I rather not call him when I have problems, because he has a "borderline"-condition. So that can really get crazy and then it will really get out of hand. But yes, the only one who answered then was my stepbrother...

Ultimately the threat of the fellow pupil turned out to be a false threat and his stepbrother showed up at school showing a lot of aggressiveness for no reason.

The not-resilient Participant 327-S2-C1,C2/3-M-NR estimated the threat of a peer as very serious. *Overview* of the situation as a whole, with the actual risks and resources visible, appeared to be lacking. The mechanism of “ignoring bullying”, which was identified by many resilient participants is not recognised by Participant 327-S2-C1,C2/3-M-NR. He appears to have a *future expectation* of “closing up” and “being beaten”, but not towards “gain” by not reacting to the challenge. Participant 327-S2-C1,C2/3-M-NR appears to have little *insight* into his own abilities and skills to deal with the challenge in a way that a certain “gain” might occur. He seems dependent on an external “solution” to occur, and this is unfortunately coming from the person from whom he really does not want to get help.

Other not-resilient participants from the different school environments indicate reacting to the challenges of fighting, provoking others to fight, or bullying others in the school environment.

#### *School environment 2*

With regard to the above, the not-resilient Participant 331-S2-C4-F-NR from School environment 2 says:

(...) Well on Wednesday last week I heard from a girl that another girl liked my friend. But I have been dating him for more than a year. But I just did not like it (...) so on Monday I went over to that girl. (...) I said "What did I hear, do you like my boyfriend?" She says, "No, no". So then she says "I got a boyfriend, you know". I say "I don't give a shit. If I see or notice something, I will beat your teeth backwards". (...)

#### *School environment 3*

This is how the not-resilient Participant 482-S3-C3-F-NR from School environment 3 puts it:

And when I have been fighting, they say "Why did you fight?" Then I say "They were the ones provoking me! Of course I will fight! If I am not taking it anymore then I am not taking it anymore".

#### *School environment 5*

The not-resilient participants from School environment 5 did not bring up the themes of bullying and fighting.

The not-resilient participants from the School environments 2 and 3 appear to identify no risk in the provoking or bullying of fellow pupils. It appears as if, in the area of fighting and bullying, they do not have *overview* of the consequences of their behaviour for their development in the school environment or do not value these consequences.

### *Gaining access to safety: Choosing friends*

Friends play an important role for all participants in their motivation to go to school. However, not all friendships contribute to resilience in terms of successful development. Resilient participants distinguish themselves from not-resilient participants in the way in which they express their selectiveness in choosing friends. Not-resilient participants express this selectiveness to a much lesser degree or select their friends on other grounds than their possible contribution to their successful development.

#### *Choosing friends: Resilient participants*

##### *School environment 2*

The resilient participants in School environment 2 illustrate how they do not engage with “tough types”:

330-S2-C1-F-R

We have our little group; we are, you could say, the “teacher’s pets”. Not that we are all that sweet, but just, (...) in the three years we have been at this school, we never had a yellow card... (...) And those other girls who (...) think they are tougher than we are. (Those) girls are screaming at the principle of the school. (...) That is just irritating.

##### *School environment 3*

The resilient Participant 519-S3-C3-M-R from School environment 3 illustrates how he is often provoked to “break a window” and how he deals with this challenge by being selective in choosing friends:

Yes, very often, then he says “Come, let’s quickly go do a window”. Break a car window. Then I withdraw. Then I say “You go do it. If that is what you want to do, then you go do it”. Then you just say to that person “If that is what you want

to do, that does not mean that you should ask me to do that or whatever. If you want to remain friends, just hang with each other, do fun things, go swimming or playing soccer, in that case you can always come to me. But if you want to do something else, then you have to do it by yourself or you look for someone else". And when you then hear "He has been arrested" and the next day again, I think "Keep some distance". Maybe he will get me involved in something. (...) And I know also what that is like, to break a window. If I get caught now, then my father will start nagging me and then... for nothing. For those thirty, forty euros. (...) You do not need to look for the toughest friend, it'll get you nowhere.

Participant 519-S3-C3-M-R has *overview* of the risks that are connected to dealing with so-called "tough boys" and with participating in criminal activities. Furthermore, he identifies skills and opportunities in himself to deal with the challenge in such a way that the risk is prevented (*insight*). Participant 519-S3-C3-M-R apparently has *positive future expectations* of reaching something that would be disturbed by the risks that so-called tough boys bring with them. By identifying these risks, he selects friends who have a positive influence on his development instead of a negative influence.

#### *School environment 5*

The resilient Participant 555-S5-C4-M-R from School environment 5 also illustrates a strategic selection attitude in choosing friends and peers. Because he has overview of the risks of dealing with so-called "noisy types", he decides to adjust his behaviour and to stay away from these types:

Some children I actually do not like and some children that I do like. For example, I do not like children who brag or children who bully. And I don't want to be friends with them. (...) I do not really like people who brag. (...) Once there was this guy who was talking about scooters and such. That the police was going to go after him and that he was going to do all kind of things, that he had shot pistols. I could not believe that, that was just simply bragging. You can brag a little, everybody does that. But not each day. He would do it almost every day. Once with a MP3-player, he says "Yes, I stole it from a guy" when he had really borrowed it. Those are all just strange little stories. (...) Yes, then I act like I am listening carefully while in the meanwhile I think "Yes, just quit it, you told me enough". Sometimes I do laugh with him and that kind of thing. I just act like I am in the story myself, but in reality that is not true. (...) I just see them, when they are in my class then I just see them as classmates with whom I sometimes hang if there is nobody else. (...) For example, by not hanging with him after school, talk little with him. He is just in your class, that's it. So not dealing with him. (...) For him it is just the same. I mean, he expects something else from me: just tough behaviour and such. (...) Then he will just remain a classmate. (...) That is exactly the same for him. (For him I am also) just a class mate. (...) I am more of a quiet type than a type who makes a lot of noise. (...) Just do your work and

pay attention in class and also talk a little every now and then. That is what I think is more of the quiet type. A tough type really has a big mouth to the teacher. Act like a group leader for example, that is really also a tough type... I don't really want that. (...) I now have friends who support me.

Resilient participants keep their distance of so-called tough types. They are not impressed by tough stories and take these stories “with a grain of salt”. They have *overview* of differences between people and of the risks the so-called “tough people” bring with them. Furthermore, they have *insight* into their own skills and opportunities to deal with these “tough types” in such a way that no negative confrontations occur and that the safety is maintained. By their behaviour they maintain *positive future expectations* of safety because they prevent potential problems.

#### *Choosing friends: Not-Resilient participants*

##### *School environment 2*

In the selection of friends, not-resilient participants show a less strategic consideration of friends that might have a positive or negative influence on their development than resilient participants. The not-resilient Participant 327-S2-C1,C2/3-M-R illustrates this not-selective attitude as following:

(...) If someone does not like me, I will not like him. If someone does like me, I will like him. Does not matter what they are like, but I will like him.

In the creation of friendships, the not-resilient Participant 327-S2-C1,C2/3-M-R *appears dependent* on others. His selection of friends is based on the choice others make to befriend him or not. He does not show the identification of risks in dealing with fellow pupils who might exercise a bad influence on his development.

Other not-resilient participants appear to actually choose friends who can help them in provoking fellow pupils or with arguments with others.

##### *School environment 3*

The not-resilient Participant 479-S3-C3-F-NR from School environment 3 illustrates these friendships by telling what her friends mean to her. She actually identifies the positive consequences of “dealing with bullies”. This gives her the safety she needs.

She indicates that she never has been bullied. In answer to the question why she never has been bullied, she replies:

I think because I was hanging with the right people. I also hanged around the bullies. (...) When I have an argument with someone or something like that... then they stick up for me. The other day, I was walking in the hallway, and a guy pulled my hair. Only at that time I did not know who did. (...) And they, my friends walk right over to him to and said to him "I know that you pulled her hair... "If I will see that once more, I will hit you". And then the guy shut up right away (...)

The not-resilient Participant 479-S3-C3-F-NR links her friendship with bullies to the fact that she has never been bullied. As a result, she does not appear to have *insight* into her own skills and opportunities to ensure that she is not bullied. That way, she is more dependent on others for the experience of the resilience promoting factor *safety* than resilient participants.

#### *School environment 5*

The not-resilient participants in School environment 5 did not speak about the selection of friends.

Summarised, it appears that the way in which resilient participants “choose” their friendships is focused on the positive effect these friendships might have on their development in the future. Resilient participants are future-oriented (*positive future expectations*), have *overview* of the risks to the achievement of their goals for that future and identify risks in dealing with so-called tough, noisy types. They have *insight* into their own skills and opportunities to prevent these risks and, therefore, actively keep a distance from these types. The way in which not-resilient participants “choose” their friendships appears less focused on the positive effects they might have on their future development. They appear to be focused more on the present and it seems that they identify no risks in dealing with so-called tough noisy types.

#### *Gaining access to safety: The creation and maintenance of constructive relationships with adults*

As discussed in Paragraph 5.5.3.1, *trust, fairness, getting help, being known and being seen* are a number of characteristics of the relational needs for safety of the participants in the school environment. Although both resilient and not-resilient

participants express these needs, they have different ways in which they deal with the challenge of fulfilling these needs. The challenges can be summarised as *the creation and maintenance of constructive relationships with adults in the school environment*. Resilient and not-resilient participants differ in their degree of constructiveness in dealing with this challenge. Resilient middle-adolescents attach a strategic meaning to the creation and maintenance of constructive relationships with adults in the school environment. Once more, this meaning shows *overview, insight and positive future expectations*.

*The creation and maintenance of constructive relationships with adults:  
Resilient participants*

#### *School environment 2*

For the resilient participants from School environment 2 a school trip to England did a lot of good for their relationships with the teachers. The resilient participants take an active approach in the creation and maintenance of these relationships. They reason that good relationships with the teachers contribute to their enjoyment of lessons.. On the question what is important for her in School environment 2, Participant 330-S2-C1-F-R replies:

I actually would say, the contact with the teachers. (...) I notice that, now that we are back from England. The relationship between teachers and pupils has changed. (...) With some teachers it is more fun now. You notice that you can say more things to a teacher you would not have dared before. You have those pupils who, when the teacher says "Now you will have to be quiet", they say "No!" And then I would argue about that, because if someone tells me to be quiet then I am simply quiet. (...) And our group gets along better with the teachers. Other pupils then say "Oh, so you are talking with the teacher, are you?!" (...) And we just don't give a shit, we just talk to them. (...) Sometimes we are standing around and then a teacher joins us and most pupils will walk away until one remains who then will have to talk with him. We just all keep standing there...

#### *School environment 3*

Resilient participants in School environment 3 indicate that they feel at home at school. Their contact with teachers and janitors in the school contributes to this feeling. The way in which they contribute to this contact themselves is illustrated by Participant 522-S3-C1-F-R:

For example, if your locker is broken you go to the janitor. Then he really will start talking to you. He'll make a joke "Hey, what did you do to it?" and (...) then you will start talking to each other more and more just like you do with other people and then you get ever more contact. And then it will be more and more than just "Hello". Then it also becomes "Hello, everything all right?" and then ever more. That is fun.

### *School environment 5*

The resilient participants from School environment 5 give strategic reasons for why a good *relationship with teachers* is important and why it is important that teachers know their names:

#### Participant 547-S5-C2-F-R:

(...) It is just fun, but at the same time, for example, when you have not done a test, they give you a hard time about it. But if you are (able to get along with the teacher) well and you have not done it, then you can negotiate. That they still give you another chance. That is why I also think it is a good thing to have a good relationship with your teachers.

(...) Yes, you basically have a School Pupil Counsellor<sup>13</sup>. But when, for example, you do not get along well with your school counsellor, then you need other teachers with whom you do get along. So, if you have a problem with a different teacher, and you have to go to your school Counsellor with whom you can't talk at all, then it is important that you have another teacher with whom you can talk.

(I think it is important that the teachers know my name) because when they, for example, have filled out a mark incorrectly and I tell them to change that mark, then they might accidentally change the mark of someone else because they got my name wrong (...).

Good contact with teachers is important because this good relationship helps you if you want to get an extra chance for a test or if you do not get along with your school counsellor. It is important that teachers know your name because that could work to your advantage. These reasons show an image of *overview* the participant has of the situations and the risks that might occur in the school environment and of *positive future expectations* of a positive outcome when she makes an effort to create and maintain a good relationship with teachers. Furthermore, Participant 547-S5-C2-F-R shows *insight* into the way in which she can achieve a good relationship with teachers:

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<sup>13</sup> A personal mentor.



I just listen. (...) Yes, that way you also get a good relationship right away. And also between classes when I run into them, then I just say "Hi!" Then we will just talk some. Yes, then you'll basically get a good relationship with your teacher I think.

Or you make a joke, then I give a different name and then they'll get all confused. Then I say "Yes, if you do not know my name, I will make it extra challenging for you". ... So now it is going better and better. They do know my name now.

On the basis of strategic considerations, Participant 547-S5-C2-F-R finds it important that the teachers know her name. She directs the situation by making jokes to the teachers during the class about the fact that they do not know her name. This way, the situation she has in mind becomes possible: the teachers learn her name and she maintains a good relationship with the teachers. This way, she provides herself *access* to safety in the form of potential resources in case she needs them when she experiences problems.

*The creation and maintenance of constructive relationships with adults: Not-resilient participants*

*School environment 2*

The not-resilient Participant 327-S2-C1,C2/3-M-NR from School environment 2 illustrates a less strategic approach to the creation and maintenance of a *good relationship with teachers*. He has problems at home. His school counsellor has offered to talk together once a week. After a few uncomfortable meetings, he starts to trust this school counsellor more and feels comfortable enough to tell more. At some point, this school counsellor suggests to end the conversations. According to Participant 327-S2-C1,C2/3-M-NR, he was not doing well at all at that moment. He actually needed these conversations. There was nobody else in his environment with whom he could talk. Participant 327-S2-C1,C2/3-M-NR however, did not mention this wish and he has lost trust in his school counsellor. The meaning, which Participant 327-S2-C1,C2/3-M-NR attaches to this situation, shows little evidence of having overview. He sees no other opportunities or resources to deal with this challenging situation. In response to the question what Participant 327-S2-C1,C2/3-M-NR did when the school counsellor suggested ending the conversations, he says:

Nothing. How do you mean what did you do? No, I did nothing.

In regard to this event, participant 327-S2-C1,C2/3-M-NR later remarks what his *insight* is in the abilities and actual skills he thinks he has for dealing with a challenge:

I don't remember anymore, but definitely let me down. And then I am not going to say to him "It is not going very well with me right now" of course. That is not how I am. I think that when you start talking with someone, then you should do it well too. Don't start talking with someone if you don't know what is going on. (...) I am not going to someone like "Yes, I am not doing very well, I want to talk to you" or something like that. That is not how I am. I am more someone who keeps something to myself.

At the moment when the school counsellor of Participant 327-S2-C1,C2/3-M-NR ended the conversations and did not indicate why, he did not identify other teachers in his environment to talk to about his problems:

Yes, and the rest of the teachers is also just crap, just like my mentor. He is just really loony tunes. You do the slightest thing and he would totally flip out. Then he would start screaming at you!

For Participant 327-S2-C1,C2/3-M-NR, there do not appear to be any "assets" in the school that could help him. Because of that, he appears to have little *access* to help in the school environment. Furthermore, he does not easily ask for help. Because of that he *provides himself with no access* to potential "assets" present in the school environment. It might be that the nature of his problems is too serious to talk about with others than his school counsellor. In any case, he does have a need for constructive relationships with adults in the school environment. However, these are only created and maintained to a limited degree, if at all.

Not-resilient middle-adolescents appear to have a strong need for good relationships with adults in the school environment. At the same time, they appear to have little *insight* into the abilities and skills necessary to create and maintain constructive relationships.

#### *School environment 2*

The not-resilient Participant 331-S2-C4-F-NR from School environment 2 illustrates how she did not get around to building a good relationship with teachers because of

her behaviour and how she regrets this afterwards, now that she almost had to repeat her grade.

They plainly told me that I would not pass and I really did not like that. I simply did not want that. I was quite upset about it. (...) Because we are now quiet in the class, the teachers are also nice. (...) Yes, frankly, (...) the teachers, (...) I do think are (...) important. (...) Well, because they do teach. But then I just did not see it, because if we were pestering then they would also fire back. So then, I did not really see it. (...) Frankly, I was very annoying those years. ...

### *School environment 3*

Not-resilient participants from School environment 3 have not explicitly expressed their constructive contact with teachers.

### *School environment 5*

The not-resilient Participant 573-S5-C4-F-NR does not contribute to fulfilling her own need for constructive relationships with adults in School environment 5 by systematically avoiding her school counsellor:

Yes, a school counsellor is (...) something like a mentor. When she needs you, she will tell you to come and see her and that sort of thing. And since I was never there, she could not call me in either. (...) Yes, she would call or send letters. My mother never got to see those letters either. (...) I did save them. They said I was absent too often. And that if I would go on (this way), I would get the school inspector going after me. (...) And yes, I would run into her in the hallway sometimes. Then she would be coming my way and then I would turn around and I would quickly get out of there. I would just walk away from her. And then I would quickly go outside. Then I would jump on my bike and get out of there.

The not-resilient Participant 573-S5-C4-F-NR recognised the risks of her behaviour *after* she had to repeat a grade. The gaining of *overview* of the risks of behaviour *after* a negative consequence occurs can be recognised in the interview data of various not-resilient participants. Because of their behaviour, they limit themselves in the gaining of *access* to constructive relationships with adults.

Summarised, not-resilient participants do not appear to oversee the risks of their behaviour until they experience a negative consequence of their behaviour (*overview*). They appear to have no *insight* into their skills or opportunities to create and maintain constructive relationships or do not appear to see the gain (*positive future expectations*) of different behaviour (such as constructive relationships with teachers).

Their own behaviour appears to lessen the *access* that they could have to safety in the school environment.

## 2) Gaining access to good education

As discussed in paragraph 5.5.3.1, the experience of *captivating classes*, of *high expectations*, of *structure*, of *clarity* and of *rules* are a number of characteristics of the needs for good education of the participants in the school environment. Although both resilient and not-resilient participants express these needs, they have different degrees of access to the experience of *good education*.

### *Gaining access to good education: Resilient participants School environment*

2

The resilient Participant 326-S2-C4-F-R illustrates how she gets access to the experience of *good education* despite noisiness in the class and her own concentration problems:

Well, I am really, I can not concentrate well. Sometimes I think that I might be having a concentration problem. I see, I hear and I know everything. In the class too. Most of the times I do not know what the class is about. Then I will ask the teacher sixty times "I do not understand". (...) Then she will explain it (...) and at a certain moment she will say "Yes, well, you do have to pay attention". And then I tell her "Yes, I do pay attention". Then she says "No, you do not pay attention". And then I want to go against it. I can't do that. I just think it is too difficult. (...) (It was very noisy in our class). At a certain moment it did get quiet, well, it wasn't really quiet, but I focused only on the teacher so that I would not hear the rest. That did work. If the teacher explained something, she would go with a marker, she would go across the blackboard, tapping and such and I would always follow that marker and then I would hear what the teacher said. And the rest I did not hear at all. (...) My friend has a lot of difficulties with math and I always help her with that (...) Most of the times she also sits next to me with math. Because when I sit there she understands. And she helps me again with economy. Because she understands that well.

Participant 326-S2-C4-F-R identifies in herself a risk for the *experience* of *good education*. She has difficulty concentrating. As a result, she has little access to the *experience of good education* and the school environment does not appear to contribute to this experience by saying that she should pay attention when she does not understand. She does remain active by trying to understand the teaching materials and she eventually finds help with fellow pupils to help her.

### *School environment 3*

The way in which resilient participants in School environment 3 have access to good education is by having *overview* of school tasks and of resources to accomplish the school tasks and *insight* into the ways in which they can utilise these resources.

Participant 488-S3-C2-F-R from School environment 3 highly values achieving good school results. The school environment plays a big role in her life as a place to learn.

Every two, three weeks I make a schedule of what I still have to do. (...) Yes, especially with history. I want to finish it up now, because I am now in the third grade, but I am also almost done for the fourth. (...) Then I will just have study hour, where you can decide yourself what you will do. I will do English, because I am very bad at that...(...) I simply want to first finish school and during the summer holiday I will have enough time to do fun things.

Participant 488-S3-C2-F-R shows *overview* of the tasks that lie ahead of her, *insight into* the opportunities that she, to a more or lesser degree, has for the successful accomplishment of those tasks and *positive future expectations* of the reward of a summer vacation. Because she quickly finishes the subjects she finds easy, much time is left for the subjects she finds difficult. With those subjects she can get extra assistance in the form of “study classes”. She provides herself, so to say, with *access* to good education.

### *School environment 5*

Resilient participants from School environment 5 illustrate how they get access to good education by how they deal with challenges of *skipping school*, by how they deal with *homework* and *by how they participate in the classes*.

The resilient Participant 552-S5-C2-F-R from School environment 5 illustrates how she deals with the challenge of skipping school.

Yes, most people do not finish their school. (...) Yes, they no longer want to learn. Or they have problems at home or they ended up on the wrong path. And once they take that path, they can no longer go back. That is also why there are many people who have not done their work: because they have problems at home, or because of friends that live in the street and such.... ...One guy. He was hanging around with the wrong people who were also no longer going to school. He was still in school himself and he had good results at school. But because he was hanging with wrong people, he ended up on the wrong path. He would also not go to school anymore, starting hanging in the street, skipping school, from one

cigarette to the other.... That is how he ruined the school results. Then he would not go to school anymore. No, he does not come anymore.

By understanding the mechanisms whereby people “take the wrong path” (*overview*), Participant 552-S5-C2-F-R is able to hold on to her decision to get her diploma:

Look, I want to achieve something. And if someone says to me “Come on, don't go to school for these last two hours!”, then I will not listen to that. (...) Because if I go skipping school with friends those last two hours, I will not get anywhere. And yes, that guy apparently felt differently. For him, friends would go first. He wanted, I think, to fit in with his friends. And with me that is not important. I mean, you have to take me as I am (...) I mean, if they do not accept me as I am, then I'll just end the ties. Just like that. Just need to be a little tough for this day and age.

Participant 552-S5-C2-F-R has the *positive future expectation* of obtaining her diploma. She has *insight* into her own opportunities and skills to deal with the pressure of peers to skip school: by being herself, with her decision to get her diploma and to sever ties if others do not accept her the way she is.

Participant 552-S5-C2-F-R also illustrates how she provides herself with access to the experience of *good education* as a result of how she behaves in the classes:

By going to school and by studying and doing tests well and listening to the teachers and by doing what they ask of you, I believe that I can easily achieve getting my diploma. Yes, those study materials come back in the exam.

Participant 552-S5-C2-F-R has *overview* of the school system: the content of what the teachers teach and the study material of the tests will come back during the exams. This *overview* gives her *insight* into the ways to reach her goal: by listening to the teachers, by doing what they ask and by making homework, you can achieve getting your diploma. She has *positive future expectations* of obtaining her diploma because she is capable of utilising the right skills to reach her goal.

Participant 555-S5-C4-M-R

Half of the class last year with whom we were joking around have left. One repeated his/her grade and some went to other schools. Because of their marks really. Half of the boys did not pass. Skipping school, marks and other things. (...) But it was the most fun class I had so far. (...) They often did not go to school, never studied for their tests. That is why they are now at a different one. (...) I

did hang with them, but when it came down to doing homework and studying, I would just do it. They never did that and, if they would, it would really be an exception. If the test was very important for their final grade, they would do it. But not otherwise. They would hang outside and I would just go home. They would go home for a while, but after that they would just stay outside. Not me, I did not do that. (They did not think that was weird) and they did respect me and that was mutual. They were just relaxed with me, they laughed about my jokes. And we talked about things that interest us. And that made them respect me. (...) Frankly, I was the only one. I just thought "Third class counts towards fourth class and in the fourth class you have to do your exams". Yes, just thinking about your future. You can make jokes, but you do have to think about your future.

They did not think about their future. They really just had a fun life. They really did not care. But I just think, in their thoughts, they really did care. They would say "What do I care whether my marks are bad", but I would think "They do care" (...) sometimes, if they were by themselves and they would hear their marks, then it was one of those sad stories. Just like "Shit, I have not been studying", or 'My father is going to say this and that'.

555-S5-C4-M-R has overview of the mechanism of skipping school. By realising to which negative consequences skipping school leads, he has *insight* into the ways to prevent these negative consequences: by not skipping school and doing the homework. He is also able to utilise skills that help him to not skip school and do his homework, despite being the only one in his group who does this. His *insight* into these skills contributes to his *positive future expectations* of achieving his goal.

Resilient participants value asking for help, giving help and cooperating in regard to homework. The meaning the resilient Participant 547-S5-C2-F-R attaches to this is a meaningful example:

Things (in my homework) I do not know I mark. (...) And when I get to school, I go to the pupils from my class or from a different class. Then I ask who understands it and that person will explain it. If nobody understands, I will eventually go to the teacher. He will explain it to me and then I will remember again. (...) If, for example, we are off the first hour, then the pupils from our class want to sleep in. But if we have a test then we (me and my friends) will always come early. Even if we have the first hour off, then we agree how late to come to school and then we will study, here at school. Together, because when you study together, you think more about questions... Yes, because when you study, for example, in a workbook, when you are alone, then it is easy to say "I don't know". But when you are with someone, then you will know the answer. Because, when you do it together, then the other one will say something and then you think "I never thought about that". Then you know the answer right away. Together you can learn faster, I believe.

The example of Participant 547-S5-C2-F-R shows *overview*, *insight* and *positive future expectations*. She knows that if she studies by herself, she will not know many answers. She identifies a risk. She has *insight into* opportunities and actual skills to deal with the challenge of delivering good school results. By cooperating with others and coming to school early, she provides herself with *access* to good education. Furthermore, she shows *positive future expectations* of the success of the chosen way by the confidence that she expresses in “being able to learn faster together”.

#### *Gaining access to good education: not-resilient participants*

##### *School environment 2*

Not-resilient participants from School environment 2 indicate how their own restlessness in the class and not doing their homework limits them in gaining access to good education.

Participant 327-S2-C1,C2/3-M-NR forgets to write down homework and if he does study the homework, he will have forgotten it the next morning.

(...) When I, for example, study something in the evening, then it is gone from my memory in the morning. Yes, or I'll know in the morning, but when I make that test, it is just all gone (...). And making homework, most of the times, I forget to write it down in my diary. But I do try to do it most of the times.

Participant 327-S2-C1,C2/3-M-NR does identify a risk in his behaviour. He does not have much confidence or *positive future expectations* that he will pass this year. He has *tried* to study longer and *tried* to do his homework and *tried* to make some more effort in the class. But most of the time it does not work. He has little *insight* into his opportunities and actual skills to deal with this challenge. Maybe he does not have these opportunities and skills. It could be that Participant 327-S2-C1,C2/3-M-NR has learning problems or concentration problems. It appears as if this has not been identified by Participant 327-S2-C1,C2/3-M-NR himself or by his school environment. He has little *overview* of the tasks that lie ahead of him, because he often forgets to write down his homework and he does not identify resources in his environment that help him deal with his potential learning problems.



### *School environment 3*

The not-resilient participants in School environment 3 primarily indicate how their own restlessness limits them in their access to good education.

Participant 479-S3-C3-F-NR:

It is just not going all that well at school. (...) Too much talking in the class and such. Yes, I am distracted easily....I am not involved with my work. (...) Yes, and I am very loud, I have heard.... (...) Yes, especially talking; class after class. And then it is peaceful in class, then it is me again... (...) and then the whole class is unruly because of me...Because each week there is a (teachers) meeting and then they (the teachers) say "Every time your name is mentioned again; that you are too loud".... (...) It have really always been that way, but lately (...) they say it more often, that I should become serious etc.

### *School environment 5*

The not-resilient Participant 573-S5-C4-F-NR from School environment 5 showed no *overview, insight, or future expectations* over the consequences of her skipping school behaviour until she had to repeat a grade. Participant 573-S5-C4-F-NR skipped school extremely often. About the role of the school environment in regard to her skipping school she says:

Yes, my school mentor did believe me, that I was always sick. Until the end of the year. Then she believed it no longer. Then the list became only longer. Yes, those were about the last four months of the year. Then the absence list became somewhat too long. (...) And then she did not believe it at all anymore. So then she called my mother. (...) She told her that I would have to repeat the grade because of my behaviour. Yes, and I did not want that because I did want to finish my school. (...) (I learned) that I should not be absent that often, that you then have to work way too hard. Because I would have to do that whole year over again. (...) And then I did think "Boy, I am in my last year of school and now you are not going to pass". "Yes, what use is that?" I wish I could rewind it! I would now have been finished with school. Yes. If I could do it over again, then I would never have done it. (...) Because I am now doing an extra year, while I could have been done in four years (of school). And now I am doing an extra year. And if I do not pass for my exams this time, then I have another problem because then I am not allowed to remain at that school. Then I have to leave that school.

The lack of *overview* that Participant 573-S5-C4-F-NR had of the risks of her behaviour has apparently contributed to maintaining the behaviour of skipping school and to the limitation of her access to the experience of *good education*.

The lack of *overview* of the expectations in the school environment, of desirable and undesirable behaviour and of the consequences of behaviour appears to be a decisive negative influence on the development of many not-resilient participants. As a result, they limit their own access to the gaining of *insight* into skills and opportunities to deal with challenging circumstances. Their own *insight* into dealing with circumstances experienced as challenging appears very limited. They seem dependent on their school environment. The not-resilient participants 327-S2-C1,C2/3-M-NR and 331-S2-C4-F-NR from School environment 2 illustrate this dependency as follows:

Participant 327-S2-C1,C2/3-M-NR:

Then I was told that I would probably not pass, so then I thought "Oh, I better make it." (...). Yes, at that point, at least, I started trying (...) just trying harder during the class. But most of the time it did not work. Other people start fooling around and then, most of the time, I get pulled in and then I will start fooling around as well.

Participant 331-S2-C4-F-NR:

Yes. (...) that I would probably not pass with those marks. So we did feel pretty bad when we heard that. Because only then I realised that I have been acting pretty badly. (...). Yes, but then I thought "Then I will start working". But yes, that was not possible, because I couldn't make up for those bad marks anymore. And that class did not help either. If the class is that loud, I can't work in it. So then I continued (fooling around) in that class.

Not-resilient middle-adolescents participate in and enjoy the restlessness in the class, but are at the same time bothered by this restlessness. They are "pulled in". They are hardly able to direct their behaviour in the unruly class situation themselves. Up until the negative consequence of their behaviour (not passing the grade) they have no *overview* of the possible consequences and risks of their behaviour. Once the consequence becomes apparent they will have *overview*, but no *insight* into the ways to adjust the behaviour and no *positive future expectations* of them actually being able to create a beneficial situation. As a result of their behaviour they limit themselves in getting *access* to good education.

#### *Extra finding*

In School environment 2 a remarkable finding was made. With their behaviour, not-resilient participants limit not only their own access to *safety* and *good education* in

School environment 2. This school environment distinguishes itself from the other environments in the many arguments between pupils themselves and between teachers and pupils. The resilient participants in the research mentioned the behaviour of a few not-resilient participants in the research as limiting for their access to *safety* and *good education*.

For instance, resilient Participant 330-S2-C1-F-R in School environment 2 is bothered by the behaviour of not-resilient participants (Participant 330-S2-C1-F-R literally mentions the names of not-resilient participants in her description of the events). Their behaviour limits her access to the experience of *good education*:

Yes, 60% of our group will not pass. Yes, bad marks. But it is also so loud in our class! And she (the teacher) runs around the class screaming and giving away yellow cards and nobody listens to it. Things are thrown around in class, everybody screams through one another. (...) And I really can't work like that.

And, just like today, everybody is screaming at each other. And then I will be doing something wrong and then I have to go sit down again and then I will have to wait for a long time. And just now, when I was telling her that I had to go to this interview, she just doesn't listen because somebody else is screaming at her. Yes, that just won't work. And yes, that is also mostly why it's not going well. (...) It is also because nobody is listening to her, I believe she has even once been called a stupid bitch. They really curse at her a lot.

And my teacher was supposed to help with an assignment. He had said "If it is not right, we will look at what's wrong with it..." He was supposed to give me those hand-outs today. But again, he is too busy with the other children in the class, to get them to work. So today again, it didn't happen for him to help me ....

The other day we wanted to make a test. (...) We had two school hours. A school hour takes 50 minutes, so together we had 100 minutes. Anyway, what it came down to was that there was so much damn noise that we only had 20 minutes to make that test. And I wasn't finished with that test. So we said (to the teacher) "I guess now I am getting a failing mark because I did not finish it in time?" Then she said "No, you get a failing mark because you made so much noise".

The behaviour of not-resilient participants apparently demands a lot of attention from the teachers in School environment 2. The access to good education of all pupils in the class appears to be limited as a result of the behaviour of not-resilient pupils. School environment 2 is apparently not able to maintain the order and strictness all the participants appear to have a need for. School environment 2 does not appear to be able to get to *offering* good education.

The behaviour of not-resilient participants in School environment 2 limits the resilient participants not only in their access to *good education*, but also in their *access* to safety. The teacher from the above-mentioned quote does not realise Participant 330-S2-C1-F-R is absent to participate in an interview with the researcher. She was too busy with the rowdy behaviour of not-resilient participants to notice Participant 330-S2-C1-F-R. Furthermore, the behaviour of not-resilient participants in School environment 2 limits the access to safety of resilient participants because they limit the creation and maintenance of constructive relationships with adults as a result of their commotion. According to resilient Participant 330-S2-C1-F-R, good contact between her and teachers is established because she, at her own initiative, likes to start conversations with the teachers when she is in class. However, these conversations often do not come about because of the commotion in class:

(...) And if it is a fun class, then the teacher is also relaxed and then you can just talk to her and then it is fun. (...) Yes, it doesn't need to be a serious conversation, but simply that you can tell a joke without her getting angry or starting to scream to someone out of nowhere. (...) Because yes, if there is such noise in class, if you talk to her then, she will likely tell you to get back to your work. (...) And if it is quiet, then you can just have a conversation with her. And that's what I will do most of the time, then the four of us will sit in a row and then she will stand in front of us and then we can talk to her. (...) But (...) she does not want to be our mentor anymore... and so she isn't our mentor anymore. A stricter teacher now is.

Participant 330-S2-C1-F-R, despite the commotion, looks for moments to still enter into a conversation with her mentor in that way to establish a good relationship. However, as a result of the commotion in the class, this mentor disappears and is replaced by a stricter teacher.

These findings were only made in School environment 2. In the other school environments, not-resilient participants appear to mainly limit their own access to *good education* and *safety* and to a lesser degree that of the resilient participants. In the School environments 3 and 5, enough other factors seem to be present to grant resilient participants access to *safety* and *good education*. How resilient participants in School environment 2 appear to still be able to develop themselves competently despite the limited access to *good education* and *safety* in this school environment will

be discussed in Paragraph 5.5.5, in which the relationship between the home environment and the school environment will be the main focus of attention.

Based on the findings from School environment 2, the researcher wrote the following logbook notes:

Logbook: 13-10-2005

As a result of what participants say about maintaining order by teachers, I realise that pupils (probably particularly not-resilient pupils) individually have a need for the teacher to have control over “the class as a whole”. The individual pupils go along with the group process of the class, but also have an individual need for order. Teachers and pupils are not on opposite ends regarding this matter.

In the following paragraphs it will be discussed whether and how resilient and not-resilient middle-adolescents *can* get access to resilience promoting factors in the school environment.

#### **5.5.4 THE IMPLICATIONS OF DIFFERENCES IN ACCESS TO RESILIENCE PROMOTING FACTORS FOR REQUIREMENTS ON THE SCHOOL ENVIRONMENT**

##### **5.5.4.1 Specific requirements on the school environment**

It appears that middle-adolescents who develop themselves *in the school environment* in a resilient way, act in “risky” situations in such a way that a problematic situation (negative consequence of their own behaviour) is prevented. Their actions appear to correlate with their *overview, insight and positive future expectations*.

Middle-adolescents who develop themselves in a not-resilient way *in the school environment*, appear to act in such a way in “risky” situations that eventually a problematic situation (negative consequence of the own behaviour) will occur. Their actions appear to correlate with a lack of *overview, insight and positive future expectations*.

As a result of their different command of *overview, insight and positive future expectations* and the different behavioural characteristics that relate to these, their school environment has to meet different requirements for them to gain access to

resilience promoting factors in their school environment. These different requirements will be discussed and illustrated in the following paragraph.

#### **5.5.4.2 Gaining access to resilience promoting factors in the school environment: Resilient middle-adolescents**

In regard to the establishment of *overview*, *insight* and *positive future expectations*, it can be stated that resilient middle-adolescents either *have these* and act accordingly in provoking situations, which they deal with successfully as a result, or *gain* these by being confronted with provoking situations. Gaining (more) *overview*, *insight* and *positive future expectations* is an outcome of the developmental process which characterises resilient middle-adolescents. In the developmental process, the *overview*, *insight* and *positive future expectations* that has been gained, can also be applied to other, new situations (transfer). In *having or gaining overview*, *insight* and *positive future expectations*, relationships between the resilient middle-adolescents and others inside and outside of the school environment play a role. In these relationships, the risk is sometimes addressed and sometimes the relationships offer help in solving the problem or dealing with the challenge in a constructive manner.

Resilient participants mention the following relationships in the school environment as contributing to their resilience: Friends, Teachers and Mentors.

Friends

*School environment 2*

Participant 326-S2-C4-F-R:

I was not the Participant 326-S2-C4-F-R I was supposed to be. I was so afraid of everything. If something happened I would look up. I would only look a little and as soon as (the tough girls in the class) looked at me I would get to my work right away, as if I did not see a thing. (...) They just had power over me. (...) Then my friend and I started to think about solutions. Especially not reacting and trying to be yourself. Just showing that you can be fun too and can act normal. (...) "Stupid bitch!" a boy said in the back of the class. (...) I really just started laughing. I was like "Go ahead. I am not going to say anything about it, I just laugh and then I will see what happens". Yes, he looked quite silly. I looked at my friend and I started to laugh really loudly. Then it was school holiday the next day and I never saw them again and I laughed. We simply had a lot of fun then. (...) Maybe that has also been the step for me to feel more confident really. (...) Yes, I do think it played a role. (...) Frankly, I got much more confidence. I felt stronger as a person. Especially, during the summer holiday, between last year

and this year, I got a lot more self-confidence because I follow up on things now. I was always afraid, somewhat withdrawn. And now I am like "It is better to do what you want yourself". "You do not have to be ashamed of anything". And I used to always do that, just out of fear. It has been a very big victory for me to become like that.

The resilient Participant 326-S2-C4-F-R identifies "being afraid" as a risk because she has *positive future expectations* of the goal of "Being yourself" that she wants to reach. Her fear limits her being herself. She looks for skills in others in her environment to deal with the challenge constructively. She reacts to this challenge by acting constructively herself and by asking for help from others. The outcome of the *developmental process* is not merely that she is no longer afraid, but also that she has more self-confidence and new convictions that help her take on new challenges (transfer).

#### Teachers

##### *School environment 3*

Participant 522-S3-C1-F-R:

I have also gotten low marks. I have started working harder because that did freak me out a bit. Yes, I do have to do a little better now... (...) Then those teachers say "Do you understand now why we gave you those low marks? Yes, that did scare you, didn't it!?" So yes, you will start doing your very best. Yes, I did get low marks, but because, for example, I would get a failing mark then you do feel kind of bad like "Hey, I did not try hard enough".

The teachers of Participant 522-S3-C1-F-R give her *overview* of the consequences of her behaviour by giving her low marks. They give her *insight* into preventing negative consequences by explaining to her *why* she received these low marks. She apparently has enough *insight* into her skills and opportunities to "try harder" and enough trust and *positive future expectations* that she will also achieve it.

#### Mentors

##### *School environment 5*

Participant 552-S5-C2-F-R

At the start of the third year I got her as my mentor. She asked me whether I wanted to get my diploma. I said "I would very much like to get my diploma". They had told me "Your third year counts as half of your national exams". "Look,

if you start doing well in the third year, let's say, if you start well, you will end well, with good marks, and if your behaviour is in order then you have sufficiently scored on 50% of your exams. And I followed that advice up to this day.

The mentor of Participant 552-S5-C2-F-R gives her *overview* of the school system at the beginning of her third year. She also gives her *insight* into the skills she has to reach her goal. Furthermore, she expresses trust in her by telling her she can achieve getting her diploma (*positive future expectations*).

#### **5.5.4.3 Gaining access to resilience promoting factors in the school environment: Not-Resilient middle-adolescents**

Not-resilient middle-adolescents show little *overview*, *insight*, and *positive future expectations*. In regard to the establishment of *overview*, *insight*, and *positive future expectations*, it can be stated that not-resilient middle-adolescents either *do not have* these and, because of that, act without *overview*, *insight* and *positive future expectations* in the school environment, or *do not obtain these by themselves* when they are confronted with provoking situations.

The lack of *overview* prior to the negative consequence is what is first noticed with not-resilient youngsters. The lacking *overview* is confirmed by the fact that various not-resilient youngsters speak of a big change or a learning moment for them when they have to repeat a class. Because of the negative consequence, it becomes clear to them what the consequences of certain behaviour are and what the risks of certain behaviour apparently are. This is how the youngsters begin to develop a certain degree of *overview* of the situation.

For gaining *overview*, not-resilient middle-adolescents are more dependent on their school environment than resilient middle-adolescents. However, as a result of their low level of activity in constructive relationships with adults in the school environment, they appear to value warnings of these adults about the risks of their behaviour less. Because of this, they do not experience the presence of help when constructively dealing with the risks as swiftly.. They have little *insight* into their own skills and opportunities to prevent risks or to solve problematic situations. Because they have little *insight* into own opportunities, they have few *positive future expectations* of a positive outcome of their efforts.



The dependency of the not-resilient participants on their school environment for gaining *overview* and for changing their behaviour elicits different “demands” on their school environment than those of resilient participants. Not-resilient participants appear to change their behaviour when the school environment provides them with *overview* and when the school environment changes the circumstances in which the not-resilient participants receive education.

### *School environment 2*

The not-resilient Participant 327-S2-C1,C2/3-M-NR has quit school prematurely. He has not experienced enough contribution from School environment 2 to his successful development to finish his education. It appears that for him School environment 2 provided him with too little *overview*. School environment 2 appears to have changed little in the environment to create an environment for Participant 327-S2-C1,C2/3-M-NR in which he gains *access to good education*. For other not-resilient participants in the research the school was able to change their school environment in such a way that the environment suited these participants more properly *for getting access to good education*. Some examples of that will follow:

Because of her lack of *overview* of what the school expects of her and what she needs to do for her school subjects, the not-resilient Participant 331-S2-C4-F-NR did not have a fun time at school. Her school results were very poor. When she eventually was not supposed to pass her grade, School environment 2 placed her back to a lower level and provided her with a contract in which clear *overview* was given of desirable and undesirable behaviour, of the way in which the marking system at school operates and of the consequences of undesirable behaviour. As a result of this *overview*, Participant 331-S2-C4-F-NR changed her behaviour. Subsequently, she understood the teaching materials better, she had more fun being at school, her marks were higher and she received more positive feedback of teachers. On the question what the school has contributed to her change and how the school could have contributed to this change earlier, she replies:

*Address us more one on one. That we should really do our exams. Yes, I have now had many more conversations about fourth grade and how that will be and that I should start doing my best. (...) There were also conversations about that contract, about the work at hand in the fourth. And about how I will succeed.*

How to get your marks. That is very hard. When I, for example, would get a five out of ten, I had to get a seven out of ten, because then I would have gained a point. Very strange how that went. I already received my report card. They included a letter with it: if I receive (...) a five, then (for) the rest I need a six and, if I receive a five twice, then I need a seven for the rest and if I have a four then I need an eight and a seven. (...) And if I am doing like I am doing right now, then I will pass, they say.

Because now we have this measure with 4B, that when you are thrown out of the class you have to stay till half past four for two days. (...) And because of that, we are also a lot quieter.

Firstly, these interview data show that School environment 2 transfers *overview* to Participant 331-S2-C4-F-NR: which consequences her behaviour has, what the risks of certain behaviour are and which marks are needed for the achievement of her goal. By telling her she will achieve her goal as a result of how she is behaving now, they give her *insight* into her opportunities and skills to reach a goal. They provide her with *positive future expectations* in the form of trust that she can also achieve her goal.

The effect of the intervention of the School environment 2 on the behaviour of the not-resilient Participant 331-S2-C4-F-NR is the following:

Now I do pay attention and I do make my work. Now it also much more fun and I enjoy school a lot more. If you know more.... (...) And if you receive higher marks, then it is just so much more fun. It was fun in the first, second, third (grade) as well, but now the work is just fun: the classes. Because now I know. I now know how I should do it. For example, last year I did not know how I was supposed to do math, because I didn't study for it. And I did not know how it worked. So now I also study for it and I am just cooperating well. And I also pay attention now. That way, I remember it again.

Participant 331-S2-C4-F-NR literally describes how gaining *insight* into how she “should do” math gives her more pleasure in the classes. Because of that she now participates in the classes and receives higher marks. In School environment 2 there always was a supply of *insight* into how you “should do”, but, because of her own behaviour, the not-resilient Participant 331-S2-C4-F-NR had no *access* to getting this *insight*. Her behaviour only changed when she got *overview* of the consequences of her behaviour. The change in her behaviour takes place under continuous supervision by the school environment. The strict consequence “sitting until half past four for two days” ensures that the class is more peaceful, resulting in Participant 331-S2-C4-F-

NR also being able to behave peacefully. By behaving more peacefully, she gets *access to insight* into the skills and opportunities she has in order to achieve a goal. By behaving more peacefully, she also gets *access* to constructive relationships with adults in the school environment that can provide her with *positive future expectations* in the form of *trust* in her achieving her goal. However, for changing her behaviour, Participant 331-S2-C4-F-NR remains dependent on the strict consequences of undesirable behaviour and of the peace within the class.

### *School environment 3*

School environment 3 has contributed to the competent development of the not-resilient Participant 479-S3-C3-F-NR by drawing up a kind of contract regarding her behaviour in the class. The dependency on the school environment for adjusting behaviour of not-resilient participants is illustrated with this example. She has been hearing for years from teachers that she is too loud in class and that she really should get more serious to be able to pass the year. Lately, Participant 479-S3-C3-F-NR no longer enjoyed school, because the teachers are always negative about her during pupil meetings. She is not able to adjust her behaviour and the negativity of the teachers causes her to not be motivated at all to go to school. She does not appear to be able to have *insight* into the skills and opportunities to change her behaviour. When the school environment takes action by placing her separately in class, Participant 479-S3-C3-F-NR finally gets *access to good education* and to constructive relationships with adults in the school environment. Because her behaviour in the class changes, she gets access to achieving good marks and to positive feedback of teachers. As a result she gets more *insight* into her own abilities and skills to achieve a goal and to gain more *positive future expectations* of the achievement of this goal.

Together with the aunt of Participant 479-S3-C3-F-NR, School environment 3 eventually thought of a way in which Participant 479-S3-C3-F-NR would be able to concentrate better without her having to learn a different kind of behaviour for it. They give her a different spot in the classroom:

Well, last week my mother came to school and then it was all very negative. (...) The whole class had to go get the reports. It was the first report of this year and afterwards all parents have to come. And then they said "It really is not going well with Participant 479-S3-C3-F-NR ". "She talks too much during the

class, loud and she doesn't do her work". And then we have looked at the cause. That I'm sitting with my friends too often.

We have (...) made an agreement that I will no longer sit next to them during the class. They are in front and I am in the back. Yes, then she said "If you abide by that, we will see again, and if you still don't manage, then we will have to think of something else". Then my mother said "You are just going to have to keep to that" and then I said "Yes, OK". (...) And I am just keeping to it. Yes, it does go better. I am able to better concentrate on my work. Yes, since I had a conversation with my mother I keep to that. Yes, that was last week.

Until the environment changes, Participant 479-S3-C3-F-NR has no *insight* into her own skills and opportunities to change her behaviour. When the environment changes, her behaviour changes too. She does not appear to *develop* new skills this way. A transfer of new skills to new situations of a different or a similar nature is not possible because of this. However, school environment 3 did contribute to her successful development this way. By realising that Participant 479-S3-C3-F-NR cannot (yet) change her behaviour and by changing the environment, Participant 479-S3-C3-F-NR is better able to be quiet during the class. That way she gains more *access* to the experience of *good education*..

Thirdly, School environment 3 offers Participant 479-S3-C3-F-NR *positive future expectations* of achieving the set goal of a diploma and they offer her trust. By changing the behaviour of Participant 479-S3-C3-F-NR, she obtains *access* to constructive relationships with adults at the school environment and to positive feedback on her behaviour:

And past week it has been going well again.... Yes, they (the teachers) do tell you that too (...) told me it was going well. Something like "It is going in the right direction, keep it up" ... (...) There is this teacher, who is sweet, I think. Yes. She often talks to me about it. (...) Almost every day. (...). Especially if I am not doing well in the class. And we always have conversations, always, really. Then she will say, "I only mean well for you and if you want to get your diploma, then you should really start doing your best now, because you are not going to make it like this..." (...) Yes, almost every day. I really hear the same story every day. Every now and then I think "I know this by now, all right?" (...) Just during the class, but often also outside of the class. If the day went well, I will go right over to her and say "It really went well today!" (...) She never says "Yes, you are a nuisance". She says "Just get started on your work, the rest can wait". Yes, she does not think I am a nuisance and she keeps saying "I know that you can do it, so start doing it".

That the change does not immediately contribute to an internal learning process is illustrated by Participant 479-S3-C3-F-NR in her answer to the question whether the positive reinforcement of her mentor helps her in changing her behaviour:

No, I am like "just cut it out..." Because she has said it so many times. And then I am like "I know this by now". Whether it helps, not really, no.

Not-resilient middle-adolescents appear less "teachable" than resilient middle-adolescents.

#### *School environment 5*

Another example of how the school environment might contribute to the successful development of not-resilient participants is the way in which School environment 5 has contributed to the change in behaviour of Participant 573-S5-C4-F-NR.

Then, at some point I talked to a teacher at school. (...) That was my teacher English at the time. (...). She is my mentor. (...) At some point she came to me and then she wanted to talk to me. (...) About my behaviour, about math and those sorts of things. (...) That I really should change my behaviour. That I otherwise might not pass because of my behaviour (instead of because of my marks). Yes, and I did not want that because I did want to finish my school. So yes, then I decided to change my behaviour...

Firstly, the mentor of Participant 573-S5-C4-F-NR in School environment 5 provides *overview* of the school system (you might also have to repeat a class as a result of your behaviour instead of your marks) and *overview* of the immediate consequences of her behaviour (if you go on like this, you will not pass).

Secondly, the math teacher at School environment 5 reminds Participant 573-S5-C4-F-NR repeatedly of the consequences of her behaviour. For instance, on the question what has helped Participant 573-S5-C4-F-NR in changing her behaviour, she replies:

Being sent out often enough during math class. Simply each class. At some point I thought "Enough already".

By constantly and consistently reminding Participant 573-S5-C4-F-NR of the consequences of her undesirable behaviour, eventually Participant 573-S5-C4-F-NR acquires *overview* of the risks that are the result of her behaviour.

After Participant 573-S5-C4-F-NR acquired *overview*, *insight* was needed in her own opportunities and skills to adjust her behaviour. Eventually, the teachers in School environment 5, together with Participant 573-S5-C4-F-NR, have acquired this *insight* by allowing Participant 573-S5-C4-F-NR to listen to music during tests. This way she is able to concentrate and make her tests better:

Listening to music. (...) Yes, everybody was allowed to listen to music. Not during a test. I was the only one who could listen to music during a test. (...) With almost all teachers. (...) Because, when I am making a test, at some point, I just can't concentrate anymore. I can't concentrate that long.... And then I will just start looking around me. And then it looks like (...) you are looking at someone else's test paper. By (listening to) music, I do not hear anything else. This was, I can concentrate on the questions. (The teachers have found out) because each class I would just be listening to music and I would not let anything get to me because I wouldn't hear anything anyway. The teachers noticed that. (...) They just noticed that I was much quieter during the class and that I was not being so irritating. Then they said "You might as well try it with the test as well".

To arrive at *insight* into the skills and opportunities that Participant 573-S5-C4-F-NR has to adjust her behaviour and to develop successfully, *overview* of her biggest risk factors needs to be acquired first. With Participant 573-S5-C4-F-NR, her lack of concentration, in combination with the noisiness of the class, form the greatest risk factor.

It appears that a positive change in the behaviour occurs with most not-resilient youngsters when *overview* and *positive future expectations* are eventually provided to the youngster by others in the school environment. However, for many not-resilient youngsters this *overview* and *positive future expectations* are acquired at a late stage, *after* an undesirable consequence of their behaviour, such as having to repeat a grade or even leaving school, has occurred. The school environment appears not to be able to contribute much to sharpening *insight* into the skills and opportunities not-resilient youngsters have for constructively dealing with challenging circumstances. Not-resilient middle-adolescents need external changes to take place, so that they can adjust their behaviour to the changing external circumstances.

Once the *overview* has been achieved in terms of consequences for certain behaviour, then not-resilient middle-adolescents have a lasting need for being reminded of the

consequences of their behaviour and for a strict direction by teachers and for external supervision of their behaviour. This direction and supervision consist of making clear which consequences (mainly having to leave school or being put back a grade) go with which behaviour.

A noteworthy difference between the content of the relationship with the school environment of the resilient and not-resilient youngsters is the degree in which the school environment needs to be adjusted in order to meet the youngsters' needs. A lasting dependency on the school environment can be observed with not-resilient youngsters. To change the behaviour of not-resilient youngsters, lasting direction is needed, whereas an internal learning process takes place with the resilient youngsters. It is apparent that much less of an internal learning process takes place with not-resilient middle-adolescents: a change in behaviour does not seem to lead to the opportunity for applying this change to different situations (transfer).

The basis for the differences in constructive relationships between middle-adolescents and supervisors, such as mentors, teachers or friends, in regard to the establishment of resilience processes will be discussed in the following paragraphs.

## **5.5.5 THE HOME ENVIRONMENT IN RELATION TO THE SCHOOL ENVIRONMENT**

### **5.5.5.1 Introduction**

Resilient middle-adolescents are active in interaction with adults and/or have constructive friendships which have either *prepared* them for “risky situations” before the “risky situation” occurs or which *assist with* constructively dealing with this situation. Both during the *preparation for* “risky situations”, as well as during the *assistance* with “risky situations”, the adults or the friends facilitate the youngsters' *overview, insight* and *positive future expectations*.

With resilient middle-adolescents, this facilitation takes place in at least the home environment. The facilitation is established by actual initiatives of the parents or one of the parents. The parents suggest actual behavioral norms (or tips) to the middle-adolescent, resulting in *insight* with the middle-adolescent into different ways of

acting in occurring situations. Furthermore, they express trust in the opportunities of the middle-adolescent (*positive future expectations*).

The facilitation especially takes place by repeating conversations with one of the parents who asks them how things are going at school. One of the parents provides actual examples of possible situations and the desired behaviour that should follow. The acknowledgment by the parent of the possible challenges the middle-adolescent will meet on his path, such as the challenge to steal, boredom in the street, distraction from homework and the possible negative effect of these challenges on the important set goals, seems crucial to the applicability of the tips. The acknowledgment and realisation of potential situations that could present themselves to a middle-adolescent shows *overview* of the situation by the parent. In the relationship with the middle-adolescent, this *overview* is facilitated.

#### **5.5.5.2 The home environment in relation to the school environment: Resilient participants**

##### *The home environment in relation to School environment 2: resilient participants*

The resilient Participant 326-S2-C4-F-R from School environment 2 indicates the difference between her relationship with her mother and the one a friend has with her mother:

She has very little contact. I have a lot of contact with my mother and she hardly ever talks. I always talk with my mother about everything. Really kind of stupid. I sometimes talk about what has happened at school, and I never heard her mother ask that either. (...) My mother even calls from work when I come from school, like "Are you going to do your homework now?" And in the bathroom we have this paper hanging and all my homework is on that. Everybody from the class has a paper like that. My mother did not allow me to keep that with me; it had to go in the bathroom. Then she could see when I had homework. (...) She sure pays attention to that. I also think it is very important that she does that because sometimes I forget. You got children in my class who don't even know we have homework and I know because my mother will tell me. So it is very important, especially for my concentration, because I don't have that at all. I do not pay attention to anything. (...) Yes, actually, my mother plays a very big role with my school. Yes. She helps me very well, actually with everything and that is what she is mother for, but with school especially. With economy. (...) She explains a lot of assignments. Especially accounting. (...) She will explain and when I do not understand right away, she will explain again and then I will understand and then she will show me an example of how you could do it too and how you can remember it.



The mother of Participant 326-S2-C4-F-R facilitates *overview* of school tasks of the participant and checks her steps. She also offers help in achieving good results. Earlier it has been discussed how School environment 2 only contributes to the experience of *good education* in a very limited degree. The reason that Participant 326-S2-C4-F-R, despite this limited contribution, still develops successfully in School environment 2 appears to be linked to the strong facilitation of *overview*, *insight* and *positive future expectations* by her mother.

### *The home environment in relation to School environment 3: resilient participants*

The resilient Participant 519-S3-C3-F-NR from School environment 3 illustrates the role his home situation plays in his development as follows:

I just think it also depends on how the parents raise you. If they don't give you attention and never sit with you around the table, then you start thinking "They don't care". Whether you won't come home for ten days or are gone forever or whether each day the police is at the door (...) (They have to) keep an eye on you. They also have to know what is happening. (...) Ask questions, pay attention and, for example, when you say "I am going to a friend" they then ask "Can I have the number of that friend?" Just to be sure. For example, when you say "I will be home at nine", and at half past ten you are still not home, then they will make a call. And maybe you are not going to that friend at all. (...) Also pay attention who you hang out with. Most of the times, they also know what kind of children they are. Also through the parents. Through here and there, they will hear stuff. (...) Most of the times in the mosque, or just in the neighbourhood.

Most of the times I will just sit at the table with my father. Then I will just talk. Then he will give me some advice, put good things in my head. (...) Most of the times in the evening, before I go to sleep. Then he says "Come sit over here. After I just ate or something. (...) I will come to the table and then he wants to talk to me. Then he will ask "How are things going at school?". And "How are things outside of school, did you do something?" "How are things with your friends?"? And "Hang out with the right friends and not with the bad ones".

And yes, most of the times he says "Those children who wear expensive clothes or who have money in their pocket, you should also think about how they got that money. If you want to become a thief, you will end up regretting it (...) if you have a record and no diploma (...) then you can just forget about it". And "use your time". "Don't come home, throw your bag in a corner and go back outside. You should also stay home a while, go over everything, you need to do this, need to do that". (...) No arguments, good marks, behaviour, never be too late. (...) I got a letter at home and then he will address it with me "Go to bed early, wake up".

My father always says: "Try to avoid arguing." He says "You do have to always fight for your right". "Just with words." Someone wants to do something you do not want, you just say "I do not want that, that's it". (...) He does understand though. He knows how it is to be 15 years old, adolescent. He has been there. He knows that you sometimes argue and steal something sometimes. That happens to everybody.

The father of the resilient Participant 519-S3-C3-F-NR has *overview* of the risks the participant might encounter in the school environment. He facilitates this *overview* to the participant and also presents *insight* into the skills the participant has to constructively deal with the risks.

The mother of the resilient Participant 488-S3-C2-F-R from School environment 3 relates the difficulties she experiences to the chances she gets to go to school:

I also just have to go to school because of my mother. (...) I really can not stay home! Other children stay home sometimes, but I really am not allowed to stay home, then I get into an argument. She will just put me out on the street, you know! "To school!" "And don't let me hear that you weren't there!" I also bet that, if she puts me outside and I wouldn't go to school, that she would just call the school...or she would bring me to school. I really have to go to school. I really am not allowed to stay home. If I am sick, then I can only stay home if I have a fever. Or I have to have a really bad stomach ache or headache, but I am not allowed to stay home just like that.

That is because my mother is also somewhat of an asthma patient. So, she has many medicines. Because of that she is actually like "There you go, start walking!" "You can do a lot!" "Enjoy for now!" "Now you can still do fun things and later you might no longer be able to".

(...) "And it is for later", she always says. If I do not go to school, I will not really have a good future. If you don't have a diploma, then you also can not work. My mother says "Then you can only be a cleaning lady". She says "Then you have to go clean restrooms, that's fun!" "You better go to school first and get diplomas and then later you can just have a fun job". And that is true. Because when you get diplomas now you can just choose what you want to do yourself.

The resilient Participant 487-S3-C2-F-R from School environment 3 relates her motivation to achieve well to the way in which her parents deal with her in regard to school:

(...) Yes, especially my parents and such, I do not want to disappoint them. That is also what I do it for. "We can do fun things", my parents say, "but you are going to have to do your best at school". So they do want something in return. Yes, like "We will go on a holiday, but then I also want you to have done your very best and

that you pass so that we can keep going with our minds at ease". I do have to do my best at school, but then, at the end of the year, we will do fun things.

(...) Yes, when I, for example, have received low marks again then I do feel somewhat guilty. Like "I have disappointed them". Because of course my parents are not going to be happy about it...

The parents of Participant 487-S3-C2-F-R facilitate *overview* and *positive future expectations*.

The parents of the resilient Participant 522-S3-C1-F-R from School environment 3 encourage her to reflect on her behaviour and decisions:

They (my parents) will say "How was school, what did you do, what have you learned? And how were the teachers, did something happen?" (...) My parents also ask me about my future: "What do you want to become?" and "What for?", "Why?" (...) And then they will say "Do you think that is hard or not?", "Why don't you want to pursue this?" "Oh, for that reason, but you could always try, right?!"

#### *The home environment in relation to School environment 5: resilient participants*

The parents of the resilient Participant 552-S5-C2-F-R from School environment 5 supply her with *overview*, *insight* and *positive future expectations* and make the connection between their own challenging circumstances and the opportunities Participant 552-S5-C2-F-R receives in the school environment.

I do not want to end up like my parents, having it be that challenging to achieve something. (...) Where there's a will, there's a way. You could end up everywhere. And it is easier to get there with a diploma than without. One evening I sat in the train with my mother and I asked my mother whether or not she was going to get that license. And then she said to me "Girl, I will do everything I can to get that license. This is what I want and I am going for it". And that thought always remained with me. (...) (My mother) told me about her youth, what had happened to her and about that time. Things are very challenging in the Netherlands right now. ...Also to get a job I think. My mother also says "Finish your school, because you should not take me as an example, that I did not finish my school, because those were different times than now". Because in her time, at least, even though she had not finished her school, she did have a job. She could earn money and in these times you can't. They demand a diploma and yes, you do have to be experienced. (...) Yes, and more people are unemployed at this moment and that makes me strong to still continue to studying. And the confidence and encouragement that my father and my mother give me. (...) "You will get your diploma. You should not be afraid that you are not going to make it because of the nerves, you will make it. Just do the best you can". (...) Let's say when I am just sitting in the living room and we will be talking, then we are talking about

school most of the time, about what happened that day, what I did, what I learned and yes, those kinds of things.

At least one parent/caretaker in the home environment of resilient middle-adolescents points out *overview*, *insight* and *positive future expectations* in one-on-one conversations. With this “baggage” these youngsters arrive at school wearing a certain pair of lenses; a road map of some sort for the school environment. For some resilient middle-adolescents, right from the beginning, an end goal (get diploma) and a number of ways to proceed (e.g. listen to the teachers, behave well) are written on this road map. For other resilient middle-adolescents the map is more detailed.

The resilient middle-adolescents proved to be able to create access to resilience promoting factors in the school environment by the above-mentioned facilitation in the context of the home environment. This skill is expressed in the area of constructively dealing with peers and adults within the school environment, such as teachers and janitors, and active participation in education. It appears this access is established because the resilient middle-adolescent estimates the value of the factors based on possible events in the future. This appreciation shows *overview* of the school environment and the events that may occur in there. By having the *overview* that resilient middle-adolescents have of the school context, they are able to identify risks for achieving the goal they have set together with the parents. This goal is repeatedly formulated and mentioned in specific situations in their relationships within the context of the home environment.

The behaviour of the middle-adolescent in the school environment leads to reactions the youngster receives in the form of reports, reactions by fellow pupils and reactions by teachers. When the reactions act as a challenge for the youngster, because the environment appears to require a different sort of behaviour of the middle-adolescent than the youngster has shown up to then, the youngster has his road map and his capacity to enter into constructive relationships with others. When the road map shows enough ways to constructively deal with the challenge (such as in a more detailed version of the road map), then the youngster will be able to make a connection between the challenge that has occurred and his own behaviour and the ways of acting mentioned on the road map. The middle-adolescent knows to adjust his

behaviour to the situation in such a way that his behaviour becomes desirable and it meets the requirements the school environment sets. By adjusting his/her behaviour, the youngster develops more skills and abilities for constructively dealing with certain situations and the youngster enlarges his behavioural repertoire.

When the road map does not mention enough ways to constructively deal with the challenge, then;

- The resilient youngster will have at least one constructive relationship in his/her home environment in which he/she is able to talk about the “challenge”. This way, he will gain *overview*, *insight* and *positive future expectations*;
- And/or the youngster will be able to, with his capacity to enter into constructive relationships with others, find others in his/her school environment who can help him/her adjust his/her behaviour in a constructive way.

In this situation, in which an occurring challenge is constructively dealt with, with the help of current constructive relationships, growth of the behavioral repertoire of the youngster (*insight*), a growing *overview* of situations that might occur and of the school environment (*overview*) and a growing trust in one’s own capacities (*positive future expectations*) occur. In a way, the road map becomes more extensive and more detailed.

The content of the relationship with the others in the school environment at that point consists of remembering the goal (providing *overview*), and/or giving an acting repertoire which enables them to reach the set goal (providing *insight*) and/or expressing trust in the youngster that he/she is able to reach the set goal (providing *positive future expectations*).

### **5.5.5.3 The home environment in relation to the school environment: Not-Resilient participants**

The “road map” from home to school that not-resilient youngsters receive differs in a number of ways from the road map of resilient youngsters. A similarity is that on both the resilient youngsters’ as well as on the not-resilient youngsters’ map, the goals “get diploma” and “good future” can be found. The implementation of this future image does not differ significantly between resilient and not-resilient youngsters either.

Firstly, regarding the differences, it appears that on the “road map” of the not-resilient youngsters less *overview* has been given of the possible challenges/problems the youngster might encounter in the school environment. The way in which not-resilient youngsters talk with parents about school seems more reactive than pro-active: one talks about school when the school calls about negative behaviour of the youngster or when negative things are said during a parent meeting.

For the most part, not-resilient youngsters do not speak with parents about school in terms of actual examples of situations which occur or might occur (*overview*), not about actual ways of acting when certain situations occur (*insight*) and not about rewards when certain goals are reached (*positive future expectations*). Furthermore, not-resilient middle-adolescents are rarely asked questions about their behaviour, about the reasons for their behaviour and about the consequences of their behaviour. According to the not-resilient youngsters, the parents do show confidence or hope the youngster will get his diploma (form of *positive future expectations*).

Furthermore, the not-resilient youngster appears inactive in his/her relationship with the parents concerning the school environment in terms of discussing current situations or challenges. Possibly in part because the not-resilient youngster does not experience the challenges and, in part, because the not-resilient youngster believes the parents “can’t help anyway”.

#### *The home environment in relation to School environment 2: not-resilient participants*

There is little effective interaction between the not-resilient Participant 331-S2-C4-F-NR and her parents. Participant 331-S2-C4-F-NR has the impression her mother could not have done anything about her behaviour. Their interaction is reactive. Their interaction is a result of bad news from school.

#### Participant 331-S2-C4-F-NR

Yes, my mother would then say stuff like... “You should do your best more”... Yes, of course I did not like that, but what is my mother going to do about it? (...) My father never talks about it. (...). Yes, for example, when something has happened, then I will tell my mother and otherwise not really. She does say “How was it at school?” and then I say “Fun. I never feel like talking, I am always so tired.

#### *The home environment in relation to School environment 3: not-resilient participants*

The parents and the not-resilient Participant 479-S3-C3-F-NR from School environment 3 talk in a “reactive” way with each other about the school environment: as a result of negative report consultations.

Well, we do not talk about it much, only during report consultation or whatever... If it is not going well or something. (...) When I go to my cousin (I often go to her house after school) her mother always asks "How were things at school?" And then I think "My mother never asks me that!" (...) Recently I told my father "Dad, I am going to be a ground stewardess" and then he said "Yes, ok". (...) He often says "Yes, you want to always become everything, but at school you don't do a thing", or he says "You want to become everything, but you do not want to do anything for it". He is right about that. (...) No, he has no idea about what I should or could become. My mother always says to me "Why don't you become a real estate agent?" And then I say " You have to be one of those highly-educated frumps for that"... That just does not suit me. (...) Simply, because I do not have the patience for that. All those years of studying, I don't feel like that. (...) I always try to end the conversation as soon as possible. Like, yes, sure... And then I leave. (Of course, they do not) start about it out of nowhere either. Often it has to do with a report consultation and if they are at home then they start talking about it (...) Then she will ask something like "How are things going otherwise at school? You should do your best, if you know for sure that you do not want to do anything for it, then you might as well stay home, because then it is just a waste of time. You will then go to school all those years for nothing".

No transfer of *overview*, *insight* and *positive future expectations* takes place; partly because Participant 479-S3-C3-F-NR avoids the conversations, partly because the parents do not appear to facilitate a lot.

#### *The home environment in relation to School environment 5: not-resilient participants*

Because of her background, not-resilient Participant 573-S5-C4-F-NR wants to get her diploma; her mother hopes she will get her diploma and says that she has confidence in it, but there is little effective interaction between her and her parents:

My brother and sister also went to this school and had to repeat the third grade twice. They have no diploma. So then I am the only one who got his diploma at this school. (...). Then I had to repeat a grade. My mother did not know most of the times that I was not at school. I was always at a friend of mine. (...) Yes, she always asks me how it was at school. Well, she knows how I feel about school, so I do not need to say much. I only have to say two things and then that is enough. A six letter word and then she knows. BORING. A six letter word. And then she knows enough. And if she doesn't ask, then my stepfather will ask. (And then I say BORING) and then he says "Yes, that is always the case, right?". Then I say "Yes. That is why". Then nothing. Then I ask how his day at work was. Then that's over and I will go on the computer or watch some TV. We hardly ever talk about

it. No. My mother just hopes that I will get my diploma so that I can achieve what I want.

Compared to the description of the road map of resilient youngsters it may be argued that the road map of the not-resilient youngsters does not mention enough ways of dealing constructively with occurring challenges. Not-resilient middle-adolescents also do not have at least one constructive relationship with one of the parents in which they are active and speak about the challenges. Therefore they do not seem to be facilitated with *overview*, *insight* and *positive future expectations*. It remains unclear whether the lack of a constructive relationship in the home environment with at least one of the parents can be contributed to inactivity of the youngster or of the parents, or if other reasons exist. However, a notion has been formed of parents who play a strongly directive role in the relationship between at least one of the parents and the resilient youngsters, a notion which cannot be found in the stories of the not-resilient youngsters.

At the same time the not-resilient youngsters are less capable or less willing to enter into constructive relationships with others in their school environment. When at the start the road map is not sufficient for constructively dealing with challenges, then the not-resilient youngsters are not able or willing to find others who can constructively help them to adjust their behaviour. The not-resilient youngster remains dependent on the environment. When the school environment actively approaches the youngster and keeps approaching him, constructive relationships with others in the school environment are formed. However, if the school environment does not remain active, the relationship deteriorates and the not-resilient youngsters are not able to maintain the contact themselves. The fact that the not-resilient youngster is able to consciously and systematically avoid the initiative of the school environment is visible as well.

A noteworthy observation is that the needs in the school environment described earlier partly are fulfilled by the home environment of resilient middle-adolescents: a situation that *stimulates*, *gives responsibility*, *motivates (by rewarding)*, *navigates*, *sets clear boundaries* and *explains why school is important*. Furthermore, the school environment supplements the home environment by: *assisting the pupils*, *helping to solve problems*, *being clear about what the pupils are allowed to do and what not*,



*ensuring a safe school environment, arranging appointments, checking whether things are going well and contacting parents.* Not-resilient middle-adolescents have more need for the school environment because they do not seem to experience these factors in their home environment.

With the researcher the findings have resulted in a comparison with a spring: A certain spring may have a lot a force (potential resilience characteristics), can be stretched far with a certain weight (risk factors) and is still be able to come back to its original position after the weight has been removed (resilience). However, to make this possible, one end of the spring needs to be anchored to a strong base. Even though the spring might have a lot of force, if the spring is not anchored to anything, the spring will still fall, together with the heavy weight. It appears as if, even though the not-resilient middle-adolescents may have resilience within them, they do not have much of a solid base at home to hold themselves on to. They have the opportunity to hold onto the school environment for their basis but, as a result of their behaviour, they do not tend to mend the relationship that allows the spring to become attached to the school environment.

In Chapter 6, a bio-ecological interpretation of the qualitative research results will be provided and the qualitative research findings will be linked to relevant literature. Furthermore, the qualitative research results will be embedded in the quantitative results.

## 6 SUMMARY, CONCLUSION, DISCUSSION AND RECOMMENDATIONS

### 6.1 INTRODUCTION

This study was carried out with the aim of gaining insight into the way in which the school environment contributes to the resilience of middle-adolescents. By studying the mechanisms contributing to successful development and not successful development, the relationship was shown between the school environment and different degrees of resilience of Dutch, urban middle-adolescents with the same low SES. In order to do so, the study was focussed on a system which connects school, community and student performance in a functional relationship. This being the focus of the study, on the basis of a literature review resilience in middle-adolescence was defined as follows:

*“A resilient middle-adolescent has the disposition to identify and use resilience qualities in himself and/or identify and use resilience qualities in a specific context whenever he is confronted with difficult and challenging circumstances. The interaction between the middle-adolescent and the context generates a constructive outcome in the development of the middle-adolescent, such as continuous learning (growth and renewal of resilience characteristics) and an increasingly flexible approach to challenging circumstances.”*

On the basis of this definition, a *Veerkracht Vragenlijst* (VVL, Resilience Questionnaire) was developed in Part A of the study. This questionnaire was used to distinguish between resilient and not-resilient middle-adolescents. This VVL was examined as regards internal structure, reliability and validity.

On the basis of the VVL scores, 21 middle-adolescents (10 resilient and 11 not-resilient) were interviewed, and a Grounded Theory was developed about “The Resilience Process in the School Environment”.

In this chapter, a number of conclusions are drawn on the basis of the results of Parts A and B of the research. First, Part A is summarised in paragraph 6.2. Secondly, in paragraph 6.3, Part B of the study is briefly described and interpreted from a bio-ecological perspective, as presented in Chapter 1. In this paragraph, relevant literature, as presented in Chapter 2, is referred back to, and additional literature is discussed. Based on research results and literature, recommendations for educational practice are formulated. In paragraph 6.4, the qualitative research results from research Part B are placed in the light of the quantitative research results from Part A. In paragraph 6.5, remarks on the research design are made. In paragraph 6.6, recommendations for follow-up research are formulated. Finally, paragraph 6.7 presents a short summary of the research results.

## **6.2 DEDUCTIVE LOGIC: PART A OF THE RESEARCH**

### **6.2.1 SUMMARY OF RESEARCH PART A**

Part A of the study aimed to initiate the development of an instrument for identifying resilience. Based on a literature review, 33 items describing resilient or not-resilient behaviour were formulated. These items were presented as the VVL to 399 middle-adolescents attending five educational opportunities schools in and around the city of Utrecht in the Netherlands. At the same time, the same middle-adolescents were presented with the *Nederlandse Persoonlijkheidsvragenlijst voor Jongeren* (NPV-J; Dutch Personality Questionnaire for Young People). The VVL has been examined in respect of its internal structure and reliability and has been validated both in terms of content and as an instrument for measuring resilience as a construct by use of the NPV-J.

### **6.2.2 QUALITY OF THE VVL**

#### **6.2.2.1 Introduction**

Principal Components Analysis (PCA) with varimax rotation of the 33 items of the VVL resulted in three components of which two are readily interpretable, reliable and valid. The content of the third, unreliable component gives direction to the formulation of multiple items for improvement of the third component. Although the third component has not been used in the study to identify resilient and not-resilient middle-adolescents, its most interesting content more than justifies the elaboration on

this topic later in this chapter, based on theory and qualitative results. In this paragraph, the first two components will be discussed first, followed by the third component.

### 6.2.2.2 Components 1 and 2

The analysis of the VVL shows that 22 of the 33 items can reliably and validly be subdivided into two “forms of behaviour”: resilient and not-resilient behaviour. Based on that analysis, these two forms of behaviour can be characterised as follows:

#### 1. Resilient behaviour

- a. Behaviour that is characterised by *identifying help* in the environment when circumstances are experienced as being difficult;
- b. Behaviour that is characterised by *identifying and using help* in the environment when circumstances are experienced as being difficult;
- c. Behaviour that is not characterised by seeking help in the environment, but by a *proactive or constructive reaction* when circumstances are experienced as being difficult;

#### 2. Not-resilient behaviour

- a. Behaviour that is characterised by actively stopping and giving up when circumstances are experienced as being difficult;
- b. Behaviour that is characterised by inactivity and a lack of constructive action when circumstances are experienced as being difficult;
- c. Behaviour that is characterised by aggressive responses when circumstances are experienced as being difficult;

The content of Component 1 largely agrees with the findings in literature on resilience and with the definition of a resilient middle-adolescent, and has therefore been interpreted as resilient behaviour. The content of Component 2 largely disagrees with these findings and this definition, and has therefore been interpreted as not-resilient behaviour. In paragraph 6.4, the validity of both components 1 and 2 will be more closely examined when considered in the light of the qualitative results.

### 6.2.2.3 Component 3

The three items in Component 3 describe two forms of behaviour and one type of self-evaluation:

#### 3. “Flexible behaviour”, “Perseverance and tolerance for negative affect” and “Identification of internal resilience qualities”

- a. Middle-adolescents’ behaviour that is characterised by flexibility and the ability to let negative feelings go.
- b. Middle-adolescents’ behaviour that is characterised by the ability to endure negative emotions and a capacity to persist.
- c. Self-evaluation by middle-adolescents that is characterised by recognising qualities within themselves.

The content of Component 3 partly agrees with the definition of a resilient middle-adolescent. The distinction between this content and that of Component 1 is based on the fact that the Component 3 items do not include the search for an actual, active solution for a problem, with or without the help of others. The content of Component 3 is more related to the ability of *enduring* the experience of stress or negative emotions, the (temporarily) *letting go* of such stress and negative emotions and the ability to *continue* despite the *experience* of such stress and emotions.

Support for the content of Component 3 can be found in literature on research into resilience. This support gives direction to the development of multiple items for Component 3 in the areas of “tolerance for negative affect” and “flexible behaviour”. In relation to a “tolerance for negative affect”, Rutter (1993), for instance, argues that resilient youths are not invulnerable. Resilience is the ability to develop successfully in the presence of stress and negative emotions. Items in Component 3 illustrate the case of experiencing stress in combination with a response that consists of “persevering” and “reacting well”. In order to explore the third component further, more items need to be formulated which describe this “tolerance for negative affect” in combination with managing stressful or difficult circumstances.

Other authors have developed ideas on how resilient youths flexibly deal with “negative affect” (such as stress) and difficult circumstances. Leontopoulou (2006) studied 326 Greek students in their first year at university. She found that resilient students made use of avoidance and withdrawal strategies much more often than not-resilient students (Leontopoulou, 2006). Leontopoulou refers to the work by Sandler, Kim-Bae and MacKinnon (2000) to explain these findings. These researchers found that resilient youths had a broader behavioural repertoire and were therefore more flexible in their interactions. According to Sandler et al. (2000), resilient adolescents more frequently deploy more avoidance coping as well as more active coping strategies. The critical property which distinguishes resilient from not-resilient individuals appears to be the availability of different strategies.

This means that resilient youths have more ways of conduct in their behavioural repertoire than the “Resilient Behaviour” Component describes. The “Resilient Behaviour” component primarily describes “active problem-solving behaviour”, with or without help. The findings of Leontopoulou (2006) and Sandler et al. (2000) convincingly show that resilient youths’ behavioural repertoire may consist of more ways of conduct than “active problem-solving behaviour”. In their behavioural repertoire, resilient youths seem to have different forms of “avoidant behaviour” “at their disposal” which contribute to their successful development. These ways of conduct could be included as items in Component 3. In paragraph 6.4, the content of new items for Component 3 will be more closely examined discussed in the light of the qualitative results.

#### **6.2.2.4 The "Resilience scale"**

For the practical use of the VVL in identifying resilient and not-resilient middle-adolescents, the “Resilience” scale has been developed. This scale includes items of Component 1 (Resilient Behaviour) and Component 2 (Not-Resilient Behaviour). The participants’ scores on the “Not-Resilient Behaviour” component are reverse-scored in this scale. Once the data have been reverse-scored, an average high score on the Resilience scale means that the respondent is identified as resilient, whereas a low score means that the respondent is not-resilient.

### 6.2.3 VVL SCORES

Analysis of the scores for Components 1 and 2 and the Resilience Scale shows that there are no differences between the scores on Resilient Behaviour, Not-Resilient Behaviour and Resilience between the five different schools. So no “school-based differences” have been ascertained. It may be concluded that the five schools do not differ in the degree to which they contribute to their pupils’ resilience. However, the specific dynamics of the relation between resilience and the school environment are more complex and less a form of “one-way traffic” than the term “contribution” seems to convey. In the discussion on the qualitative results in paragraph 6.3, these dynamics and the way in which different school environments are related to the resilience of their pupils will be more closely examined.

Analysis of the scores for Components 1 and 2 and the Resilience Scale shows that girls score significantly higher than boys on the “Resilient Behaviour” Component and the “Resilience” scale. Boys do not score significantly higher than girls on the “Not-Resilient Behaviour” Component, so the differences in scores on the “Resilience” Component are explained by the difference in scores on the “Resilient Behaviour” Component.

In Chapter 4, it was suggested that boys are perhaps less inclined towards active problem-solving behaviour than girls (the content of the items in the “Resilient Behaviour” Component). This could explain the differences in their scores on “Resilient Behaviour” and “Resilience”. The “Resilience” scale now merely comprises the items of the “Resilient Behaviour” and “Not-Resilient Behaviour” Components. This scale could be expanded when Component 3 has been further developed. On the basis of the content of Component 3, it may be argued that boys might score higher than girls on items which directly relate to “tolerance for negative affect” and “flexible behaviour”. When the newly developed content of Component 3 is included in the “Resilience” scale, the difference in scores on this scale between boys and girls might be reduced.

The findings in the qualitative Part B of the study offer information towards developing items which describe other forms of behaviour besides active problem-solving behaviour.

## **6.3 INDUCTIVE LOGIC: PART B OF THE RESEARCH**

### **6.3.1 SUMMARY OF RESEARCH PART B**

#### **6.3.1.1 The emergent Theoretical Model of the Resilience Process in the School Environment**

Part B of the study aimed to inductively develop a “Grounded Theory” on the relation between the school environment and the resilience of urban middle-adolescents with a low socio-economic background. In order to do so, 21 middle-adolescents (10 resilient and 11 not-resilient) have been interviewed, a Grounded Theory has been developed as regards the way in which the school environment and resilience are mutually related, and the way in which the school environment can contribute to the resilience of both resilient and not-resilient middle-adolescents has been explored.

The Grounded Theory developed, “The Resilience Process in the School Environment”, about the relation between the school environment and the resilience of middle-adolescents, relates the *school environment* to the *home environment* through the *resilience qualities* of the middle-adolescent, which are expressed in his or her resilient or not-resilient behaviour in the school environment.

- 1 Resilient and not-resilient middle-adolescents enter the school environment in need of the resilience promoting school factors of *safety* and *good education*;
- 2 In interaction with their parents, resilient and not-resilient middle-adolescents have made different “road maps” of the school environment. These different road maps are expressed in the extent to which resilient and not-resilient middle-adolescents possess the resilience qualities of *overview*, *insight* and *positive future expectations* in relation to situations, events and people within the school environment;
- 3 Resilient and not-resilient middle-adolescents attach meaning to situations, events and people within this school environment on the basis of these resilience qualities;



- 4 Resilient and not-resilient middle-adolescents act on the basis of this meaning attachment when interacting with their environment. They elicit behaviour and reactions in others and create relationships on the basis of their meaning attachment;
- 5 The interaction with the environment results in a renewal, expansion, status quo or reduction of existing resilience qualities.

This Grounded Theory will now be discussed by means of a summary of the findings in the areas of:

- The needs for resilience promoting factors in the school environment;
- The differences in access to resilience promoting factors in the school environment;
- The specific demands on the school environment;
- The home environment in relation to the school environment.

The findings will be linked to relevant literature. This discussion will be concluded by a summary of the way in which the school environment can contribute to the resilience of both resilient and not-resilient middle-adolescents on the basis of their specific demands on the school environment.

### **6.3.1.2 The needs for resilience promoting factors in the school environment.**

#### *Summary*

Resilient and not-resilient middle-adolescents are similar in terms of the content of their needs for resilience promoting factors in the school environment. These are *safety* and *good education*. “*Good education*” contributes to a sense of “*safety*” and “*safety*” contributes to being able to experience and take part in “*good education*”.

The ways in which the school environment *may* contribute to *safety* according to resilient and not-resilient middle-adolescents are:

#### **Safety:**

The school has clear rules; the school team checks on the pupils; presence and absence are recorded; the school directly intervenes in case of fighting or a different

“problematic situation”; the school maintains intensive contact with external organisations, such as community centres and the police.

The school team can be trusted and it expresses its trust in its pupils; pupils are known; the school team knows the pupils by name; the school team has a positive attitude towards pupils; adults in the school environment keep an eye on all pupils; pupils are treated justly and fairly by teachers; teachers let pupils know what they are doing right, not only what they are doing wrong; teachers remain calm when pupils misbehave; pupils are allocated a personal counsellor or mentor; pupils learn to collaborate; the school team members are friendly with one another; in class, teachers allow room for short, informal conversations between pupils and between teachers and pupils.

The school team is able to motivate the pupils; the pupils get help with their homework; captivating teaching creates a good atmosphere in the class room.

The ways in which the school environment *may* contribute to *good education* according to resilient and not-resilient middle-adolescents are:

**Good Education:**

Teachers are firm, teachers are clear; teachers attach consequences to not attending; teachers have good control over their classes.

Teachers and mentors have high expectations of the pupils; teachers and mentors underline that good marks are important; teachers teach in a captivating manner;

Pupils are assisted in doing homework and learning subject matter; teachers offer room for asking questions about homework and subject matter; teachers clearly explain the subject matter; teachers offer extra time for homework; teachers provide an overview of school tasks; during assignments, teachers regularly evaluate how the pupils are getting on and offer help towards their progress with the homework; the pupils learn to plan their work; the pupils learn to work self-sufficiently.

When teachers and the school team have good control within the school environment, set clear rules, offer support in doing assignments, know how to hold the attention of their hearers, show an interest in the pupils, give pupils responsibilities and have pupils collaborate who would normally not be inclined to work together, then the atmosphere in the classroom and in the school environment will be good, and the pupils will feel safe. Consequently, they will experience greater access to *good education*. They will also behave better when they have the sense of learning something and are assigned certain responsibilities within the school environment.

#### *Relevant literature and interpretation*

These findings agree with the earlier research findings of Van der Wolf (1984) on premature school-leaving restraining factors and of Henderson and Millstein (2003) on resilience promoting factors. Inspired by the work of Rutter (1979; 1981), Van der Wolf (1984) investigated *premature school-leaving* in relation to *school-internal* factors and *school results* for regular, primary education. Based on his findings, Van der Wolf construed a theoretical “premature school-leaving restraining school”. This school distinguishes itself from others in five areas: (i) the performance of the school team; (ii) the performance of the school management; (iii) the pedagogic-didactic policy; (iv) the attention paid to the importance of knowledge and structure; (v) the deployment of internal and external support. The findings in the present study regarding the needs of middle-adolescents in the school environment agree with the characteristics of the premature school-leaving restraining school where the relationship between the school environment and pupils is concerned. These characteristics relate to *paying attention to the importance of knowledge and structure* and *the deployment of internal and external support*.

Based on the findings in the present study in relation to Van der Wolf’s (1984) findings, it is likely that the fulfilment of the middle-adolescents’ needs in the school environment concerning safety and good education contributes to preventing Dutch, urban middle-adolescents with a low socio-economic status from prematurely leaving school. The fact that meeting the needs for *safety* and *good education* in the above-mentioned manners also contributes to the resilience of Dutch, urban middle-adolescents with a low socio-economic status, is confirmed by literature on resilience. Within the resilience-oriented framework, Henderson and Milstein published a

handbook in 2003 for creating a resilience promoting school by use of the “Resiliency Wheel”. The “Resiliency Wheel” is based on different interaction processes between risk factors and protective factors. The “Resiliency Wheel” applies to both primary and secondary education. The theory behind the so-called “resiliency wheel” in Henderson and Milstein’s (2003) handbook concerns a combination of theory on risk reduction and on the improvement of the characteristics of an individual and his environment; this enables the individual to positively develop despite the presence of risk factors. The findings in the present study relating to the needs of middle-adolescents in the school environment agree with the strategies of Henderson and Milstein (2003) in the areas of: setting clear and consistent limits; teaching life skills; providing care and support; setting and communicating high expectations and offering possibilities for meaningful participation.

The reason for Van der Wolf’s (1984) research was, among other things, an unexplained variance found in the results of research into the relationship between child and family characteristics and school results. Likewise, the present study was founded on an unexplained variance found in the development of different pupils *within* schools. The findings in the present study illustrate how the needs of all middle-adolescents are similar; how, according to some middle-adolescents, these characteristics *are* present in their school environment; and how, according to other middle-adolescents, these characteristics are not or not sufficiently present in that same school environment. Some pupils develop in a successful way, whereas others leave school prematurely or are referred to other forms of education because of their low performance or undesirable behaviour. Different pupils within one and the same school environment perceive the presence or absence of the same resilience promoting school factors. The observed variance in the degree of successful development can thus not be explained by the presence or absence of these factors. Because this present study focused on pupils from more or less the same “high-risk backgrounds” within schools, this variance cannot be explained by the degree of SES or immigrant or native background either. How this difference *can* be explained, will be discussed in the paragraph below.

### 6.3.1.3 The differences in access to resilience promoting factors in the school environment

#### *Summary*

The present research showed that resilient and not-resilient middle-adolescents have similar needs for resilience promoting factors. However, both groups differed in the degree to which they experienced or perceived these “resilience promoting factors” in the school environment, the extent to which they experienced their access to these “resilience promoting factors” and the measure in which they contributed to their access to these “resilience promoting factors” themselves. They attach different meanings to events and actors within the same school environment.

The attachment of meaning by resilient middle-adolescents and not-resilient middle-adolescents distinctly differs in the degree to which it demonstrates *overview*, *insight* and *positive future expectations* of and in situations, events and persons in the school environment:

#### *Overview*

The resilience quality of “having an overview” relates to the degree to which a middle-adolescent “oversees” the school environment in terms of *school tasks, mechanisms and patterns in behaviour of people in that environment; expectations regarding one’s own behaviour; situations that may arise in the school environment; risks for one’s own development that may be present in the school environment; and the presence of potential resources to assist one’s own development.*

#### *Insight*

The resilience quality of “having insight” is related to the measure in which a middle-adolescent has insight into his or her own actual abilities and skills to deal with situations and possible problems or risks.

#### *Positive future expectations*

The resilience quality of “having positive future expectations” refers to the degree to which a middle-adolescent trusts their will be improvement of a situation after a

problem or risk has occurred, and of the benefits to be gained by making an effort to deal with a problem or risk.

Resilient middle-adolescents reveal a strategic approach to their school environment. They motivate their behaviour by making a connection between their behaviour and their needs for *safety* and *good education*. They attach meaning to persons and events on the basis of the fulfilment of their needs for *safety* and *good education*. They create access to *safety* and *good education* with their behaviour in the following four areas:

*1. Negative influence of peers*

Resilient middle-adolescents attune their behaviour to their need for *safety* by not concerning themselves with the gossiping of fellow pupils, by not responding to rumours or challenges and by refraining from bullying. This way, they create access to resilience promoting factors in the school environment, because a sense of *safety* contributes to experiencing access to *good education*.

*2. Selecting friends;*

Resilient middle-adolescents are selective in choosing their friends. Constructive friendships are regarded as resilience promoting factors. They attune their behaviour to the need for constructive friendships by keeping their distance from fellow pupils who frequently skip school, display disruptive behaviour or challenge them to take part in criminal activities. They choose as their friends those who behave like they feel their fellow pupils should behave. This way, they create access to resilience promoting factors in the school environment, because they select friends on the basis of their potentially positive influence on their own development.

*3. Creating and maintaining constructive relationships with adults in the school environment*

With respect to safety, resilient middle-adolescents feel that good relationships with teachers are important, because these contribute to their *access to protective factors* in the school environment. A good relationship with several teachers is useful, for instance, when one teacher is not prepared or able to help solve a specific problem. Another teacher will then be able to help them with that problem, provided they have a good relationship with that teacher. The behaviour which resilient middle-adolescents attune to these needs includes listening to teachers, having a chat during or in-between classes and making little jokes in order to get to know the teachers. In

this way, they build good relationships with teachers and create access to potential resilience promoting factors, because they have activated various potential resources by building those good relationships.

#### 4. *Participating in education*

As regards good education, they feel it is important to do their homework and behave well in class. Their motivation for their behaviour is that the homework's subject matter is included in examinations and that behaviour is an assessment criterion. They attune their behaviour to their need for good education by doing their homework in time in order to be able to ask their teacher in class what they do not know; by doing the homework together with fellow pupils so that they get a firmer grasp of the subject matter; or by quickly completing - what they consider - easy work in order to have more time available for the subjects they find more difficult. This way, they create access to *good education*, because they can ask well-directed questions and thus ask for and receive well-directed help. Also, they create access to safety by generating teachers' positive feedback through their behaviour.

Not-resilient middle-adolescents reveal no strategic approach to their school environment. They express the same needs for *safety* and *good education*, but their motivation for their behaviour does not connect these needs to their own behaviour. The meaning they attach to situations, events and actors reveals less *overview*, *insight* and *positive future expectations*. They actually do associate with "bullies" and accept challenges to fight. They seem less intent on creating and maintaining constructive relationships with adults in the school environment, either because of their disruptive behaviour in class by which they generate a lot of negative feedback, or by avoiding contact with adults in the school environment. Finally, they effect less access to *good education*, because their agitated behaviour in class prevents them from participating in the education, or because they forget or do not do their homework. As a result, they are less able to ask specific questions and seek and get specific help.

#### *Relevant literature and interpretation*

In accordance with the results in the area of "access to resilience promoting factors in the school environment", Waxman, Huang and Wang (1997) and Padron, Waxman and Huang (1999) found that resilient pupils fit in better in the directive class system than not-resilient pupils. The resilient pupils included in these studies showed more

motivation and more attention, answered questions voluntarily and therewith or thereby received more attention and approval from the teachers. The not-resilient pupils in the same study seemed bored, unwilling to answer and, at various times, not prepared to work. They also found that resilient pupils spent significantly more time interacting with teachers for instruction purposes (effective proximal interaction processes), whereas not-resilient pupils spent more time interacting with fellow pupils for social or personal purposes. “Help seeking behaviour” in class turned out to be a strategy which helps pupils deal with school-related difficulties. This way, help seeking behaviour becomes a protection mechanism within the context of the classroom. On the whole, these findings agree with the image arisen in the present study.

At the same time, this study has clearly revealed that teachers play a key role in creating opportunities for the emergence of effective proximal interaction processes: by having control in class, by teaching in a captivating manner and by being a confidant.

Based on the findings of Waxman et al. (1997) and Padron et al. (1999) in combination with the findings in the present study, it could be argued that resilient pupils more actively create access to resilience promoting factors in the school environment. Even when instructions and class activities are given directly, resilient pupils are able to make their interaction with the teacher a responsive one by answering questions voluntarily, by involvement in clarifications and by spending time with the teacher for instruction purposes. Through their own actions and attitude, resilient pupils benefit from and contribute to resilience promoting factors in the school environment themselves. They create social support.

The differences in resilience qualities between resilient and not-resilient middle-adolescents seem to manifest differences in the demands on the school environment they make through their behaviour. These demands will be discussed in the following paragraph.

#### **6.3.1.4 Specific demands on the school environment**

##### *Summary*



Resilient and not-resilient middle-adolescents differ in the extent to which they are *dependent* on the proper organisation of the school environment for their successful development.

Because they possess the resilience characteristics of *overview*, *insight* and *positive future expectations*, resilient middle-adolescents are able to utilise potentially existing “resilience promoting” factors in the school environment and contribute to the existence of these factors. These resilience promoting factors can be subdivided into the categories of *safety* and *good education*. In cooperation with the school environment, resilient middle-adolescents create and utilise these factors.

Not-resilient middle-adolescents are more dependent on the school environment for their successful development, because resilience factors in the categories of *safety* and *good education* are relational factors in that environment. Not-resilient middle-adolescents bring less resilience characteristics into the school environment and therefore contribute less to the emergence of relational resilience factors in this environment. They thus have less *access* to potentially existing resilience promoting factors in the school environment.

In the elaboration on the bio-ecological interpretation of the qualitative research results in paragraph 6.4, these specific demands will be further discussed.

#### *Relevant literature and interpretation*

In a lot of literature on resilience, many resilient personality characteristics are mentioned (e.g. a positive nature, an outgoing personality, sense of humour, hope, intrinsic motivation, determination, self-confidence; see Appendix 2). As discussed in Chapter 2, these resilient personality characteristics contribute equally to both resilience and the outcomes of resilience. Due to these resilience qualities, middle-adolescents are able to create resilience factors at school level (e.g. supportive peers, positive relationships with teachers, a safe school environment; see Appendix 2).

On the basis of the findings in research Part B, it is likely that there is a relation between resilient personality characteristics, such as an outgoing personality, hope, determination and self-confidence, and the resilience qualities of *overview*, *insight*,

and *positive future expectations*. The resilient personality characteristics and the resilience factors at school level mentioned in Appendix 2 can be classified as *insight* and *positive future expectations*: resilient middle-adolescents have *insight* in the ways in which they can create and maintain positive relationships (e.g. supportive peers, positive relationships with teachers) in the school environment (e.g. by means of a positive attitude towards teachers and fellow pupils, through humour), and they have *positive future expectations* of a positive outcome of their efforts (hope, determination, self-confidence).

The present study complements the list of resilient personality characteristics by adding the term *overview*. In research Part B, it was found that resilient middle-adolescents initiate and maintain positive relationships with teachers and fellow pupils because they have an *overview* of the importance of these relationships for their successful development and the potential risk factors in the school environment. This *overview* enables them to *identify* and *utilise* resilient personality characteristics in themselves and resilience factors in the school environment.

By identifying and utilising resilient personality characteristics and resilience factors in the school environment, they gain access to “help” when circumstances arise which they experience as difficult. This help emerges from the relationship between the middle-adolescent and his environment, and comprises the facilitation of more *overview*, *insight* and *positive future expectations* for constructively dealing with the circumstance experienced as difficult. In their relationship with the middle-adolescent, the resilience factors in the school environment contribute to the further development of resilience characteristics, such as positive nature, outgoing personality, sense of humour, hope, intrinsic motivation, determination and self-confidence, by offering *overview*, *insight* and *positive future expectations* in dealing with challenges.

#### *The Resiliency Model and the Resilience Cycle*

In the *Resiliency Model* (Chapter 2, paragraph 2.3.3.6), Richardson et al. (1990) shed light on the steering role of the individual in establishing resilience due to individuals consciously or unconsciously choosing the way in which they “reintegrate” after a challenging experience. In summary, Chapter 2 stated that the Resiliency Model developed by Richardson et al. (1990) describes resilience as a skill to successfully

deal with stressful circumstances, which emerges and expands as a result of the transaction between an individual and his environment. In this, the individual's choice to utilise the help and support in his environment and the presence of help and support in that environment are essential prerequisites. The experience of challenging or stressful situations is, in accordance with the challenge model, critical for positive development in terms of growth and the development of resilience characteristics.

The most essential prerequisite for growth and increasing resilience characteristics of experiencing situations which are challenging or stressful, has been confirmed in research Part B. Owing to their *overview*, resilient middle-adolescents identify more circumstances as *challenging*, because they identify these circumstances as risks for the goal they have set. They know the consequences of certain behaviour and are able to identify risks on the basis of these consequences. By experiencing challenging or high-risk situations more frequently, resilient middle-adolescents appear to be more "teachable" than not-resilient middle-adolescents.

Confirmation of this finding can be found with Morales (2000). He suggests that recognising risks and support in the environment are necessary conditions for the ability of steering situations towards resilient development.

In relation to symbolic interactionism, Morales (2000) formulated the hypothesis that the not-resilient students in his study (those who did not undergo a successful educational development) had not experienced the manifestation of protective factors in their environment. The development of these not-resilient students is characterised by the presence of potentially protective factors. These potential factors carry with them the possibility to protect the individual against risk factors, however, they have not yet been activated, because they have not been *identified* by the not-resilient middle-adolescents.

Morales (2000) found that the individual's recognition of a high-risk circumstance is essential to bringing about resilient development. According to Morales, recognising a high-risk circumstance is the start of the resilience process. In his study, he found that students growing up in high-risk circumstances and who were nevertheless capable of great performances in school, passed through the so-called resilience cycle:

1. The student identifies/recognises his or her greatest risk factors in a realistic and effective manner;
2. The student is able to recognise or seek protective factors which may potentially compensate for or ease the identified and potentially negative effects of the risk factors;
3. Together, the protective factors stimulate the student's high performance in school;
4. The student is capable of recognising the value of the protective factors and to continuously implement and refine them;
5. The consistent and continuous refinement and implementation of protective factors, together with the developing vision of the desired goal by the adolescent, support the adolescent's performance in school, even if new school-related challenges arise.

Through the resilience cycle, insight has been gained into the possible reason why a certain event initiates a learning process in resilient middle-adolescents, whereas the same events do not do so in not-resilient middle-adolescents and sometimes result in dropping out of school. According to Morales' (2000) resilience cycle, the situations which did not lead to not-resilient middle-adolescents' developmental growth were *not experienced as high-risk*.

Emphasising the identification of risks as point of entry to the resilience cycle, Morales elaborates primarily on the quality of *overview*. The present study has confirmed the need for *overview* (of the entire situation in which a potential challenge arises wherein risks and resources can be recognised and wherein it is clear which behaviour is desirable or undesirable) towards a resilient development. Resilient middle-adolescents identify risk factors and protective factors. Partly because they identify their biggest risk factors, they rate the protective factors at their true value and are able to implement and refine them.

The findings in this study complement Morales' findings by adding the need for *insight* (into the opportunities and specific skills the middle-adolescent thinks he has

in order to deal with a challenge) and *positive future expectations* (which the middle-adolescent has of improving the situation and the benefits to be gained).

Furthermore, it has been found that not-resilient middle-adolescents not only identify fewer risks and protective factors, they seem to have less access or do not utilise their access to protective factors in the school environment, because they have less constructive relationships with their peers and adults in that environment.

### **6.3.1.5 The home situation in relation to the school environment**

#### *Summary*

The socio-economic background of participants in this research is mostly low. No clear differences were observed between resilient and not-resilient participants in terms of their parents' education level or occupational status.

The risks carried by the backgrounds of both the resilient and not-resilient participants in this study, are:

1. Challenges related to being a member of an ethnic minority;
2. Challenges related to financial deficiencies;
3. Challenges related to parents' low education level.

The home environment of resilient and not-resilient middle-adolescents only differs in the extent to which it facilitates *overview*, *insight* and *positive future expectations* in the interaction between parents and middle-adolescents. The three circumstances (challenges) seem to have a positive effect when the interaction between parents and middle-adolescents is active and effective. Resilient middle-adolescents appear to attach more importance to means and ways to outgrow certain limitations because of the above-mentioned three challenges. Resilient middle-adolescents dealing with those challenges regard the school as *the* means to achieve that goal, because, in the interaction with their children, parents make a connection between the school and the chance it offers to reduce the number of limitations such as their parents had to cope with. It is then the role of the school environment to challenge, steer and motivate the resilient middle-adolescent (the challenge model, as discussed above).

Incidentally, it appears that the above-mentioned three challenges do not always apply to not-resilient middle-adolescents; far from it. But their family context does often show a low degree of active, effective relationships. This low activity is not merely determined by personality characteristics; the fact that not-resilient middle-adolescents can be very active in active, effective relationships in the school environment once *overview* has been acquired as a result of “interfering” in their daily habits, demonstrates this. In contrast to resilient middle-adolescents, this interference often only takes place when a competence reduction has already occurred: duplication or a move down to a lower level.

### **6.3.2 BIO-ECOLOGICAL INTERPRETATION OF RESEARCH PART B**

#### **6.3.2.1 Summary**

According to the bio-ecological perspective (Bronfenbrenner and Ceci, 1994; Bronfenbrenner, 2001; Leseman, 2005; Swart & Pettipher, 2005), the development of middle-adolescents takes place through interaction between the middle-adolescent and his environment. A middle-adolescent develops according to the bio-ecological perspective because of the realisation of certain potential characteristics, which have been genetically determined. The form of expression of the middle-adolescent, and therefore of his behaviour, is, according to the perspective, “merely” a reflection of his realised genetic possibilities. The middle-adolescent has far more genetic potential, but only a small part of it is realised. Which and what measure of genetic potential are realised depends on both the middle-adolescent’s environment and the middle-adolescent himself. In relation to the influence of the environment on the middle-adolescent’s development, according to the bio-ecological perspective, only the genetic potential for which a need exists in the environment is activated. This need is not an objectively present need, but is experienced by the middle-adolescent as a need in proximal interaction processes with his environment. Proximal interaction processes are those interaction processes that take place between the middle-adolescent and the direct environment in which he finds himself at a certain moment (e.g. the family environment, the school environment).

Thus far, the contribution of the school context to the resilience of urban middle-adolescents could be understood by means of increasing effective interaction

processes between the middle-adolescent and his environment. However, as discussed in Chapter 1, the middle-adolescent himself gives form and meaning to his environment through his demand characteristics. In addition to shaping the environment and eliciting responses from his environment, these demand characteristics are expressed in selective patterns of attention, expression and responses by the middle-adolescent in his environment. These expressions are partly attributable to hereditary predispositions to specific characteristics, as well as to previous experiences of the individual with his environment.

Middle-adolescents thus experience a need for their own specific characteristics on the basis of their own selective patterns of attention, expression and responses, which in turn have been established by genetic predispositions and previous experiences. As genetic potential is realised through proximal interaction processes between middle-adolescents and their environment, an individual unconsciously selects which genetic potentials are realised within him through his selective patterns. The middle-adolescent therefore unconsciously controls which characteristics are established in his behaviour.

From the bio-ecological perspective on successful development as introduced in Chapter 1, it was argued that it is more the relationship between the middle-adolescents and their environment in which they posit their demands which influences successful development, than the middle-adolescents' active demands. On the basis of the bio-ecological model it was assumed that middle-adolescents differ in their access to effective proximal processes within the school environment, because of selective patterns of attention and responses and because of their own characteristics which elicit the behaviour of others in their environment. These patterns of attention and responses and characteristics arise through genetic predispositions and prior experience. Following this line of argument, it was argued that an identical school environment for middle-adolescents with different experiences in other microsystems would have a different significance, as a result of their difference in *access to* effective proximal interaction processes in the school processes and therefore as a result of educational experiences. Therefore, it was argued that in order to create effective proximal processes, middle-adolescents require different approaches by the school environment.

### 6.3.2.2 A bio-ecological perspective on resilience

#### *The Resilience Process in the school environment*

Middle-adolescents have a choice of reintegrating in a certain way when they experience a situation as challenging. In order to develop a resilient way, a situation should be identified as high-risk first, before being able to deal with that situation constructively. To do so, *overview* of the situation is needed. Resilient middle-adolescents already have this *overview*, or are able to acquire it in the school environment with the help of important people in that environment, such as mentors, teachers or friends. These important people can subsequently contribute to *insight* in the skills needed to deal with the challenge, and to *positive future expectations* of a reward for doing so.

#### *The microsystem in the school environment: Demand characteristics and effective proximal interaction processes*

Facilitation of *overview*, *insight* and *positive future expectations* takes place in effective proximal interaction processes between middle-adolescents and their school environment. However, a constructive relationship should already exist between middle-adolescents and their supervisors, such as mentors, teachers or friends. Non-resilient middle-adolescents create and maintain less constructive relationships with supervisors or friends. They thus have less access to effective proximal interaction processes and therefore have less access to acquiring *overview*, *insight* and *positive future expectations*. The needs for *safety* and *good education* are *relational needs*. The relationship between the specific pupil and the school environment determines whether trust and safety will be established. By contributing to disruption, some pupils deny themselves the order in class which they actually need. Other pupils are capable of jokingly expressing their dissatisfaction towards teachers about a situation and their need for a different situation. In summary, it may be said that the ways in which the school environment can contribute to *safety* and *good education* in the school environment (see paragraph 6.3.1.2) are ways in which the school environment creates room for effective proximal interaction processes. The research results also show how the reciprocity of interaction is decisive for the effectiveness of proximal interaction processes.



*The mesosystem: The relationship between the home environment and the school environment*

The interaction between the middle-adolescent and the school environment is connected as a microsystem in a mesosystem to the microsystem of interaction between the middle-adolescent and his home environment: the interaction between the middle-adolescent and his home environment contributes to the measure of resilience qualities with which the middle-adolescent enters the school environment. Resilient middle-adolescents are more active in effective proximal interaction processes in the home environment than not-resilient middle-adolescents. This finding is in accordance with the bio-ecological perspective on successful development, illustrated in Chapter 1 (paragraph 1.5.4.): when the quality of proximal interaction processes is low, then the present genetic potentials do not evolve into effective development. When the quality of the proximal processes increases, the effective development of an individual will also increase as a result of the genetic potentials being realised by the interaction processes.

*The mesosystem: microsystems in the school environment*

Arguing from the bio-ecological perspective, through their dispositions middle-adolescents themselves influence the occurrence of effective proximal interaction processes. After all, proximal interaction processes should be mutual and reciprocal to be effective. The school context can *offer* effective proximal interaction processes in the form of mentors or teachers. However, these only have a positive influence on the development of middle-adolescents if middle-adolescents are themselves active in their relationships with these mentors and teachers. Moreover, especially in the school context a great number of interaction processes are not by definition aimed at successful development, such as the interaction with classmates and friends. These do prove to contribute to their successful development, however. The interaction between the middle-adolescent and their classmates is connected as a microsystem in a mesosystem to the microsystem of interaction between the middle-adolescent and adults in the school environment. Resilient middle-adolescents create access to resilience promoting factors in the school environment by not responding to gossip or challenges to fight and by refraining from bullying: a sense of *safety* contributes to experiencing access to *good education*.

*The chronosystem: the phase of middle-adolescence*

Bronfenbrenner and Ceci (1994) submit that in a child's early life it is largely adults who give form and meaning to proximal processes. Although children, from birth, influence proximal interaction processes through selective attention, behaviour and response, parents still have a dominating influence in the early stages of development. In the course of his development, a middle-adolescent will have developed more patterns of selective attention, behaviour and response; these will dominate his interacting with the school environment and his giving form and meaning to a greater extent than in his childhood. Although the school environment can improve the middle-adolescent's exposure to effective proximal interaction processes, in terms of attention, behaviour and response it is up to the individual adolescent to enter the proximal interaction processes which are effective for his successful development. The specific phase of middle-adolescence has implications for the way in which the school environment will have to actively facilitate the opportunities for effective proximal interaction process and initiate and maintain these processes.

*The exosystem: the relationship between external institutions and the school environment*

In the form of maintaining contact between the school environment and external institutions, the exosystem influences the interaction between the middle-adolescent and the school environment: the interaction between the school environment and external institutions can contribute to the presence of resilience qualities in the school environment.

### **6.3.3 RECOMMENDATIONS FOR EDUCATIONAL PRACTICE**

In relation to literature mentioned earlier (Chapter 2, paragraph 2.3.3.1), it may be argued that resilient middle-adolescents develop in the school environment according to the *challenge model* (Fergus & Zimmerman, 2005): small challenges in the school environment suffice to initiate successful development, because they are able to deal with these challenges constructively themselves or ask for help with these challenges. As regards the school environment, this means that it should challenge these resilient middle-adolescents, for instance in terms of high expectations, learning to collaborate with fellow pupils and learning to deal with conflicts between fellow pupils. In addition, the school environment should offer possibilities for creating constructive

relationships between resilient middle-adolescents and adults and fellow pupils by offering opportunities for informal conversations and activities.

Not-resilient middle-adolescents do not develop in the school environment according to the challenge model, but more as illustrated by the *compensation model* (Chapter 2, paragraph 2.3.3.2). The compensation model (Hollister-Wagner & Foshee, 2001; Fergus & Horwood, 2003; Fergusson & Zimmerman, 2005) describes resilience as the outcome of a process in which a protective factor and the risk factor do not interact with each other, but both have an independent influence on the individual. Not-resilient middle-adolescents do not identify circumstances as challenging, as a result of which they tend not to learn from these circumstances. When they do identify a circumstance as challenging, they do not tend to identify in themselves or their environment the skills and help needed to deal with the challenge. Moreover, they have less access to help in their environment, because they create their access to help less strategically. This means that the school environment should facilitate *overview*, *insight* and *positive future expectations* for not-resilient middle-adolescents more directly. The school environment should compensate for missing, non-activated skills, so that the not-resilient middle-adolescents will be able to constructively deal with high-risk circumstances. The school environment should more directly impart *overview* to not-resilient middle-adolescents in terms of *school tasks, mechanisms and patterns in behaviour of people in that environment; expectations regarding one's own behaviour; situations that may arise in the school environment; risks for one's own development that may be present in the school environment; and the presence of potential resources to assist one's own development*. This could be done for instance by being strict and clear in the classroom, by drawing up a contract on desired and undesired behaviour and the consequences of certain behaviour, by allocating or allowing pupils to choose a personal school counsellor and by regularly offering help without the middle-adolescent asking for it. When *overview* is achieved, the not-resilient middle-adolescent is capable of identifying challenges. When challenges have been identified, the school environment needs to directly provide *insight* by pointing out to middle-adolescents their own existing possibilities and skills to deal with situations and any problems or risks. The not-resilient middle-adolescent and the school environment should acquire this *insight* together by examining together which strategy works best for the specific middle-adolescent (e.g. listening to music in class

and during examinations to improve concentration, sitting away from the others in class). In addition, the school environment should directly offer the not-resilient middle-adolescent *positive future expectations* of the improvement of a situation after a problem or risk has occurred, and of the benefits to be gained by making an effort to deal with a problem or risk. Meanwhile, the school environment should continuously remind the middle-adolescent of the *overview, insight* and *positive future expectations*.

In summary, the daily situations in the school environment offer enough tools to contribute to the resilience of resilient and not-resilient middle-adolescents. These should, however, be recognised by both the middle-adolescent and the adults in the school environment as opportunities for development, which should subsequently be grasped in order to learn to deal with these challenges constructively.

In the next paragraph, the results of the qualitative research will be placed in the light of the quantitative research part, recommendations for follow-up study will be made, and the limitations of the study presented here will be discussed.

## **6.4 INTERSUBJECTIVE KNOWLEDGE THROUGH INDUCTIVE AND DEDUCTIVE LOGIC**

### **6.4.1 INTRODUCTION**

The present study utilised both deductive and inductive knowledge development. In Chapter 2, paragraph 3.4.1, the Research Cycle developed by Tashakkori and Teddlie (2003) was presented, in which deductive and inductive logic is combined in order to develop intersubjective knowledge. The deductive research part of the present study has informed the inductive part through the possibility of identifying middle-adolescents as resilient and not-resilient on the basis of their behaviour in dealing with circumstances experienced as challenging. The inductive research part has served as validation of the deductively developed definition of resilience and the VVL developed on the basis of this definition. Also, the inductive research part has informed the deductive part through findings on the establishment of behaviour which the VVL identified as “Resilient Behaviour”, and on additional conduct which can be considered as “Resilient Behaviour”. In this paragraph, the results of both research

parts will be combined in the discussion on the definition of resilience and the validity of the VVL. At the end of this paragraph, some concluding remarks will be made on the use of the VVL.

#### **6.4.2 THE DEFINITION OF RESILIENCE**

The inductively acquired research results confirm the deductively developed definition of resilience. Resilience is the ability to identify and utilise internal resilience characteristics (*insight*) and to identify and utilise resilience qualities in the (school) environment (*overview*) when circumstances are experienced as difficult or challenging. The interaction between the middle-adolescent and the (school) environment generates constructive outcomes in the development of the middle-adolescent and an increasingly flexible approach by the middle-adolescent to challenging circumstances (such as increasing *overview*, *insight* and *positive future expectations*).

The qualitative research results have provided insight into the conditions for the establishment of resilience: the identification of high-risk or challenging circumstances (*overview*), *access* to resilience qualities in the (school) environment, *insight* in personal skills and possibilities to deal with circumstances experienced as challenging, and *positive future expectations* of a constructive outcome of the deployment of these skills.

#### **6.4.3 THE VALIDITY OF THE VVL**

##### **6.4.3.1 The establishment of Resilient Behaviour**

The establishment of “Resilient Behaviour” occurs on the basis of the resilience qualities of *overview*, *insight* and *positive future expectations*. These resilience qualities are in the first place established in effective interaction processes between resilient middle-adolescents and their home environment.

Behaviour which on the basis of the qualitative research results can be referred to as “Resilient Behaviour”, are:

- Keeping a distance from negative influence of peers;
- Actively selecting constructive friendships;

- Creating and maintaining constructive relationships with adults in the school environment;
- Actively participating in education.

In the qualitative research results, effective proximal interaction processes in the home environment in which *overview*, *insight* and *positive future expectations* are facilitated, are illustrated by recurring conversations between parents and resilient middle-adolescents about events in school, possible high-risk situations, ways of dealing with high-risk situations constructively and trust in the middle-adolescent.

This behaviour and these processes confirm the applicability of a number of items in the VVL's "Resilient Behaviour" Component and complement these items. As concerns the VVL's validity, it may be concluded that the formulated items correspond to the behaviour that can be recognised in the resilient participants in the qualitative research Part B. This indicates a certain degree of construct validity of the VVL: Component 1 of the VVL measures behaviour that can be identified as resilient behaviour. The additional items reflect proactive behaviour. This proactive behaviour facilitates the access to resilience promoting factors in the school environment.

#### **6.4.3.2 Confirmation of applicability of existing items in Component 1**

The behaviour of "Keeping a distance from negative influence of peers" is included as item in the VVL (32. *If my friends want to do something I know will cause problems then I won't participate.*).

The behaviour of "Actively participating in education" is included in the VVL as two items (16. *If a teacher is angry with me then I will try to concentrate more on my schoolwork*; 30. *If I get a lot of poor marks for a particular subject I will find someone who can help me with my homework for that subject.*).

The effective proximal interaction processes between the middle-adolescent and his or her home situation have been included in the VVL as three items (1. *If I have to make a difficult decision then I talk to someone at home who can give me advice*; 23. *I try to*

*help make the best of things when there are problems at home; 26. I apologise when my parents are angry with me and they are right.*).

#### **6.4.3.3 Suggestions for creating additional items for Component 1**

Additional items in the area of “Keeping a distance from negative influence of peers” could be formulated with regard to refraining from bullying and not responding to challenges to fight.

Additional items in the area of “Actively participating in education” could be formulated in regard to presence in school and actively participating in class.

The behaviour of “Actively selecting constructive friendships” has as yet not been included in the VVL; it represents proactive behaviour which facilitates access to resilience promoting factors in the school environment. A number of new items could be created in this respect.

The behaviour of “Creating and maintaining constructive relationships with adults in the school environment” has as yet not been included in the VVL; it represents proactive behaviour which facilitates access to resilience promoting factors in the school environment. A number of new items could be created in this respect.

Additional items in the area of “Effective interaction processes in the home environment” could be formulated in terms of parents facilitating *overview*, *insight* and *positive future expectations* for the middle-adolescent.

#### **6.4.3.4 The establishment and effect of Not-Resilient Behaviour**

Not-resilient middle-adolescents demonstrate little *overview*, *insight* and *positive future expectations*. As regards the establishment of *overview*, *insight* and *positive future expectations*, it may be said that these are either not facilitated in the home environment for not-resilient middle-adolescents, as a result of which they act without *overview*, *insight* and *positive future expectations* in the school environment, or that these are *not acquired by themselves* when they are confronted by challenging situations. In order to acquire *overview*, not-resilient middle-adolescents are more dependent on their school environment than resilient middle-adolescents. However,

because of their limited activity in constructive relationships with adults in the school environment, they seem to attach less value to these adults' warnings of the risks of their behaviour. Therefore, they also experience the presence of help in constructively dealing with risks less quickly. They have little *insight* in their own skills and possibilities to prevent risks or solve problematic situations. Because they have little *insight* in their own possibilities, they have little *positive future expectations* of a positive outcome of their efforts.

The behaviour of the participants identified as not-resilient is mainly characterised by:

- Responding to or participating in negative influence of peers;
- Not selecting constructive friendships;
- "Not creating" and not maintaining and/or disrupting constructive relationships with adults in the school environment;
- "Not participating" in education.

In the qualitative research results, non-effective proximal interaction processes in the home environment in which no *overview*, *insight* and *positive future expectations* are facilitated are illustrated by a reactive attitude of parents towards school (school is only a topic of conversation if negative messages about the middle-adolescent are received from the school environment) and towards not-resilient middle-adolescents walking out on conversations about school and about their behaviour in school.

This behaviour confirms the applicability of a number of items in the VVL's "Not-Resilient Behaviour" Component and complements these items. As concerns the VVL's validity, it can be concluded that the formulated items in Component 2 correspond to the behaviour that can be recognised in the not-resilient participants in the qualitative research Part B. This indicates a certain degree of construct validity of the VVL: Component 2 of the VVL measures behaviour that can be identified as not-resilient behaviour. The additional items reflect non-proactive behaviour and counterproductive behaviour. This counterproductive behaviour hinders the access to resilience promoting factors in the school environment.



#### **6.4.3.5 Confirmation of applicability of existing items in Component 2**

The behaviour of “Responding to or participating in negative influence of peers” is included as item in the VVL (21. *If my friends want me to do something that I would rather not do, I will go along with their plan anyway.*).

The behaviour of “Not creating and maintaining and/or disrupting constructive relationships with adults in the school environment” is included in the VVL as three items (17. *I stop going to school if there are problems at home.* 24. *If I’m feeling anxious about problems at school then I won’t go the next day;* 31. *If I’m feeling anxious about problems at school then I’m really unpleasant to the teachers.*).

The behaviour of “Not participating in education” is included in the VVL as two items (15. *If I get a lot of bad marks for a subject then I stop learning that subject;* 24. *If I’m feeling anxious about problems at school then I won’t go the next day.*).

The non-effective proximal interaction processes between the middle-adolescent and his or her home situation have been included in the VVL as two items (9. *I am really unpleasant to my family, if I have had an argument with my friend;* 18. *If I really want something and my parents won’t pay then I’ll argue with my parents.*).

#### **6.4.3.6 Suggestions for creating additional items for Component 2**

Additional items in the area of “Responding to or participating in negative influence of peers” could be formulated in terms of taking part in bullying, responding to challenges to fight and joining in with truancy or criminal activities.

The behaviour of “Not selecting constructive friendships” has as yet not been included in the VVL. A number of new items could be created in this respect.

Additional items in the area of “Not creating and not maintaining and/or disrupting constructive relationships with adults in the school environment” could be formulated in regard to avoiding teachers and mentors, “not asking for help” when circumstances are experienced as difficult and pestering of teachers.

Additional items in the area of “Not participating in education” could be formulated with regard to not doing homework, disrupting the order in the classroom and not asking for help in understanding the subject matter.

Additional items in the area of “Non-effective interaction processes in the home environment” could be formulated in regard to walking away from conversations with parents about school, about not conversing at home about the middle-adolescents’ behaviour in the school environment and on the home environment not expressing trust in the middle-adolescent.

#### **6.4.3.7 “Flexible behaviour” and “Tolerance for negative affect”: Component 3**

In the elaboration on Component 3, it was argued that additional items should be created in regard to a “*tolerance for negative affect*” and “*flexible behavioural repertoire*”. Confirmation was found in the qualitative research results for the ability to tolerate negative feelings and the possession of a *flexible* behavioural repertoire. Resilient middle-adolescents who, for instance, were bullied, were capable of tolerating the unpleasant experience of being bullied due to their *overview* of the bullying mechanisms, their *insight* in the ways in which they would be the least troubled by this bullying, and their *positive future expectations* of ending this bullying if they would deal with it constructively. To them, this constructively dealing with bullying meant that they did *nothing* and did *not respond* to bullies. This reaction could be interpreted as non-active problem-solving behaviour. It should nevertheless be interpreted as resilient behaviour: carrying on despite negative emotions and experiences. At other times, these same resilient middle-adolescents did demonstrate active problem-solving behaviour. Having both active problem-oriented strategies and avoidance strategies at one’s disposal can be interpreted as possessing a flexible behavioural repertoire. It may be concluded from this that in the qualitative research Part B confirmation has been found for the suggestion that additional items can be created for Component 3 with regard to a “tolerance for negative affect” and a “flexible behavioural repertoire”.

#### **6.4.4 CONCLUDING REMARKS ON THE VVL**

Labelling middle-adolescents as not-resilient can imply a deficit model in which a middle-adolescent should acquire resilience qualities *before* he can function successfully in the school environment. However, the VVL is aimed at identifying where not-resilient middle-adolescents' needs lie for gaining access to successful development in the school environment. The identification of these needs can be used to devise new ways in which the school environment can be adapted towards becoming an environment where middle-adolescents gain access to factors which contribute to their successful development, such as *safety* and *good education*. With these, middle-adolescents can acquire the resilience qualities of *overview*, *insight* and *positive future expectations* and further develop the skill of constructively dealing with circumstances which are experienced as difficult. The results and findings in research Part B offer tools for the way in which the school environment can be adapted in order to facilitate the possibilities to support resilient as well as not-resilient middle-adolescents in increasing their resilience. These have been discussed in paragraph 6.3.3.

#### **6.5 REMARKS ON THE RESEARCH DESIGN**

As Patton (1990, in Marshall & Rossman, 1999) states, there is no perfect research design. According to Marshall and Rossman (1999), a discussion of the study's limitations demonstrates that the researcher understands this reality. This understanding implies that no overweening claims are made about generalisability or conclusiveness relative to what is learned in the present study. The theoretical frame and traditions adhered to place limits on the research. By choosing a definition of resilience within a specific context, the conclusions are applicable solely within that definition and context.

In this study, both quantitative and qualitative methods were used. The quantitative study was essential preliminary research, proposed to reliably identify resilient adolescents. The qualitative method was used to gain insight in the relationship between school context and resilience, the main research question. The small sized sample of the qualitative study and the recognition of the uniqueness of personal truth prevent the findings from being generalisable in the statistical sense, but the findings

might suggest the relevance of researching the same question in the same research design in other contexts.

The emergent theoretical model of The Resilience Process in the School Environment (Paragraph 6.3.1.1) was the researcher's interpretation of 21 participants' perceptions of their school environment, their own behaviour and thinking in that environment, their background in relation to their school environment, and their reasoning about these elements. As is frequently the case in qualitative research, the results of this analysis are unique to the particular researcher, participants and context of the study. The quantitative data can claim to represent at least five schools in respect of their resilient and not-resilient middle-adolescents, the qualitative data can claim to represent at least three schools in that same respect. The aim set for creating intersubjective knowledge has been pursued and achieved by applying various literature controls on the analysis' results. These findings were then compared with findings in other studies and handbooks for professional practice. Also, the analyses and findings were amply discussed with colleagues in educational practice and fellow researchers. Similarities and differences between the analysis results and other findings or views were interpreted, detailed and further examined until new, additional knowledge was given shape as the emergent theoretical model. The transferability of this theoretical model takes place as the reader examines these results in the context of specific circumstances of interest.

Furthermore, at the beginning of the study the following limitations of the quantitative research Part A were identified and anticipated: (i) The lack of an established identification instrument for resilient individuals; (ii) The proposed quantitative instruments, the VVL and the NPV-J, contain personal questions. As in many survey studies, the instruments were used in the classroom with all 20-30 students present. Such circumstances are not ideal for the reliability and validity of an instrument. Therefore, the privacy of the respondents was guarded in administering the questionnaires, and the presence of a trusted teacher was ensured. The VVL's reliability and validity proved to be well.

One of the limitations of the qualitative research Part B is indicated by Marshal & Rossman (1999), who state that the research method of interviewing has limitations and weaknesses. Interviews involve personal interaction; cooperation is essential.

Participants may have been unwilling or uncomfortable sharing their stories with me, or they may have been unaware of recurring patterns in their lives. During the interviews it became clear that especially not-resilient participants in Research Cycles 3 and 4 did not voluntarily take part in the study. Their reason for their unwillingness was that they received EUR 10 for their participation in another study. It was then decided to retroactively give all participants EUR 10 for their participation in the interviews, and to encourage new participants with the prospect of the same amount. In order to prevent participants not seriously cooperating after receiving the EUR 10, they were informed that they would only receive the amount after the interview, when it had become clear that they had seriously and honestly answered the questions. Furthermore, the great value of their honest participation was emphasised. Any negative effects of offering EUR 10 on the reliability of the research data may be regarded as a study limitation.

In analysing the qualitative research data, some findings were at “over school” level, due to comparing the interview data of resilient participants and their not-resilient counterparts with each other, regardless of their specific school environment. This means that several times merely appropriate illustrations were found for two out of the three school sites. As limitations of the research it could be said that new interviews should have taken place in order to find appropriate illustrations or to falsify a finding. The research design regarding the choice of three resilient and three not-resilient middle-adolescents per school site and practical considerations, such as the approaching examinations, have however delimited the total number of interviews and thus the research process.

## **6.6 RECOMMENDATIONS FOR FOLLOW-UP RESEARCH**

### **6.6.1 NOT-RESILIENT MIDDLE-ADOLESCENTS**

The findings in the present study identify factors such as *clarity*, *strictness*, *creating opportunities for development*, *offering alternatives for behaviour*, *expressing trust and positive future expectations* and *activating self-reflection* as resilience-promoting factors. Follow-up research could focus on ways in which constructive relationships can emerge in the school environment between that school environment and the young people therein, whereas these young people through their behaviour do not contribute to these relationships themselves. How can resilience be activated in not-

resilient young people? Which experiences and factors can further be identified? What are the effects of directly facilitating *overview*, *insight* and *positive future expectations* for not-resilient middle-adolescents?

The present study did not focus on the school results in terms of marks. The interviews showed that the resilient participants achieved better school results than their not-resilient counterparts, and that not-resilient participants repeated classes more often or even left school prematurely. These findings could be tested in follow-up research. Does resilience lead to better school results, and does promoting resilience in not-resilient middle-adolescents lead to better school results for these middle-adolescents?

### **6.6.2 RESILIENT MIDDLE-ADOLESCENTS**

With regard to resilient middle-adolescents, it could be examined how promoting resilience in young people from a low SES background relates to promoting resilience in young people from a high SES background. Does a high SES contribute more to resilience like resilience literature supposes and, if yes, what does this contribution entail?

In the present study it was found that resilient middle-adolescents already possess resilience qualities when they enter the school. Interesting research could be carried out into the effect of additional promotion of these resilience qualities. Does additional promotion of resilience qualities lead to even better school performance and development of resilient middle-adolescents?

## **6.7 SUMMARY**

In the present study, a theoretical model of the way in which the school environment contributes to the resilience of middle-adolescents was constructed. Although risk and resilience literature emphasise numerous risk factors for healthy development, the assumed risk factor of an urban, low SES family background did not prove to have a decisive negative effect on the successful development of middle-adolescents in the school environment. Effective proximal interaction processes in the family background set the stage for resilience in the school environment and for bouncing beyond the limitations that might be set by an urban, low SES status. When, in these

processes, parents can make a connection between the situations they experience as difficult and the chances the school environment offers, then the circumstances of a low SES status are in fact sources of motivation for middle-adolescents to labour for their successful development. To be able to do so, they above all have a need for the skill to connect their circumstances to their own behaviour. Additionally, they need:

- *Overview* of the risks and challenging circumstances they can expect and which could hinder their successful development;
- *Insight* in the skills they have for dealing with these challenges;
- *Positive future expectations* of the possible positive outcomes of their efforts.

These middle-adolescents' needs are met in *effective* proximal interaction processes in the home situation. This finding is in accordance with the bio-ecological perspective on successful development, illustrated in Chapter 1 (paragraph 1.5.4.). Effective proximal interaction processes in the home situation have a greater impact on successful development than the level of socio-economic status. An addition to the bio-ecological perspective on successful development is the fact that the school environment can offer proximal interaction processes, but that their effectivity is established in the quality of the relationships between the school environment and middle-adolescents. Middle-adolescents themselves influence that quality. For a good quality, not-resilient middle-adolescents are more dependent on their school environment.

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## APPENDICES

### Appendix 1 Risk Conditions

*Summary of Risk Conditions and Subsequent Adolescent or Adult outcomes (Doll & Lyon, 1998, Table 2)*

<b>Conditions of Risk</b>	<b>Adolescent/Adult Outcomes</b>
Poverty	Increased delinquency/criminal activity
Low parent education	Lower measured intelligence
Marital discord or family dysfunction	Increased educational and learning problems
Ineffective parenting	Increased likelihood of physical and mental health problems
Child maltreatment	Increased likelihood of teenage parenthood
Poor physical health of child or parent	Increased likelihood of unemployment
Parent mental illness or incapacity	Decreased likelihood of social competence



## Appendix 2 Resilience Factors on Individual, Family and Social-environmental level

*Individual-level, Family level, and Social-environment level resources (Olsson et al., 2003, p. 5-6)*

Individual Level	Family Level	Social- environment level
<p><i>Constitutional resilience:</i></p> <ul style="list-style-type: none"> <li>- Positive temperament</li> <li>- Robust Neurobiology</li> <li>- Psycho physiological health</li> <li>- Easy Temperament</li> <li>- Outgoing Personality</li> <li>- Gender</li> </ul> <p><i>Sociability:</i></p> <ul style="list-style-type: none"> <li>- Responsiveness to others</li> <li>- Pro-social attitudes</li> <li>- Attachment to others</li> <li>- Positive behaviour</li> </ul> <p><i>Intelligence:</i></p> <ul style="list-style-type: none"> <li>- Academic achievement</li> <li>- Planning and decision making</li> <li>- Higher cognitive functioning</li> <li>- Success at school</li> </ul> <p>Communication Skills:</p>	<p><i>Supportive Families:</i></p> <ul style="list-style-type: none"> <li>- Parental warmth, encouragement, assistance</li> <li>- Cohesion and care within the family</li> <li>- Close relationship with a caring adult</li> <li>- Belief in the child</li> <li>- Non-blaming</li> <li>- Marital support</li> <li>- Talent or hobby valued by others</li> <li>- Nurturing supportive family members who are positive models</li> <li>- Safe and stable (organized and predictable) home environment</li> <li>- Family literacy</li> <li>- Provision of high quality child care</li> <li>- Secure attachments, early and ongoing.</li> </ul>	<p><i>Socio-economic status:</i></p> <ul style="list-style-type: none"> <li>- Material resourced</li> <li>- Adequate financial resources</li> </ul> <p><i>School experiences:</i></p> <ul style="list-style-type: none"> <li>- Supportive peers</li> <li>- Positive teacher influences</li> <li>- Success (academic or not)</li> <li>- Success at school</li> <li>- Positive relationship with one or more teachers</li> <li>- Postive relationships with peers and appropriate peer models</li> </ul> <p><i>Promoting full development:</i></p> <ul style="list-style-type: none"> <li>- Nurturing and supportive climate school-wide and in classrooms</li> <li>- Conditions that foster feelings of competence, self determination and connectedness</li> </ul> <p><i>Supportive communities:</i></p>

<ul style="list-style-type: none"> <li>- Developed language</li> <li>- Advanced reading</li> </ul> <p><i>Personal Attributes:</i></p> <ul style="list-style-type: none"> <li>- Tolerance for negative affect.</li> <li>- Self-efficacy.</li> <li>- Self esteem.</li> <li>- Foundational sense of self.</li> <li>- Internal locus of control.</li> <li>- Sense of humor.</li> <li>- Hopefulness.</li> <li>- Strategies to deal with stress.</li> <li>- Enduring set of values.</li> <li>- Balanced perspective on experience.</li> <li>- Malleable and flexible.</li> <li>- Fortitude, conviction, tenacity and resolve.</li> <li>- Strong abilities for involvement and problem solving.</li> <li>- Sense of purpose and future.</li> </ul> <p><i>Promoting full development:</i></p> <ul style="list-style-type: none"> <li>- Pursues opportunities for personal development and empowerment.</li> <li>- Intrinsically motivated to pursue full development, wellbeing and a value-based life.</li> </ul>		<ul style="list-style-type: none"> <li>- Believes the individual's stress</li> <li>- Non-punitive</li> <li>- Provisions and resources to assist</li> <li>- Belief in the values of a society</li> <li>- Strong economic conditions/emerging economic opportunities</li> <li>- Safe and stable communities</li> <li>- Available and accessible services</li> <li>- Strong bond with positive others</li> <li>- Appropriate expectations and standards</li> <li>- Opportunities to successfully participate, contribute and be recognized.</li> </ul>
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### Appendix 3 Veerkracht Vragenlijst (Resilience Questionnaire)

1. If I have to make a difficult decision then I talk to someone at home who can give me advice.
2. If I have had an argument at home, I don't do anything for the rest of the day.
3. If I want to do something that my friends think is stupid, then I will do what I want anyway.
4. If I cannot solve a task at school at once then I quit.
5. If someone tells me something I do not understand then I ask them what they mean.
6. If I feel bad about problems at home then I go and talk to someone about it.
7. If I've had a rotten day at school then I will go and do something I enjoy in the evening.
8. If I really want something and my parents won't pay for it then I work really hard until I have enough money for it.
9. I am really unpleasant to my family, if I have had an argument with my friend.
10. If I feel unhappy about problems at school then there is always someone at school who will help me.
11. If I'm feeling melancholy, I continue to feel like this for days.
12. If my friends want to do something I don't, then I search for someone in the group that also doesn't.
13. If I have to make a difficult decision then I tend to wait too long so that the opportunity to make the decision is lost.
14. If I have had a quarrel at home then I talk to a friend about it.
15. If I get a lot of bad marks for a subject then I stop learning that subject.
16. If a teacher is angry with me then I will try to concentrate more on my schoolwork.
17. I stop going to school if there are problems at home.
18. If I really want something and my parents won't pay then I'll argue with my parents.
19. If I am not feeling well, then I go and do something I like.
20. If I have to make a difficult decision than I will consider all the options and choose the best one.
21. If my friends want me to do something that I would rather not do, I will go along with their plan anyway.
22. If I cannot solve a task at school at once then I try a different way.
23. I try to help make the best of things when there are problems at home.
24. If I'm feeling anxious about problems at school then I won't go the next day.
25. I have had difficult experiences in the past which I have reacted well to.
26. I apologise when my parents are angry with me and they are right.
27. If someone tells me something I do not understand, then I pretend to understand.
28. If a teacher is angry with me then I get angry myself and the situation worsens.
29. If I have an argument with my friend then I will try any way I can to sort things out.
30. If I get a lot of poor marks for a particular subject I will find someone who can help me with my homework for that subject.
31. If I'm feeling anxious about problems at school then I'm really unpleasant to the teachers.

32. If my friends want to do something I know will cause problems then I won't participate.
33. I still keep going even if things are against me.

## Appendix 4 Topic List Open-Ended Interviews

### Introduction:

In this study we want to find out what students *think* about their school, how they *feel* in school, what their **school and their school-day look like** and how they deal with things that they *experience as difficult or challenging*. I want to look over your shoulder/through your eyes/ to your school as if I am invisible. I will not ask a lot, I would like you to tell me yourself. I am interested in *your* story. *Your story* is what counts in this interview, more than the story of your teacher or the story of other students.

This interview will be completely **anonymous**. Know one will know your name. You can let me know at any time if you wish **to pause, continue** or **end** the interview. I will write things down as I am listening to you. If it is okay with you, I will record this interview on tape. If I have written the whole interview down you will have the opportunity to see if I have understood you correctly and If my words represent yours.

Interviewer asks what the participant thinks about in relation to the *word/idea “school”*.

Interviewer clarifies that she wants to know what is *important* in the school, what helps to deal with difficult circumstances and to keep going.

Ask First about Positive things (Many), then about things that are not so positive.

Ask the participant about his/her *experiences* with difficult circumstances. Then ask “how did you deal with them?”

### Topic list (if needed):

What helps you when you are not feeling well?... And the school? Is there something in the school that can help? What makes you strong? What keeps you motivated and going?

What do you do if you really have a problem or if you experience something as really difficult? (Focus on the school).

When you speak about thing that you experience as difficult, then how is that related to the school? ...

What could the school do to make things easier for you or to help you cope?

### Summarize

**Ask for approval to contact the participant again if needed for validity or extra questions.**

## Appendix 5 Example letter for Parental Consent

Utrecht, *date* 2004.

Concerns: Research

Contactperson: \*(Name of student-coordinator of the school)

*Dear sir, madam,*

As you may have noticed, for the last few years the VMBO has had negative publicity in the media. The voices of teachers in the VMBO, the students and their parents are often much more positive. Many of the students, also at the *\*\*\*name of the school\*\*\**, develop successfully and graduate to start working or continue to study.

Therefore, the *\*\*\*name of het school\*\*\** is happy to participate in a study that focuses on the strenghts and successful development of students in the VMBO. For this study, all students from the third year will be invited to fill out two questionnaires. Additional interviews will be plannend with some of the students.

### **Who carry out the study?**

The study is carried out by pedagogues from the Hogeschool Utrecht. The researcher is Ms. M. Enthoven. She is guided and supervised by Professor Van der Wolf and Professor Bouwer. If you have any questions about the study you can contact Ms. Enthoven via *\*\*\*emailaddress\*\*\**.

### **Privacy**

The data will be completely confidential. The interviews will be processed anonymously. In the research report no names of the participants of the study will be mentioned.

### **The results**

The researchresults are important for the improvement of the quality of schools. The results could be used for interventions and for improvement of studentcare.

The quality of the study is dependent on the willingness of schools, students and parents to participate in the study. Therefore we hope your child will be allowed, able and willing to participate. If you have any objections to your child participating in the study, then you are free and invited to inform the studentcoordinator (*name of studentcoordinator*) at *telephonenumber and/or emailaddress* before *date*.

Thank you sincerely for your cooperation,

Kind regards,

M. Enthoven/\*Name student coordinator/\*Name principal of the school (as the specific school wishes).