

Factors which influence the well-being of pupils in Flemish secondary schools

Nadine Engels^{1*}, Antonia Aelterman², Karen Van Petegem²
& Annemie Schepens²

¹*Vrije Universiteit Brussel, Belgium*; ²*Universiteit Gent, Belgium*

The Flemish government considers well-being of pupils as an important output indicator for the quality of education. The education inspectorate needed an instrument to measure this well-being in a school context, an instrument that should also be a basis for actions plans aimed at enhancing pupils' well-being. The development of this instrument is described in this article. A total of 342 pupils were interviewed. The material from these interviews was used for construction of—mainly Likert-type—items for a questionnaire. A pilot version of the questionnaire was examined by experts and tested with a random sample of 306 pupils. The experimental version was tried out on a random sample of 2054 pupils. This resulted in a questionnaire with four consistent scales and thirteen subscales. Significant differences between schools were found. Atmosphere at school, contacts with teachers, involvement in class and at school, school regulations and infrastructure were among the best predictors.

Introduction

Definition of the problem and conceptual framework

The instrument was developed at the request of the education inspectorate of the Flemish Community. Although existing questionnaires were of value, there was a need for an instrument which could take account of specific and contemporary context variables in Flemish schools. The instrument should be a basis for action plans aimed at enhancing the well-being of pupils. Existing instruments do not really have this potential.

The inspection teams used the CIPO¹ model for their school investigations. In this context, 'well-being' was used as one of the output variables. This view of well-being as an output is very similar to a positive definition of well-being (Bouverne-De Bie & Verschelden, 1998) whereby the emphasis is less on correcting, remedying and preventing problem behaviour at school and more on offering a harmonious training of young people based on an emancipatory, person-oriented view of education.

The research questions were as follows: (1) what aspects in the classroom and at school relating to the learning and living environment did the pupils find relevant to their well-being? (2) which indicators validly measure the degree of well-being relating to identified aspects of perception? (3) what perceptions correlate to general

*Corresponding author: Vrije Universiteit Brussel, Interfacultair Departement Leraren opleiding, Pleinlaan 2, 1050 Brussels, Belgium. Email: nengels@vub.ac.be

well-being in a school situation the most? and (4) what characteristics of the school increase the chances of experiencing the school as something positive?

The conceptual framework

In order to define the concept of 'well-being', the dynamic approach was used (Vos, 1990). Examination of the literature published on this subject resulted in the following description of well-being (*Wohlbefinden*, well-being, *bien-être*) of pupils at school:

Well-being at school (of pupils in secondary education) expresses a positive emotional life which is the result of harmony between the sum of specific environmental factors on the one hand and the personal needs and expectations of pupils vis-à-vis the school on the other.

Pupils with their personal needs and expectations is a type of sub-system within a more extensive system, i.e. the school and what happens at school. In its turn, the school is part of a specific social context (Wielemans, 1993). The needs of pupils are not static but are formed by social reality, i.e. the environment.

The term 'expectation', like the term 'need', is a subjective one and occurs through interaction with the environment. Expectations are distinct from needs in the sense that they are aimed at the future. All knowledge and skills are gained from this subjective need and expectation perspective. Specific to the relationship between the pupils and their environment is that there is evidence of mutual influence. In describing well-being at school, this dynamic aspect is reflected in the term 'harmony' as well-being has a positive connotation.

Current and sustainable well-being

In addition to the definition of well-being which we have formulated, we have made use of a few additional insights of Eder's (1995) relating to this concept. He does not base himself on the term 'well-being' but on the concept *Befinden* related to that of Lewin (Lewin, 1963, in Eder, 1995, p. 16) described as 'affektiv-wertende Selbstwahrnehmung einer Person in ihrem Lebensraum' (affectively valued self-observation of a person in his environment). The *Lebensraum* is in this context the individual world which exists for a particular person based on his needs and expectations (Lewin, 1963, in Eder, 1995, p. 16). The idea of *Befinden* has a judgmental, evaluative component which can be good or bad, positive or negative. In Eder's view, *Befinden* in the positive sense can be translated as *Wohlbefinden* or well-being and coincides with psychological health. Negative *Befinden* on the other hand is not equivalent to the opposite of psychological well-being. The absence of *Wohlbefinden* can be both a negative and a neutral state, Eder believes.

Freely translated, *Befinden* is both a *judgement* and a *psychological state of health*. It can thus be postulated that *Befinden* has a cognitive component (cf. judgement) but also refers to a psychological and social aspect. This psychological state is not

something passively experienced but rather something in which a person plays an active role (Perreijn, 1993, p. 302).

Eder (1995) makes a distinction between the *aktueller (Wohl-)Befinden* (current well-being) and the *habituellem (Wohl-)Befinden* (habitual well-being): the 'here and now' situationally determined state of well-being and the state of well-being in the long term.

As indicators of a current, situationally oriented state of well-being (the *aktueller Wohlbefinden*), Eder refers to the immediate feelings of feeling good at school, satisfaction with aspects of the situation, school-related feelings of fear and various psychological and psychosomatic factors induced by the school situation. General self-confidence, the image of one's own capabilities, one's self-image, the academic concept of self and the social and emotional self-image of pupils are included in the indicators of the state of well-being in the long term or what is referred to as *sustainable well-being* (the *habituellem Wohlbefinden*).

There is of course a continual exchange between current and sustainable well-being and both concepts can therefore not be looked at separately. Current well-being is the result of the effect on the pupil of influences from various directions. The school, the family, the media, etc. all influence the judgement (satisfaction) and the perception (feeling) of the pupil in specific situations so that personal needs and expectations relating to the school are created. Through repeated exposure to these forces, these perceptions are internalized with the pupil developing certain attitudes. Characteristics of personality which after some time become specific to the pupil and are described as indicators of sustainable well-being, are in their turn the starting point from where the current situational perception takes shape.

If use is made of indicators of sustainable well-being, the differences between schools and classes are not really evident. The results then mainly reflect individual differences between pupils. The individual diagnosis of the well-being of pupils is not the main objective of this study. It is the efforts that the school makes to develop pupils' well-being that are important. Measurement of 'current well-being', current feelings and satisfaction which have a direct link to the school as a learning and living environment appears to be the best option. This also includes behaviour, the expression of a positive or negative perception, which has also been used as an indicator.

Method

Panel discussions

The *core aims* of panel discussions are to: (1) ascertain which perceptions in the classroom or at school, as learning and living environments, are considered by pupils as relevant in relation to their well-being; (2) check aspects of perception based on a search of the literature against the youngsters' realm of perception; and (3) ascertain how pupils express these perceptions and indicators with construction of the written questionnaire in mind. The subject for discussion is analysed again taking into account the construction of the written questionnaire. Panel discussions

are based on open questions which stimulate the free expression of opinions and feelings. Additional questions are used to find out about possible links and attributes or order of importance of perceptions.

A stratified, random sample of 64 panels was interviewed. The stratification is based on criteria which were found to be relevant for well-being at school in previous investigations such as the age and gender of the pupils, the type of education followed (H&ASE,² TSE,³ VSE,⁴ GSE⁵), the type of educational network (free subsidized or official schools), the size of the school (small or large), and its location (urban or rural). Efforts were made to set up a group of pupils that was as differentiated as possible. When setting up every panel, account was taken of the following criteria:

- (1) six pupils to avoid overloading the discussions;
- (2) as many girls as boys;
- (3) as many different disciplines per grade as possible;
- (4) as many different classes per grade as possible;
- (5) pupils from the beginning of the alphabet so that the panels can be set up at random.

Pupils were encouraged to maintain the use of language specific to them and/or to their youth culture.

To process the qualitative data, the Atlas•ti computer program for analysing and coding discussion material was chosen. Researchers must discover and code the themes themselves. However, the computer program provides support to collate and order the text fragments with the same code. The program also helps to gain an insight into the mutual relations between the concepts.

During analysis, every transcription is first put down on paper to get an initial idea of what came to light during the discussions. In this respect, the core objectives of the panel discussions were emphasized. The first notes take shape during this screening process—these were the first codes.

The codes must in the first place refer to a meaningful quote in answer to a main question (question codes). Such a question code was given to every main question asked during the panel discussions. For example, the question ‘Some pupils like going to school while others do not. Why do you think this is?’ is given the question code: ‘likes going to school’. An additional code adds information about the content of the quote (content code). Below is a passage from one of the panel discussions to illustrate this.

Interviewer: Some pupils like going to school while others do not. Why do you think this is? (...)

Pupil: I think this has something to do with your friends. If you are teased, you’re less keen to go to school or you are just (...). [Codes: ‘likes going to school’, ‘friends’ and ‘teasing’.]

Interviewer: Your friends, being teased. Are there other reasons why pupils like to school or not?

Table 1. Number of items and sample size in the various versions of the questionnaire

Version	Type of question						
	Sample size	Number of items	Personal characteristics	Relating to feeling	Relating to behaviour	Relating to satisfaction	General well-being
Pilot	306	161	10	93	34	22	2
Experiment	2054	118	7	68	20	19	4
Final		117	7	68	19	19	4

Pupil: The teachers, if you don't like some of the teachers. [Codes: 'likes going to school' and 'teacher'.]

Interviewer: The teachers, your friends. These are two important reasons why pupils like to go to school. Are there any others?

Pupil: Maybe your marks. If you have bad marks or (...). [Codes: 'likes going to school' and 'marks'.]

A network has been worked out for each of the questions asked (question codes). A network is a display of the most important content codes for one question and of the relationships among them. They gave the researcher an overview of the most important discoveries and were a support when trying to form theories.

Using 'cross-case analysis' a combination could be made of the uniqueness of every case and comparisons of the case studies. Cross-case analysis implies a combination of two approaches: the case approach and the variable-oriented approach. This comes down to analysing parts within the case studies and comparing them across all case studies (Patton, 1990).

Questionnaire

An overview of the development of the questionnaire across all the various versions is included in Table 1.

Every version has been constructed in an analogue manner. The commissioning party, objectives and subject of the study are described in a general introduction. Specific personal characteristics such as gender, age and disciplines were then requested. The motives for pupils attending school were examined.

After this introductory part, questions were included which are directly connected to the well-being of pupils at school. The questions are constructed around the themes which are considered important for the pupils' well-being at school. Four different types of question were distinguished to make the indicators operational:

- (1) Questions relating to feelings: the frequency of a particular situation occurring and the pupil's feeling relating to the situation. An example of such a question was: 'Do the teachers treat you with respect? How do you feel about this situation?'. The reply categories to the first question varied from 'never' to

- 'always' with three intermediary categories. In answer to the second question, a five-point scale was used varying from 'very bad' to 'very good'.
- (2) Questions relating to satisfaction: examining the degree of pupils' satisfaction with specific subjects. An example of this is: 'Are you satisfied with the atmosphere in the classroom?'. This question was answered with reply categories varying from '1: not at all' to '5: entirely'.
 - (3) Questions relating to behaviour, which examine how often pupils have already behaved in a certain way at school. The behaviour of pupils is examined based on these questions. An example of this is: 'Do you stick to school regulations?'. The reply possibilities in this case are limited to a code ranging from 1 to 5 with 1 standing for 'never' to 5 standing for 'always'.
 - (4) General questions which ascertain the scores for well-being are:
 - I usually like going to school;
 - I would prefer to go to another school;
 - I really like my school;
 - I generally feel good at school.

These four general questions are to be answered on a five-point scale ranging from 'I do not agree' to 'I agree entirely'.

The pilot version was submitted to experts, with a view to ascertaining the questionnaire's validity. These included persons involved in caring for the well-being of pupils, among who were pupil supervisors and those working for various pupil guidance centres and members of educational inspection teams who will ultimately be the ones using the instrument. The questionnaire was then adjusted where necessary. It was then completed by 306 pupils to try out the technical aspects of the instrument. The level of difficulty, the length, the clarity, relevance of the questions, etc. were examined.

A factor analysis with Varimax rotation was carried out on the data. Based on the results, it appears that four clearly demarcated scales could be distinguished. These scales were the basis for the experimental version of the questionnaire. Questions were deleted or modified if they did not function well in the previous version.

For the experimental version, a representative large-scale sample survey was drawn up. The strata used were the network, the size of the school and the type of subjects followed. In order to determine the number of classes that should be asked per school, it was assumed that there was an average of 15 pupils per class. Efforts were made to include all study years and grades in the survey. In total, 2054 pupils in 26 schools took part in the survey.

On the basis of the factor analysis carried out on all questions concerning feelings, satisfaction and behaviour in the experimental version, a definitive version of the questionnaire was drawn up consisting of four scales. These new scales group the items together somewhat differently from the scales of the experimental version. Moreover, they were divided into a number of sub-scales and one question was deleted.

Carrying out analyses on the extensive data matrix enabled us to formulate results relating to the well-being of pupils in secondary education.

Results

The instrument

In the first scale, a wide range of questions concerning 'perceptions of the classroom and the school' as learning and living environment were included. This scale has 56 items and the highest level of internal consistency: a Cronbach's α of 0.9479. In the classroom, sub-scales were used to distinguish 'involvement', 'contacts with teachers' and items relating to 'the learning process'. The latter focused on teachers' approach to teaching. In the school context, questions were included about 'the infrastructure and facilities', 'action plans', 'school atmosphere', 'regulations', 'involvement', 'contacts with other members of staff' and 'how the school deals with problems'.

Within the second scale, 17 items relating to 'study pressure and the school curriculum' were included. Cronbach's α of this scale is calculated at 0.8492. As this scale covers a great deal, it was split up further into sub-scales: 'study pressure', 'the curriculum, and content' and 'the marking system'. The latter part focused on the performance-oriented character of education.

The third scale consists of 16 items examining the 'behaviour' of pupils at school. The contents relating to this scale remain unchanged compared with the previous version of the questionnaire. Cronbach's α in this case is 0.8746.

The fourth scale consists of 15 questions relating to 'contacts with friends' at school. This scale has a Cronbach's α of 0.8665.

If Cronbach's α is used for the complete questionnaire, we arrive at a value of 0.9585, which is extremely high. This indicates that there is strong coherence between the individual items on the questionnaire.

General well-being and indicators

On a five-point scale in which 1 stands for a very negative perception and 5 for a very positive perception, an average score of 3.42 was reached for well-being. There were significant differences between schools in relation to one another regarding the well-being of pupils, with scores varying from 2.84 to 4.35.

Feeling (affective component), satisfaction (cognitive component) and behaviour are strong indicators of well-being. They correlate considerably with a number of general questions which probe well-being and which have been tested in other studies. After regression analysis, it appears that satisfaction is the best predictor of well-being (cf. Table 2).

While the scores for satisfaction and feeling scored on average reasonably well, the average score for behavioural questions was somewhat higher, 3.849 (cf. Table 3).

Well-being and the various scales and sub-scales

A regression analysis was done on the various aspects of school and classroom perception using scales and sub-scales as independent variables, with the general

Table 2. Beta values for the three indicators after regression analysis

	Standardized coefficients		
	Beta	t	Sig.
(constant)		-7,177	0.000
Behaviour	0.146	8,163	0.000
Feeling	0.146	6,005	0.000
Satisfaction	0.517	20,525	0.000

Table 3. Means and standard deviations for the three indicators

	M	SD
Behaviour	3.849	0.582
Feeling	3.3883	0.589
Satisfaction	0.146	0.678

well-being of pupils (measured based on four general questions) as a dependent variable (Table 4).

Scale 1, with questions like ‘the perception and satisfaction of pupils in the classroom’ and ‘the perception and satisfaction of pupils at school’, is the best indication of pupils’ well-being. Within this scale, concepts such as ‘school atmosphere’, ‘regulations’, ‘infrastructure and facilities’, ‘involvement in school’ and ‘involvement in class’ are good indicators for well-being. Scales 3 and 4 are also

Table 4. Beta values for scales and sub-scales after regression analysis with general well-being as dependent variable

	Beta	t	Sig.
(Constant)		-7.604	0.000
Involvement in class	0.065	2.962	0.003
Contacts with teachers	-0.056	-2.101	0.036
Learning process	-0.053	-2.012	0.044
Infrastructure & facilities	0.110	5.729	0.000
Action plans at school scale 1	-0.020	-0.970	0.332
Atmosphere at school	0.330	14.005	0.000
School regulations	0.156	7.054	0.000
Involvement at school	0.085	3.724	0.000
Contacts with other staff	0.013	0.594	0.553
Support and counselling	0.028	1.414	0.158
Study pressure	0.013	0.609	0.543
Curriculum, learning content scale 2	0.104	4.687	0.000
Marking system	-0.045	-2.286	0.022
Friends scale 3	0.110	6.502	0.000
Behaviour scale 4	0.175	9.415	0.000

Table 5. Means and standard deviations for general well-being, scales and sub-scales

	M	SD
Well-being	3.4	1.0
Scale 1: Perception and satisfaction in the classroom and at school	3.3	0.7
Involvement in class	3.5	0.7
Contacts with teachers	3.4	0.8
The learning process	3.6	0.7
Infrastructure and facilities	2.6	0.9
Action plans for school	3.4	0.9
Atmosphere at school	3.4	0.9
School regulations	3.1	0.9
Involvement at school	3.1	0.9
Contacts with other teaching staff	3.2	0.9
Support and counselling	3.6	1.1
Scale 2: Perception and satisfaction with study pressure and curriculum	2.9	0.7
Study pressure	2.8	0.8
Curriculum, learning content	3.1	0.8
Marking system	2.7	0.9
Scale 3: Behaviour	3.8	0.6
Scale 4: Perception and satisfaction with friends	3.9	0.7

good indicators. However, this is not the case for scale 2. Table 5 provides an overview of the average scores for Flemish pupils for the various scales and sub-scales.

Well-being and pupil characteristics

Pupils' motives for going to school. Based on our results, it appears that getting one's school-leaving certificate was often cited as the most important motive to go to school (cf. Table 6), though 'interesting subjects' and 'to learn something' are the best indicators of a high level of well-being if several reply possibilities are available.

Gender. Girls demonstrate a higher level of well-being than boys. This result is not only noted for general well-being but also for 'behaviour', 'perception and satisfaction in the classroom and at school', 'study pressure and the curriculum' and 'friends'. The results also indicate that girls go to school mainly for the 'certificate', 'friends' or 'to learn something' while boys go to school for 'the interesting subjects' and regard school more often as 'an obligation imposed by home'.

Age, grade. The profile is characterized by a low point in the second grade (4th year) with a slight increase in the third grade (5th and 6th years), with the latter score not exceeding the score of the first grade (1st year) (cf. Table 7).

Table 6. Means and distribution for well-being for the main motives for going to school

Motive	N	M	SD	95% confidence interval for mean	
				Lower bound	Upper bound
Friends	262	3.418	0.986	3.298	3.538
To learn	278	3.680	0.896	3.575	3.786
Diploma	1339	3.416	0.993	3.363	3.469
Interesting subjects	42	3.810	0.981	3.504	4.115
Obligations from home	61	2.210	0.961	1.964	2.456

Table 7. Means and distribution for well-being for the various years in secondary education

Year	N	M	SD	95% confidence interval for mean	
				Lower bound	Upper bound
1st year	447	3.729	1.026	3.634	3.825
2nd year	397	3.504	0.962	3.409	3.599
3rd year	328	3.283	1.025	3.171	3.394
4th year	329	3.132	1.029	3.020	3.244
5th year	318	3.347	0.909	3.246	3.447
6th year	234	3.386	0.950	3.264	3.509

Table 8. Means and distribution for well-being for various types of education

Type of secondary education	N	M	SD	95% confidence interval for mean	
				Lower bound	Upper bound
1st grade (comprehensive)	844	3.623	1.002	3.556	3.691
GSE	514	3.529	0.872	3.453	3.604
VSE	209	2.997	1.074	2.851	3.144
TSE	421	3.003	0.978	2.909	3.097
H&ASE	65	3.992	0.676	3.825	4.160

Type of secondary education. The most important and striking finding is that pupils in humanities and arts secondary education feel much better than pupils in all other forms of education. The well-being of pupils in general secondary education and the first grade does not differ significantly but both these groups do better than pupils in technical and vocational secondary education (cf. Table 8).

Discussion

The majority of pupils in Flemish secondary schools appear to be reasonably satisfied with school, they feel relatively good and behave in rather a positive way at school. However, the fact remains that the well-being of pupils in some schools is seriously disturbed. Using this means of measurement, the inspection teams will be able to pinpoint particular problems, evaluate them in the light of the context, input and process variables and formulate targeted advice on which strategies to be taken to enhance the well-being of pupils will be based.

In this section, the results of the quantitative data are discussed with the addition of information from the panel discussions and tested against the results noted in the literature.

Perception and satisfaction of pupils in the classroom

It seems that the degree to which pupils participate in the classroom has a positive effect on their well-being. 'Involvement in class' was spontaneously brought up by pupils when asked during panel discussions what was important for their well-being at school. In line with other surveys, it can be stated that the degree of well-being increases the more pupils are involved in and actively participate in the classroom (Eder, 1995). This enhances the feeling of responsibility for one's own learning process.

The teacher is a crucial figure. A suitable relationship with the teaching staff enhances a positive attitude towards the school (Samdal *et al.*, 1997). This fact appeared both during panel discussions and in the literature. Teachers who treat their pupils with respect and who encourage them whenever they do something good during lessons, contribute considerably to their well-being. Dissatisfaction is often the result of an unequal balance of power between teacher and pupil. The results of the qualitative survey are in line with the findings of Brekelmans *et al.* (1989), who, on the basis of the Leary model, have drawn up a typology of teachers based on descriptions by pupils. Pupils prefer teachers who give them space and clear instructions. Teachers who are inconsistent and unsure have a negative effect on pupils.

While little attention is paid in the literature to the relationship between working methods used and the quality and use of didactic material during lessons and the well-being of pupils, this was strongly emphasized during the panel discussions. Pupils have a preference for active working methods and diverse media. As a supervisor of learning and development processes, the teacher is responsible for the development of an effective learning environment. Pupils are especially appreciative if teachers show signs of competence, expertise and commitment. This was examined in the written survey based on questions under 'the learning process' sub-scale. Here, too, the importance of good didactic support for pupils' well-being was highlighted (cf. Table 4: learning process in class).

Perception and satisfaction of pupils in school

What should be noted is the low scores for 'infrastructure and facilities' at school. Nevertheless, whether or not pupils are satisfied is one of the better indicators of well-being. Schools differ considerably in this respect. If the buildings are in a poor state of repair, are not properly maintained and classrooms poorly laid out, this is closely connected with a negative view. It goes without saying that a pleasant environment and involvement in its enhancement is conducive to a positive atmosphere at school (cf. also Vandierendonck, 1992).

The 'action plans at school' sub-scale refers to initiatives that the school takes to take preventive action to deal with problems such as drugs, bullying and violence. Even though this sub-scale was not an important indicator, preventive action undertaken by the school is often a hot topic at school. It is extremely important for a school to be seen as taking action to deal with such problems as violence, order disturbance, drugs and bullying. These appear to be criteria used by parents when choosing a school for their child. Pupils give many schools a relatively high score for actions undertaken to tackle problem behaviour. This is important as from many surveys and discussions with pupils, it appears that a feeling of security has a positive influence on well-being (Monard, 1998). Informing pupils, raising their awareness and developing a clear code of behaviour are objectives that the school must fulfil (Stevens & Van Oost, 1994).

Pupils have a preference for tolerant and authoritative teachers and they expect their teachers to have these characteristics (Brutsaert, 1985, in Schuurman, 1986). The average score of 3.1 which the pupils gave to 'regulations' in the written survey is rather neutral. However, schools showed strong differences among themselves. On the one hand, pupils do not like too many rules and on the other, they expect the school to act consistently when it comes to dealing with problem behaviour such as violence and drug abuse. In the survey done by van der Linden and Roeders (1983) and Penninx (1986, in Klaassen, 1991), it was ascertained that pupils judge the atmosphere at school in a more positive light when regulations were implemented democratically. Pupil-oriented school regulations enhanced a positive atmosphere. As the 'regulations' sub-scale under 'perception and satisfaction in the classroom and at school' is the second most important indicator, it can be assumed that clear regulations which have been drawn up in consultation with pupils, and which are consistently applied, promote well-being.

The conclusion that 'involvement at school' boosts pupils' well-being corresponds to what Elchardus *et al.* (1999) and Eder (1995) noted in their survey: well-being improves when there is active participation in the classroom and at school. A horizontal organization of the school can be of help in this case (van der Linden & Roeders, 1983, in Dieleman *et al.*, 1993). In this survey, a rather neutral score, 3.077, was noted for the sub-scale 'involvement at school'. This value is lower than the 3.532 value noted for 'involvement in class' (cf. Table 5). From the panel discussions it appears that many pupils had no knowledge of the existence of a pupils' council in their school or they put the degree of involvement that could be attained by means of the council strongly into perspective.

The sub-scale containing questions about 'the atmosphere at school' was the best indicator of well-being. Pupils experiencing a positive school culture is linked to a good atmosphere at school (Leirman, 1993). As the school culture refers to everything, whether formal or informal, that happens at school, values and norms, we regard the atmosphere at school as the sum of all other aspects of school examined. The mentality and the image of the school was discussed with the pupils. Pupils not only come into contact with teachers and fellow pupils at school but also with other members of the teaching staff. According to the results noted in Table 4, 'contact with other members of staff' is a poor indicator of well-being. In discussion with pupils, the course of these internal contacts determined the atmosphere at school to a large degree. In these relations, too, there is a need for respect, appreciation, space, dialogue and clearness of rules. It goes without saying that this was stronger in contacts with teachers with whom the pupils were continuously in contact. In the written survey, the majority of pupils stressed the importance of having someone to whom they could also consult if there were any problems. A score of 3.6 in this sub-scale is relatively high (cf. Table 5) but without significantly contributing to the differences in general well-being.

Perception and satisfaction of pupils regarding study pressure and the curriculum

Pupils on average give a low score for scale 2, with items about 'perception and satisfaction of pupils regarding study pressure and the curriculum'. The sub-scales 'the curriculum, contents' and 'marking system' contribute to the explanation of general well-being.

For the 'study pressure' sub-scale, this relates to questions regarding the subjective perception of study pressure connected to unclear expectations of the teacher, poor distribution of tasks and tests, and lack of arrangements relating to this between the teachers among themselves. Furthermore, it referred to too little support for the learner because teachers wanted to get through too many subjects. The feeling of being overburdened came up during panel discussions. In the case of sub-scale 'curriculum and contents', this mainly referred to the extent to which pupils thought the subjects were interesting or useful. The differences between the schools for both sub-scales were not great. The perception was overwhelmingly negative.

Study pressure and the way in which pupils see subjects is seen in perspective. In the panel discussions, it was evident that pupils are especially interested in and prepared to make an effort for subjects which they perceive as useful, that are connected to their perception of the world and which are up to date. The 'marking system' used in school is closely connected to the amount of pressure experienced. The emphasis on an achievement-oriented goal rather than on a learning-oriented goal is the determining factor for motivation and is subsequently linked to pupils' well-being. The results of this survey, enhanced with findings in the literature (Vandenberghe, 1994), lead us to conclude that when it comes to 'study pressure and the curriculum', a learning-oriented goal increases the chances of a positive perception of well-being.

Pupils' behaviour

The reason for including questions about behaviour as an indicator of well-being was based on the assumption that when pupils' well-being is disturbed, misbehaviour and truancy increase (Boekaerts & Simons, 1995). Other problems which the school may have to deal with are violence and drug abuse (Eder, 1995).

Our survey confirms that there is a strong connection between the general score for well-being and the score for the 'behaviour' scale. Although there are great differences when it comes to pupils' behaviour between the schools themselves, positive scores are often noted.

The relatively high averages must be differentiated as it is highly likely that the pupils want to give a positive impression of themselves and be socially accepted. There is an interaction between positive behaviour of pupils and a positive atmosphere at school. Pupils who feel good at school and are satisfied have less tendency towards problematic behaviour while positive behaviour has a positive influence on the school's atmosphere.

Perception and satisfaction of pupils regarding friends

What is noteworthy concerning questions about 'friends' is that differences between the schools are minor and the average score is the highest compared to all other scales. It was already clear from the panel discussions that contacts with fellow pupils are a positive aspect in the environment of the school. Being together with friends is one of the most important motives for pupils to go to school. This highlights the importance of school as a living environment in which contact with friends is considered extremely important (Thys, 1994; Vandeputte, 1996). Matthijssen (1986) speaks in this connection about a culture of conviviality. However, in some discussions mention was made now and then to bullying behaviour with immediate negative effects on well-being. Positive contacts with fellow pupils and solidarity within the group is an important component of a good classroom and school culture, and a positive school atmosphere, which has a positive effect on well-being.

Well-being and pupil characteristics

Pupils' motives for going to school. While 'friends' and 'to learn something' is for more than half of the pupils a possible motive when there are more motives to choose from, they are devalued when the main motive is asked. 'Getting a diploma' remains the main motive. Reply categories 'obligations from home' and 'interesting subjects' are given little priority. Pupils regard the school as a learning environment but also as a social meeting place where contacts with friends are possible.

From the literature and from the panel discussions, it appears that achievements, the pleasure of studying and the feeling of well-being develop favourably if pupils come to school due to an intrinsic motivation such as learning to better themselves.

Our quantitative analyses confirm this. Pupils who go to school 'due to obligations imposed from home' score significantly lower for well-being than pupils who did not tick this motive. Pupils who give their main motive as 'to learn something' score the highest in terms of well-being. From the data it appears that a balance between the school as a learning and living environment should be aspired to.

Gender. Other surveys mention a difference in well-being depending on gender, with girls having the advantage (Stoel, 1980a, b; Crabbe & Spaey, 1984, in Van den Houte, 1990; Verhoeven *et al.*, 1992; Thys, 1994; Van Damme *et al.*, 1997). These tendencies can be confirmed.

Age, grade. Although other surveys indicate that the feeling of well-being diminishes as pupils get older (van der Veen, 1989; Verhoeven *et al.*, 1992), in our survey there was no evidence of such a linear decrease. Although there is a considerable decrease in well-being in the second grade (ages 15–16), there is again a slight increase in the third grade. A relationship with motives exists.

In contrast with what was expected, few pupils in the sixth year of secondary education gave the certificate as the main motive. This could indicate that the culture of marks disappears into the background. The motive 'friends' scores high until the fifth year. In the first grade, pupils mainly attend school 'to learn something'. The low point regarding well-being in the second grade coincides with the large number of pupils of that age who come to school because their parents force them to. This latter motive has a negative effect on the perception and satisfaction of the pupils.

Type of education. Existing surveys (Stoel, 1980a, b; Schuurman, 1984; Thys, 1994; Verhoeven *et al.*, 1992; Van Damme *et al.*, 1997; Elchardus *et al.*, 1999) are not entirely clear about this. However, in most surveys the score for well-being in GSE is found to be the highest, while it is the lowest in VSE. While the general trend is the same in our results, we found the high level of well-being in H&ASE striking.

If we once again return to the motives given, those such as 'getting a diploma' and 'in order to learn something' are the most important for pupils in GSE followed by those in TSE and VSE, while pupils in H&ASE give their motive for going to school as 'interesting subjects'. Achievement orientation is therefore the highest with GSE pupils while the intrinsic interest in the curriculum is important to pupils following the H&ASE type of education. H&ASE pupils, compared with pupils in other types of educational establishments, perceive education less as an obligation imposed by parents.

In recommending additional research, it may be interesting to investigate links to the situation at home (level of education of the parents, social origin, etc.). Not only the influence of the situation at home, but also the increasing role of the media and how pupils spend their leisure time, have not been dealt with in this survey. These are interesting lines of thought that could lead to new insights to add to the results gleaned from the present survey.

Undertaking a questionnaire is not only useful for external evaluation by inspec-

tion teams but can also be used by the schools to draw up specific plans of action relating to increasing well-being at school.

Notes

1. Content—Input—Process—Output (Scheerens *et al.*, 1988).
2. Humanities and Art Secondary Education.
3. Technical Secondary Education.
4. Vocational Secondary Education.
5. General Secondary Education.

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