# This is a self-archived version of an original article. This version may differ from the original in pagination and typographic details. 

Author(s): Haapasalo, Ilona; Välimaa, Raili; Kannas, Lasse

Title: How Comprehensive School Students Perceive their Psychosocial School Environment

Year: 2010

Version: Accepted version (Final draft)

Copyright: © 2010 Scandinavian Journal of Educational Research

Rights: CC BY-NC-ND 4.0

Rights url: https://creativecommons.org/licenses/by-nc-nd/4.0/

## Please cite the original version:

Haapasalo, I., Välimaa, R., \& Kannas, L. (2010). How Comprehensive School Students Perceive their Psychosocial School Environment. Scandinavian Journal of Educational Research, 54(2), 133-150. https://doi.org/10.1080/00313831003637915

# How Comprehensive School Students Perceive their Psychosocial School Environment 

Ilona Haapasalo, Raili Välimaa and Lasse Kannas<br>University of Jyväskylä


#### Abstract

The aim of this study was to describe students' perceptions of their psychosocial school environment and to examine the associations between such perceptions and students' perceived school performance. Our analyses were based on data from the Health Behaviour in School-Aged Children 2006 study, involving responses by Finnish students from grades 7 and 9. The results indicated that students' perceptions of their school environment were fairly positive, but that a remarkably large proportion of the students reported negative attitudes towards school. School engagement, school strain, and teacher-student relations were found to be the most influential predictors in the psychosocial school environment regarding perceived school performance; as were the grade and educational aspirations out of the selected background factors. The findings imply that despite good academic achievement in Finnish comprehensive schools, there is still a need to improve students' school engagement and their satisfaction with school.


Keywords: school perceptions, school engagement, school environment, perceived school performance

In the recent international student assessments (OECD, 2007) the performance of Finnish students was found to be high in all assessment areas. In addition, the variation in student performance between schools was low in Finland, indicating that the performance is fairly consistent throughout the entire school system (OECD, 2007). Despite this success story, there is both national and international evidence to suggest that the satisfaction of Finnish adolescents with school is rather poor.

In addition to the aspects involving high performance, it matters a great deal how students experience the school environment and school life in general-since, after all, young people spend a notable part of their time within school. School plays a significant role in the lives of young people due to its socializing aspect, preparing the students for society and for life. Finnish adolescents regard school especially as a place for developing student relations and for their own social growth (Linnakylä \& Malin, 1997). Clearly, experiences within school are important for young people's development. School builds up

[^0]adolescents' later conceptions of working life and society (Liinamo \& Kannas, 1995; Willms, 2003). School experiences are also associated with the health and well-being of adolescents (Samdal, Dür, \& Freeman, 2004). Thus, from every point of view, students' perceptions of school and the school environment cannot be ignored.

Students' experiences of school vary. Some students feel that school is fun, that the teachers are motivating, that their classmates are encouraging, and that schoolwork is challenging. In contrast, others regard school as boring, the teachers as unfair, their classmates as depressing, and their school days uninspiring (Linnakylä \& Malin, 1997). In a large-scale ethnographic study by Gordon, Lahelma, and Tolonen (1995) Finnish schools were metaphorically described as a prison, an asylum, or a boring book by the students. Previous studies, both national and international, have shown that Finnish adolescents' levels of school satisfaction have been fairly low (Kannas, Välimaa, Liinamo, \& Tynjälä, 1995; Linnakylä \& Malin, 1997; Samdal et al., 2004). According to the PISA 2003 study, Finnish students' school engagement and school satisfaction was below average in comparison with 30 OECD countries (Kupari \& Välijärvi, 2005).

Previous studies have also shown that age, gender, life style, academic achievement, and socioeconomic background are important determinants for the quality of school life and for school satisfaction (Liinamo \& Kannas, 1995; Samdal, Nutbeam, Wold, \& Kannas, 1998). Older students are less satisfied with school (Samdal et al., 1998, 2004; Ding \& Hall, 2007) and feel less attached to school (McNeely, Nonnemaker, \& Blum, 2002) than younger students. Boys are less satisfied than girls (Borup \& Holstein, 2006; Currie et al., 2008; Ding \& Hall, 2007; Samdal et al., 1998, 2004). Students who do well at school tend to be more satisfied with school (Samdal et al., 1998; Samdal, Wold, \& Bronis, 1999). It has been suggested that satisfaction with school and its social components may increase life satisfaction and perceived health status. Social support from peers influences adolescents' health, well-being (Ravens-Sieberer, Gyöngyi, \& Thomas, 2004) and achievement (Rosenfeld, Richman, \& Bowe, 2000). Furthermore, students who receive higher grades, who participate in extracurricular activities, and who do not play truant feel more attached to school (McNeely et al., 2002).

Students who perceive teachers as creating a caring, well-structured learning environment in which expectations are high, clear, and fair are more likely to report engagement with the school (Klem \& Connell, 2004). In turn, high levels of engagement are associated with higher levels of academic achievement (Voelkl, 1995). It has been suggested that enabling people to have control over important parts of their lives and to work in a supportive environment affects their health, no matter whether they are children or adults (Gillander Gådin \& Hammarström, 2005). However, improving students' sense of belonging and engagement will not necessarily lead to direct improvements in achievement. A positive learning environment within the school seems to be the factor that is associated with student learning (Ding \& Hall, 2007; Diseth, 2007).

Academic achievement has been put forward as an important predictor of future life opportunities such as educational and employment opportunities (Currie et al., 2008). According to previous studies, whether one is examining academic performance or involvement with a range of health behaviors, students who feel that they belong to their school, and who feel that teachers are supportive and treat them fairly, do better (see Libbey, 2004). In contrast, students who report receiving low support from their parents, friends, and teachers, have the poorest school outcomes (Rosenfeld et al., 2000). The PISA studies have also found a connection between students' socioeconomic background and their academic
performance. Students with a higher socioeconomic background have achieved better assessment scores than students with a poorer socioeconomic background. Despite the fact that in Finland this difference was less than the OECD average, it does affect the equitable utilization of learning opportunities (Kupari \& Välijärvi, 2005).

To maintain the high performance level and equity in learning, and also to improve Finnish students' experiences of school environment and school life, it is important to examine the features that affect both the school performance and the perceptions of school.

The study reported here is based on the study Health Behaviour in School-aged Children (HBSC), which is a World Health Organization (WHO) collaborative cross-national study. In the present study the main focus is on psychosocial factors within the school. The psychosocial school environment can be defined as the social situations existing at school that are related to pupils' work situation (such as teacher support, work demands, and influence over school work), and also related to pupils' peer relations at school (such as bullying, isolation, etc.) (Gillander Gådin \& Hammarström, 2005). The present study aims to clarify the following issues:
(1) How do students perceive their psychosocial school environment, and what kind of school experiences do they have? How are grade, gender, educational aspiration, and perceived school performance associated with these school perceptions?
(2) How are grade, gender, family affluence, school perceptions, and educational aspiration associated with perceived school performance?

## Methods

## Data

The present study is a part of The Students' Engagement in School Life (STAGE) project. The data used in this study are from the Health Behaviour in School-aged Children (HBSC) 2006 study, which is an international study conducted with the collaboration of the WHO. The HBSC study aims to gain an improved understanding of adolescent health behaviors, health, and lifestyles within their social context. The data are collected through school-based surveys; anonymous, standard questionnaires are issued every fourth year to young people aged 11,13 , and 15 . Standard cluster sampling is followed regionally; hence the sample used in this study represents the whole country. Sampling is conducted in accordance with the structure of the national education system; the primary sampling unit is the school class or the whole school when class level information is not available. To follow the international protocol of the HBSC study, countries are required to time their data collection so that the mean ages within their samples fall with in $+/-0.5$ years of the means 11.5, 13.5, and 15.5 years (Currie et al., 2008: www.hbsc.org). In Finland the data are collected from 5th, 7th, and 9th graders. In this article the focus is on the responses given by students from the 7th (mean age 13.8) and 9th (mean age 15.8) grades. The 2006 questionnaire was sent to 190 schools at the end of the school year (March-May), and $100 \%$ of the schools responded. The student response rate was $88.2 \%$. In all, the data for this study consisted of 3,405 students from grades 7 and 9 (Table 1).

## Measures

The questionnaire for the 2006 survey was developed in English by the members of the HBSC research network, and translated into Finnish. In order to follow the research protocol
Table 1
Data Sample by Grade and Gender

and to ensure correctness in the interpretations, the questions were retranslated back into English (Currie et al., 2008: www.hbsc.org). Students’ school perceptions were measured by means of questions concerning the school climate, the school environment, teachers, peers, and parents. There were 28 statements in total (Table 2). The students gave their opinion by expressing the degree to which they agreed with the statements, using a scale with five response keys: "strongly agree," "agree," "neither/nor," "disagree," and "strongly disagree."

In addition to these statements concerning the psychosocial school environment, essential demographic information was included, such as grade, gender, perceived school performance, educational aspiration, and the perceived socioeconomic background of the home.

Perceived school performance was measured by the single item: "In your opinion, what does your class teacher(s) think about your school performance compared to your classmates;" this had four response keys from "very good" to "below average." Educational aspiration was also measured by a single item in which students were asked if they were intending to apply for high school, for vocational school, for an apprenticeship, or to get a job; also if they were most likely to be unemployed, or if they were as yet undecided. The variable was rescaled so that the keys "I'm going to apply for high school" and "I'm going to apply for vocational school" were kept as they were, but with the other options combined into a single key.
"How well off do you think your family is?" was asked in order to measure young people's perceptions of their own family's socioeconomic position relative to that of others. The item had five response keys: "very well off," "quite well off," "average," "not so well off," and "not at all well off." For the analyses, the first two keys, "very well off" and "well off," were combined, as were "not so well off" and "not at all well off."

Explorative factor analysis (with Oblimin rotation) was conducted for the 28 variables in order to reduce the data and to uncover the underlying dimensions of the school perceptions. The factor analysis resulted in six factors (Table 2). The six-factor solution explained $52 \%$ of the total variance.

The items in each factor were added up to give sum scores, which were named as follows: "School engagement" indicates the outlook on school life and on belonging at school; "Parental support" indicates the parents' involvement; "Student relations" and "Teacher-student" relations reflect relationships and interactions at school; "Student autonomy" indicates how students perceive their participation opportunities; and "School strain" reflects workload and attitudes towards school. The items included in each sum score are presented in Table 2. To keep the original scale in the sum scores formed, the sums were divided by the number of items in each sum score. The internal consistencies of the sum scores were satisfactory. Cronbach's alpha for the sum scores varied between .72 and .85 (Table 2).

These six sum scores together with the demographics were used to illustrate students' perceptions of their psychosocial school environment, using cross-tabulation and variance analysis. Logistic regression analysis was conducted to determine the predictors of perceived school performance.

## Results

## How do Students Perceive their Psychosocial School Environment?

Table 3 shows how students assessed their psychosocial school environment. The assessment revealed significant differences between 7th and 9th grades and between male
Table 2
Results of the Factor Analysis: Six Factors Describing School Perceptions, $n=3405$

|  |  |  | Factors |  |  |  |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 1 | 2 | 3 | 4 | 5 |

Table 2
(Continued)

|  | Factors |  |  |  |  |  | Communalities |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1 | 2 | 3 | 4 | 5 | 6 |  |
| The rules in this school are fair |  |  |  |  | . 566 |  | . 404 |
| My teachers are interested in me as a person |  |  |  |  | . 509 |  | . 379 |
| The students are not treated too severely/strictly in this school |  |  |  |  | . 450 |  | . 326 |
| I feel safe at this school |  |  |  |  | . 328 |  | . 380 |
| 6. School strain |  |  |  |  |  |  |  |
| I have too much school work |  |  |  |  |  | . 758 | . 548 |
| I find school tiring |  |  |  |  |  | . 673 | . 559 |
| I find school difficult |  |  |  |  |  | . 661 | . 469 |
| I wish I didn't have to go to school |  |  |  |  |  | . 412 | . 417 |
| There are many things about school I do not like |  |  |  |  |  | . 398 | . 258 |
| Cronbach's Alpha | . 85 | . 75 | . 73 | . 72 | . 80 | . 74 |  |

Table 3
Percentage of the Students Agreeing with the Statements About School Perceptions by Grade and Gender

| Items | Grade |  |  | Gender |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 7th } \\ & \% \end{aligned}$ | $\begin{gathered} 9 \text { th } \\ \% \end{gathered}$ | Sig. | Boys \% | $\begin{gathered} \text { Girls } \\ \% \end{gathered}$ | Sig. |
| 1. School engagement |  |  |  |  |  |  |
| I like being in school | 43 | 41 |  | 35 | 49 | *** |
| I look forward to going to school | 49 | 43 | *** | 42 | 50 | *** |
| I enjoy school activities | 35 | 31 | ** | 31 | 35 | * |
| Our school is a nice place to be | 57 | 46 | *** | 47 | 56 | *** |
| I feel I belong at this school | 67 | 56 | *** | 61 | 62 |  |
| 2. Parental support |  |  |  |  |  |  |
| My parents are interested in what happens to me at school | 85 | 83 |  | 85 | 84 |  |
| My parents encourage me to do well at school | 87 | 86 |  | 87 | 86 |  |
| If I have a problem at school, my parents are ready to help | 85 | 82 | * | 84 | 82 |  |
| My parents are willing to help me with my homework | 60 | 53 | *** | 56 | 57 |  |
| My parents are willing to come to school to talk to teachers | 57 | 49 | *** | 53 | 54 |  |
| 3. Student autonomy |  |  |  |  |  |  |
| Students have a say in deciding what activities they do | 19 | 17 |  | 22 | 14 | *** |
| Students have a say in how class time is used | 34 | 33 |  | 39 | 29 | *** |
| 4. Student relations |  |  |  |  |  |  |
| Most of the students in my class(es) are kind and helpful | 69 | 69 |  | 69 | 69 |  |
| Other students accept me as I am | 69 | 71 |  | 75 | 65 | *** |
| The students in my class(es) enjoy being together | 69 | 63 | *** | 76 | 57 | *** |
| 5. Teacher-student relations |  |  |  |  |  |  |
| Our teachers treat us fairly | 57 | 46 | *** | 53 | 50 |  |
| Most of my teachers are friendly | 74 | 71 | * | 70 | 75 | *** |
| I am encouraged to express my own views in my class(es) | 49 | 41 | *** | 46 | 44 |  |
| When I need extra help, I can get it | 66 | 61 | * | 63 | 64 |  |
| The rules in this school are fair | 63 | 51 | *** | 52 | 62 | *** |
| My teachers are interested in me as a person | 27 | 20 | *** | 26 | 22 | ** |
| The students are not treated too severely/strictly in this school | 41 | 42 |  | 33 | 49 | *** |
| I feel safe at this school | 67 | 69 |  | 66 | 70 | * |
| 6. School strain |  |  |  |  |  |  |
| I have too much school work | 42 | 46 | ** | 46 | 41 | * |
| I find school tiring | 53 | 64 | *** | 61 | 57 | ** |
| I find school difficult | 22 | 31 | *** | 26 | 27 |  |
| I wish I didn't have to go to school | 26 | 26 |  | 32 | 21 | *** |
| There are many things about school I do not like | 39 | 48 | *** | 46 | 41 | ** |

Note: ${ }^{*} p<.05 ;{ }^{* *} p<.01 ;$ *** $p<.001$.
and female students. Younger students generally perceived their psychosocial school environment more positively than older students. Nevertheless, the results were not flattering: only $43 \%$ of the 7 th graders and $41 \%$ of the 9 th graders liked being at school, and only slightly over $30 \%$ of the students enjoyed school activities. Nearly half ( $49 \%$ ) of the

7th graders looked forward to going to school, but only $43 \%$ of the 9 th graders agreed with this view ( $p<.001$ ). Girls and younger students felt that their school was a nice place to be $(p<.001)$ more frequently than boys or older students. Younger students also indicated more often than older students that they belonged at their school ( $p<.001$ ). Two out of three students indicated that they felt safe at school. Girls felt safer than boys ( $p<.05$ ).

Negative attitudes towards school were quite common, and more common among older students. Almost half ( $48 \%$ ) of the 9 th grade students and $39 \%$ of the 7 th grade students ( $p<.001$ ) indicated that there were many things at school they did not like. As many as $42 \%$ of the 7 th graders and $46 \%$ of the 9 th graders ( $p<.01$ ) reported having too much school work, and even more ( $53 \%$ of the 7 th graders and $64 \%$ of the 9 th graders, $p<.001$ ) found school tiring. At the same time, $22 \%$ of the younger and $31 \%$ of the older students ( $p<.001$ ) found school difficult, and $26 \%$ of both groups wished that they did not have to go to school.

Evaluations of parental support were more positive. Over four out of five students at both grade levels reported that their parents were interested in what happened to their children at school. The same proportion said that their parents encouraged them to do well at school, and that their parents were willing to help if they encountered a problem at school. According to the students, their parents were not so keen on actually making an effort. Of the 7th graders, $60 \%$ said that their parents were willing to help with homework, and almost as many $(57 \%)$ reported that their parents were willing to come to school to talk to the teachers. The situation with older students was not so good. Of the 9th graders, $53 \%$ were able to get help with homework and less than half (49\%) said that their parents were willing to come to school to talk to the teachers ( $p<.001$ ).

Student relations appeared to be fairly positive. The majority of the students agreed that their peers were kind and helpful and willing to accept others as they are. Younger students reported more often than their older counterparts that students in their classes enjoyed being together ( $p<.001$ ).

The students' relations with the teachers were less positive than the relations with their peers; again older student's views were less positive than those of their younger counterparts. The majority of the students reported that their teachers were friendly, but only $49 \%$ of the 9 th graders and $57 \%$ of 7th graders ( $p<.001$ ) indicated that students were treated fairly by their teachers. Only $51 \%$ of the older students and $63 \%$ of the younger students $(p<.001)$ regarded the rules of the school as fair. Only a minor proportion of the students in both grades reported that students were not treated too severely/ strictly in their schools. Again, girls were more positive $(p<.001)$. Furthermore, less than one third of the 7th grade students and only one fifth of the 9th grade students ( $p$ $<.001$ ) thought that the teachers were interested in them as individuals. The students also thought that they had little say in decision-making. Only $14 \%$ of the girls and $22 \%$ of the boys ( $p<.001$ ) reported having a say in the activities they carried out, while $29 \%$ of the girls and $39 \%$ of the boys $(p<.001)$ thought that they had a say in planning the use of their time.

## Relationships Between School Perceptions

The correlations (Pearson) between school perceptions are shown in Table 4. There was a linear relationship, either positive or negative, between all the dimensions of school

Table 4
Pearson's Correlations Between School Perceptions

| Sum scores | 1 | 2 | 3 | 4 | 5 | 6 |
| :--- | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. School engagement | 1 |  |  |  |  |  |
| 2. Parental support | $.369^{* *}$ | 1 |  |  |  |  |
| 3. Student autonomy | $.210^{* *}$ | $.099^{* *}$ | 1 |  |  |  |
| 4. Student relations | $.360^{* *}$ | $.254^{* *}$ | $.251^{* *}$ | 1 |  |  |
| 5. Teacher-student relations | $.661^{* *}$ | $.413^{* *}$ | $.237^{* *}$ | $.282^{* *}$ | 1 |  |
| 6. School strain | $-.571^{* *}$ | $-.250^{* *}$ | $-.048^{* *}$ | $-.121^{* *}$ | $-.476 * *$ | 1 |

Note: ${ }^{*} p<.05 ; * * p<.01 ;{ }^{* * *} p<.001$.
perceptions ( $p<.01$ ). School engagement correlated positively with all the other dimensions except with school strain. The strongest relationships were found between school engagement and teacher-student relations (.661), between school strain and school engagement ( -.571 ), and between school strain and teacher-student relations ( -.476 ) (Table 5).

## Relationships Between School Perceptions and Background Variables

The relationships between school perceptions and background variables were examined using variance analysis. The background variables tested were students' gender, grade, perceived socioeconomic background of the home, educational aspiration, and perceived school performance. The results of the variance analysis are shown in Table 5. Gender, grade, perceived school performance, and perceived socioeconomic background of the home were the most significant background variables related to the school perceptions. In addition, educational aspiration correlated quite strongly with most of the dimensions of school perceptions, and particularly with school engagement, parental support, teacherstudent relations, and school strain.

All the dimensions of the school perceptions could be explained fairly well by the variables selected. A closer look at the most significant background variables showed that girls are more satisfied with school than boys. Furthermore, girls reported more favorable teacher-student relations than boys, and had fewer negative feelings towards school. In contrast, boys reported being more autonomous and as having more positive student relations than girls. There were no significant differences between boys and girls in terms of parental support.

Younger students were more positive in all the dimensions of school perceptions than older students. The differences were slightly smaller in respect of student relations and school strain. In all dimensions of the school perceptions better perceived socioeconomic position of the family explained significantly more positive attitudes than poorer socioeconomic position of the family. In addition, perceived school performance was a significant background variable in all the dimensions of school perceptions, working in favor of those students who perceived their school performance to be better.

Higher educational aspiration explained significantly more positive attitudes than lower aspiration, in all other dimensions except student relations. An interesting finding is that students who intended to go to a vocational school reported even more negative perceptions than the undecided and/or work-orientated students.
Table 5
Relations Between School Perceptions and Some Background Variables (Based on Analysis of Variance)

|  | df | F | sig | $\eta^{2}$ | Descriptive statistics, mean values min 1 (positive); max 5 (negative) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Gender |  | Grade |  | Perceived socioeconomic background |  |  | Educational aspiration |  |  | Perceived school performance |  |  |  |
|  |  |  |  |  | $\begin{gathered} \begin{array}{c} \text { Boys } \\ n=1626 \end{array} \end{gathered}$ | $\begin{gathered} \begin{array}{c} \text { Girls } \\ n=1779 \end{array} \end{gathered}$ | $\begin{gathered} \text { 7th } \\ n=1735 \end{gathered}$ | $\begin{gathered} \begin{array}{c} 9 \text { th } \\ n=1670 \end{array} \end{gathered}$ | $\begin{gathered} \text { Good } \\ n=2309 \end{gathered}$ | $\begin{gathered} \text { Avg. } \\ n=919 \end{gathered}$ | $\begin{gathered} \text { Poor } \\ n=133 \end{gathered}$ |  |  | Other $n=302$ | $\begin{gathered} \text { Very } \\ \text { good } \\ n=545 \end{gathered}$ | $\begin{gathered} \text { Good } \\ n=1362 \end{gathered}$ | $\begin{gathered} \text { Avg. } \\ n=1225 \end{gathered}$ | $\begin{gathered} \text { Below } \\ \text { avg. } \\ n=188 \end{gathered}$ |
| School engagement | 1 | 43.10 | *** | . 013 | 2.84 | 2.64 | 2.64 | 2.84 | 2.68 | 2.81 | 3.09 | 2.55 | 2.99 | 2.88 | 2.37 | 2.54 | 2.96 | 3.62 |
| Gender | 1 | 45.44 | *** | . 014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | 2 | 19.22 | *** | . 012 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic | 2 | 105.70 | *** | . 063 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Educ. aspiration <br> Performance | 3 | 175.67 | *** | . 141 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Parental support | 1 | 0.49 | - | . 000 | 2.08 | 2.06 | 1.98 | 2.15 | 1.99 | 2.22 | 2.45 | 1.96 | 2.22 | 2.11 | 1.80 | 1.97 | 2.22 | 2.55 |
| Gender | 1 | 49.79 | *** | . 015 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | 2 | 26.29 | *** | . 034 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic. | 2 | 51.88 | *** | . 032 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Educ. aspiration <br> Performance | 3 | 90.66 | *** | . 078 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Student autonomy | 1 | 32.30 | *** | . 010 | 3.01 | 3.26 | 3.10 | 3.25 | 3.13 | 3.30 | 3.24 | 3.20 | 3.18 | 3.10 | 3.12 | 3.15 | 3.21 | 3.34 |
| Gender | 1 | 23.27 | *** | . 007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | 2 | 9.23 | *** | . 007 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic | 2 | 1.96 | - | . 001 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Educ. aspiration Performance | 3 | 3.85 | *** | . 004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Student relations | 1 | 68.10 | *** | . 020 | 2.17 | 2.39 | 2.24 | 2.33 | 2.23 | 2.39 | 2.56 | 2.28 | 2.28 | 2.36 | 2.18 | 2.22 | 2.36 | 2.50 |
| Gender | 1 | 10.47 | ** | . 003 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | 2 | 23.64 | *** | . 014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic | 2 | 1.72 | - | . 001 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Educ. aspiration | 3 | 15.66 | *** | . 014 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Performance |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

Table 5
(Continued)

|  | df | F | sig | $\eta^{2}$ | Descriptive statistics, mean values min 1 (positive); max 5 (negative) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Gender |  | Grade |  | Perceived socioeconomic background |  |  | Educational aspiration |  |  | Perceived school performance |  |  |  |
|  |  |  |  |  | $\begin{gathered} \text { Boys } \\ n=1626 \end{gathered}$ | $\begin{gathered} \text { Girls } \\ n=1779 \end{gathered}$ | $\begin{gathered} \text { 7th } \\ n=1735 \end{gathered}$ | $\begin{gathered} \text { 9th } \\ n=1670 \end{gathered}$ | $\begin{gathered} \text { Good } \\ n=2309 \end{gathered}$ | $\begin{gathered} \text { Avg. } \\ n=919 \end{gathered}$ | $\begin{gathered} \text { Poor } \\ n=133 \end{gathered}$ |  |  | Other $n=302$ | $\begin{gathered} \text { Very } \\ \text { good } \\ n=545 \end{gathered}$ | Good $n=1362$ | $\begin{gathered} \text { Avg. } \\ n=1225 \end{gathered}$ | $\begin{gathered} \text { Below } \\ \text { avg. } \\ n=188 \end{gathered}$ |
| Teacher-student | 1 | 15.37 | *** | . 005 | 2.63 | 2.54 | 2.50 | 2.68 | 2.55 | 2.65 | 2.82 | 2.48 | 2.73 | 2.67 | 2.28 | 2.45 | 2.77 | 3.29 |
| relations | 1 | 61.62 | *** | . 019 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Gender | 2 | 16.78 | *** | . 010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | 2 | 55.51 | *** | . 034 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic Educ. aspiration Performance | 3 | 181.18 | *** | . 144 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| School strain | 1 | 35.10 | *** | . 011 | 2.75 | 2.91 | 2.88 | 2.79 | 2.87 | 2.80 | 2.53 | 3.04 | 2.57 | 2.60 | 3.24 | 3.00 | 2.59 | 2.11 |
| Gender | 1 | 11.51 | ** | . 004 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Grade | 2 | 12.85 | *** | . 008 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Socioeconomic | 2 | 156.87 | *** | . 090 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Educ. aspiration Performance | 3 | 191.88 | *** | . 153 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

[^1]
## Associations Between Perceived School Performance, School Perceptions, and Background Variables

Logistic regression analysis was conducted to examine the associations between perceived school performance and perceptions of school, and also between selected background factors. For the purposes of the analysis the variables were rescaled. Perceived

Table 6
Logistic Regression Analysis: Factors Predicting Good or Very Good Perceived School Performance. Odds ratio, Significance, and Confidence Interval

| Item | $n$ | OR | Sig. | 95\% CI |
| :---: | :---: | :---: | :---: | :---: |
| Gender |  |  |  |  |
| Boys | 1318 | 1.21 | . 035 | 1.0-1.45 |
| Girls | 1557 | 1.00 |  |  |
| Grade |  |  |  |  |
| 7th Grade | 1445 | 1.67 | . 000 | 1.39-2.00 |
| 9th Grade | 1430 | 1.00 |  |  |
| Perceived socioeconomic background |  |  |  |  |
| Good | 1961 | 2.21 | . 001 | 1.41-3.46 |
| Average | 799 | 1.49 | . 092 | 0.94-2.37 |
| Poor | 115 | 1.00 |  |  |
| Educational aspiration |  |  |  |  |
| High school | 1637 | 3.43 | . 000 | 2.52-4.67 |
| Vocational school | 989 | 0.86 | . 352 | 0.63-1.18 |
| Other | 249 | 1.00 |  |  |
| School engagement |  |  |  |  |
| High | 981 | 2.22 | . 000 | 1.59-3.10 |
| Average | 1513 | 1.61 | . 001 | 1.2-2.13 |
| Low | 381 | 1.00 |  |  |
| Parental support |  |  |  |  |
| Supportive | 2554 | 1.31 | . 058 | 0.99-1.74 |
| Not supportive | 321 | 1.00 |  |  |
| Student autonomy |  |  |  |  |
| Feeling of autonomy | 822 | 0.93 | . 459 | 0.77-1.13 |
| No autonomy | 2053 | 1.00 |  |  |
| Student relations |  |  |  |  |
| Good relations | 2290 | 0.99 | . 953 | 0.79-1.24 |
| Poor relations | 585 | 1.00 |  |  |
| Teacher-student relations |  |  |  |  |
| Good relations | 2142 | 1.84 | . 000 | 1.48-2.29 |
| Poor relations | 733 | 1.00 |  |  |
| School strain |  |  |  |  |
| High | 1492 | 1.00 |  |  |
| Low | 1383 | 2.01 | . 000 | 1.67-2.41 |

school performance was rescaled into two categories: very good/good, and average/poor. School engagement was divided into three categories: high, average, and low engagement. All the other sum scores were split into two categories, hence placed on the positive or negative side.

As shown in Table 6, gender, grade, the perceived socioeconomic background of the home, and educational aspiration were related to good or very good perceived school performance. Boys (OR $1.21 ; p<.05$ ) and 7th graders ( $\mathrm{OR}=1.67 ; p<001$ ) were more likely to report good or very good perceived performance than girls and 9th graders, respectively. Students with a good perceived socioeconomic background and also students with higher educational aspiration more frequently perceived their school performance to be good or very good than students with lower aspiration or a poorer socioeconomic background.

Perceived school performance was also related to school engagement, teacher-student relations, and school strain. Students who reported high school engagement were more likely to report good or very good perceived school performance (OR 2.21; p $=.001$ ) than the students with average or low school engagement. Students who reported having good relations with teachers indicated their school performance as better (OR 1.86; $p<.001$ ). Low school strain also predicted good or very good perceived performance (OR 2.01; $p<001$ ).

## Discussion

This study addressed the paradox in the Finnish comprehensive school: despite successes in assessments of achievement, there appears to be fairly strong dissatisfaction with school on the part of Finnish students. The present study looked at Finnish students' perceptions of their psychosocial school environment and examined the associations between such perceptions and the students' perceived school performance. The descriptive statistics of the school perception variables indicated that students' perceptions of their school environment were on the positive side; nevertheless a remarkably large proportion of students reported negative attitudes towards school. The findings show that a major proportion of the Finnish students in the study did not enjoy school activities, or going to school, or being at school. The students also found school tiring and felt that they had too much schoolwork. The assessment revealed significant differences between genders and grades, favoring girls and younger students-a result also found by others (Borup \& Holstein, 2006; Currie et al., 2008; Ding \& Hall, 2007; McNeely et al., 2002; Samdal et al., 1998, 2004).

The selected background variables explained the dimensions of the school perceptions fairly well. Grade, perceived school performance, and the perceived socioeconomic background of the home proved to be the most significant background factors. Younger students had more positive perceptions of their school environment than older students, and a more favorable socioeconomic background explained positive experiences in school (cf. Currie et al., 2008). Moreover, the higher the perceived school performance of the students, the more likely they were to have positive perceptions of their psychosocial school environment.

The results also indicate significant correlations between all the dimensions of school perceptions. The strongest associations were found between school engagement, school strain, and teacher-student relations. School engagement and teacher student relations were associated positively with each other, and negatively with school strain (cf. Linnakylä,
1996). From the cross-sectional data it is not possible to determine causality. However, it is likely that these factors have a strong influence on each other. Given the positive relationship between school engagement and teacher-student relations, the promotion of positive school experiences should be an important issue for policymakers concerned with school development. The same would apply to actions aimed at decreasing students' school strain.

In this study, school engagement, school strain, and teacher-student relations were found to be the most influential predictors in the psychosocial school environment in respect of perceived school performance (cf. Ding \& Hall, 2007; Samdal et al., 1999; Voelkl, 1995), as were the grade and the educational aspiration out of the selected background factors (cf. Currie et al., 2008). Students who had more positive perceptions of school, who were more engaged, and who had lower school strain were more likely to report better perceived performance. An interesting finding was that boys were more likely to report good perceived performance than girls. According to previous studies, girls have reported good perceived performance more often than boys (Currie et al., 2008; Samdal et al., 2004). However, in the PISA 2003 assessment boys were found to report higher self-efficacy and self-confidence in learning than girls (Kupari \& Välijärvi, 2005). This might reflect the fact that sometimes girls place undue pressure on themselves and do not believe in their competence (see Niemivirta, 2004). One should nevertheless bear in mind that in this study the perceived performance was measured through a single item and that the answers were based only on students' reported perceptions. In this sense it is unclear how valid the measures actually are, or how well they correspond to actual academic achievement. Even so, students' own perceptions are of great importance and should not be understated.

The teacher-student relationship is clearly a crucial one. Students who reported good relations with their teachers were also more likely to report better perceived performance. During adolescence, young people increasingly look to non-parental adults for support and guidance. In much the same way as parents, teachers can be warm, caring, and accepting; they can also express high expectations for all students, be available to help and guide, and seek to be understood (Kalil \& Ziol-Guest, 2008). When that teacher-student relationship is not working it can affect other aspects of school life. Although the results of the study are based on cross-sectional data, one can reasonably suggest that teacher-student rela-tions-along with other perceptions of school-may be of importance to students' perceived school performance; this has also been suggested by previous studies (Samdal et al., 1999, 2004).

Expressing one's perceptions might also be a culture-specific matter. There are at least three possible culture-specific explanations that could explain the dissatisfaction expressed by Finnish students. First of all, in Finnish culture it is (stereotypically) more common to express one's dislike or negativity than to give praise or express positive attitudes. Secondly, negative attitudes towards school might be supported within the home: the free availability of education is often taken for granted and may therefore readily face criticism. However, according to a longitudinal study by Räty and Kasanen (2007) Finnish parents were quite satisfied with the functioning of their child's school in the first school years. Thirdly, it might just be that the Finnish students are not satisfied with school, despite the high achievement and the associations that have been shown elsewhere between performance and school perceptions. After all, the PISA studies have shown a low level of variation in students' performance throughout the Finnish school system, which means that those who are dissatisfied with school still perform above the average level.

This study does have some limitations. It is important to emphasize that the questionnaire used in this study limits interpretations. The variables which were chosen for this study all had five response keys: two denoting agreement, two denoting disagreement, and one denoting a neither/nor opinion. The neither/nor key was widely used. Indeed, with each variable approximately one third of the respondents used this option. This might be due to the phrasing of the questions. For example, the statement "Our teachers treat us fairly" could be taken to include all the teachers. That might cause problems in answering if a student feels that most teachers are fair but that one is not. This entails something that one might consider in analyzing the data: whether to include or exclude the neither/nor answers. In this study the neither/nor answers were included in the sum scores, and were considered to be part of the scale. Despite the high number of the neither/nor answers in this study, the results were consistent with the School Health Promotion Study, which included questions about school life without any neither/nor option (Luopa, Pietikäinen, \& Jokela, 2008).

The findings of this study indicate a need for more widespread assessments of students' perceptions of school. The Finnish comprehensive school has done well in achieving good learning standards, but one can ask whether the standards have been achieved at the expense of school satisfaction. There is still a need to improve the students' school engagement and their satisfaction with school.

Nevertheless, despite the above, and despite the dissatisfaction with school, Finnish students do seem to realize the relevance of schooling and achieving (Linnakylä, 1996). Going to school is a priority as well as a duty for Finnish adolescents. Hence, it would be preferable if students, as well as teachers, could to some extent gain positive experiences, joy in learning, and joy in their schoolwork. Schools do not need to be all fun and play, but they should at least be bearable places for those who attend them. Meeting the needs of students who are not engaged to school may well be the biggest challenge currently faced by teachers and school administrators. Some actions to improve well-being in schools have already been undertaken. The Ministry of Education has launched plans of action, aimed at improving the situation in Finnish schools. More thorough research could clarify the underlying reasons associated with school engagement and the related consequences. It would also be important to critically analyze the cultural appropriateness of assessment instruments concerned with school perceptions at a national level.

## References

Borup, I., \& Holstein, B. (2006). Does poor school satisfaction inhibit positive outcome of health promotion at school? A cross-sectional study of schoolchildren's response to heath dialogues with school health nurses. Journal of Adolescent Health, 38, 758-760.
Currie, C., Gabhainn, S.N., Godeau, E., Roberts, C., Smith, R., Currie, D., et al. (2008). Inequalities in young people's health. HBSC International Report from the 2005/2006 survey. Glasgow, Scotland: World Health Organization.
Ding, C., \& Hall, A. (2007). Gender, ethnicity, and grade differences in perceptions of school experiences among adolescents. Studies in Educational Evaluation, 33, 159-175.
Diseth, $\AA$. (2007). Students' evaluation of teaching approaches to learning, and academic achievement. Scandinavian Journal of Educational Research, 51, 185-204.
Gilliander Gådin, K., \& Hammarström, A. (2005). A possible contributor to the higher degree of girls reporting psychological symptoms compared with boys in grade nine. European Journal of Public Health, 15, 380-385.

Gordon, T., Lahelma, E., \& Tolonen, T. (1995). "Koulu on kuin...": Metaforat fyysisen koulun analysoinnin välineenä ["School is like...": Using metaphors in analyzing physical school]. Nuorisotutkimus, 13, 3-12.
Kalil, A., \& Ziol-Guest, K. (2008). Teacher support, school goal structures, and teenage mothers' school engagement. Youth \& Society, 39, 534-548.
Kannas, L., Välimaa, R., Liinamo, A., \& Tynjälä, J. (1995). Oppilaiden kokemuksia kouluviihtyvyydestä ja kuormittuneisuudesta sekä koulukiusaamisesta Euroopassa ja Kanadassa [Students' perceptions of school satisfaction, work load and bullying in Europe and Canada; in Finnish]. In L. Kannas (Ed.), Koululaisten kokema terveys, hyvinvointi ja kouluviihtyvyys [School children's perceived health, well-being, and school satisfaction; in Finnish] (pp. 109-130). Helsinki: Hakapaino.
Klem, A., \& Connell, J. (2004). Relationships matter: Linking teacher support to student engagement and achievement. Journal of School Health, 74, 262-273.
Kupari, P., \& Välijärvi, J. (2005). Suomalaisen osaamisen perusta säilynyt vahvana [The foundation of Finnish knowledge has remained strong; in Finnish] In P. Kupari \& J. Välijärvi (Eds.), Osaaminen kestävällä pohjalla: PISA 2003 Suomessa [Knowledge on solid foundation: PISA 2003 in Finland; in Finnish] (pp. 223-233). Jyväskylä, Finland: Gummerus.
Libbey, H., (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. Journal of School Health, 74, 274-283.
Liinamo, A., \& Kannas, L. (1995). Viihdynkö, pärjäänkö, selviänkö turvallisesti: Koulunkäynti oppilaiden kokemana [Do I like school, do I get on, am I safe: School as pupils perceive it]. In L. Kannas (Ed.), Koululaisten kokema terveys, hyvinvointi ja kouluviihtyvyys [School children's perceived health, well-being, and school satisfaction; in Finnish] (pp. 109-130). Helsinki: Hakapaino.
Linnakylä, P. (1996). Quality of school life in the Finnish comprehensive school: A comparative view. Scandinavian Journal of Educational Research, 40, 69-85.
Linnakylä, P., \& Malin, A. (1997). Oppilaiden profiloituminen kouluviihtyvyyden arvioinnissa [Finnish students' engagement profiles in evaluating school satisfaction; in Finnish]. Finnish Journal of Education - Kasvatus, 28, 122-127.
Luopa, P., Pietikäinen, M., \& Jokela, J. (2008). Kouluterveyskysely 1998-2007: Nuorten hyvinvoinnin kehitys ja alueelliset erot [The School Health Promotion Study 1998-2007: Trends in youth well-being and regional differences; in Finnish]. Stakes Reports 23/2008. Helsinki: Stakes.
McNeely, C., Nonnemaker, J., \& Blum, R. (2002). Promoting school connectedness: Evidence from the National Longitudinal Study of Adolescent Health. Journal of School Health, 72, 138-146.
Niemivirta, M. (2004). Tyttöjen ja poikien väliset erot oppimismotivaatiossa [Differences between boys and girls in learning motivation]. In The Finnish National Board of Education (Ed.), Koulu - sukupuoli - oppimistulokset. [School - gender - learning outcomes]. Helsinki: The Finnish National Board of Education.
OECD (Organisation for Economic Co-operation and Development). (2007). PISA 2006: Science competencies for tomorrow's world executive summary. Retrieved August 27, 2008, from http://www.pisa.oecd.org/dataoecd/15/13/39725224.pdf
Ravens-Sieberer, U., Gyöngyi, K., \& Thomas, C. (2004). School and health. In C. Currie, C. Roberts, A. Morgan, R. Smith, W. Settertobulte, O. Samdal et al. (Eds.), Young people's health in context: Health Behaviour in School-aged Children (HBSC) study. International report from the 2001/2002 survey (pp. 184-195). Denmark: World Health Organization.
Rosenfeld, L., Richman, J., \& Bowe, G. (2000). Social support networks and school outcomes: The centrality of the teacher. Child and Adolescent Work Journal, 17, 205-226.
Räty, H., \& Kasanen, K. (2007). Parents' perceptions of their children's schools: Findings from a five-year longitudinal study. Educational Studies, 33, 339-351.

Samdal, O., Nutbeam, D., Wold, B., \& Kannas, L. (1998). Achieving health and educational goals through schools: A study of the importance of the school climate and the students' satisfaction with school. Health Education Research, 13, 383-397.
Samdal, O., Wold, B., \& Bronis, M. (1999). Relationship between students' perceptions of school environment, their satisfaction with school and perceived academic achievement: An international study. School Effectiveness and School Improvement, 10, 296-320.
Samdal, O., Dür, W., \& Freeman, J. (2004). School. In C. Currie, C. Roberts, A. Morgan, R. Smith, W. Settertobulte, O. Samdal et al. (Eds.), Young people's health in context: Health Behaviour in School-aged Children (HBSC) study. International report from the 2001/2002 survey (pp. 42-51). Denmark: World Health Organization.
Voelkl, K. (1995). School warmth, student participation, and achievement. Journal of Experimental Education, 62, 127-138.
Willms, J.D. (2003). Student engagement at school: A sense of belonging and participation. Results from PISA 2000. Retrieved July 10, 2008, from http://www.pisa.oecd.org/dataoecd/42/35/ 33689437.pdf


[^0]:    Ilona Haapasalo, Finnish Institute for Educational Research, University of Jyväskylä; Raili Välimaa, Research Center for Health Promotion, University of Jyväskylä; Lasse Kannas, Research Center for Health Promotion, University of Jyväskylä.

    The present study is part of a larger research project "Students' Engagement in School Life (STAGE)" (111091) coordinated by Professor Jouni Välijärvi. The project is funded by the Academy of Finland.

    Correspondence concerning this article should be addressed to Ilona Haapasalo, Finnish Institute for Educational Research, PO Box 35, 40014 University of Jyväskylä, Finland. E-mail: ilona.haapasalo@jyu.fi

[^1]:    Note: ${ }^{*} p<.05,-$ not significant; ${ }^{* *} p<.01 ;{ }^{* * *} p<.001$.

