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Title: Changes in Students' Psychological Well-Being during Transition from Primary School to Lower Secondary School : A Person-Centered Approach

Year: 2019

Version: Accepted version (Final draft)

Please cite the original version:

Virtanen, T., Vasalampi, K., Torppa, M., Lerkkanen, M.-K., & Nurmi, J.-E. (2019). Changes in Students' Psychological Well-Being during Transition from Primary School to Lower Secondary School : A Person-Centered Approach. Learning and Individual Differences, 69, 138-149. https://doi.org/10.1016/j.lindif.2018.12.001

***Title Page WITH author details**

* POST-PRINT: Accepted for publication in Learning and Individual Differences *

Changes in Students' Psychological Well-Being during Transition from Primary School to Lower Secondary School: A Person-Centered Approach

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The study has been supported by grants from the Academy of Finland (No. 268586 2013–2017, No. 292466 2015-2019, No. 263 891 2013-2015, No. 299 506 2017-2019, and No. 276239 2014-2019)

Conflicts of interest: none

Abstract

This person-centered study examined the patterns and the dynamics of pattern change based on 1,666 Finnish students' self-reported psychological well-being during the transition from primary school to lower secondary school. Moreover, we examined the stability in the profile memberships and the influence of changes in perceived support from teachers, families, and peers on changes in students' psychological well-being. Six student profiles were identified using the I-states-as-objects-analysis (ISOA) procedure: (a) High well-being profile; (b) Average well-being but low educational aspirations profile; (c) Low well-being profile; (d) Low well-being but high educational aspirations profile; (e) Low well-being but average self-esteem profile; and (f) Average well-being but high educational aspirations profile. Students' psychological profiles changed more often from lower well-being to higher well-being, rather than the other way round, indicating a tendency for improved well-being. Changes in peer support was the most robust variable to explain changes in profile membership.

Keywords: school transition, psychological well-being, person-oriented analysis, student-perceived support

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1. Introduction

School transitions pose educational and psychological challenges. School transitions have been associated with losses in student engagement (Skinner, Furrer, Marchand, & Kindermann, 2008), increase in disengagement (Eccles & Midgley, 1989), declines in students' psychological well-being (Gutman & Eccles, 2007), depressive symptoms (Rueger, Chen, Jenkins, & Choe, 2014), weakened self-esteem (Jindal-Snape & Miller, 2008), and cascading effects of externalizing problems, and academic competence (Moilanen, Shaw, & Maxwell, 2010). The pattern of a decrease in psychological well-being appears to occur in students' first year at their new school in different educational systems (Symonds & Galton, 2014), despite the slightly varied ages of transition to lower secondary school in each country. However, previous studies indicate that, while school transitions are hazardous for some students (Jindal-Snape & Foggie, 2006; Vaz, Parsons, Falkmer, Passmore, & Falkmer, 2014), others experience successful transitions (see Anderson, Jacobs, Schramm, & Splittgerber, 2000). Many buffering effects have been suggested to help students cope with a school transition. For example, high levels of support from teachers, family, and peers have been reported to be possible sources of resilience and to protect students from the detrimental effects of primary to lower secondary school transition (Jindal-Snape & Miller, 2008; Martínez, Aricak, Graves, Peters-Myszak, & Nellis, 2011; Waters, Lester, & Cross, 2014).

However, previous research focusing on students' well-being in the transition from primary to lower secondary school has its limitations. First, even though no given student cohort is homogeneous (Lord, Eccles, & McCarthy, 1994), most of the studies are variable-oriented and assume that the same model holds for all individuals. Empirically, sample heterogeneity can be modelled by identifying the profiles, which calls for a holistic and

system-oriented approach. Such a person-centered approach focuses on identifying groups of individuals who show different profiles or patterns of values with different variables (Bergman & Andersson, 2010; Bergman, Magnusson, & El-Khouri, 2003). Second, there is scarcity of analyses that take into account the role of students' parental support during the transition (Symonds & Galton, 2014). Third, although some studies on how changes in student-perceived support from teachers, family, and peers during the transition from primary to lower secondary school are related to changes in students' psychological well-being (Barber & Olsen, 2004; Grolnick, Kurowski, Dunlap, & Hevey, 2000; Martínez et al., 2011), research is needed that considers the conjoint effects from multiple sources of support (Gniewosz, Eccles, & Noack, 2011). Knowing more about the relative influences of changes in support from different sources might deepen understanding of risk and protective factors for students' psychological well-being in a new school environment. This will enable planning support so that more and more young people can flourish (McLellan & Steward, 2015).

The present study focused on identifying subgroups of students based on their psychological well-being in Grades 6 and 7 in transition from primary to lower secondary school. We used person-centered approaches in order to examine how students' psychological well-being varied across different profiles. In the school context, high psychological well-being not only includes personal resources, such as high self-esteem, but also aspects of motivation and behavior that are beneficial for learning and adjusting to school (see e.g., Lawson & Masyn, 2015; Salmela-Aro, Moeller, Schneider, Spicer, & Lavonen, 2016; Salmela-Aro & Upadyaya, 2014). Thus, in the present study, psychological well-being was operationalized to consist of school enjoyment, future educational aspirations, (absence of) school burnout, self-esteem, (absence of) externalizing problems, and (absence of) internalizing problems. Among the measures used, we regarded the first three (school

enjoyment, future educational aspirations, and school burnout) as students' school functioning within the broad domain of psychological well-being. We also examined the degree of stability in group memberships across the transition and whether changes in psychological well-being was associated with changes in student-perceived support from teachers, family, and peers. Introducing the three sources of social support in the study highlights the importance of the social context to understand students' well-being at school (see McLellan & Steward, 2015; Symonds, 2015). These findings may help to develop targeted intervention strategies for different groups of students in school transition (Roeser, Eccles, & Sameroff, 1998).

1.1 Profiles in students' psychological well-being at school transition

Profiling studies among adolescents have provided some knowledge about the variability of students' academic and emotional adjustment (Korhonen, Linnanmäki, & Aunio, 2014; Roeser, Eccles, & Freedman-Doan, 1999), but none of the existing person-centered studies have focused on the transition from primary school to lower secondary school. Roeser et al. (1999) identified four qualitatively different school functioning and mental health profiles before students transitioned to high school (i.e., to upper secondary education). Students in the first profile were well-adjusted (25.5% of the sample students), while students in the second, the multiple problems profile (23.4%), showed the lowest level of engagement, self-esteem, and mental health of any of the children. Students in the poor motivation profile (26.1%) devalued school, felt relatively incompetent despite feeling high levels of well-being, reported average self-esteem, and performed academically at the average level. Finally, those in the poor mental health profile (25.0%) felt relatively sad, angry, and hopeless despite a continued pattern of engagement at school and average self-esteem and achievement. Gender differences in group memberships were not demonstrated even though females were slightly overrepresented in the high well-being and engagement

profile and were slightly underrepresented in the low engaged profile. Group memberships were relatively stable across the transition to high school. Interestingly, students in the multiple problems group reported improved self-esteem and mental health at the transition to high school.

Korhonen et al., (2014) investigated the relations between learning difficulties, educational attainment, and dropout among students facing a transition after completing lower secondary school. The results showed that ninth graders with low psychological well-being (high levels of school-related burnout) were at increased risk for school dropout after transitioning to upper secondary school, despite their average performance levels in reading and mathematics. In another study (Tuominen-Soini, Salmela-Aro, & Niemivirta, 2012), students' goal orientation profiles across the transition from lower secondary to upper secondary school were examined. The results showed that mastery-oriented and success-oriented students reported the most engagement and high levels of valuing school, while avoidance-oriented students reported the least engagement. After the transition, mastery-oriented students reported the highest degree of satisfaction with their educational choices followed by success-oriented students. However, the results showed further that mastery-oriented and particularly success-oriented students also displayed relatively high levels of exhaustion (a form of school burnout). The results indicated that high levels of valuing school and engagement may relate to high levels of school-related burnout; that is, some adolescents value school but do not enjoy it (see also Symonds & Hargreaves, 2016).

1.2 Student-perceived support from teachers, family, and peers during school transition

The person–environment fit perspective (Eccles & Roeser, 2011) highlights the role of a student's proximal contexts (i.e., family members, teachers, and peers). When a student's basic need of relatedness to others is fulfilled, his/her adjustment to school is supported. In general, prior empirical studies have shown the importance of support from teachers (Barber

& Olsen, 2004; Hanewald, 2013; Pitzer, 2015; Skinner et al., 2008), family (Waters et al., 2014), and peers (Waters et al., 2014) in school transition. During the primary to lower secondary school transition, support from teachers has been found to protect adolescents from behavioral and emotional disaffection (Skinner et al., 2008). Furthermore, secondary school teachers have been found to report a higher sense of self-efficacy than primary school teachers (Midgley, Feldlaufer, & Eccles, 1989), and they seem to be able to increase student's well-being. Support from parents acts as a resource against depression (Rueger et al., 2014). Personal involvement of mothers (parents' interest in and knowledge about their children's school lives) buffers students against increases in learning problems and acting-out (Grolnick et al., 2000). Peer support has been shown to prevent school burnout (Kiuru, Aunola, Nurmi, Leskinen, & Salmela-Aro, 2008), predict an expectation of an easy or somewhat easy transition (Waters et al., 2014), decrease symptomatology (Hirsch & DuBois, 1992; Lester & Cross, 2015), and increase prosocial behavior (Lester & Cross, 2015).

Studies showing the positive effects of student-perceived support on well-being in school transitions have not, however, typically focused on how changes in student-perceived support are associated with changes in students' psychological well-being during the transition from primary to lower secondary school. Prior research has reported a decline in student-perceived support from teachers (Barber & Olsen, 2004; Bru, Stornes, Munthe, & Thuen, 2010; Jindal-Snape & Miller, 2008; Lester & Cross, 2015; Martínez et al., 2011; Symonds & Hargreaves, 2016) and peers (Seidman, Allen, Aber, Mitchell, & Feinman, 1994) after transition from primary school to lower secondary school, a decline which may be more marked for girls than for boys (Martínez et al., 2011). Previous studies have also shown that a decline in teacher support explains a decrease in students' self-esteem and increase in depression (Barber & Olsen, 2004) across the transition from primary to lower secondary school. The level of support from parents appears to remain stable across the primary to

lower secondary school transition (Furrer & Skinner, 2003). A study by De Wit, Karioja, and Rye (2010) showed that declining perceptions of support from teachers and peers in the transition from Grade 9 to Grade 10 were associated with declining school attendance rates. In addition, declining support from teachers and peers has also been associated with decreased self-esteem and increased depression symptoms, and declining peer support has been further associated with increased social anxiety.

The research described in this paper complements what has been learned in previous investigations on primary to lower secondary school transitions. First, we used two person-centered methods – latent profile analysis (LPA) (Muthén & Muthén, 1998-2015) and I-states-as-objects-analysis (ISOA) (Bergman & Nurmi, 2010; Bergman, Nurmi, & von Eye, 2012) in order to examine how students' psychological well-being (school enjoyment, future educational aspirations, school burnout, self-esteem, externalizing problems, and internalizing problems) varied across different profiles of students. Second, we investigated the stability of group membership across transition to lower secondary school. Third, we examined how changes in students' perceptions of support from teachers, family, and peers during the transition from primary to lower secondary school explained both a decrease and increase in students' psychological well-being in terms of shifting a profile in the transition. Analysis like this may help to illuminate the extent to which students' psychological well-being is related to distinct student profiles and perceived support from teachers, family, and peers, as opposed to a general pattern of change during primary to lower secondary school transition.

1.3 The research questions

This study addressed the following research questions:

(1) What kinds of profiles can be identified based on students' self-reported psychological well-being during the primary (Grade 6) to lower secondary (Grade 7) school transition?

Based on previous research (Lawson & Masyn, 2015; Salmela-Aro et al., 2016; Salmela-Aro & Upadyaya, 2014), we assumed that students form groups that vary in their school functioning and well-being. First, we hypothesized identifying a profile with a high level of psychological well-being and a profile with a low level of psychological well-being (Roeser et al., 1999). Second, we hypothesized finding a profile with low psychological well-being and average self-esteem (Roeser et al., 1999). Finally, we expected to find a profile with high levels of valuing school combined with low levels of psychological well-being (Tuominen- Soini et al., 2012; Hypothesis 1).

(2) How stable are the memberships in the profiles and what types of changes between the profiles are typical? Previous studies have shown that patterns of students' psychological well-being are relatively stable (Roeser et al., 1999; Tuominen-Soini & Salmela-Aro, 2014). Accordingly, we hypothesized finding relatively high stability in the students' profile memberships across the transition (Hypothesis 2a). Moreover, we expected to find a general trend of students' profiles changing from higher well-being to lower well-being during the transition (Gutman & Eccles, 2007; Jindal-Snape & Miller, 2008; Moilanen et al., 2010; Rueger et al., 2014; Symonds & Galton, 2014; Hypothesis 2b).

(3) What is the influence of students' perceived changes in support from teachers, family, and peers on changes in profile memberships (a) from higher to lower psychological well-being, and (b) from lower to higher psychological well-being? Previous studies have indicated that improvements in peer and teacher support are associated with positive changes in students' post-transition psychological well-being at school (De Wit et al., 2010; De Wit, Karioja, Rye, & Shain, 2011; Symonds, 2015). Moreover, the importance of support from family during the school transition has also been recognized (Waters et al., 2014). We, therefore, assume that increases in teacher, family, and peer support will be associated with students' memberships changing to profiles that are characterized by higher psychological well-being and decreases

in support will be associated with profiles changing to lower psychological well-being (Hypothesis 3).

2. Method

2.1 Context

In Finland, primary school consists of Grades 1–6 (from age 7 to 12) and lower secondary school includes Grades 7 through 9 (from age 13 to 15). Teachers have at least a master's degree. In primary school, class teachers are primarily responsible for giving instruction, whereas instruction in lower secondary school is given by multiple subject teachers. Finnish schools are almost exclusively public schools, differences between the schools are minor, and there are no high-stakes national standardized tests or test-based school accountability. Teachers follow the guidelines provided by the National Core Curriculum for basic education (Finnish National Agency for Education, 2014), which stress an educational continuum from Grade 1 to 9 and emphasizes students' well-being at school. Learning is strongly supported by addressing each student's learning and development needs.

In primary to lower secondary school transition, students' psychological well-being is supported by several educational practices and policies. First, student enrollment is based on catchment areas, where the child is allocated a place in a school nearest where he or she lives. Therefore, the majority of students' primary school classmates enter the same lower secondary school, serving as a possible source of social support after the transition. Moreover, students are typically allowed to name a few of their close primary school friends who they would like to have as their classmates in lower secondary school. Second, relevant student-related information is transferred by a feeder school to the transfer school as a practice to improve lower secondary school teachers' knowledge of their new students' skills and well-being. Finally, post-transition induction weeks are aimed at deepening the relationships between new teachers and students.

2.2 Participants and procedure

The present study is part of an extensive longitudinal study (Lerkkanen, Niemi, Poikkeus, Poskiparta, Siekkinen, & Nurmi, 2006-2016), for which the statement for the project was received from the University Jyväskylä Ethical Committee on 30.6.2006. The study has followed approximately 2,000 Finnish children from kindergarten to Grade 9. The follow-up data were collected from four municipalities in April 2013 and again in April 2014. The language of instruction in all schools was Finnish. Written consent for students' participation in the study was required from parents. The percentage of students with parental consent to take part in the study was 76.2 %. Students' mean age at Grade 6 (n = 1,666) was 12.76 years (*SD* = 0.34 years) and 47.6% of students were girls. At Grade 7 (n = 1,744), students' mean age was 13.75 years (*SD* = 0.33 years) and the percentage of girls was 47.2. The number of Grade 6 primary schools was 75 and the number of Grade 7 lower secondary schools was 34. Research assistants administered the data collection during lessons and reassured the students that their responses would be treated with confidentiality. Teachers were advised to be present during the lesson when the data were collected. This study followed the guidelines of the National Advisory Board on Research Ethics in Finland.

2.3 Measures

Within the broad array of measures to assess students' psychological well-being during the school transition, school functioning was measured with three variables: school enjoyment, future educational aspirations, and school-related burnout.

2.3.1 **School enjoyment** (Grade 6 and Grade 7) included three items (Aunola, Onatsu-Arvilommi, & Nurmi, 1999). The 5-point scale was: *1 = not true at all; 2 = not very true; 3 = neutral; 4 = somewhat true; 5 = very true*. The composite mean score was used in subsequent analyses as an indicator of students' school enjoyment. The Cronbach's α's for

the school enjoyment items (e.g., *It's nice to come to school*) at Grades 6 and 7 were .85 and .83, respectively.

2.3.2 Future educational aspirations (Grade 6 and Grade 7) were measured with three items taken from the Student Engagement Instrument (Appleton et al., 2006). The scale was a 4-point Likert scale (*1 = strongly agree; 4 = strongly disagree*). All the items were reverse-coded so that higher scores indicated a higher level of future aspirations. We used the composite mean score for subsequent analyses as an indicator of students' future aspirations. The Cronbach's α's for future aspirations (e.g., *I plan to continue my education following comprehensive school*) were .82 and .86.

2.3.3 School burnout (Grade 6 and Grade 7) was measured using six items taken from the Adolescents' School Burnout Inventory (Salmela-Aro & Näätänen, 2005). The items (e.g., *I often sleep badly because of matters related to my schoolwork; I feel that I am losing interest in my schoolwork*) were measured using a 5-point Likert scale (*1 = totally disagree; 5 = totally agree*). A mean score of burnout was used in the analyses. The Cronbach's α's for the scale were .82 and .82.

2.3.4 Self-esteem (Grade 6 and Grade 7) was assessed using a shortened version of the Rosenberg Self-Esteem Scale (Rosenberg, 1965). We used three items with positively-worded statements (e.g., *On the whole, I am satisfied with myself*). Items were answered on a 5-point scale (*1 = totally disagree; 5 = totally agree*) and they were averaged to create a single index of self-esteem. Cronbach's α's were .87 and .90.

***2.3.5* Externalizing problems** (Grade 6 and Grade 7) were measured by merging Conduct Problems and Hyperactivity scales from Strengths and Difficulties Questionnaire as suggested by Goodman, Lamping, and Ploubidis (2010). Students responded to a ten-item Externalizing Problems scale (e.g., *I fight a lot; I can make other people do what I want; I usually do as I am told*), via three response options: *1 = not true; 2 = somewhat true; 3 =*

true. Three items were reverse-coded so that higher scores indicated a higher level of externalizing problems. The items were averaged into a single index of externalizing problems. The Cronbach's α's for the scale were .71 and .73.

2.3.6 Internalizing problems (Grade 6 and Grade 7) were measured by merging Emotional Symptoms and Peer Relationship Problems scales from the Strengths and Difficulties Questionnaire (Goodman et al., 2010). Again, response options to ten items (e.g., *I get a lot of headaches, stomachaches, or sickness; Other people my age generally like me*) were: *1 = not true; 2 = somewhat true; 3 = true*. Two items were reverse-coded so that higher scores indicated a higher level of internalizing problems. The mean score was used in the subsequent analyses. The Cronbach's α's for the scale were .75 and .78.

2.3.7 Support from teachers, family, and peers. Support from teachers, family, and peers was measured using items from the Student Engagement Instrument (Appleton et al., 2006). The items were measured using a 4-point Likert scale (*1 = totally disagree; 4 = totally agree*). *Support from teachers* (Grade 6 and Grade 7) consisted of three items (e.g., *At my school, teachers care about students*). The Cronbach's α's for the scale were .87 and .88. *Support from family* (Grade 6 and Grade 7) consisted of three items (e.g., *My family/guardian(s) are there for me when I need them)*. The Cronbach's α's for the scale were .79 and .81. *Support from peers* (Grade 6 and Grade 7) consisted of three items (e.g., *Students at my school are there for me when I need them)*. The Cronbach's α's for the scale were .83 and .84. Changes in student-perceived support from teachers, family, and peers were calculated by subtracting the sixth-grade mean levels from the seventh-grade mean levels.

***2.3.8* Student background characteristics.** We entered four statistical covariates into the binary logistic regression analyses (research question 3): gender (1 = *girl*), register information on change in grade point average (sixth-grade mean levels subtracted from the seventh-grade mean levels), and school type (1 = *unified comprehensive school: Grades 1-9,*

0 = *separate lower secondary school: Grades 7-9*). Parent-reported family socioeconomic status was categorical with four classes: *Entrepreneurs*, *Higher white collar*, *Lower white collar*, and *Workers*. SES was included in the analysis as *k*-1 dummies.

2.4 Data analysis strategy

LPA (Muthén & Muthén, 1998-2015) and ISOA (Bergman & Nurmi, 2010; Bergman, et al., 2012) were used to identify profiles of students' psychological well-being during the transition from primary school to lower secondary school (research question 1). LPA allowed us to use statistical criteria in deciding about the number of latent profiles that fitted the data best. ISOA assumes that approximately the same classification structure applies to all measurement points, yet study participants may move from one profile to another (Bergman & Nurmi, 2010). ISOA was an optimal method to study short-term developmental stability and change in time-invariant patterns of students' psychological well-being (research question 2).

Data analysis proceeded through the following steps. First, in order to capture the kinds of profiles that emerged in students' psychological well-being across the transition from primary to lower secondary school (research question 1), the mean scores for each of the six variables capturing participants' psychological well-being in Grades 6 and 7 were organized in the long form. The two observations (one for sixth and one for seventh grade) thus formed two separate observations within a single variable instead of two discrete variables, one for each time point. This yielded a data set with 3,410 observations.

Second, a series of models with progressively increasing numbers of profiles were subjected to LPA. The best model was chosen based on the statistical criteria (loglikelihood, Akaike information criterion, Bayesian information criterion, Vuong-Lo-Mendell-Rubin likelihood ratio test, and entropy value) available in the Mplus statistical modeling program.

Third, the data were re-organized to include a student's profile memberships at Grade 6 and Grade 7 as separate variables. The stability of profile membership was thereafter analyzed with contingency tables and Chi square testing (research question 2).

Fourth, the influence of change in support from teachers, family, and peers was examined (research question 3). Two binary logistic regression analyses were utilized: the first subjected to students moving from the Grade 6 profile showing the highest levels of psychological well-being to some other profile (decline in well-being) and the second subjected to students who moved from some other profile to the profile showing the highest levels of well-being (increase in well-being). We controlled students' gender, family socioeconomic status, change in students' grade point average from Grade 6 to Grade 7, and school type.

Preliminary analysis indicated that between-classroom variation was minor. Design effects were below the threshold 2.0 indicating that there was no need to take the clustering of the data into account (see Muthén & Satorra, 1995). Design effects for the variables used for profiling ranged between 1.0 and 1.6 at Grade 6 and between 1.1 and 1.6 at Grade 7. Consequently, further analyses were conducted in a single-level framework.

The latent profile analysis was conducted by using Mplus statistical package version 7.4. The estimation method was maximum likelihood with robust standard errors (MLR), which were computed using a sandwich estimator (Muthén & Muthén, 1998-2015). The missing values were imputed with the Mplus Bayesian multiple-imputation method (Rubin, 1987), and summary data across 50 imputed data sets were used for the analyses.

3. Results

3.1 Identification of profiles in psychological well-being at the transition from primary to lower secondary school

In order to investigate the first research question concerning the number and nature of the latent profiles, we utilized LPA (Muthén & Muthén, 1998-2015). The fit indices of the latent profiles are reported in Table 1.

[TABLE 1 NEAR HERE]

Results showed that log-likelihood values and Akaike and Bayesian information criteria improved when the number of latent profiles increased (i.e., loglikelihood values increased and Akaike and Bayesian information criteria values decreased as the number of latent classes increased). The Vuong-Lo-Mendell-Rubin likelihood ratio test (H_0: *k*-1 latent classes) indicated that a seven-profile solution provided the best fitting model for the data. However, an extremely sparsely populated profile was found in the seven-profile model, consisting of only 0.56% of the students. Therefore, the seven-profile solution's replicability to other samples was rather unlikely; thus, we selected the six-profile solution as the final model. It was also more parsimonious than the seven-profile model and had good profile separation (entropy .85) and assignment accuracy (mean of average latent class probabilities for the most likely latent class membership .90). The profiles (Figure 1) were labelled as follows: (1) *High well-being profile;* (2) *Average well-being but low educational aspirations profile;* (3) *Low well-being profile;* (4) *Low well-being but high educational aspirations profile;* (5) *Low well-being but average self-esteem profile;* and (6) *Average well-being but high educational aspirations profile*. Assignment accuracy was further examined through an analysis of misclassification rates. The diagonal values in Table 2 show high classification accuracy for the profiles of *High well-being* and *Low well-being* as 94–95% of the cases are classified in only one profile. The classification accuracy for the other profiles was somewhat less accurate, 84%–89%. Of the students, 11%–16% could have been classified as belonging to a

profile other than the one with the highest probability. It is, however, unlikely that profile changes were due to measurement error as the general misclassification percentages in the profiles were small.

[TABLE 2 NEAR HERE]

The six-profile solution was further supported by clear between-profile mean differences in variables used for profiling. Table 3, including full sample and profile-specific descriptive information, shows that all η^2 effect sizes clearly exceeded the large effect .14 (Cohen, 1988). Because ISOA assumes approximately the same classification structure in all measurement points, the time-invariance of the profile solution was checked. Profiles of Grades 6 and 7, presented in the Appendix, were almost identical, showing time-invariance across the primary to lower secondary school transition.

[TABLE 3 NEAR HERE]

As shown in Figure 1, the first latent profile exhibited high levels of psychological well-being.

[FIGURE 1 NEAR HERE]

The first latent profile, which included 997 students (29.2% of the sample), was labelled *High well-being profile* and contained the same number of boys and girls: $\chi^2_{\text{Grade 6}}$ (1) = 2.58, p = .108 and $\chi^2_{\text{Grade 7}}$ (1) = 0.917, p = .338). The second latent profile was labelled *Average well-being but low educational aspirations profile*. It consisted of students with

average school enjoyment and well-being but low future educational aspirations and was composed of 987 students (28.9%). The profile was overpopulated by boys: $\chi^2_{\text{Grade 6}}$ (1) = 20.90, $p < .001$ and $\chi^2_{\text{Grade 7}}$ (1) = 41.63, $p < .001$). The third latent profile exhibited low levels of psychological well-being and was labelled *Low well-being profile.* It included 357 students (10.5%) and had no gender difference in Grade 6: $\chi^2_{\text{Grade 6}}$ (1) = 1.01, $p = .314$ but had more boys than girls in Grade 7: $\chi^2_{\text{Grade 7}}$ (1) = 5.31, $p = .021$. The fourth latent profile exhibited low levels of enjoyment and well-being but high future educational aspirations and was labeled *Low well-being but high educational aspirations profile*. This subgroup included 154 students (4.5% of the sample) and had no gender difference in Grade 6: $\chi^2_{\text{Grade 6}}$ (1) = 2.32, $p = .128$ but had more girls than boys in Grade 7: $\chi^2_{\text{Grade 7}}$ (1 = 5.50, $p = .019$. The fifth profile, labelled *Low well-being but average self-esteem profile,* was characterized by students who reported low psychological well-being in combination with self-esteem close to the sample mean. This profile included 104 students (3.0%). The majority of the students in this profile were boys: $\chi^2_{\text{Grade 6}}$ (1) = 13.30, $p < .001$ and $\chi^2_{\text{Grade 7}}$ (1) = 9.68, $p = .002$. The sixth latent profile, labelled *Average well-being but high educational aspirations profile,* included 813 students (23.8%). There were no gender differences in Grade 6: $\chi^2_{\text{Grade 6}}$ (1) = 3.22, $p = .073$, but Grade 7 had more girls than boys: $\chi^2_{\text{Grade 7}}$ (1) = 13.16, $p < .001$.

3.2 Stability of the memberships in the student psychological well-being profiles

Table 4 shows the results concerning stability and changes in profile membership. On average, approximately 41% of the students stayed in the same latent profile from Grade 6 to Grade 7. The most stable profile was *High well-being profile* with two thirds remaining in the profile across the transition. The most typical transitions were from *Low well-being but average self-esteem profile* to *Average well-being but low educational aspirations profile* (with 34.0% moving) and from *Low well-being but high educational aspirations profile* to *Average well-being but high educational aspirations profile* (with 30.6% moving).

[TABLE 4 NEAR HERE]

3.3 Influence of change in student-perceived support from teachers, family, and peers

In order to examine if the change (sixth-grade mean levels subtracted from the seventh-grade mean levels) in student-perceived support from teachers, family, and peers has an impact on decline and increase in students' psychological well-being, two binary logistic regression analyses were conducted. The first logistic regression was targeted students' profile membership changing from the highest levels of well-being (*High well-being profile*) to some other profile (decline in well-being, n = 150) showed that, after controlling students' gender, family socioeconomic status, change in grade point average from Grade 6 to Grade 7, and school type, shifting was explained by a decrease in support from teachers (β = -.08, p =.004) and peers (β = -.09, p <.001). In addition, students from higher (β = -.10, p = .014) and lower white collar (β = -.09, p = .022) families were less likely to move from *High well-being profile* to some other profile than students from working-class families. The second binary logistic regression, with the same statistical controls as in the first model, showed that moving to the *High well-being profile* (n = 228) was associated with increased support from family (β = .08, p =.003) and peers (β = .09, p = .001).

4. Discussion

Due to the lack of person-centered analyses during the primary to lower secondary school transition (Symonds & Galton, 2014), the present study identified different student profiles in Grades 6 and 7 based on students' self-reports on their psychological well-being. We also examined the stability of memberships in the profiles across the transition to lower secondary school and the influence of changes in student-perceived support from teachers, family, and peers on students moving from the profile with the highest levels of well-being

(*High well-being profile*) to some other profile; and students moving from some other profile to *High well-being profile*. The results expand upon existing literature by showing that (1) students cluster to six profiles with respect to self-reported psychological well-being in Grades 6 and 7; (2) students with high levels of well-being tend to remain in the *High well-being profile* after the transition to lower secondary school; (3) students' profile memberships changes more often from a lower levels of well-being profile to a profile characterized by higher levels of well-being than the other way around; and (4) changes in support from teachers, families, and peers explain changes in profile memberships.

Our analyses identified subgroups of students according to their level of psychological well-being in the transition from primary to lower secondary school. Well in accordance with Hypothesis 1, the study identified six distinct latent profiles of students: *High well-being profile* (29.2% of the sample), *Average well-being but low educational aspirations profile* (28.9%), *Low well-being profile* (10.5%), *Low well-being but high educational aspirations profile* (4.5%), *Low well-being but average self-esteem profile* (3.0%), and *Average well-being but high educational aspirations profile* (23.8%). The first profile *High well-being profile* (Roeser et al., 1999) was composed of students who experienced high levels psychological well-being, while the second profile *Average well-being but low educational aspirations profile* students were close to the sample mean in the profiling variables except for their future educational goals. Also, students in the *Average well-being but high educational aspirations profile* were close to the sample mean, except for reporting high educational aspirations. Together, they comprised about 82% of the sample. Students' well-being is known to associate positively with academic performance (Wang & Peck, 2013), particularly in combination with motivation (Parhiala et al., 2018), thus protecting students from school failure. Even though students in *Average well-being but low educational aspirations profile* perceived their future educational goals below average

relative to students in other profiles, their absolute future goals mean value was relatively high (above three out of a maximum value of four), which indicates that, on average, these students' future educational aspirations are relatively high during the transition from primary to lower secondary school. Students in these three profiles are not expected to face major difficulties in their schooling.

The third profile *Low well-being profile* was overrepresented by boys at Grade 7, which is in line with previous research showing that boys are less engaged, enjoy school less, and experience more school-related strain (Parhiala et al., 2018) and externalizing problems (Crick & Zahn–Waxler, 2003) than girls. It is important to note that about 10% of students already show low well-being at the lower secondary school transition (for the similar result, see Parhiala et al. 2018). It has been suggested that these students lack personal resources needed for study-related demands, which may lead to low well-being and self-esteem and an increased risk of depression (Salmela-Aro & Upadyaya, 2014) and dropping out of school (Bask & Salmela-Aro, 2013).

The fourth profile consisted of students whose low well-being at school was linked with high future educational goals (*Low well-being but high educational aspirations profile*). In line with studies showing that girls experience more internalized problems (Parhiala et al., 2018), report higher levels of future educational aspirations (Carter, Reschly, Lovelace, Appleton, & Thompson, 2012), and lower levels of general self-esteem (Parhiala et al., 2018), the majority of students in this profile in Grade 7 were girls. These students' high educational goals do not appear to protect them against low psychological well-being. Rather, combined with low self-esteem and high levels of school burnout, as well as internalizing and externalizing problems, high future goals may be a risk factor in these students' educational path. Also, earlier studies among older Finnish high school students (Tuominen-Soini & Salmela-Aro, 2014) and among Grade 9 students (Parhiala et al., 2018) identified a group of

students who are motivated and academically capable but who show decreased levels of well-being and below average self-esteem. Our findings show that the corresponding profile of students who value school but do not enjoy it (see Symonds & Hargreaves, 2016) can be found as early as Grades 6 and 7. Because there is evidence to show that school burnout is associated with students dropping out of school (Bask & Salmela-Aro, 2013; Korhonen et al., 2014; Tuominen-Soini & Salmela-Aro, 2014), these students may be at risk later in their school careers. Furthermore, Wang and Peck (2013) reported that emotionally disengaged students had higher rates of depression than other students, which places these adolescents at risk for mental health problems.

The fifth profile, *Low well-being but average self-esteem profile* consisted mainly of boys. Those students' educational aspirations were low and they did not find school enjoyable. Despite elevated levels of school burnout and externalizing problems, their levels of internalizing problems and general self-esteem were close to the sample mean. It is possible that they do not see school as relevant for themselves, which protects their self-esteem from weakening. Students in this profile may be focusing on things other than academic education, including vocational school preparation and the attainment of adult status (Klaczynski and Reese, 1991). This result is also in line with the results that boys tend to report better general self-esteem than girls (Parhiala et al., 2018; Wigfield, Eccles, Mac Iver, Reuman, & Midgley, 1991). These two profiles (*Low well-being profile* and *Low well-being but average self-esteem*) align with the profiles identified by Roeser et al. (1999). These students, complemented by the students in the *Low well-being but high educational aspirations profile* (together, 18% of the students), form the focus groups for whom interventions could be targeted because the lack of school-related well-being puts them at risk of subsequent school dropout. For example, in another Finnish sample, Korhonen et al.

(2014) found that students with negative academic well-being were prone to drop out from secondary education.

The sixth latent profile, *Average well-being but high educational aspirations profile*, was distinguishable from *Average well-being but low educational aspirations profile* not only in their stronger orientation to future education but also in their higher levels of school burnout and internalizing problems. In Grade 7, these students were more likely girls than boys. It appears that even though students' well-being in this profile is generally at the average level, school staff should make additional efforts to monitor their levels of school burnout and internalizing problems. The aim should be to prevent their high educational aspirations, which may put them at risk for subsequent school problems. Tuominen-Soini and Salmela-Aro (2014) showed an increased probability of strongly engaged students to develop symptoms of burnout and depression in the long run.

Overall, there was a tendency of positively laden emotional domains (enjoying school and self-esteem) and negatively laden emotional domains (school burnout and internalizing problems) complemented by externalizing problems to cluster together. However, the critical variable that followed a different pattern from the others was future educational aspirations. This may be due to it being a variable that conceptually calls for a student's cognitive (Appleton et al., 2006) or motivational (Symonds & Hargreaves, 2016) evaluation, rather than an emotional or behavioral evaluation. Moreover, this evaluation is future-oriented in nature, which may explain the emergence of the profile with low well-being combined with high future educational goals. These students, despite experiencing negative school-related feelings, see education as an instrument for their future careers (Symonds & Hargreaves, 2016).

Contrary to Hypothesis 2a, we found many profile membership changes across the transition from primary to lower secondary school. The most stable profile was *High well-*

being profile with two thirds of students staying high in levels of their psychological well-being across the primary to lower secondary school transition. Further, in contrast to Hypothesis 2b, the profile membership changes happened more often toward profiles with higher levels of well-being at school than to profiles with lower levels of well-being. In congruence with Roeser et al.'s study (1999), the largest improvements in students' psychological well-being were discovered for students with low psychological well-being prior to transition (*Low well-being but average self-esteem profile*). More than one third of these students moved to the *Average well-being but low educational aspirations profile* and those who remained in the *Low well-being but average self-esteem profile* reported higher post-transition than pre-transition values in psychological well-being. Also, approximately 25% of the students in the *Average well-being but high educational aspirations profile* moved to the *High well-being profile,* characterized by levels of high well-being in all measured variables. The generally positive trend in Finnish students' transition to lower secondary school is a finding that contradicts the international literature, which shows the negative effects of the transition to lower secondary school (Gutman & Eccles, 2007; Jindal-Snape & Miller, 2008; Rueger, et al., 2014; Symonds & Galton, 2014). It is possible that there are certain practices in Finnish schools that can explain the differences in the results. In Finnish schools, various transition practices are applied to promote a successful transition to lower secondary school. The neighborhood school principle, knowledge transfer between primary and lower secondary school teachers, and allowing students to name close friends as classmates guarantee continuity to some extent. Thus, for most children, primary school friends are readily available support in the new school environment (see Sameroff, Peck, & Eccles, 2004), and teachers can get information on students' well-being and achievement from their primary school. Particularly the result that students belonging to the *Low well-being but average self-esteem profile* experienced a successful start in lower secondary

school in terms of improved well-being (Roeser et al., 1999) may be partly explained by the information transfer practice. Feeder schools routinely monitor students at risk for school failure later on in their school path and make efforts to deliver the relevant information to receiving schools in order to promote the students' transition to the new school. Moreover, in Finnish lower secondary schools, post-transition induction weeks are partially devoted to helping children make friends, developing a positive classroom climate, and deepening the new teachers' knowledge of their students. In brief, for many Finnish students, discontinuity between the last year in primary and the first year in lower secondary school indicates a fresh start in their educational career. The new school level enables students to practice their independence from adults (Symonds & Galton, 2014) and extends their possibilities to be included in new peer groups (Li & Lerner, 2011; Symonds, 2015; Symonds & Hargreaves, 2016) along with new positive challenges in terms of new subjects (Symonds & Hargreaves, 2016).

Partially in line with Hypothesis 3, the most robust predictor of membership change from the highest levels of psychological well-being to a less optimal profile, or from the less optimal profile to the highest levels of psychological well-being profile, was changes in support from peers. More specifically, on the positive side, students' experiences of higher post-transition than pre-transition support from peers increased the likelihood of students moving to the *High well-being profile* in the transition. This can be explained by the fact that a student's primary school classmates follow him or her to the same lower secondary school with some of the primary school classmates even in the same lower secondary school class. It is likely that the stability in peer relations lowers the possible disruptive nature of the primary to lower secondary school transition. Moreover, in the new school context, students cannot only seek help and support from peers they already know from primary school, but they can also forge new relationships with peers with more diverse personal characteristics (Symonds

& Hargreaves, 2016). This along with the fact that peers are of major importance (LaFontana & Cillessen, 2010), particularly for adolescents, may explain the results concerning the crucial role of increased support from peers during the transition to lower secondary school. It is noteworthy that decreased support from teachers was associated with increased likelihood that a student will shift to a profile with less optimal levels of well-being in lower secondary school. This is an important finding, given that perceived quality of teacher–student relationships is not only important in itself for directly positively influencing students' psychological well-being, but it is also related to the quality of peer relationships. Ulmanen et al. (2016) found that the sense of belonging constructed in teacher–student relationships promotes positive peer influences in lower secondary school. If teachers do not create good relationships with their students, they miss opportunities to influence students' peer relations and, thus, their well-being in school. This possibly explains the relationship between decreased support from teachers and lowered student well-being, and indicates the necessity for intervention targets to prevent potential problems in the transition from primary to lower secondary school.

The results also showed that families' high socio-economic status protected students from moving to less optimal profiles from the most optimal well-being profile during the transition to lower secondary school. This result can be explained by the positive links between high socio-economic status families' high educational expectations for their children and children's own school motivation and engagement (cf. Schoon, Martin, & Ross, 2007), which is further related to students' well-being. This was highlighted in a previous cross-sectional study (Virtanen, Lerkkanen, Poikkeus, & Kuorelahti, 2018), which showed that behavioral and cognitive engagement correlate negatively with an indicator of student well-being, namely school-related burnout among lower secondary school students.

Students who perceived that family support increased in lower secondary school compared to primary school were more likely to move to the *High well-being profile* than students who did not. It has been shown that family support on average tends to remain stable across the primary to lower secondary school transition (Furrer & Skinner, 2003). However, if parents make additional efforts to increase their interest in their children's education and encourage them in the face of obstacles in the new school environment, it can promote children's psychological well-being during this important transitional phase. It is noteworthy, however, that, the relationship between family support and a student's psychological well-being may also be reversed or reciprocal. More specifically, it could, for instance, be that adolescents who have high well-being receive more family support because they may also be more willing to receive the support. The effects are most likely reciprocal: family support increases a student's psychological well-being, and well-being increases support provided by the family.

4.1 Practical implications

This study shows that there are distinct student psychological well-being profiles at the transition from primary to lower secondary school. For some students, school transition is a disruptive phase in their schooling and is manifested in lowered levels of school-related psychological well-being. Preventing downward spirals where low levels of students' well-being decreases their positive functioning at school which further weakens their well-being, requires strong focus on these students. Two groups characterized by low well-being (*Low well-being* and *Low well-being but average self-esteem*, along with the group *Low well-being but high educational aspirations*, need to be identified so that preventive acts can be provided to them accordingly. Transition programs and pastoral care strategies, including parental and peer support already provided in primary school are beneficial in facilitating these students' school transitions (see Hanewald, 2013; Waters, Cross, & Shaw, 2010). Parents could be

made aware of their crucial role in students' lower secondary school transition by emphasizing the need for increased family support after transition. Post-transition induction programs could be employed at schools to facilitate positive student-student relationships in the new school environment. Lower secondary school teachers could support their students' well-being in the new school environment by focusing on creating close relationships with them.

4.2 Limitations

This study is not without limitations. First, post-transition psychological well-being was measured at Grade 7 in the spring term. This provided students with time to adjust to the new school environment. Therefore, no possible rebound effect could be examined (Wigfield et al., 1991). Further studies could measure student well-being at school closer to the time of the initial adjustment phase (Grade 7 fall term). Second, our results do not allow drawing conclusions about whether the results are caused by the contextual change of transitioning to a differently organized school system or by normative age-related development (Bru et al., 2010). Future studies could also examine whether, for instance, the beginning of puberty is associated with students' psychological well-being during the primary to lower secondary school transition. Third, the measures in the present study are based on student reports. Collecting data from multiple informants would increase confidence in the results. Fourth, the measurement invariance of the profiles across time was assessed by visually comparing the profiles at Grade 6 and 7 (Appendix). Future research could test the time invariance by applying Latent Transition Analysis, LTA (Lanza, Patrick & Maggs, 2010).

4.3 Conclusion

Overall, the findings indicated that the vast majority (two thirds) of lower secondary school students remain high in well-being across the transition to lower secondary school. Also, more students changed to better well-being profiles than the other way round. Changes in

support from teachers, family, and peers were all associated with changes in students' well-being in the school transition. It is important to note that changes in peer support explained both decreases and increases in students' well-being during the school transition. This calls for strategies that focus particularly on increasing supportive peer relations in school transitions.

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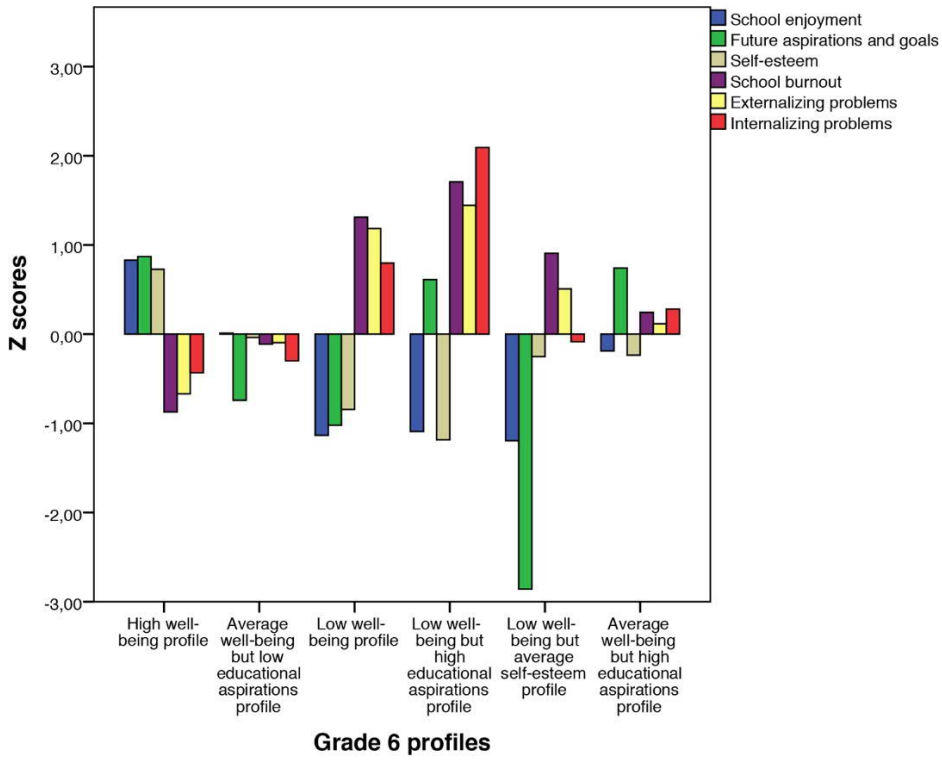
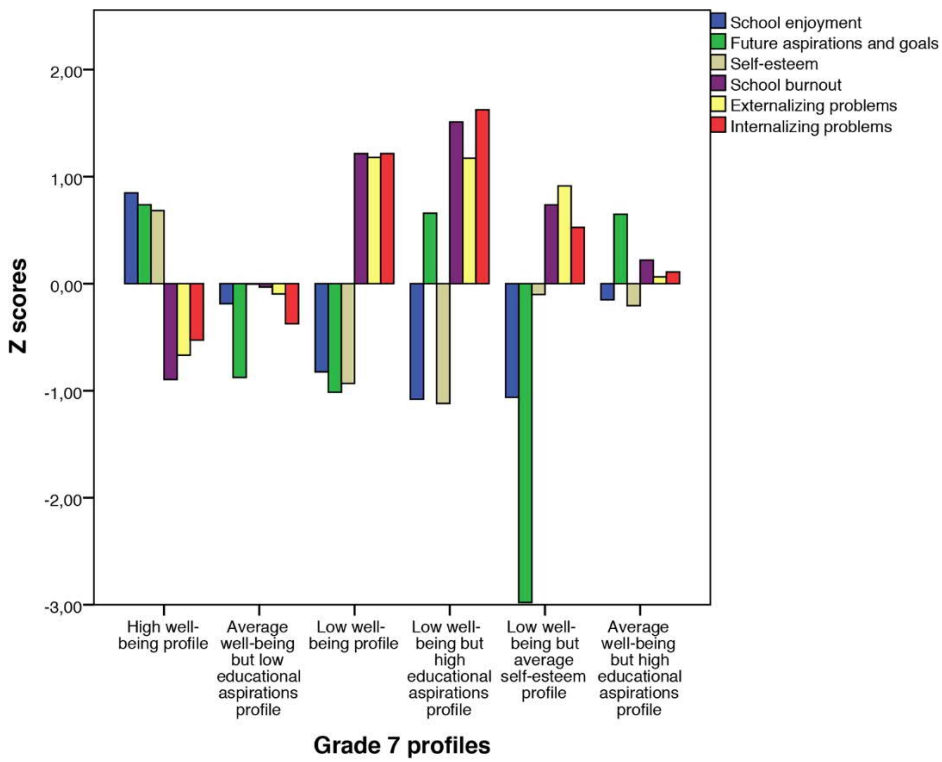
Appendix

Grade 6 and 7 profiles




School enjoyment
Future aspirations and goals
Self-esteem
School burnout
Externalizing problems
Internalizing problems
Z scores
2,00
1,00
0,00
-1,00
-2,00
-3,00
High well-being profile
Average well-being but low educational aspirations profile
Low well-being profile
Low well-being but high educational aspirations profile
Low well-being but average self-esteem profile
Average well-being but high educational aspirations profile
Grade 7 profiles

Figure
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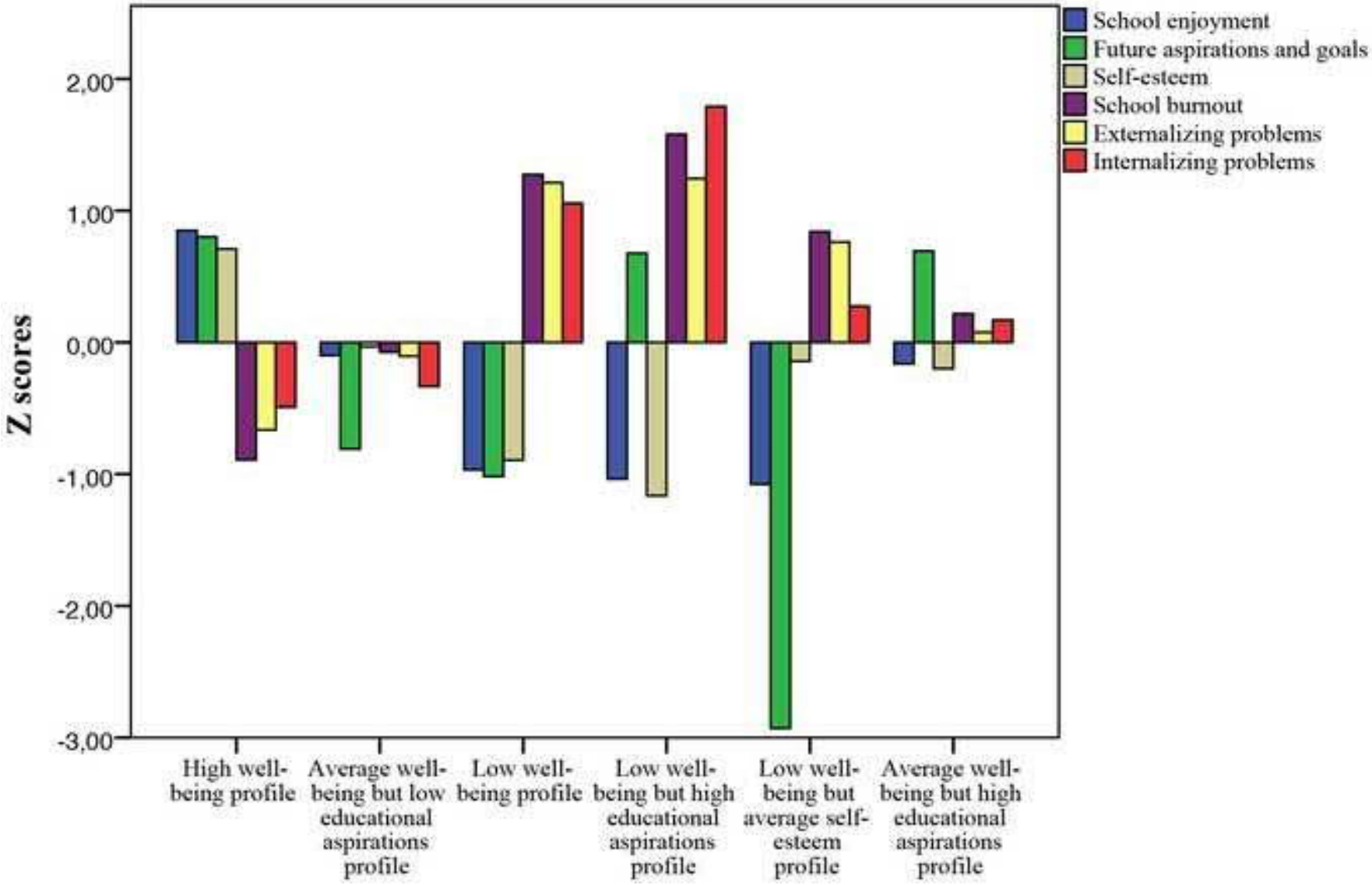

Figure caption

Figure 1. Standardized values of the variables used in profiling according to the latent profile.

Table

Table 1

Goodness-of-Fit Statistics and Group Sizes for the Estimated Latent Profiles

No. profiles	No. free parameters	LL	AIC	BIC	Entropy	*p*VLMR	Group sizes
2	19	-15547.79	31133.58	31250.14	.78	< .001	1003, 2409
3	26	-15026.86	30105.71	30265.22	.74	< .001	439, 1293, 1680
4	33	-14819.06	29704.12	29906.57	.74	.011	1740, 362, 305, 1005
5	40	-14324.35	28728.69	28974.10	.90	.0019	108, 445, 1010, 1513, 336
6	47	-14078.52	28251.04	28539.39	.85	< .001	104, 154, 987, 357, 997, 813
7	54	-13879.33	27866.66	28197.95	.87	< .001	19, 102, 975, 817, 357, 990, 152
8	61	-13798.97	27719.94	28094.18	.87	0.255	19, 102, 981, 798, 70, 349, 983, 110

Note. Analysis was conducted with Grade 6 and Grade 7 observations merged (n = 3,410). LL = Log-likelihood. AIC = Akaike information criterion. BIC = Bayesian information criterion. *p*VLMR = Vuong-Lo-Mendell-Rubin likelihood ratio test.

Table

Table 2. Average Latent Class Probabilities for Most Likely Latent Class Membership

	High well-being profile	Average well-being but low educational aspirations profile	Low well-being profile	Low well-being but high educational aspirations profile	Low well-being but average self-esteem profile	Average well-being but high educational aspirations profile
High well-being profile	.95	.00	.02	.03	.00	.00
Average well-being but low educational aspirations profile	.00	.89	.00	.01	.00	.10
Low well-being profile	.00	.00	.94	.04	.01	.01
Low well-being but high educational aspirations profile	.01	.01	.10	.88	.00	.00
Low well-being but average self-esteem profile	.00	.00	.00	.00	.89	.11
Average well-being but high educational aspirations profile	.00	.03	.01	.00	.13	.84

Table

Table 3

Full Sample and Profile-Specific Means, Standard Deviations, and Effect Sizes in Students' Psychological Well-being Variables

		Profile of Students' Psychological Well-Being						
	Full Sample $N_{Grade6} = 1667$ $N_{Grade7} = 1745$	High well-being profile	Average well-being but low educational aspirations profile	Low well-being profile	Low well-being but high educational aspirations profile	Low well-being but average self-esteem profile	Average well-being but high educational aspirations profile	η^2
School enjoyment								
Sixth grade	3.30 (0.99)	4.15 (0.60)	3.26^{a} (0.79)	2.22^{b} (0.79)	2.30^{b} (0.93)	2.18^{b} (0.86)	3.13^{a} (0.84)	0.40
Seventh grade	3.40 (0.94)	4.18 (0.58)	3.24^{a} (0.74)	2.58^{b} (0.88)	2.38^{b} (0.83)	2.41^{b} (0.92)	3.25^{a} (0.75)	0.41
Future goals								
Sixth grade	3.48 (0.53)	3.94 (0.13)	3.08 (0.21)	2.95 (0.24)	3.85^{a} (0.18)	1.97 (0.44)	3.87^{a} (0.16)	0.87
Seventh grade	3.55 (0.55)	3.95^{a} (0.12)	3.07 (0.18)	2.98 (0.22)	3.90^{a} (0.16)	1.91 (0.43)	3.90^{a} (0.16)	0.89
Self-esteem								
Sixth grade	3.67 (0.78)	4.25 (0.56)	3.63^{a} (0.60)	2.97^{b} (0.75)	2.74^{b} (1.02)	3.45^{a} (0.95)	3.53^{a} (0.71)	0.29
Seventh grade	3.73 (0.84)	4.30 (0.57)	3.73^{a} (0.66)	2.98^{b} (0.83)	2.77^{b} (0.87)	$3.69^{a,c}$ (0.94)	3.55^{c} (0.72)	0.32
School burnout								
Sixth grade	2.14 (0.78)	1.44 (0.39)	2.08 (0.52)	3.19 (0.66)	3.43 (0.73)	2.88 (0.80)	2.30 (0.54)	0.54
Seventh grade	2.20 (0.79)	1.50 (0.40)	2.16 (0.51)	3.15 (0.62)	3.41 (0.72)	2.79 (0.78)	2.38 (0.53)	0.56
Externalizing problems								
Sixth grade	1.48 (0.28)	1.29 (0.19)	1.46^{a} (0.21)	1.83^{b} (0.29)	1.83^{b} (0.34)	1.65 (0.26)	1.50^{a} (0.24)	0.35
Seventh grade	1.52 (0.30)	1.32 (0.19)	1.49 (0.22)	1.88^{a} (0.25)	1.89^{a} (0.33)	1.79^{a} (0.37)	1.55 (0.25)	0.40
Internalizing problems								
Sixth grade	1.43 (0.32)	1.28^{a} (0.23)	$1.33^{a, b}$ (0.22)	1.74 (0.35)	2.06 (0.36)	$1.42^{b,c}$ (0.29)	1.50^{c} (0.28)	0.34
Seventh grade	1.45 (0.34)	1.27 (0.21)	1.32 (0.21)	1.82 (0.33)	2.01 (0.35)	1.61 (0.40)	1.49 (0.28)	0.41

Note. Profile comparisons in variables used for profiling students were conducted with One Way Analysis of Variance using the Sidak post hoc test. Profiles sharing a superscript for a variable, are not different at $p < .05$ (read horizontally).

Table

Table 4

Stability and Change in Students' Psychological Well-Being Profile Memberships

	Grade 7					
Grade 6	High well-being profile	Average well-being but low educational aspirations profile	Low well-being profile	Low well-being but high educational aspirations profile	Low well-being but average self-esteem profile	Average well-being but high educational aspirations profile
High well-being profile	298 (66.5%)	46 (10.3%)	15 (3.3%)	4 (0.9%)	1 (0.2%)	84 (18.8%)
Average well-being but low educational aspirations profile	121 (21.6%)	234 (41.8%)	49 (8.8%)	10 (1.8%)	21 (3.8%)	125 (22.3%)
Low well-being profile	4 (2.4%)	35 (21.0%)	61 (36.5%)	25 (15.0%)	11 (6.6%)	31 (18.6%)
Low well-being but high educational aspirations profile	4 (6.5%)	4 (6.5%)	12 (19.4%)	22 (35.5%)	1 (1.6%)	19 (30.6%)
Low well-being but average self-esteem profile	4 (8.5%)	16 (34.0%)	11 (23.4%)	0 (0.0%)	13 (27.7%)	3 (6.4%)
Average well-being but high educational aspirations profile	95 (24.9%)	71 (18.6%)	32 (8.4%)	27 (7.1%)	4 (1.0%)	153 (40.1%)

***Highlights (for review)**

1. Students' psychological well-being in school transition was examined.
2. Six distinct psychological well-being profiles were identified in Grades 6 and 7.
3. More profile changes were from worse to better well-being profile than vice versa.
4. Peer support explained both decreases and increases in students' well-being.