

Investigating Associations between Early Adolescents' School Enjoyment,
Perceived Social Support and Social Emotions in a Finnish Junior High
School: Results from an Explorative Study Based on Cross-Sectional and
Intense Longitudinal Data from the REBOOT-project.

Master's Thesis in Developmental Psychology

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Abstract

Background and Purpose: Despite impressive academic achievements, many Finnish junior high school students tend to score low on school enjoyment in international comparisons. However, these epidemiological studies are typically based on single-item constructs. The purpose of this study was to explore Finnish 7th graders' school enjoyment by means of ecological momentary assessment, analyze the associations between four indicators of school enjoyment, as well as to assess the influence of social support and daily social emotions on school enjoyment.

Method: Two sets of data from project REBOOT was used in the study: a cross-sectional survey ($N = 101$, $M_{age} = 13.21$, $SD = 0.42$, 59.4 % female) and a three-day ecological momentary assessment ($N = 48$, $M_{age} = 13.24$, $SD: 0.45$, female: 78.7 %). Both samples consisted of Swedish-speaking 7th graders who attended the same junior high school in Mustasaari, Finland. Data were analyzed by means of correlational and regression analysis.

Result: Among the results, three major findings were most prominent. The first was that social support from school adults and parental structure predicted 7th graders' school enjoyment at the six-month level. The second was that social support from friends predicted a positive change in school enjoyment across the transition to junior high school. Additionally, school enjoyment at the three-day level was found significantly and positively correlated with feeling popular, feeling liked by others and feeling safe, and significantly and negatively correlated to feeling lonely, invisible and misunderstood.

Discussion: The results and method of the study are discussed, along with suggestions for further research and implications for the promotion of early adolescents' social adjustment at school.

Keywords: school enjoyment, early adolescents, social support, ecological momentary assessment

Abstrakt

Bakgrund och syfte: Trots imponerande studieprestationer tenderar många finska högstadieelever att rapportera låg skoltrivsel i internationella jämförelser. Dock tenderar sådana epidemiologiska mätningar att basera sig på indikatorer där enbart en fråga ställts. Denna studie syftade till att utforska finska sjundeklassisters skoltrivsel genom en ekologisk momentan bedömning och utforska associationer mellan fyra indikatorer för skoltrivsel. Därtill syftade studien till att utvärdera förhållandet mellan skoltrivsel och deltagarnas upplevda sociala stöd samt dagligt upplevda sociala emotioner.

Metod: Studien använde sig av två sampel från REBOOT-projektet. Det ena samplet var baserat på en tvärsnittsstudie ($N = 101$, $M_{\text{ålder}} = 13.21$, $SD = 0.42$, 59,4 % flickor), medan det andra var baserat på en tredagars ekologisk momentan bedömning ($N = 48$, $M_{\text{ålder}} = 13.24$, $SD: 0.45$, flickor: 78,7 %). Båda samplen bestod av svenskspråkiga sjundeklassister som alla studerade vid samma högstadium i Korsholm, Finland. Datat analyserades med hjälp av korrelations- och regressionsanalys.

Resultat: Bland studiens resultat var det särskilt tre fynd som stack ut. Det första var att socialt stöd från vuxna i skolan och föräldrars strukturella stöd predicerade sjundeklassisternas skoltrivsel på sex månaders tvärsnittsnivå. Det andra var att socialt stöd från kompisar predicerade sjundeklassisternas positiva förändring i upplevd skoltrivsel mellan sjätte och sjunde klass. Därtill fann studien att skoltrivsel på dagsnivå korrelerade signifikant och positivt med att känna sig populär, omtyckt av andra och trygg, och signifikant och negativt med att känna sig ensam, osynlig och missförstådd.

Diskussion: Studiens resultat och metod diskuteras, liksom studiens implikationer för fortsatt forskning om skoltrivsel och främjandet av unga tonåringars sociala anpassning i högstadiet.

Sökord: skoltrivsel, tonåringar, socialt stöd, ekologisk momentan bedömning

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Summary in Swedish – Svensk summering

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1 Introduction

For most adolescents, school is an important social environment. However, school can also be “a devastating place for those who experience loneliness, are bullied or have problematic social relations” (Rönkä, et.al, 2017). In Finland, about 14 % of junior high school students feel lonely at school (THL, 2020). In the last two years, the number of Finnish 8th and 9th graders who experience severe loneliness (often or all the time) have increased by 12 %, while the proportion of students reporting that they have no close friend to talk to has increased by 7 % (THL, 2020).

In international comparisons, a remarkably large proportion of Finnish adolescents report negative attitudes towards school (Haapasalo et.al., 2010). This observation stem from the results of both national and international epidemiological surveys, such as The School Health Promotion Study (THL, 2020) and Health Behavior of School-Aged Children-study (HBSC) (WHO, 2016). In these surveys, students’ feelings towards school are assessed by an indicator that comprises only one question: “How do you feel about school?”. For this indicator, the latest statistical reports from the Finnish Institute for Health and Welfare show that the proportion of Finnish students who report little or no liking for school is greater for 8th and 9th graders (40 %) than for 4th and 5th graders (20 %) (THL, 2020). Likewise, the World Health Organization (2016) report that the proportion of Finnish students who “like school a lot” is greater among 11-year-olds (32 %) than among 15-year-olds (21 %) (WHO, 2016).

The epidemiologically observed tendency for Finnish 15-year-olds to “dislike school” coexist with the Finnish 15-year-olds’ top-ranking achievements in the triennial Programme for International Student Assessment (PISA); showing for instance that Finnish 15-year-olds are among the best readers in the OECD-countries (Ministry of Education and Culture, 2019). The paradoxical nature of this occurrence has been indicated by the Finnish researchers Haapasalo, Välimaa and Kannas, who in 2010 stated that “despite good academic achievement in Finnish comprehensive schools, there is still a need to improve students’ school engagement and their satisfaction with school.”

In recent years, some social scientists have started to notice the possibility to analyze or integrate the epidemiological single-item indicator of “liking school” (hereafter referred to as “the indicator”) into their own research on school-related outcomes. For instance, Kutsar and Kasearu (2016) noticed that, within the epidemiological surveys’ selection of school related items, the “How do you feel about school”-item showed the greatest between-country-variation. In light of this observation, Kutsar and Kasearu (2016) conducted an analysis of the indicator, using data from the International Children’s Worlds Study. Results showed that, over time, the strongest predictor for acquiring a “school dislike status” was to not feel safe at school (Kutsar & Kasearu, 2016).

In order to contrast the indicator to various factors (e.g. within students' psychosocial environment), the indicator is typically modified into an outcome (e.g. "school dislike") (Haapasalo, et.al., 2010; Kutsar & Kaserau, 2016; Rönkä et.al., 2017). In Finland, Rönkä, Sunnari, Rautio, Koironen and Taanila (2017) investigated the indicator as included within the general population-based Northern Finland Birth Cohort 1986 study. In a sample of 16-year-olds, Rönkä et.al (2017) found associations between "school dislike" and loneliness (for girls), hanging around with friends who get in trouble (boys and girls), being afraid of going to school (boys) and not "getting along" with other adolescents (boys).

Albeit useful and informative, these two efforts are nevertheless limited by the researchers' choice to analyze the indicator within its epidemiological origin, thus the selection of predictive variables is restricted to other single-item indicators. In effect, these studies are difficult to match with relevant theoretical concepts available within the social scientific literature. This is because the social scientific fields use multidimensional constructs that are not readily assessed by one single item only. Instead, multiple-item questionnaires are used.

This observation of a conceptual and methodological gap between the epidemiological field and the social scientific field, with regard to early adolescents' social adjustment to junior high school, is the core of this thesis. As mentioned, epidemiological agencies such as THL and the WHO use single-item indicators in their assessments of students' feelings towards school. Meanwhile, social scientists approach this subject through the lens of theoretical concepts.

In the scientific literature, students' feelings towards school does not exist as a distinct construct. Rather, it is incorporated into broader constructs, such as that of *school belonging* (for a review see Allen & Kern, 2017). School belonging is defined as "the extent to which students feel personally accepted, respected, included, and supported by others in the school social environment" (Goodenow & Grady, 1993). There are three operationalizing aspects to school belonging; (1) school-based relationships, (2) student-teacher relationships and (3) students' general feelings of school as a whole (Allen & Kern, 2017). Furthermore, the concept of *school satisfaction* is also relevant. This is defined as "a student's subjective cognitive appraisal of the quality of his or her school life" (Baker & Maupin, 2009).

In a recent study on HBSC-trends with regard to the indicator, Löfstedt et.al. (2020) chose to relate to the indicator as a measure of school satisfaction. However, this was done without consideration to the fact that, as a construct, school satisfaction is usually measured within a 40-item multidimensional scale for students' general life satisfaction (Suldo, Bateman & McMagan (2014). Hence, it remains unclear if the indicator is a valid measure for school satisfaction.

Apparently, there is currently no social scientific concept to be found that directly matches the indicator. This is the case despite notions that the use of too general concepts leads to a lack of focus within the social sciences, especially for the study of students' feelings of enjoyment at school (Smith, et.al., 2016).

Nevertheless, if a distinct construct for "school liking" were to be developed, a better term for it would be *school enjoyment*. This term has already been used by U.S researchers Smith, Mann, Georgieva, Curtis and Schimmel (2016) in order to reflect "a positive emotional connection to school". These researchers have found a value in investigating to which degree students like school in general, and have subsequently expressed the need to investigate this matter further: "[...]variables related to how much students enjoy school have been too often overlooked by educational researchers studying student motivation and academic performance, as well as professional educators and policymakers looking to improve student outcomes" (Smith et.al., 2016).

In order to explain a phenomenon such as "the Finnish school paradox", social scientists need to connect their research to the indicators covered within epidemiological surveys. This author suggests that social scientists could use the epidemiological indicator as a proxy for social adjustment or other school-related socio-emotional outcomes.

As mentioned, the indicator has been analyzed by researchers, such as Kutsar and Kaserau, (2016) and Rönkä, and colleagues (2017). With the intent to build from these initial efforts, this study will analyze the indicator within an explorative two-way approach, through which both cross-sectional and real-time data will be collected.

As the chosen location for the current study, Finland is an excellent country to investigate school enjoyment. Due to stipulations made in the National Core Curriculum for Basic Education (FNBE, 2016), Finnish educators are currently teaching youth in the spirit of the joy of learning, and are attuning their teaching practices in concordance to the shared conception that learning is enhanced by "*positive emotional experiences, collaborative working and interaction, creativity and activity*" (Ministry of Education and Culture, 2015). While applying this conception to day-to-day practice, junior high school educators may benefit from knowing whether non-academic factors influence students' learning environment and academic performance. Hopefully, this study will provide some useful insights into this matter.

1.1 Disposition

In this study, a mixed set of data on 7th graders' school enjoyment is analyzed. Descriptions of how the data were collected, the measures that were used and how the study was conducted in terms of

statistical procedures will be presented in chapter 2. Furthermore, the data were analyzed within three separate phases. The results from each of these phases will be accounted for in chapter 3. In chapter 4, the results from each phase will be synthesized and discussed, followed by a discussion regarding the methodology of the study. Finally, implications for future research will be provided as well as advice to the field. However, before moving on to these chapters, this introduction continues with statements of the key definitions, the frame of reference as well as the research questions and hypotheses of this study, as follows.

1.2 Definitions

The chosen target group for the current study consists of Finnish *7th graders*. In Finland, *7th graders* are students who are attending their first year of junior high school at the age of 13 (approximately).

In this thesis, the target group will be interchangeably referred to as *early adolescents*. Early adolescence is the first stage of adolescence. It starts somewhere between the age of 10 and 12 with the onset of puberty, and ends at approximately at age 14 (SAHRC, 2013).

Junior high school in Finland is attended by 12 to 16-year-olds and consists of three grades (7–9). However, in Finland, junior high school is considered an informal term. Officially, there is no such thing in Finland as junior high school education or middle school education. There is only *basic education*. This starts at grade 1 (age 6–7) and ends with the completion of grade 9 (age 15–16).

In educational settings across the western world, early adolescents typically transition from a single educator primary school environment to a multiple educator secondary school environment (Curtis, 2015). This is also the case in Finland. Even though the Finnish basic education (a.k.a. *comprehensive school*) encompass each of the first nine grades, there is typically a transition taking place between grade 6 and grade 7. Within the scope of this thesis, this *transition* will be referred to as a pivotal event in early adolescent development. For practical reasons, the pre-transition environment (grade 1–6) will be referred to as *elementary school*, while the post-transition environment will be referred to as *junior high school* (grade 7–9).

For many early adolescents, transitioning from one educational stage to the other also means changing school. As will be argued in this paper, this event constitutes a sudden accumulation of changes in early adolescents' lives resulting in an intense need for *social adjustment*. To socially adjust means to accommodate to the demands, restrictions and mores of society, be able to work with others harmoniously and to engage in satisfying interactions and relationships ("Social Adjustment", n.d.). In this case, this means that, in the event of educational transition from elementary school to junior high school, early adolescents will need to identify and accommodate to the social demands,

rules and norms of their new school and new social identity, in order to interact harmoniously and satisfyingly with their new peers and teachers.

Social adjustment also requires a capacity for *social interaction*, which means any process that involves reciprocal stimulation or response between different individuals, including the development of cooperation and competition, the influence of status and social roles, group behavior dynamics, leadership and conformity (“Social Interaction”, n.d.).

For the sake and purposes of this thesis, the epidemiological “liking school”-single-item-indicator (referred to as “the indicator”) will be regarded as an operationalization of *school enjoyment*. Within this specific context, school enjoyment is defined as “a positive feeling towards school in general”. In turn, school enjoyment will be regarded as proxy for *social adjustment*.

1.3 Frame of Reference

Next, the reader will be provided with a frame of reference. This comprises three themes; the educational transition to junior high school from a developmental perspective, two relevant policy reforms in Finland, as well the rise of smartphone research within the social sciences.

1.3.1 The Educational Transition in Early Adolescence

This section argues that the transition from elementary school to junior high school places heavy demands on early adolescents’ capacity for social adjustment.

The transition to junior high school occurs at the same time as the onset of *puberty*. This physical metamorphosis towards sexual maturation encompasses dramatic changes, such as rapid growth, change in body proportions, increased interest in sex, interest in pair bonding and a subsequent need to compete with peers (Weisfeld & Janisse, 2005). By its own merits, puberty is a taxing process; hence, it is typically associated with emotional distress (Mendle, 2014) and sleep deprivation (Colrain & Baker, 2011).

Furthermore, the process of puberty is known to have implications for the quality of the child-parent-relationship. At the beginning of the pubertal growth spurt, the parent-child relationship tends to become increasingly quarrelsome, shifting towards secrecy as it reaches its peak (Weisfeld & Janisse, 2005). Nevertheless, in order to develop into autonomous adults, teenagers are expected to distance themselves from their parents. However, this natural part of growing up has a potential downside: parents will be less able to identify warning signs and adjust their provision of structural and self-regulatory support to the child accordingly (Steinberg, 2005).

The level of adult monitoring of students' individual development and well-being decreases between grade 6 and grade 7. This is in part due to a profound change in the student-teacher relationship. In junior high school, the teachers are subject teachers. In elementary school the teachers are class teachers. A class teacher teaches one group of children all day in various subjects, while a subject teacher teaches the same subject all day but to different groups of students. As a consequence, junior high school teachers may not be as able to keep track of students' development on a personal level as are elementary school teachers.

Furthermore, this shift in the teacher-student relationship is something that researchers associate with increased rates of subtle bullying, even suggesting that relational aggression is a predominant way for early adolescents to manage peer relationships (see review by Pellegrini, 2002).

From a developmental perspective, it may very well be that early adolescents are not ready to operate at the level of social competence that is required in a junior high school setting, especially if they are simultaneously experiencing a significant drop in adult monitoring. This makes sense from a neurocognitive perspective as well, as teenagers' ability to regulate affect and behavior in accordance with long-term goals and consequences are still developing during adolescence (Steinberg, 2005). In comparison to adults, teenagers are not as effective at decision-making, especially when they are under the influence of emotional arousal or social pressure (Steinberg, 2005). For that matter, teenagers are also known to be more sensation-seeking, risk taking, reward-sensitive (Steinberg, 2004), and present-oriented (Steinberg & Cauffman, 1996) than adults.

In sum, the transition to junior high school imposes not a challenge, but an *aggravation* of challenges. As pointed out by Mcgee (2004), the transition is stressful for students. Even though most students adjust quickly, there is still a proportion of students that need intervention prior to the transition (Mcgee, 2004).

1.3.2 Supporting Students' School Enjoyment and Welfare in Finland: Recent Policy Reforms

The 2014 Core Curriculum for Basic Education

In their role as capable professionals, Finnish teachers ground their work to the national education strategy, which is expressed in the core curriculum. The core curriculum is a national level document that provides local level authorities and teachers with guidelines on how to construct versatile learning environments (Vahtivuori-Hanninen, et.al., 2014). The core curriculum is developed by a team of different stakeholders; national and local education authorities, university professors, representatives

from industry groups, the union of municipalities, teacher unions, parent associations and student unions (Vahtivuori-Hanninen, et.al., 2014).

In order to meet the challenges of a changing and complex world, Finland reformed the national core curricula at all levels between 2014 and 2017 (Halinen, 2018). New approaches were developed in order to improve meaningfulness of learning, the engagement and well-being of students and educational equality (Halinen, 2018). According to Halinen (2018), the curriculum is to a large extent designed to combat the down-spiraling trend with regard to Finnish students' attitudes towards school (Halinen, 2018).

In the 2014 core curriculum, which came in effect 2016, the need for students to develop an all-round, multidimensional competence is clearly stated (FNBE, 2016). This multidimensional competence is comprised of seven aspects; (1) ability to think and learn, (2) cultural and communicative skills, (3) everyday life skills, (4) multiliteracy, (5) digital skills, (6) work life and entrepreneurial skills and (7) ability to influence and contribute to a sustainable future.

The 2014 curriculum promotes learning that is multi-dimensional and phenomenon-based. The students are viewed as active actors:

“While acquiring new knowledge and skills, the pupils learn to reflect about their learning, experiences and emotions. Positive emotional experiences, the joy of learning and creative activities promote learning and inspire the pupils to develop their competence (FNBE, 2016, section 2.3.)”

According to interpretations made by educational researchers, the aim of the current curriculum is “[...] to foster ethical and respectful students with a sense of fairness and an open attitude towards all kinds of diversity” (Zilliacus, Holm & Sahlström, 2017) and “[...] to develop a friendly, unhurried atmosphere as well as structures, procedures, and ways of working which inspire learning and support the all-round development and well-being of students (Halinen, 2018).

The Pupil and Student Welfare Act

In 2014, The Finnish Government adopted new legislation regarding the organization of student welfare activities under the Pupil and Student Welfare Act (1287/2013). By the enactment of this bill, the realization of student welfare activities within the Finnish education system shifted emphasis from corrective individual work to preventive communal student welfare.

The purpose of the new legislation is to (1) promote students' learning, health, welfare, inclusion, as well as to guard against problems; (2) promote welfare within the school environment as well as the communication between school and home; (3) ensure that supportive measures are provided in good

time; (4) ensure equal access to welfare-services that students need and (5) strengthen the realization and management of the student welfare activities as a multi-sectional, functional whole (The Pupil and Student Welfare Act, 1287/2013). Under this act, each member of the school staff is responsible for the well-being of all students that attend the school.

In the Finnish education system, *the student welfare activities* (in Finnish: oppilashuolto; in Swedish: elevhälsovård) support student welfare through general-targeted activities as well as through individual-targeted activities. As emphasized by the new legislation, these activities are to be realized in a way that increase multi-professional communality, participation and cooperation (The Pupil and Student Welfare Act, 1287/2013).

General-targeted welfare activities are such measures that promote students' learning, well-being, health, social accountability, social interaction, inclusion and create a healthy, safe and accessible learning environment (The Pupil and Student Welfare Act, 1287/2013).

Individual-directed welfare activities ensures students' access to health care and counselling services. These activities also include readiness to carry out multi-sectional interventions.

Moreover, the Child Welfare Act (417/2007) specify that the municipality formulate an action plan for ensuring the welfare of its children and youth. Among many things, this plan must include information on how student welfare activities in each of the municipality's schools are to be realized. In turn, The Pupil and Student Welfare Act ensures that each school have a *student welfare plan* in force.

The school's student welfare plan must state which measures the school takes to promote students' general welfare and protect students from violence, bullying, and harassment (The Pupil and Student Welfare Act, 1287/2013). The plan is to be developed, planned and executed by a multi-professional student-welfare-team (The Pupil and Student Welfare Act, 1287/2013). In junior high school, this team typically includes the school principal, a special education teacher, a school nurse, the school psychologist, a school social worker and a school counsellor (Ahtola & Niemi, 2014).

1.3.3. The Rise of Smartphone Research in the Social Sciences

Rapid advances in mobile technology, along with the broad-scale use of smartphones within the global population, are key factors behind the latest trend within the social sciences; coined by Miller (2012) as "the rise of smartphone research".

In 2012, in the article "The Smartphone Psychology Manifesto", Miller prophesized that the rise of "smartphone research" could profoundly transform the field of psychology:

By 2025, when most of today's psychology undergraduates will be in their mid-30s, more than 5 billion people on our planet will be using ultra-broadband, sensor-rich smartphones far beyond the abilities of today's iPhones, Androids, and Blackberries. Although smartphones were not designed for psychological research, they can collect vast amounts of ecologically valid data, easily and quickly, from large global samples. If participants download the right "psych apps," smartphones can record where they are, what they are doing, and what they can see and hear and can run interactive surveys, tests, and experiments through touch screens and wireless connections to nearby screens, headsets, biosensors, and other peripherals. (Miller, 2012).

Revelations like Miller's have contributed to the development and adaption of smartphone-based assessment methodologies. As for now, smartphones are firmly recognized as user-friendly and efficient tools for psychological research (Kuntsche & Labhart, 2013, Russel & Gajos, 2020).

In recent years, the smartphone-based method named Ecological Momentary Assessment (EMA) has become increasingly popular within the social sciences and the health sciences (Kuntsche & Labhart, 2013). EMA is a method that allow for in-depth assessments of links between context and behavior in people's natural environment in real time (Kuntsche & Labhart, 2013, Russel & Gajos, 2020). EMA relies on prompt manual data that is produced by, or provided by, the study participants through their own smart phones. This is achieved either by simply using the web browser or through downloading dedicated apps that alerts the user to complete assessment questions (Kuntsche & Labhart, 2013; McKay et al., 2016).

It has been proposed that the EMA-approach could be utilized in order to sidestep certain issues regarding the reliability of traditional self-report-surveys (McKay et al., 2016). In the social sciences, a great deal of research is based on surveys, through which respondents assess their behavior, emotions, thoughts, symptoms e.g. for a given time period in retrospect. However, since autobiographical memories are often distorted and compressed (Rollins, 2018), retrospective survey-responses may be subjected to memory-related biases.

In order to address this issue, researchers have combined traditional surveys with EMA. By means of this two-way approach, retrospective responses and daily responses (as well as variations in daily reports) can be assessed from a relationship/discrepancy perspective.

Potentially, this two-way approach may shine new light on the established knowledge within the social scientific community. For instance, when comparing the discrepancy between World Trade Center-responders' retrospective reports of PTSD-symptoms with their daily reported PTSD-symptom reports, Schuler and colleagues (2019) found that the traditional assessment rather reflected symptom severity on the worst day of the reporting period than the average severity across the reporting period.

Additionally, EMA-methodology can be used to distribute training sessions that are beneficial to the participants. For instance, results from a randomized controlled trial on the effects of an EMA-based mindfulness and self-control training method, suggest that a state of mindfulness and self-control may be interconnected in people's daily life through EMA (Rowland, Wenzel & Kubiak, 2019).

1.4. Previous Research

Next, the reader will find a presentation of previous research regarding educational transition, school enjoyment and EMA-studies conducted with youth.

1.4.1 Early Adolescents' Psychosocial Functioning Across the Transition to Junior high school

Many studies have linked the transition to junior high school with various disruptive outcomes, such as increased emotion dysregulation (Olson, et al., 2013), increased peer aggression (e.g. bullying) (Pellegrini & Long, 2002, Pepler et al., 2006; Werner & Hill, 2010), decreases in academic achievements (Mcgee, 2003; Ryan et.al., 2013; Benner, et.al., 2017), decreased self-esteem and perceived social support from classmates and teachers (DeWit, et.al., 2011) increased depressive symptoms (DeWit, et.al.,2011; Benner, et.al., 2017) and increased feelings of loneliness (Benner et.al., 2017).

In a longitudinal study, which followed 2,616 students across the transition to junior high school, DeWit, Karioja and Shain (2011) found that boys are more at risk for disruptive outcomes than girls. Additionally, boys in this study demonstrated steeper declines in classmate support and self-esteem, and sharper increases in depressive symptoms compared to girls (DeWit, et.al., 2011). This finding contradicts the general picture with regard to adolescents' psychological well-being. For instance, adolescent girls are known to experience lower quality of life (Bisegger et al., 2005), higher levels of negative affect (Ben-Zur, 2003), and sharper increases in depressive symptoms than adolescent boys (Blakemore, 2019).

Moreover, protective factors have been identified by studies as well. While some studies pinpoint the value of social support, especially social support from friends (Muscarà et.al., 2018; Benner, et.al., 2017), other highlight parental presence and affective involvement (Waters, et.al., 2014; Muscarà et.al., 2018) and adolescents' sense of self-worth (Robinson et.al., 1995) as protective factors for students' well-being in the course of educational transition.

1.4.2 School Enjoyment in Early Adolescence

This section reviews social scientific studies in which school enjoyment is assessed by the epidemiological single-item-indicator for “liking school”.

As already mentioned, the outcome of “not liking school” has been associated with students not feeling safe at school (Kutsar & Kasearu, 2016), feeling lonely, hanging around with friends who get in trouble, being afraid of going to school and “not getting along” with other adolescents (Rönkä, et.al., 2017). Additionally, school enjoyment appears to be related to feelings of school pressure (Löfstedt, et.al., 2020).

However, the findings mentioned above is produced by studies that have analyzed large-scale, epidemiological data. As far as other kinds of studies are concerned, very few have included the indicator of interest. Primarily, there is a study by Smith and colleagues (2016), who examined school enjoyment as a proxy for a so called “stage-environment fit” between students’ needs and their school environment. As hypothesized, students who reported “having their needs met” was more likely to report enjoying school. This was especially true for students who reported a high level of social support from teachers and counsellors (Smith et.al., 2016).

Other studies have found positive relationships between school enjoyment (“liking school”) and adolescents’ *adaptability*, defined as “appropriate cognitive, behavioral and/or affective adjustment in the face of uncertainty and novelty” (Martin et.al., 2013) and eating breakfast regularly (Sampasa-Kanyinga, & Hamilton, 2017). School enjoyment has also been found to be negatively associated with alienation from learning (e.g. student find no pleasure in learning) (Morinaj & Hascher, 2019), and daytime sleepiness (Drake, et.al, 2003).

Furthermore, there is evidence suggesting that male students enjoy school less than female students (Lightbody et.al., 1996, Smith et.al., 2016).

Additionally, as a phenomenon, “liking school” have been found to be more strongly associated with school life in general than schoolwork (Honma & Uchiyama, 2014).

1.4.3 Research on Adolescents’ Socio-Emotional Experiences using EMA

Currently, there is a growing body of research that use Ecological Momentary Assessment (EMA) methodology to demonstrate the ways in which salient intrapersonal processes, peer processes and other factors of the social environment, such as exposure to violence and poverty, are associated over time. This section reviews studies using self-report EMA methods with youth.

An early example is a study by Rusby, Westling, Crowley and Light (2013), who used EMA to assess youths’ perceptions of peer affiliates and social contexts to determine their association with

youths' current and future mood states in a sample of 82 7th graders. During their free time, participants reported their peer affiliations, perceptions of peer affiliates, moods, activities, location, and behaviors in three waves, each consisting of 27 randomly prompted assessments during a week. By analyzing this data, Rusby et al. (2013) showed that besides the fact that youth spent a large amount of time on screen devices, being “out and about” increased over the school year. Meanwhile, adult supervision decreased (Rusby, et.al, 2013). The study also found that affiliating with peers who were perceived to be popular was associated with adolescents' feelings of happiness. In turn, negative moods were associated with affiliating with peers by whom they were teased or treated meanly. Moreover, risk status and affiliation with peers who tease them predicted sadness and anxiety (Rusby, et al., 2013).

A similar result was reported by Johnson and Swendsen (2015). In their study, adolescents' who perceived themselves as lower in social status at school reported a greater degree of sad and anxious moods following negative school and family events, than students who perceived themselves as higher in status (Johnson & Swendsen, 2015). On the same topic, a study by Ha, van Roekel, Iida, Kornienko, Engels, and Kuntsche (2019) linked adolescents' perceived peer rejection to emotional reactivity (high levels of negative emotions and low levels of positive emotions).

Moreover, Odgers and Russel (2017) investigated the influence of daily exposure to violence on at-risk youths' mental health symptoms and behavioral reactivity through a 30-day EMA. They reported that the respondents were more likely to experience symptoms of anger, depression and conduct problems on days they were exposed to violence (Odgers & Russel, 2017).

Magallón-Neri et.al (2018) collected within-context-assessments (where, with whom, doing what) of 100 adolescents' emotional and behavioral symptoms over a one-week period. This data was analyzed by the respondents pre-assessed level of victimization, showing that the highest level (top 10 %) was significantly related with being away from home and being with friends other than classmates, and not being with parents or relatives (Magallón-Neri et.al, 2018).

EMA has also been used in a study with a population-representative sample, in which youth's perception of subjective social (demographic) status (SSE) was found to be a unique predictor of mental health by age 14. (Rivenbark et.al., 2019).

Next, the purpose and questions of the current study will be stated.

1.5 The Purpose of the Study

The purpose of the current study is to analyze four different applications of the epidemiological single-item-measure for school enjoyment, which will be assessed in a combined cross-sectional and intense longitudinal study on early adolescents' social adjustment in junior high school.

The study aims to assess Finnish 7th graders' school enjoyment at two different levels; cross-sectionally at a six-month level and within an ESM-approach at a three-day level. Secondly, by means of this two-way approach, the current study aims to study the stability of the school enjoyment-measure when modified to, and assessed at, two different levels (in retrospect compared to real-time). Thirdly, the study aims to explore associations between school enjoyment, social support and social emotions, as operationalized both in terms of sample averages, and individual discrepancy.

1.5.1 Research Questions and Hypotheses

Based on previous research, the following hypotheses are made:

1) Higher levels of school enjoyment, at least at a cross-sectional level, is expected to be associated with higher levels of (a) social support from friends, (b) social support from school adults, and (c) supportive parenting styles (Muscarà et.al., 2018; Benner, et.al., 2017; Waters, et.al., 2014; Smith et.al., 2016).

2) Boys are expected to report lower school enjoyment as well as lower support from peers than girls (Lightbody et.al., 1996, Smith et.al., 2016; DeWit, et.al., 2011).

3) School enjoyment, at least at the three-day level, is expected to be a) negatively correlated to feelings of loneliness and b) positively correlated to feeling liked by others, c) feeling popular and d) feeling safe (Benner et.al., 2017; Rönkä, et.al., 2017; Ha, et.al., 2019; Kutsar & Kasearu, 2016).

4) The discrepancy in daily school enjoyment-ratings is expected to be negatively correlated to (a) social support from friends (b) feeling liked by others and (c) feeling popular (Johnson & Swendsen, 2015; Rusby, et al., 2013).

In addition to these hypotheses, the study will explore questions where previous research is scarce or inconsistent. Such exploratory questions include (i) whether the measures of school enjoyment at the six-month and three-day level correspond to or diverge from another (ii) to what extent the different measures of school enjoyment diverge in terms of their relation to student' social support, (iii) to what extent social emotions influence the students' level of daily school enjoyment when also considering the effect of social support.

2 Method

The current study analyzed 7th graders school enjoyment using a mixed set of data collected within the research project REBOOT (Re-assessment of Bullying and Ostracism among Ostrobothnian Teenagers), which was launched by the Department of Developmental Psychology at Åbo Akademi University, Finland, in the spring of 2019.

The REBOOT-data has two levels. The first level is comprised by retrospective, cross-sectional data collected through a 100-item paper-pencil survey. The second level consists of EMA-data collected through a smartphone application in the course of one week. The current study extracted two samples from the REBOOT-dataset. One sample was entirely based on cross-sectional data, while the other was based on a mixed cross-sectional and intense longitudinal data-set. These two samples of data were analyzed in three phases. These are presented as follows.

In the first phase, four different measures of school enjoyment were examined, as well as their intercorrelation ($N = 48$). In the second phase, the question whether, and to what extent, the items for school enjoyment at the six-month level (SE1 and SE2) is associated with social support from friends (PSS1), school adults (PSS2), and parents (PSCQ1–3), was examined. Additionally, gender effects were explored ($N = 101$). The question whether, and to what extent, the items for school enjoyment at the three-day level (SE3 and SE4) is associated with daily perceived social emotions was examined in phase three, as well as the question whether the associations diverge from one another by the participants' level of social support.

Next, the reader will be provided with information about the participants and the methodological procedures that were conducted within the REBOOT-project.

2.1 Data Collection and Participants

In the beginning of spring 2020, the REBOOT-project collected cross-sectional data, as well as EMA-data with regard to 7th graders' experiences and observations of social phenomena in their everyday environment. The latter was achieved by collecting responses to a series of daily mini-questionnaires. These were prompted by a smartphone application that the participants were instructed to download to their own devices.

The participants were recruited from a single junior high school, situated in the municipality of Mustasaari, in Western Finland. This is a Swedish-speaking school that is attended by approximately 600 pupils from all over the vast and sparsely populated, rural municipality.

Half of the participants received their first six years of basic education in one of the municipality's (then) eight small "village schools", with less than 60 pupils in each. Meanwhile, the other half of the participants attended one of the three larger elementary schools, with approx. 150–250 pupils in each.

By the time the data for the current study were collected, the respondents had attained six months of junior high school experience.

In a series of meetings held prior to the data collection, the principal investigator and the project coordinator (the author of this thesis) provided the municipality administration, the teachers and all the parents of the 7th graders of the school with information about the study. Permission to conduct the study was granted by the municipality administration and the school principal. Active parental consent was digitally collected through a hyperlinked form that was distributed to the parents through the school's digital communication system.

2.1.1 Start-up Sessions

A total of 183 active parental consents were collected, making 130 (out of 220) students at the 7th grade eligible to participate in a series of start-up sessions that were held at school. These start-up sessions were administered by the project coordinator and a research assistant.

At the start-up sessions, the pupils received verbal and written information about the study's purpose and method, as well as how their data and integrity would be protected and managed. The respondents were then instructed to download the mobile application RealLifeExp (Life Data©) to their own mobile phone, and to create a user ID. Next the pupils were asked to download a pre-coded study package (so-called LifePak) within the app. This package, containing multiple time-scheduled mini-questionnaires, had been prepared in advance by the research team using the Lifedata software.

When first opened, the study package prompted a request for the participants' informed consent for study participation (along with the participants' GDPR consent). The study would not launch without consent. The pupils who declined to participate at this stage resumed their schoolwork, while the pupils who agreed to participate continued the session by filling out a 100-item paper-pencil questionnaire.

The start-up survey was completed by a hundred and one 7th graders ($M_{\text{age}} = 13.21$, $SD = 0.42$, 59.4 % female). All ten classes of the 7th grade were represented, by a minimum of five students.

2.1.2 EMA-Assessment

EMA-data were collected three times a day, through mini-questionnaires prompted by the app at fixed time points: 10:40 am, 02:00 pm and 06:00 pm, during five consecutive days (Monday-Friday). A separate weekend questionnaire was scheduled to 11:00 am on Saturday. Additionally, an optional user-initiated questionnaire was available.

The EMA-data collection was run automatically by the application and the participants themselves. As scheduled, the app prompted mini-questionnaires at the given timepoints without any intervention from the researchers. The respondents were invited to answer the scheduled mini-questionnaires through screen notifications on their smartphone.

Participants responded on a voluntary basis. It was possible for the participant to skip entire sessions as well as specific items within a session. For sessions during school hours, a response window of two hours was set. For the evening session, the response window was set to five hours. The weekend session response window was twelve hours. Reminders were used in the evening sessions (one time with three hours spacing) and for the weekend session (two times with four hours spacing).

Seventy-seven participants from the start-up-survey participated in the EMA-data collection (drop-off rate: 23.7 %). Across the week, the participants completed between 1 (min) and 16 (max) mini-questionnaires by the following rates; 1–3 times: 20.8 %, 4–6 times: 13 %, 7–9 times: 18.2 %, 10–12 times: 13 %, 13–15 times: 27.3 % and 16 times: 7.8 %.

Due to a cumulative drop-off effect across the week, the final sample for the EMA only included those participants that responded to at least one mini-questionnaire a day during the first three days (Monday through Wednesday). Based on this criteria, forty-eight 7th graders were selected (M_{age} : 13.24, SD : 0.45 female: 78.7 %). The drop-off rate between the start-up survey and the fourth day of the EMA-assessment could be determined to that of 54.4 %. Despite the drop-off, all ten classes remained represented, by one participant minimum. The proportion of male participant decreased however by 32 %.

2.1.3 Samples

The current study analyzed two samples from the REBOOT-dataset, named Sample X (cross-sectional) and Sample Y (mixed)

Sample X ($N = 101$, $M_{\text{age}} = 13.21$, $SD = 0.42$, 59.4 % female) is the final sample from the start-up survey (see section 2.1.1). This sample consist of retrospective data, representing the six-month level. This data was analyzed in phase 2.

Sample Y ($N = 48$, $M_{\text{age}}: 13.24$, $SD: 0.45$, female: 78.7 %) is the final sample from the EMA-assessment week (see section 2.1.2.) This sample-data consists of data collected from the same participants at both the six-month level (through the start-up survey) and at the three-day level (through EMA-assessment). This data was analyzed in phase 1 and 3.

2.2 Measurements

2.2.1 Demographics

Socio-demographic information was gathered through the start-up-survey. Participants reported their age, gender (male, female or other), class (A-J), grades, their living arrangements, languages spoken at home, number of siblings, perceived financial stability at home, the size of their previous (elementary) school and their standard mean of transport to school.

For the purposes and limitations of the current study, only information about age and gender were included into the analysis.

2.4.2 School Enjoyment

The current study applied four measures of school enjoyment, two of them based on a six-month retrospect, and two of them based on a same-day retrospect assessed across three consecutive days of EMA.

In order to mirror the epidemiological custom of measuring (THL, 2020; WHO; 2016), the current study assessed school enjoyment using single-item measures.

At the six-month level, school enjoyment was measured at both grade 6 (“How did you like school at grade 6?”) and grade 7 (“How do you like school now, at grade 7?”). Both items were measured on a Likert scale (1=not at all, 5= a lot).

The single-item for “school enjoyment at 7th grade” (SE1) remained a measure as such, while the item for 6th grade was used as a reference in order to assess the relative change in participants’ school enjoyment across the transition to junior high school. This so-called “relative change in school enjoyment” (SE2) was computed by subtracting the participants’ ratings of school enjoyment in grade 7 with their ratings for grade 6. By thus, each participant was assigned a value between -4 to +4, where positive values indicate an increased sense of school enjoyment, 0-values equals no change, and a negative value indicate decreased sense of school enjoyment across the transition.

During the week of EMA-assessment, daily school enjoyment was measured once a day by the item “On a scale from 1-10, how did you like school today?”. This question was part of the mini-

questionnaire that was prompted at 6:00 pm and was only assessed when the participants positively reported being in school that day. Based on the daily reports, an “average three-day school enjoyment” (SE3)-score was computed.

Furthermore, a measure for “daily school enjoyment discrepancy” (SE4) was computed by subtracting the three-day average from the daily reports and keeping the highest discrepancy score for each participant. Finally, this discrepancy-score was standardized for more convenient interpretation of the data.

2.2.3 Social Support

The participants’ perceived support from 1) friends, 2) school adults, and 3) parents were assessed in the start-up-survey.

Perceived social support from friends (PSS1) (e.g. “I have friends with whom I can share my joys and sorrows) and perceived social support from school adults (PSS2) (“There are adults at school who cares about my feelings”) were both measured using 8 (4 + 4) items inspired by the Multidimensional Scale of Perceived Social Support (MSPSS) (Zimet, et.al., 1990) that were translated to Swedish.

Parental support was assessed using three 4-item-subcales from the Parents as Social Context Questionnaire (PSQ) (Skinner, et.al, 2005). These were parental autonomy support (e.g. “My parents try to understand my point of view”), parental structure (e.g. “When I want to do something, my parents show me how”) and parental warmth (e.g. “My parents enjoy being with me”). All items were translated to Swedish.

For the cross-sectional sample ($N = 101$), all scales showed adequate to good internal reliability. Cronbach’s alpha was .90 for the PSS1-scale and .70 for the PSS2- scale. The PSQ-sub scaled scored .70 for autonomy support, .80 for structure and .70. for warmth.

2.2.4 Daily Perceived Social Emotions

Participants’ daily perceived social emotions were assessed once a day during the EMA. The experiences that participants rated were; feeling popular (DPSE1) feeling liked by others (DPSE2) feeling lonely (DPSE2), feeling safe (DPSE3), feeling invisible (DPSE4), and feeling misunderstood (DPSE6). At 6 pm, the application randomly prompted a daily set of five (out of six) items with wordings such as “On a scale from 1–5, how safe have you felt today?”.

Three-day mean scores for each DPSE-variable was created.

2.5 Data Preparation and Statistical Analyses

The REBOOT-data collection was partially based on a planned missingness design (Little, & Rhemtulla, 2013). A planned missingness design automatically results in a higher proportion of known missingness, at the expense of higher overall missingness.

According to the planned missingness design, about 80% of the items for the social support scales and daily perceived social emotion scales were administered to the participants. Variable missingness in Sample X ranged from 0 % to 2 % for variables that were given to all participants, and from 23.8 % to 28.7 % for scale items that were randomly assigned to three out of four participants (where missingness completely at random would be expected to account for about 25%). Variable missingness in the EMA-data ranged from 6 % to 26 % for the school enjoyment ratings, and from 20 % to 38 % for the daily perceived social emotion items. Missing data were imputed by means of the EM-algorithm in SPSS v.26.

Descriptive analyses (phase 1–3), including one-way ANOVAs for gender differences (phase 2), was used to survey the items, and correlational analysis (phase 1–3) was conducted to examine the extent to which the items were associated with one another. The influence of social support as a predictor for school enjoyment was assessed by multiple regression analysis (phase 2).

2.6 Ethical and Legal Compliances

The current study was approved by the Åbo Akademi University Ethical Board.

Ethical and legal compliances were directed towards ensuring the participants' personal integrity and liberal rights as minors. For a detailed description on the study procedure, see chapter 2.2.

Like adults, minors have the right to personal liberty and integrity (the Constitution of Finland, 741/1999). Furthermore, the Medical Research Act (488/1999, section 8) states that minors under the age of 15 “[...] may be research subjects only where [informed] consent for this has been given by their guardian or legal representative”. Moreover, “[r]esearch subjects shall have their rights, the purpose and nature of the research and the procedures it involves properly explained to them (the Medical Research Act (488/1999, section 6).

In accordance with the Data Protection Act (1050/2018), the study took measures to ensure that the participants were informed about how their personal data would be used, stored, and managed. The Data Protection Act (1050/2108) states that providers of personal information must be informed about their right to read, withdraw or correct their personal data and receive instructions on how to do so.

Moreover, the study was conducted in accordance to the ethical principles for research with human participants issued by the Finnish National Board on Research Integrity TENK (2019). Among other things, the study complied to principles of voluntary-based participation and gathering of active, informed consent from all concerned parties (FNBRIT, 2019).

3 Results

The results from the three phases of the study are presented in ascending order. First, results with regard to the relationship between the four measures of school enjoyment (SE1–SE4) are presented (phase 1). Then, the results from the second phase are presented, with regard to associations between the measures for school enjoyment and social support at the six-month level. Finally, results from phase 3 are presented. In this phase, relationships between the measures of school enjoyment, social support and social emotions at the three-day level were examined.

3.1 Phase 1

Within its first phase, the study performed a descriptive analysis and a correlational analysis on the four measures of school enjoyment, SE1-SE4 as measured within Sample Y (mixed) ($N = 48$, M_{age} : 13.24, SD : 0.45, female: 78.7 %). Results are presented as follows.

3.1.1 Descriptive Statistics

Descriptive statistics for each of the four SE-variables are presented in Table 1.

For the single-item measure of “school enjoyment at 7th grade” (SE1), the distribution was skewed (skewness = -1.05, kurtosis = 1.76). This was corrected by collapsing the lowest individual scores into the value of 2. In doing so, the new statistics for SE1 were: $M = 3.91$, $SD = .81$, with skewness -.65 and kurtosis .31. The distribution was normal.

For the “relative change in school enjoyment”-measure (SE2), the participants’ scores ranged from -3 to +2 with an almost neutral mean score ($M = -.01$, $SD = 1.16$, skewness = -.08, kurtosis = .27) and were distributed as follows: in 31.3 % of the cases, the SE2-score was negative by at least half a point, in 39.6 % of the cases the score was neutral and in 29.2 % the score was found positive by at least half a point.

For the “average three-day school enjoyment “(SE3) the distribution was skewed ($M = 7.17$, $SD = 1.54$, skewness = -1.20, kurtosis = 1.23). The latter was corrected by collapsing the extreme values found in the lower end of the distribution, into the closest neighboring value. Thus, the final statistics for SE3 was: $M = 7.26$, $SD = 1.31$, with skewness -.68 and kurtosis -.28. Final scores ranged from 4.57—9.33.

For the measure of “daily school enjoyment discrepancy” (SE4), the participants’ highest discrepancy-scores ranged from 0 (no variation) to 8.78 ($M = 2.57$, $SD = 1.78$). The data was non-normally distributed (skewness = 1.16, kurtosis = 1.99), which was corrected by collapsing extreme values that was found in the higher end of the distribution into the closest neighboring value. Final

statistics for SE4 were: $M = 2.51$, $SD = 1.62$, with skewness .64 and kurtosis -.13. Final discrepancy scores ranged from 0—6.2.

Due to the small sample size and the low proportion of boys, gender differences could not be adequately examined.

Table 1

Descriptive Analysis of the Four Measures of School Enjoyment.

	Scale	Range	Mean (SD)	Skewness	Kurtosis
School enjoyment at 7 th grade (SE1)	1–5	2–5	3.91 (.81)	-.65	.31
Relative change in school enjoyment, grade 6–7 (SE2)	-4–4	-3–2	-.01 (1.10)	-.08	.27
Daily school enjoyment, three days average (SE3)	1–10	4.6–9.3	7.3 (1.31)	-.68	-.28
Daily school enjoyment discrepancy (SE4)	0–9	0–6.2	2.51 (1.62)	.64	-.13

3.1.2 Bivariate Correlational Analysis

A bivariate correlational analysis between the continuous variables SE1, SE2, SE3 and SE4 was conducted. The results are presented in Table 2.

Despite different wordings and scale-ranges, the single-item measures for school enjoyment (“like school”) at the six-month level (SE1) and the three-day-level (SE3), showed a significant and moderately strong positive correlation ($r = .45$, $p = .001$).

There was a positive and moderately strong relationship found between “school enjoyment at 7th grade” (SE1) and “relative change in school enjoyment” (SE2) ($r = .39$, $p < .01$). This finding suggests that those participants who scored high on school enjoyment at grade 7 tended to report an increased level of school enjoyment across the transition to junior high school.

Furthermore, the study found that the higher the score for “average three-day school enjoyment” (SE3), the more stable the participants perception of school enjoyment seemed to be, and vice versa. This was indicated by the moderately strong, significant negative relationship found between the participants’ average three-day score (SE3) and their discrepancy-scores for daily school enjoyment (SE4) ($r = -.48$, $p = .001$).

The relationship between school enjoyment at 7th grade (SE1) and daily discrepancy scores (SE4) was not significant. Relative change in school enjoyment (SE2) was uncorrelated with daily school enjoyment (SE3) and daily school enjoyment discrepancy (SE4).

Table 2

Correlational Analysis of Four Measures of School Enjoyment.

	SE1	SE2	SE3	SE4
School enjoyment at 7 th grade (SE1)		.39**	.45**	-.14
Relative change in school enjoyment, grade 6–7 (SE2)			.03	-.02
Daily school enjoyment, three days average (SE3)				-.48**
Daily school enjoyment discrepancy (SE4)				

Note. ** $p < .01$, * $p < .05$, † $p < .10$.

3.2 Phase 2

This section presents the results from the second phase of the study, in which a descriptive analysis, a correlational analysis, and a regression analysis was conducted in order to examine the relationship between school enjoyment and social support at the six-month level. For this analysis, the cross-sectional Sample X ($N = 101$, $M_{\text{age}} = 13.21$, $SD = 0.42$, 59.4 % female) was selected.

3.2.1 Descriptive Statistics

As was the case for the mixed Sample Y, the participants' level of school enjoyment at grade 7 (SE1) within Sample X, was moderately high ($M = 3.83$, $SD = .86$) and the individual ratings (ranging from 2-5) were normally distributed. Similarly, the participants' relative change in school enjoyment across the transition (SE2) ranged from -3 to +2 ($M = -.17$, $SD = 1.11$). Moreover, the SE2-scores for this sample was negative with at least half a point in 38.6 % of the cases, positive in 26.7 % of the cases and neutral in 34.7 % of the cases. The distribution for SE2 was normal.

Means, standard deviations as well as gender effects for both school enjoyment variables as well as for each social support variable are presented in Table 3.

One significant gender effect was found. The girls' reported significantly higher perceived social support from friends (PSS1) than the boys ($F(1,97) = 15.51$, $p < .001$).

Table 3

Descriptive Statistics for School Enjoyment at 7th Grade (SE1), Relative Change in School Enjoyment Across the Transition to Junior high school (SE2), Perceived Social Support from Friends (PSS1), School Adults (PSS2) and Parental Autonomy Support (PSQ1), Structure (PSQ2) and Warmth (PSQ3).

	Total Scores Mean (SD)	Girls Mean (SD)	Boys Mean (SD)	Gender Effect One-way ANOVA
SE1	3.83 (.86)	3.80 (.95)	3.91 (.79)	-
SE2	-.17 (1.11)	.09 (.95)	-.29 (1.10)	-
PSS1	4.22 (.79)	4.46 (.70)	3.88 (.81)	G > B **
PSS2	3.17 (.90)	3.17 (.94)	3.19 (.87)	-
PSQ1	3.40 (.56)	3.40 (.53)	3.39 (.60)	-
PSQ2	3.20 (.75)	3.16 (.80)	3.26 (.67)	-
PSQ3	3.40 (.66)	3.40 (.66)	3.41 (.68)	-

Note. G = girls, B = boys, ** $p < .001$.

3.2.2 Bivariate Correlational Analysis

A correlational analysis of all the continuous variables was conducted, separately for boys and girls. The results are presented in Table 4.

Table 4

Correlational Analysis between School Enjoyment at 7th Grade (SE1), Relative Change in School Enjoyment Across the Transition to Junior high school (SE2), Perceived Social Support from Friends (PSS1), School Adults (PSS2) and Parental Autonomy Support (PSQ1), Structure (PSQ2) and Warmth (PSQ3).

	SE1	SE2	PSS1	PSS2	PSQ1	PSQ2	PSQ3
SE1		.45**	.18	.45**	.24'	.38**	.29*
SE2	.60**		.12	.15	-.01	.07	-.02
PSS1	.45**	.39*		.30*	.14	.25'	.00
PSS2	.28'	.26'	.39*		.26*	.29*	.37**
PSQ1	.44**	.23	.18	.48**		.64**	.56**
PSQ2	.55**	.19	.29'	.44**	.66**		.68**
PSQ3	.49**	.13	.12	.31'	.69**	.75**	

Note. Correlations for girls are presented above the diagonal and for boys below the diagonal.

** $p < .01$, * $p < .05$, ' $p < .10$.

School Enjoyment at Grade 7 (SE1)

As shown in Table 4, school enjoyment at grade 7 (SE1) was significantly correlated with most forms of social support, and for both genders.

A significant positive correlation was found between school enjoyment at grade 7 (SE1) and perceived social support from school adults (PSS2). Even though correlations were found for both genders, the relationship appeared to be stronger for girls ($r_{girls} = .45$, $p < .001$; $r_{boys} = .28$, $p < .10$).

Moreover, perceived social support from friends (PSS1) was positively correlated with school enjoyment at grade 7 (SE1), but only significantly so for boys ($r_{girls} = .18$, $p = ns$; $r_{boys} = .28$, $p < .10$).

Furthermore, the study found that school enjoyment at grade 7 (SE1) was positively correlated to all the PSQ-subscales respectively, and for both genders. The correlations between SE1 and parental structure (PSQ2) ($r_{girls} = .36$, $p < .01$; $r_{boys} = .55$, $p < .001$) and parental warmth (PSQ3) ($r_{girls} = .29$, $p < .05$; $r_{boys} = .49$, $p < .01$) were significant at the .05 or .01-level, except for the correlation between boys' SE1 and autonomy support (PSQ1), which was only significant at the .10-level.

Relative Change in School Enjoyment Across the Transition to Junior high school (SE2)

As presented in Table 4, with regard to the relationship between relative change in school enjoyment across the transition to junior high school (SE2) and the different measures of social support, the correlational analysis generated mixed findings.

The relationships between relative change in school enjoyment (SE2) and social support from friends (PSS1), as well as SE2 and social support from school adults (PSS2) were only significant for the boys ($r_{PSS1} = .36, p < .05$; $r_{PSS2} = .26, p < .10$).

Furthermore, the correlational analysis did not demonstrate any relationship between the PSQ-subscales and SE2.

Test of Interaction Effects and Preparation for Regression Analysis

In order to test for possible gender effects between the correlations presented in Table 4, a Fisher's r-to-z transformation was conducted.

Although certain correlations appeared to be stronger for boys than for girls (e.g. between PSS2 and SE1), the Fishers' test showed no significant differences between the correlations ($[z] \leq 1.48, p > .10$).

As no significant interaction effects between social support and gender on the six-month-measures of school enjoyment (SE1 and SE2) was found, the study proceeded to the regression analysis without separating the sample by gender.

Prior to the regression analysis, two of the three PSQ-scales were excluded due to multicollinearity ($r \geq .56, p < .001$). As the predictor for school enjoyment at grade 7 (SE1), the most strongly correlated PSQ-scale, parental structure (PSQ2), was selected.

The results from the regression analysis will be presented next.

3.2.3 Regression Analysis

As potential predictors for school enjoyment, the variables that were found significant in the analysis of variance and the correlational analysis, were included in two linear regression models using the standard method.

School Enjoyment at Grade 7 (SE1)

In the regression model for school enjoyment at 7th grade (SE1), three variables were included as predictors; social support from friends (PSS1), from school adults (PSS2) and parental structure (PSQ2).

A significant model emerged ($F(3,97) = 10,78, p < .001$), which explained 23 % of the variance in SE1 (adjusted $R^2 = .23$). As seen in Table 5, perceived social support from school adults (PSS2) and parental structure (PSQ2) were significant predictors, with a positive relationship to school enjoyment at grade 7 (SE1). However, when accounting for the effect of support from school adults and parental structure, perceived support from friends (PSS1) was not a significant predictor of school enjoyment.

Table 5

Multiple Linear Regression of Three Dimensions of Social Support on 7th graders' School Enjoyment.

Variables	B	β	SE	t	p
Perceived support from friends (PSS1)	.10	.09	.11	.94	.35
Perceived support from school adults (PSS2)	.26	.26	.10	2.69	.01
Parental structure (PSQ2)	.35	.31	.11	3.25	.00

Relative Change in School Enjoyment Across the Transition to Junior high school (SE2)

In the regression model for relative change in school enjoyment across the transition to junior high school (SE2), two variables were included as predictors; perceived social support from friends (PSS1), and perceived social support from school adults (PSS2).

A significant model emerged ($F(2,98) = 3,98, p < .05$), which explained 6 % of the variance in SE2 (adjusted $R^2 = .06$). As seen in Table 6, perceived social support from friends (PSS1) was a significant predictor, with a positive relationship to SE2. Perceived support from school adults (PSS2) was not a significant predictor.

Table 6

Standard Multiple Linear Regression of Social Support on Relative Change in School Enjoyment Across the Transition to Junior high school (SE2).

Variables	B	β	SE	t	p
Perceived support from friends (PSS1)	.29	.21	.14	2.03	.045
Perceived support from school adults (PSS2)	.15	.13	.13	1.22	.226

3.3 Phase 3

For the third and final phase of this study, Sample Y (mixed) was selected ($N = 48$, M_{age} : 13.24, SD : 0.45, female: 78.7 %)

In this phase, the relationship between school enjoyment at the three-day level (SE3/ SE4) and daily perceived social emotions (three-day average scores) was examined.

Unfortunately, due to small sample size and greater proportion of girls in relation to boys, the planned analyses of gender effects and interaction effects could not be performed.

Nonetheless, a descriptive analysis and correlational analysis of the selected variables was performed. The results are presented as follows.

3.3.1 Descriptive Statistics

Descriptive statistics of study variables in phase 3 are presented in Table 7.

Table 7

Descriptive Analysis of Variables with regard to 7th Graders' Daily School Enjoyment, Daily Social Emotions and Social Support.

	Scale	Range	Mean (SD)	Skewness	Kurtosis
Daily school enjoyment, three days average (SE3)	1–10	2.0–5.0	3.91 (.81)	-.65	.31
Daily school enjoyment discrepancy (SE4)	0–9	-3.0–2.0	-.01 (1.10)	-.08	.27
Perceived social support from friends (PSS1)	1–5	2.7–5.0	4.29 (.71)	-.93	-.30
Perceived social support from school adults (PSS2)	1–5	1.8–4.2	3.34 (.81)	-.29	-.88
Parental autonomy support (PSQ1)	1–5	2.5–4.0	3.38 (.59)	-.80	-.69
Parental structure (PSQ2)	1–5	1.4–4.0	3.17 (.73)	-.87	-.23
Parental warmth (PSQ3)	1–5	2.3–4.0	3.45 (.53)	-.87	-.48
Feeling popular (DPSE1)	1–5	1.0–4.7	2.23 (.77)	.56	.86
Feeling liked by others (DPSE2)	1–5	1.2–4.1	3.01 (.72)	-.65	-.09
Feeling lonely (DPSE3)	1–5	0.9–3.9	2.12 (.83)	.31	-.35
Feeling safe (DPSE4)	1–5	1.0–3.6	3.37 (.68)	-.22	.22
Feeling invisible (DPSE5)	1–5	1.0–3.7	2.23 (.67)	.26	-.40
Feeling misunderstood (DPSE6)	1–5	1.0–3.6	1.95 (.65)	.56	-.13

3.3.2. Bivariate Correlational Analysis

A correlational analysis with all the continuous variables was conducted. The results are presented in Table 8.

Table 8

Correlational Analysis between Average School Enjoyment Across Three Days (SE3), Discrepancy in Daily School Enjoyment-scores (SE4); Perceived Social Support from Friends (PSS1, and School Adults (PSS2); Parental Autonomy Support (PSQ1), Structure (PSQ2) and Warmth (PSQ3); Feeling Popular (DPSE1), Feeling Liked by Others (DPSE2), Feeling Lonely (DPSE3), Feeling Safe (DPSE4), Feeling Invisible (DPSE5), and Feeling Misunderstood (DPSE6).

	SE3	SE4	PSS1	PSS2	PSQ1	PSQ2	PSQ3	DPSE1	DPSE2	DPSE3	DPSE4	DPSE5	DPSE6
SE3		-.48**	.20	.36*	.09	.24	.27'	.27'	.53**	-.41**	.34*	-.33*	-.24'
SE4			-.10	-.22	-.22	-.24'	-.36*	.12	-.31*	.26'	-.36'	-.02	.29*
PSS1				.39*	.20	.32*	.23	.40**	.47**	-.22	.42**	-.16	-.16
PSS2					.18	.23	.14	.11	.29*	-.05	.13	-.01	-.12
PSQ1						.65**	.68**	-.19	.05	-.05	.25'	-.18	.21
PSQ2							.69**	.08	.30*	-.25	.25'	-.42**	-.09
PSQ3								-.12	.21	-.19	.32*	-.04	.09
DPSE1									.54**	-.38**	.25'	-.42**	.15
DPSE2										-.63**	.52**	-.60**	-.40**
DPSE3											-.25'	.42**	.28'
DPSE4												-.32*	-.30*
DPSE5													.49**
DPSE6													

Note. ** $p < .01$, * $p < .05$, ' $p < .10$.

Daily School Enjoyment (SE3)

As shown in Table 8, the participants' average scores on daily school enjoyment (SE3) were correlated to some, but not to all dimensions of social support. A significant positive correlation was found between daily school enjoyment (SE3) and perceived social support from school adults (PSS2): ($r = .36, p < .05$). However, the relationship between SE3 and perceived support from friends (PSS1) was not significant. Furthermore, SE3 was positively and significantly correlated to parental warmth (PSQ3) ($r = .27, p < .10$) but was not correlated to parental autonomy support (PSQ1), nor to parental structure (PSQ2).

Moreover, SE3 was significantly correlated to all the three-day averages scores for daily perceived social emotions. In other words, the participants' daily school enjoyment was positively correlated with feeling popular ($r = .27, p < .10$), feeling liked by others ($r = .53, p = .00$) and feeling safe ($r = .34, p < .05$) and negatively correlated to feeling lonely ($r = -.41, p = .004$), feeling invisible ($r = .33, p < .05$) and feeling misunderstood ($r = -.24, p < .10$).

Perceived support from friends (PSS1) was significantly and strongly correlated with feeling popular ($r = .40, p = .00$), feeling liked by others ($r = .47, p < .001$) and feeling safe ($r = .42, p = .002$). Perceived support from school adults (PSS2) was only correlated with feeling (less) liked by others ($r = -.24, p < .10$).

All three PSQ-variables were positively and significantly correlated with feeling safe ($r_{PSQ1} = .25, p < .10$; $r_{PSQ2} = .25, p < .10$; $r_{PSQ3} = .32, p < .05$). Additionally, parental structure (PSQ2) was also significantly correlated with feeling liked by others ($r = .30, p < .05$), feeling lonely ($r = -.27, p < .10$), and feeling invisible ($r = -.42, p < .01$).

Daily School Enjoyment Discrepancy (SE4)

As also shown in Table 8, the correlational analysis did not demonstrate any significant relationship between the participants' daily school enjoyment discrepancy scores (SE4) and their perceived social support (PSS1, PSS2, PSQ1, PSQ2), besides for parental warmth (PSQ3).

The relationship between SE4 and PSQ3 was negative ($r = -.36, p < .05$), which suggests that the higher levels of parental warmth, the more stable the daily SE-ratings were, and vice versa. The correlation effect was moderate, yet considerable.

For the DPSE-variables, SE4 was significantly positively correlated with feeling lonely ($r = .26, p < .05$) and feeling misunderstood ($r = .29, p < .10$) and negatively correlated with feeling liked by others ($r = -.31, p < .05$) and feeling safe ($r = -.36, p < .05$).

Additional Findings

Finally, a correlational analysis of the six-month measures of school enjoyment, SE1 and SE2, and the DPSE-variables was performed.

As shown in Table 9, school enjoyment at 7th grade (SE1) was significantly and negatively correlated to daily feelings of loneliness ($r = -.30, p < .05$) and significantly and positively correlated to daily feelings of safety ($r = .47, p < .05$).

No significant correlations between relative change in school enjoyment (SE2) and the DPSE-variables was found.

Table 9

Correlational Analysis between School Enjoyment at 7th Grade (SE1), Relative Change in School Enjoyment Across the Transition to Junior high school (SE2), Feeling Popular (DPSE1), Feeling Liked by Others (DPSE2), Feeling Lonely (DPSE3), Feeling Safe (DPSE4), Feeling Invisible (DPSE5), and Feeling Misunderstood (DPSE6).

	SE1	SE2	DPSE1	DPSE2	DPSE3	DPSE4	DPSE5	DPSE6
SE1		.36*	.23	.26	-.30*	.47**	.02	.19
SE2			.21	.09	.00	.20	-.05	.18

Note. ** $p < .01$, * $p < .05$, $p < .10$.

4 Discussion

In this section, the results and method of the study will be discussed, along with suggestions for further research and implications for the promotion of early adolescents' social adjustment at school.

4.1 Results

Next, the results of the three phases of this study will be summarized and discussed as one. The discussion is structured in accordance with the research questions and hypotheses. These are addressed in descending order, as follows.

4.1.1 School Enjoyment Across the Transition to Junior high school

In the hope of capturing the implicit complexity of the phenomena, school enjoyment in junior high school was assessed within two contexts; first within a six-month retrospect (SE1 and SE2) and secondly within a same-day retrospect (SE3 and SE4). The two levels were assigned with two measures each. Two of them assessed the 7th graders' stable perception of school enjoyment (SE1, SE3), while the other two assessed changes in the 7th graders' perception of school enjoyment; across the transition to junior high school (SE2) and within the three days of repeated measuring (SE4). Thus, the first research question (i) asked whether the measures of school enjoyment at the six-month and three-day level would correspond or diverge from one another.

The study found that despite the use of different wordings and scale-ranges, the single-item measure for school enjoyment (liking school) correlated between the six-month level (SE1) and the three-day-level (SE3). Due to the limited scope of this study, questions whether this measure is reliable across different contexts or works as a proxy for social adjustment could not be addressed. Further research is needed on this specific topic. Still, the measure shows potential for being intuitively understood by students as a distinct phenomenon, though more research is needed to identify the types of criteria students apply in their assessments of school enjoyment.

Moreover, the study found that 7th graders who reported a high level of school enjoyment in grade 7 (SE1) also tended to report enjoying school more in the 7th grade than at the 6th grade (= positive change for SE2). This was shown by the strong, positive relationship between school enjoyment at 7th grade (SE1) and relative change in school enjoyment (SE2). This finding can be interpreted as indicative of successful adjustment to junior high school for some of the participants. However, this finding may also be a product of a "successful transition-bias". For instance, 7th graders may perhaps feel that liking elementary school more than junior high school signifies being immature and "not

cool”. Thus, they may want to assign grade 7 with a slightly higher score for school enjoyment than grade 6. Within retrospective surveys, this kind of problem is expected to occur (Rollins, 2018).

The last finding of phase 1 underscores the value of the EMA- approach. A significant pattern regarding daily rating-styles was found. That is, the higher the participants scored on daily school enjoyment (SE3), the less discrepancy was found between the three days of repeated measuring (SE4) and vice versa. Findings by Smith et al. (2016) provide a possible explanation for this pattern, showing that students who experience that their school environment matches their needs also like school better. Perhaps, students who “like school a lot” have “good” days school in terms of having their needs met, whereas students who dislike school tend to have both “good” and “bad” days at school. This finding calls for further investigation.

4.1.2 School Enjoyment and Social Support

The second research question (ii) asked whether 7th graders’ social support may influence their experience of school enjoyment.

As was hypothesized (hypothesis 1), the study found that, overall, perceived social support from peers, school adults and parents is associated with 7th graders’ school enjoyment (Muscarà et.al., 2018; Benner, et.al., 2017; Waters, et.al., 2014; Allen, et.al., 2018; Smith et.al., 2016). However, the three dimensions of social support appear to play different roles for SE, depending on context.

The regression analysis in phase 2 produced two major findings. The first (1) is that social support from school adults (PSS2) and parental structure (PSQ2) predicted 7th graders’ school enjoyment at the six-month level (SE1). The second (2) is that social support from friends (PSS1) predicted positive change in school enjoyment (SE2) across the transition.

In the light of previous research, the author suggests the following interpretation:

Finding 1. Seventh graders’ post-transition levels of school enjoyment are related to structural and emotional support from significant adults being provided both at school and at home (Smith, et.al., 2016; Waters, et.al., 2014; Muscarà et.al., 2018, Allen et.al, 2018). This finding also supports the arguments presented in the frame of reference, regarding the need for early adolescents to have access to adequate self-regulatory support from their significant adults across the event of educational transition (section 1.3.1).

Finding 2. As a proxy for early adolescents’ successful adjustment to junior high school, a positive change in adolescents’ sense of school enjoyment between grade 6 and grade 7 is related to successfully acquiring or maintaining support from friends (Muscarà et.al., 2018; Benner, et.al., 2017).

When interpreting these findings, it should be noted that the regression models explained only 6 % of the variance for SE2. The model for SE1 performed better, as 29 % of the variance was explained. Irrespectively, further research is needed in order to map-out missing predictors.

4.1.3 Gender Differences

It was hypothesized (hypothesis 2a) that boys would report lower school enjoyment than girls (Lightbody et.al., 1996, Smith et.al., 2016). As this study found that the boys did not report lower school enjoyment than the girls', this hypothesis was rejected.

It was also hypothesized (hypothesis 2b) that boys would report lower support from peers than girls (DeWit, et.al., 2011). This hypothesis was confirmed, as the boys did indeed report a significantly lower level of support from friends than the girls. However, it is important to note that this difference stems from the girls' tendency to rate their level of perceived support as being extremely high, not from the boys perceiving their level of social support from friends as low. In effect, this study found no meaningful gender differences for 7th graders' school enjoyment and social support.

4.1.4 School Enjoyment and Daily Perceived Social Emotions

The third and final research question (iii) asked to what extent social emotions influence the students' level of daily school enjoyment when also considering the effect of social support. Due to low sample size (in sample Y), interaction effects could not be analyzed. Thus, this question can only be answered in a descriptive way, by means of the correlational analysis that was performed in the third phase of this study.

As was hypothesized (hypothesis 3), the study found that daily school enjoyment was negatively correlated with daily feelings of loneliness, positively correlated to feeling liked by others, feeling popular as well as with feeling safe (Benner et.al., 2017; Rönkä, et.al., 2017; Ha, et.al., 2019; Kutsar & Kasearu, 2016). Additionally, daily school enjoyment was also negatively correlated to feeling invisible and feeling misunderstood.

It was furthermore expected (hypothesis 4) that the 7th graders' discrepancy in daily school enjoyment would be negatively correlated to (a) feeling liked by others and (b) feeling popular (Johnson & Swendsen, 2015; Rusby, et al., 2013). This hypothesis was confirmed.

Moreover, social support from friends was linked to 7th graders feeling popular, liked by others and safe. Among these feelings, only that of safety was linked to school enjoyment at the six-month level. Thus, one may speculate that feeling safe is a key-factor behind the relationship between social

support from friends and positive change in school enjoyment across the transition to 7th grade. That is, having supportive friends makes the 7th graders' feel safer while they are adjusting to their new educational environment, which in turn results in increased school enjoyment.

Moreover, feeling safe was correlated to parental support, and most strongly so to parental warmth. Possibly, this finding suggests that affective parenting may indirectly influence 7th graders' feelings of safety at school (Waters, et.al., 2014; Muscarà et.al., 2018).

Daily school enjoyment was positively correlated to perceived support from school adults. However, on the three-day-level, support from school adults was only correlated with feeling liked by others. This relationship was negative, perhaps indicating that 7th graders who experience peer problems are more strongly connected to adults at school through counselling or other supportive measures. Parental structure was also correlated to feeling liked by others, but this relationship was instead positive. A mediation analysis could have provided some clarity into how support from significant adult's influence 7th graders' daily school enjoyment when also considering the influence of daily social emotions. Unfortunately, the sample size did not allow for such an analysis.

In conclusion, for 7th graders' both friends and parents seem to be important sources of emotional security. In turn, safety may be a key factor for school enjoyment across the transition to junior high school (Kutsar & Kasearu, 2016; Rönkä et.al., 2017). However, this conclusion is to be regarded as a hypothesis until it has been properly tested in additional studies.

4.1.5 Major Findings

Among the results, three findings were prominent. The first was that social support from school adults and parental structure predicted 7th graders' school enjoyment at the six-month level. The second was that, among the three sources of perceived social support (friends, school adults and parents), only perceived social support from friends predicted increased school enjoyment across the transition to junior high school. The third major finding was that school enjoyment at the three-day level was found significantly and positively correlated with feeling popular, feeling liked by others and feeling safe, and significantly and negatively correlated to feeling lonely, invisible and misunderstood.

4.2. Method

In order to explore the topic of school enjoyment in early adolescence, this study chose a two-way approach. That is, the study assessed 7th graders' perception of school enjoyment from two different viewpoints, using both the traditional survey-method and the EMA-method. By means of this approach, a mixed dataset was successfully collected and analyzed.

In this two-way approach, the initially collected traditional survey-data was expected to be influenced by retrospective memory distortions and self-serving biases (see Rollins, 2018). In order to expose this assumedly overlooked complexity of traditional self-reports, this method compared the participants overall, subjective and retrospective perception of school enjoyment (as assessed cross-sectionally) with their everyday perceptions (as assessed through EMA). As the findings from the correlational analyses of this study demonstrate, the two levels of data corresponded significantly to each other in various ways. In this regard, the two-way approach was successful.

However, the limitations of this study need to be acknowledged. The first limitation regards the fact that the aim to study interaction effects between variables such as gender, class, or other potential grouping variables, fell short due to the low size of Sample Y. Thus, the findings of this study need to be interpreted with caution and are not to be generalized. Due to high variable missingness (20–38%), this is especially true for findings regarding the daily perceived social emotions.

As the use of smartphone research methodologies are concerned, eliminating procedural bottlenecks is important. Two of such were identified by this study. The first regard the procedure of collecting parental consent. It seems that all parents could not be reached through the parent-school communication system, as they were not actively using it. Secondly, during the start-up sessions, the task of downloading the application to the participants smartphones was constricted by various issues, such as slow internet access, not enough storage space on the participants phones, parental app-blockers, and participants refusing to download the app due to suspicions of viruses.

When collecting data during the EMA-week, a cumulative participant drop-off-effect occurred, which is the main reason for the small size of the mixed Sample Y. Possibly, the participation rate could have been increased if the EMA would have focused on measuring single-items only. Filling out multiple-item scales repeatedly across several days is likely to be perceived as boring and repetitive, causing participants to opt out from the study. Instead, EMA-measures need to be as short and intuitive as possible. Moreover, EMA-items benefit from being as smartphone-friendly as possible. That is, using wordings that mimic “chat-language” that allow for quick, effortless reading comprehension.

Another limitation of this study regards the aim of the two-way approach. For the current study, this aim became clear in the wisdom of hindsight, after the data was collected. This lack of clarity caused unnecessary mistakes such as assigning the single items for school enjoyment at the different levels (SE1 and SE3) with un-matching scale ranges.

Nevertheless, when new methodologies are under development, errors are expected to occur. As being highly explorative, this study contributed to the development of smartphone-based-methodologies by simply trying, learning and reporting the results.

4.3. Suggestions for Future Research

This aim of this study was to extend the existing research on early adolescents' school enjoyment by investigating 7th graders' school enjoyment through an EMA. By doing so, this study was able to demonstrate that students' daily experience of school enjoyment is significantly associated with six different, daily assessed social emotions. Four of these emotions (feeling popular, liked by others, safe, and lonely) had already been identified within existing research, but two (feeling misunderstood and feeling invisible) were new discoveries. Future EMA-based studies may test whether other single-item indicators contribute to the "social emotional picture of school enjoyment". However, in order to link studies on school enjoyment to epidemiological observations, the "liking school"-indicator need to be thoroughly assessed first. A suggestion would be to compare the indicator to established constructs, such as school belonging and school satisfaction.

Moreover, EMA appear to be a creative tool for researchers. EMA can be used in various ways, for instance to identify exposures and occurrences in the students' everyday social environment (Odgers & Russel, 2017) with relevance for students' sense of school enjoyment. In order to achieve this, greater sample sizes than those analyzed within this study will be needed. This is important for future studies on differences in students' perceptions of school enjoyment, which need to be studied as well. For instance, students' level of victimization could be applied as a grouping variable (Magallón-Neri et.al, 2018).

Moreover, in order to assess how students' sense of school enjoyment develops across the transition to junior high school, longitudinal studies are highly encouraged.

4.4. Advice to the Field

Educators may consider the possibility to promote students' school enjoyment through collaboration with EMA-researchers. By participating in an EMA-study on topics such as school enjoyment, students will be daily reminded to stop and reflect on their emotions and well-being while at school. Studies show that EMA could be used to teach students useful skills like mindful awareness and self-control (Rowland et.al, 2019). In the Finnish school context, such an application of EMA would fit into the agenda of the national core curriculum with regard to teaching students to reflect upon their emotions and experiences (see chapter 1.3.1).

In terms of creating strategies that promote early adolescents' social adjustment in junior high school, researchers stress that educators and policy makers consider the developmental and individual needs of their students (Smith, et al. 2016). Among these, the need for relatedness is especially

important (Muscarà, et.al, 2018; Benner et.al., 2017). To accommodate to this need, teachers are advised to create opportunities where adolescents can experience the importance of peer relationships, as well as the importance of emotional communication with parents (Muscarà, et.al, 2018). A suggestion would be to create collective learning strategies, whereby students help each other to learn new concepts, which also could be constructed in a way that involve the parents (Muscarà, et.al, 2018).

Summary in Swedish – Svensk summering

Härnäst följer en svensk summering av avhandlingen som helhet.

Undersökning av förhållandet mellan unga tonåringars skoltrivsel, upplevda sociala stöd och sociala emotioner i ett finlandssvenskt högstadium: Resultat från en explorativ studie baserat på tvärsnitts- och intensivt longitudinellt data från REBOOT-projektet

Introduktion

För de flesta ungdomar är skolan en viktig social miljö. För andra ungdomar däremot, som utsätts för ensamhet, mobbning eller problematiska sociala relationer, kan skolan upplevas som en förkrossande plats. (Rönkä, et.al, 2017). I Finland upplever 14 % av högstadieeleverna ensamhet i skolan (THL, 2020).

I internationella jämförelser har det påvisats att en stor andel finska tonåringar hyser negativa attityder till skolan (Haapasalo et.al., 2010). Denna observation har sitt ursprung i epidemiologiska mätningar där studerandes känslor för skolan utvärderas med hjälp av en indikator för ”skolgillande”. Denna mäts med en enstaka fråga, i stil med ”Tycker du om att gå i skola?”. Mätningar av ”skolgillande” utförs regelbundet på både nationell och internationell nivå, bland annat av Institutet för hälsa och välfärd (THL) och Världshälsoorganisationen (WHO).

Senaste statistik för indikatorn ”skolgillande” visar att högstadieelever i Finland inte gillar skolan lika mycket som lågstadieelever (THL, 2020; WHO, 2016). Denna observation samexisterar med de finländska högstadieelevernas topprestationer i PISA-mätningar (Undervisnings och kulturministeriet, 2019). Vad dessa motsägelsefulla resultat beträffar, har de finska forskarna Haapasalo, Välimaa och Kannas (2010) kommit till slutsatsen att: ” [g]oda akademiska prestationer

till trots finns det fortfarande ett behov av att förbättra studerandes skolengagemang och skoltrivsel [fri översättning].”

På senare tid har forskare börjat analysera hur den epidemiologiska indikatorn för ”skolgillande” förhåller sig till andra indikatorer i de epidemiologiska enkäterna. Sådana studier har funnit att indikatorn för ”skolgillande” (hädanefter ”indikatorn”) genererar den största variationen mellan olika länder (Kutsar & Kaserau, 2016). Vidare har ett positivt samband mellan indikatorn och att känna sig trygg i skolan påvisats (Kutsar & Kaserau, 2016, liksom ett negativt samband mellan indikatorn och att känna sig ensam, att hänga med kompisar som råkar i trubbel, vara rädd för att gå till skolan samt att inte komma överens med andra ungdomar (Rönkä et.al., 2017).

Ovannämnda försök att studera indikatorn är, om än viktiga och informativa, begränsade på grund av att forskarna valt att använda indikatorns ursprungliga epidemiologiska data som grund för sina analyser. Detta innebär att indikatorn enbart jämförts med andra en-fråge-indikatorer. Eftersom socialvetenskapliga teoretiska koncept baserar sig på mätinstrument med många frågor, innebär detta att epidemiologiska observationer av ungas skoltrivsel inte direkt kan matchas med den socialvetenskapliga litteraturens teoretiska koncept om dito fenomen. Då socialvetenskapliga koncept är multidimensionellt uppbyggda, låter de sig inte mätas med en enstaka fråga. Därmed uppstår ett glapp mellan den epidemiologiska observationen och den socialvetenskapliga förklaringen av ungas skoltrivsel som fenomen.

För att kunna förklara varför så stor del av finländska högstadieelever inte trivs i skolan jämfört med andra länder behövs ett integrativt förhållningssätt i forskningen, i fråga om koncept och mätinstrument. Denna studie kommer att bygga vidare på existerande forskning om fenomenet ”skolgillande” genom att utföra en explorativ studie där indikatorn analyseras i två olika typer av insamlat data, ett tvärsnittsdata och ett intensivt longitudinellt data.

Denna studies syfte och forskningsfrågor förklaras närmare efter att studiens referensram presenterats, som följer.

Referensram

Studiens referensram består utav tre teman. Det första berör utmaningar i samband med att unga tonåringar börjar högstadiet från ett utvecklingspsykologiskt perspektiv. Det följande handlar om reformer som genomförts i Finland för att främja skoltrivsel. Det tredje temat berör en trend inom socialvetenskapen att forska via smarttelefoner.

Övergången från lågstadiet till högstadiet från ett utvecklingspsykologiskt perspektiv

Övergången från lågstadiet till högstadiet sammanfaller med att barnen genomgår puberteten. Denna djupgående, fysiska metamorfos innebär dramatiska förändringar, som snabb tillväxt, förändrade kroppsproportioner, spirande intresse för sex och parrelationer samt påföljande behov att konkurrera med jämnåriga om partners (Weisfeld & Janisse, 2005). Att genomgå puberteten är en taxerande process som associeras med såväl emotionell upprivenhet (Mendle, 2014) som sömnbrist (Colrain & Baker, 2011).

Puberteten associeras även med en förändring i relationen mellan barnet och deras föräldrar. Typiskt sett präglas förhållandet mellan föräldrarna och den unga tonåringen av ökad grälsjuka, som med tiden övergår i hemlighetsfullhet (Weisfeld & Janisse, 2005).

Att växa upp innebär att barnet på naturlig väg söker allt större autonomi från föräldrarna. Detta innebär samtidigt att föräldrarnas insyn i barnets förehavanden minskar, liksom deras förmåga att tillhandahålla emotionellt och strukturellt stöd i rätt tid och omfattning om så skulle behövas (Steinberg, 2005).

Mellan lågstadiet och högstadiet förändras relationen mellan elev och lärare. I högstadiet frångås systemet med klasslärare, där en lärare undervisar samma grupp i olika ämnen. I högstadiet undervisas barnet av flera lärare under en och samma dag. Detta medför att högstadieelevens individuella utveckling inte övervakas på samma sätt som i lågstadiet. I forskning associeras detta skifte, från en-pedagog-miljö till multipel-pedagog-miljö, med ökad förekomst av subtil mobbning (se Pellegrini, 2002).

Det är möjligt att unga tonåringar inte är mogna eller socialt kompetenta nog att hantera högstadiesituationen, särskilt om tillgången till emotionell och beteendemässig reglering från vuxna märkbart minskar som en konsekvens av flytten till högstadiet. Detta resonemang stöds på etablerad kunskap om tonåringens neurokognitiva utveckling som vidhåller att människans förmåga att reglera sitt beteende och sina känslor i förhållande till långsiktiga mål och konsekvenser utvecklas under hela tonårstiden (Steinberg, 2005). Detta innebär att tonåringar inte är lika effektiva som vuxna när det kommer till att fatta beslut. Detta gäller särskilt i situationer där tonåringen är emotionellt upprymd/uppjagad eller utsätts för gruppträck (Steinberg, 2005).

Sammantaget innebär flytten till högstadiet inte bara en utmaning, utan en aggregation av flera parallella utmaningar som kan orsaka stress för den unga tonåringen. Trots detta går högstadieanpassningen bra för de allra flesta ungdomar.

Reformer med relevans för främjandet av finländska studerandes välfärd och trivsel i skolan

Finländska lärares roll är att som kapabla, professionella tjänsteutövare grunda sitt arbete i den nationella läroplanen.

Läroplanen för grundskoleutbildningen reformerades mellan åren 2014 och 2017 för att bättre kunna bemöta den allt mer komplexa och föränderliga världens utmaningar (Halinen, 2018). Reformen syftade särskilt till att vända den nedåtgående spiralen vad finländska skolelevers trivsel och välmående beträffar (Halinen, 2018). Målet är att skapa en skolmiljö som är vänlig och inte upplevs som jäktad, där studerande stöttas och inspireras till att lära sig (Halinen, 2018).

År 2014 reformerades även elevvårdslagen. Detta innebar att den finska elevvården skiftade fokus från att ingripa i enskilda fall till att arbeta preventivt för kollektivt välmående. Elevvårdslagen säkerställer bland annat att det i varje skola finns ett multiprofessionellt elevvårdsteam som arbetar för elevernas välmående och trivsel i såväl individuell som generell mening (Lag om elev- och studerandevård, 1287/2013). Därtill har alla vuxna i skolan ansvar för elevernas trivsel och välmående i skolan (Lag om elev- och studerandevård, 1287/2013).

Smarttelefonforskningens inträde i den socialvetenskapliga forskningen

Den snabba utvecklingen av mobilteknologi och smarttelefoners utbredning i den globala befolkningen har skapat en ny trend inom socialvetenskapen: smarttelefonforskning.

Detta innebär att nya metoder för datainsamling via deltagarnas smarttelefon utvecklas och förbättras i rask takt, däribland en metod med namnet ekologisk momentan bedömning (EMA).

I en EMA-studie svarar deltagarna på frågor i sin mobiltelefon, antingen via en särskild applikation för ändamålet eller via webbläsaren. Detta tillvägagångssätt gör att forskare på olika sätt kan undersöka förhållandet mellan kontext och beteende i människors naturliga miljö i realtid (Kuntsche & Labhart, 2013, Russel & Gajos, 2020).

Det har framförts att EMA kan användas för att komma runt vissa problem som existerar kring användningen av traditionella enkäter (McKay et al., 2016). Det är nämligen sannolikt att retrospektiva enkätsvar, där deltagare rapporterar om sitt beteende, sina tankar, attityder osv med hjälp av minnet, inte helt motsvarar verkligheten. Detta beror på att autobiografiska minnen ofta är förvrängda och hoppessade (Rollins, 2018).

Tidigare forskning

Härnäst följer en redogörelse för tidigare forskning om unga tonåringars psykosociala funktion i samband med flytten till högstadiet, skoltrivsel i högstadiet samt om EMA-forskning om ungas socio-

emotionella erfarenheter. Vad skoltrivsel beträffar är översikten begränsad till studier som använt samma en-fråge-indikator som i epidemiologiska mätningar.

Övergången till högstadiet

Många studier har förknippar unga tonåringars övergång till högstadiet med utbrott av olika slag. Dessa berör försämrad förmåga att reglera känslor (Olson, et al., 2013), ökad förekomst av aggressivitet bland elever (Pellegrini & Long, 2002, Pepler et al., 2006; Werner & Hill, 2010), försämrade akademiska prestationer (Mcgee, 2003; Ryan et.al., 2013; Benner, et.al., 2017), försämrade självkänsla samt minskat upplevt stöd från klasskamrater och lärare, (DeWit, et.al., 2011), liksom ökad förekomst av depressiva symptom samt upplevelse av ensamhet (Benner et.al., 2017).

Andra studier fokuserar på skyddsfaktorer, där särskilt socialt stöd från vänner och föräldrar visat sig vara viktigt för den sociala anpassningen i högstadiet (Muscarà et.al., 2018; Benner, et.al., 2017; Waters, et.al., 2014).

Skoltrivsel

Vad skoltrivsel beträffar har tidigare studier påvisat samband mellan att inte gilla skolan och att känna sig ensam, vara rädd för att gå till skolan, umgås med stökiga kamrater, samt att inte komma överens med jämnåriga (Rönkä, et.al., 2017). Därtill finns det bevisade samband mellan studerandes ogillande för skolan och att studerande inte finner glädje i att lära sig (Morinaj & Hascher, 2019) samt att de känner sig sömniga på dagtid (Drake, et.al., 2003).

Att trivas i skolan förknippas med att studerande känner sig trygga (Kutsar & Kasearu, 2016), att lärare och elevvårdare bemöter studerandes individuella behov (Smith et.al., 2016) samt att studerande äter frukost regelbundet (Sampasa-Kanyinga, & Hamilton, 2017). Slutligen finns det en del bevis för att pojkar trivs sämre i skolan än flickor (Lightbody et.al., 1996, Smith et.al., 2016).

EMA-forskning om ungas socio-emotionella erfarenheter

Studier om ungas erfarenheter med hjälp av ekologisk momentan bedömning (EMA) blir allt vanligare. I sådana studier har man bland annat kunnat visa att ungas glada känslor prediceras av att ha populära vänner, medan att ha vänner som retas och är elaka predicerar känslor av ledsamhet och ångest (Rusby, et al., 2013). Liknande studier har funnit samband mellan ungas grad av ledsamhet och ångest till följd av tråkiga händelser och deras upplevda social status i skolan (lägre status – starkare reaktion) (Johnson & Swendsen, 2015). Vidare har EMA-studier visat att ungas som i hög utsträckning exponeras för våld tenderar att bland annat uppföra sig mer reaktivt än andra ungdomar

(Odgers & Russel, 2017), medan unga som blir mobbade tenderar att söka kamratskap utanför den egna klassen och undvika sina föräldrar (Magallón-Neri et.al, 2018).

Här näst övergår texten till att behandla syftet med denna studie, samt dess forskningsfrågor.

Studiens syfte och forskningsfrågor

Syftet med denna studie är att analysera fyra tillämpningar av det epidemiologiska måttet för skoltrivsel. Studien har som målsättning att mäta sjundeklassisters skoltrivsel på två sätt, dels i en tvärsnittsstudie på sex-månaders nivå, dels inom en tre-dagars ekologisk momentan bedömning. Vidare kommer studien att undersöka förhållandet mellan skoltrivsel, socialt stöd och dagliga sociala emotioner.

På basen av tidigare forskning ställdes följande hypoteser:

1) Hög nivå av skoltrivsel (åtminstone på tvärsnittsnivå) förväntas vara associerat med högre nivåer av socialt stöd från vänner, från vuxna i skolan och stöttande uppfostringsstilar från föräldrarna (Muscarà et.al., 2018; Benner, et.al., 2017; Waters, et.al., 2014; Smith et.al., 2016).

2) Pojkar förväntas rapportera lägre skoltrivsel, liksom lägre upplevt stöd från vänner, jämfört med flickor (Lightbody et.al., 1996, Smith et.al., 2016; DeWit, et.al., 2011).

3) Skoltrivsel (åtminstone på tre-dagarsnivå) förväntas vara negativt korrelerad med känslor av ensamhet, positivt korrelerad med att känna sig populär och omtyckt av andra samt att känna sig trygg (Benner et.al., 2017; Rönkä, et.al., 2017; Ha, et.al., 2019; Kutsar & Kasearu, 2016).

4) Diskrepans i dagliga bedömningar av skoltrivsel förväntas vara negativt korrelerad med socialt stöd från vänner, att känna sig omtyckt av andra och att känna sig populär (Johnson & Swendsen, 2015; Rusby, et al., 2013).

Studien kommer även att utforska frågor som tidigare forskning inte besvarat. Dessa frågor berör (i) huruvida måtten på skoltrivsel sammanfaller eller avviker från varandra mellan de två tidsnivåerna, (ii) i vilken utsträckning de olika måtten på skoltrivsel skiljer sig åt i relation till studerandes sociala stöd, samt (iii) i vilken utsträckning sociala emotioner influerar studerandes dagliga skoltrivsel då även effekten av socialt stöd beaktas.

Härnäst följer en beskrivning av studiens metod.

Metod

Denna studie analyserade sjundeklassisters skoltrivsel med hjälp av data som samlats in inom ramen för projektet REBOOT (Re-assessment of Bullying and Ostracism among Ostrobothnian Teenagers). Detta projekt startades av utvecklingspsykologiska institutionen vid Åbo Akademi år 2019.

REBOOT-datauppsättningen består av två nivåer. Den första består utav tvärsnittsdata som samlades in via en 100-frågors papper-penna enkät. Den andra nivån består av EMA-data som samlades in via en mobilapplikation i en veckas tid.

Studien analyserade ovannämnda data i tre faser. I första fasen jämfördes de olika måtten på skoltrivsel med varandra ($N = 48$). I andra fasen undersöktes huruvida de olika måtten på skoltrivsel är associerade med socialt stöd från vänner, vuxna i skolan och föräldrar, samt eventuella könseffekter ($N = 101$). I tredje fasen utforskades huruvida måtten för daglig skoltrivsel är associerade med dagliga sociala emotioner.

Datainsamling och deltagare

Våren 2020 samlade personerna bakom REBOOT-projektet in data från finlandssvenska sjundeklassister vid Korsholms Högstadium i Korsholm, Finland. I denna skola studerar ca 600 elever i årskurs 7 till 9.

Studien genomfördes till stor del på skoltid i samarbete med skolans rektorer och övrig personal, med tillstånd från kommunen samt Åbo Akademis etiska nämnd. Aktivt medgivande samlades in från deltagarnas föräldrar via skolans kommunikationssystem.

Datainsamlingen genomfördes i två steg. Första steget bestod av att en projektkoordinator och en assistent genomförde en serie uppstartssessioner med deltagarna på lektionstid. I dessa deltog sjundeklassister vars föräldrar samtyckt till deras deltagande i studien. Under uppstartssessionerna informerades deltagarna om studiens syfte, metod samt hur deras personliga data skyddas och hanteras. Därefter laddade deltagarna ner applikationen RealLifeExp (Life Data©) till sina mobiltelefoner, för att sedan fylla i tvärsnittsenkäten.

Datainsamlingens andra steg bestod av en veckas ekologisk momentan bedömning. Data samlades in med hjälp av applikationen i deltagarnas mobiltelefon. Applikationen sände notifikationer till sammanlagt 16 mini-enkäter som förprogrammerats med hjälp av LifeDatas mjukvara för ändamålet. Mini-enkäterna besvarades enligt följande schema: från måndag till fredag kl. 10:40, kl. 14:00 och kl. 18:00, samt kl. 11:00 på lördagen.

För denna studie användes två sampel. Det första samplet (X) bestod av de sjundeklassister som fyllde i tvärsnittsenkäten ($N = 101$, $M_{\text{ålder}} = 13.21$, $SD = 0.42$, 59,4 % flickor). Det andra samplet (Y) bestod av sjundeklassister som både deltog i tvärsnittsstudien och EMA-datainsamlingen under de tre första dagarna ($N = 48$, $M_{\text{ålder}}: 13.24$, $SD: 0.45$, flickor: 78,7 %). Första samplet (X) analyserades i fas 2, medan det andra samplet (Y) analyserades i både fas 1 och 2.

Mätinstrument

Tvärsnittsstudien mätte socialdemografisk information (varav ålder och kön inkluderades i studien), skoltrivsel och tre dimensioner av socialt stöd. EMA-studien mätte skoltrivsel och dagliga sociala emotioner.

Skoltrivsel mättes med frågan ”Hur trivs du i skolan?”. Följande mått på skoltrivsel skapades: skoltrivsel på sjunde klass (SE1), förändring i skoltrivsel mellan sjätte till sjunde klass (SE2), medeltal för tre dagars upprepade bedömning av skoltrivsel (SE3) samt diskrepans mellan dagliga värden för skoltrivsel (SE4).

Socialt stöd från vänner (PSS1) och vuxna i skolan (PSS2) mättes med hjälp av påståenden i stil med ”Jag har vänner/det finns vuxna i skolan som jag kan dela min glädje och sorg med” med inspiration från MSPSS-skalan av Zimet, et.al. (1990). Stöd från föräldrar mättes med hjälp av de tre del-skalorna autonomistöd, struktur och värme från PSQ-skalan av Skinner et al. (2005).

Alla mätinstrument på tvärsnittsnivån visade god reliabilitet.

Dagliga sociala emotioner mättes med en fråga per följande känslor: att känna sig populär (DPSE1), omtyckt av andra (DPSE2), ensam (DPSE3), trygg (DPSE4), osynlig (DPSE5) och missförstådd (DPSE3). Känslorna mättes med frågan ”Hur [känsla] har du känt dig idag?”.

Förbearbetning av data och statistiska analyser

REBOOT-datainsamlingen genomfördes med en strategi för planerat bortfall. Detta innebär att deltagarna bara fick 80 % av frågorna för de olika skalorna medan de obesvarade frågorna beräknades med hjälp av EM-algoritmen i SPSS v26.

För varje fas av studien (3) genomfördes deskriptiva analyser samt korrelationsanalyser för de valda variablerna. I fas två genomfördes en-vägs-ANOVA för att studera skillnader mellan pojkar och flickor, samt regressionsanalys för att studera huruvida socialt stöd predicerar skoltrivsel.

Resultat

Här näst följer en summering av studiens resultat och tillhörande diskussion.

Skoltrivsel

I denna studie, i förhoppningen att fånga upp komplexiteten i ungas skoltrivsel som fenomen, undersöktes sjundeklassisters skoltrivsel i två olika sammanhang. Först genom en sex-månaders tillbakablick (med hjälp av tvärsnittsenkäten), därefter i dagligt här-och-nu sammanhang (med hjälp av ekologisk momentan bedömning). I de båda sammanhangen mättes skoltrivsel på två sätt vardera

(se Tabell 1 s. 23 i huvudtexten för resultat från den deskriptiva analysen för de olika måtten). På tvärsnittsnivå mättes deltagarnas upplevda skoltrivsel på sjundeklassen (SE1) och den beräknade skillnaden mellan den upplevda skoltrivseln i sjätte klass jämfört med motsvarande för sjundeklass (SE2). På dagsnivå mättes deltagarnas dagliga trivsel, varav ett medeltal för tre dagars bedömningar beräknades (SE3), samt ett diskrepansmått (SE4).

Första forskningsfrågan löd huruvida dessa mått på skoltrivsel sammanfaller eller avviker från varandra (i). Studien fann att skoltrivsel på sjundeklass (SE1) var positivt och signifikant korrelerad med daglig skoltrivsel (SE3). Detta trots att formuleringen av en-fråge-måttet ”Hur trivs du i skolan” formulerades på olika sätt för att passa sammanhanget, samt att olika skalbredder användes (både 1–5 och 1–10). Dessvärre kunde denna studie inte ta ställning till en-fråge-måttets reliabilitet mellan kontexterna. Däremot tyder fyndet på att deltagarna tillskriver sina svar på en-fråge-måttet på skoltrivsel till samma typ av upplevelse, dvs. deltagarna tänker på sin skoltrivsel som en specifik upplevelse. Det är däremot upp till fortsatt forskning att utröna vilka kriterier ungdomar använder när de bedömer sin skoltrivsel.

Studien fann även att sjundeklassister som rapporterade hög skoltrivsel för sjunde klass (SE1) tenderade att även rapportera en positiv förändring i skoltrivseln mellan sexan och sjuan (SE2=positivt värde). Detta eftersom SE1 var positivt och signifikant korrelerad med SE2. Fyndet kan tolkas på olika sätt. Å ena sidan kan det vara fråga om att en del rapporterar lyckad anpassning till högstadiet genom att ge något högre betyg för skoltrivsel i 7.an än för dito i 6:an. Å andra sidan kan det hända att studerande ger ett högre betyg för 7:an än 6:an för att det upplevs som barnsligt att gilla lågstadiet bättre än högstadiet. I traditionella enkäter är sådana förskönings effekter sannolika att förekomma (Rollins, 2018).

Vad gäller skoltrivsel på dagsnivå fann studien en koppling mellan höga dagsvärden och låg diskrepans-poäng mellan de dagliga värdena. Det vill säga, ju högre daglig skoltrivsel, desto mindre skillnad mellan de tre dagliga värdena och vice versa. En möjlig förklaring av detta fynd är att ju oftare studerande upplever att skolupplevelsen motsvarar deras förväntningar på trivsel, desto stabilare är deras uppfattning att de trivs i skolan och tvärtom (se Smith et.al, 2106).

Skoltrivsel och socialt stöd

Den andra forskningsfrågan gällde (ii) huruvida sjundeklassisters skoltrivsel påverkar deras skoltrivsel. Som förväntat (hypotes 1) fann studien samband mellan skoltrivsel i sjunde klass och alla de tre dimensionerna av socialt stöd (från vänner, vuxna i skolan och föräldrar) (Muscarà et.al., 2018;

Benner, et.al., 2017; Waters, et.al., 2014; Allen, et.al., 2018; Smith et.al., 2016). De olika stödformerna verkar dock spela olika roller för skoltrivseln.

Regressionsanalyserna i studiens andra fas (se Tabell 5 och 6, s. 28–29 i huvudtexten) visade att socialt stöd från vuxna och strukturellt stöd från föräldrar predicerade skoltrivsel på sjunde klass. Detta fynd stöder tesen i kap 1.3.1. i huvudtexten, att vuxnas har en viktig, såväl stöttande som reglerande funktion, i unga tonåringars liv. Därför är det inte otänkbart att stöd från vuxna skulle kunna avspegla sig i form av ungas skoltrivsel, något som tidigare studier även visat (Smith, et.al., 2016; Waters, et.al., 2014; Muscarà et.al., 2018, Allen et.al, 2018).

Ett annat fynd från regressionsanalysen var att förändringen i skoltrivsel mellan sjätte och sjunde klass predicerades enbart av socialt stöd från vänner. Ifall man tänkte sig skoltrivsel som ett ombud för social anpassning till högstadiet, tyder detta fynd på att studerande som lyckas hålla, eller rentav förbättra sin tillgång till stöd från vänner mellan sjätte och sjunde klass, klarar övergången bättre än de som inte gör det (Muscarà et.al., 2018; Benner, et.al., 2017).

Skillnader mellan flickors och pojkars skoltrivsel

Pojkar förväntades (hypotes 2a) rapportera lägre skoltrivsel än flickor (Lightbody et.al., 1996, Smith et.al., 2016). Denna hypotes förkastades, eftersom studien inte fann någon signifikant skillnad mellan pojkar och flickors skoltrivsel. I denna studie rapporterade både flickor och pojkar rätt hög skoltrivsel (se Tabell 3, s.25 i huvudtexten).

Pojkar förväntades (hypotes 2b) även rapportera lägre socialt stöd från vänner än flickorna. Denna hypotes kunde bekräftas av studien, eftersom en signifikant skillnad uppmättes. Fyndet kan ändå inte betraktas som särskilt meningsfullt med tanke på att såväl flickor och pojkar värderade sitt stöd från vänner som starkt. Den uppmätta könseffekten är mer relaterat till flickorna än pojkarna. Flickornas medeltal för socialt stöd från vänner var nämligen extremt högt (se Tabell 3, s.25 i huvudtexten).

Skoltrivsel och dagliga sociala emotioner

Den sista forskningsfrågan (iii) gällde i vilken utsträckning sociala emotioner influerar studerandes dagliga skoltrivsel om effekten av socialt stöd även beaktas. På grund av den låga sampelstorleken (för sampel Y) kunde denna studie inte analysera interaktionseffekter. Därför kan denna forskningsfråga enbart besvaras deskriptivt, vilket sker på basis av resultatet från korrelationsanalysen i studiens fas 3, som följer.

Som förväntat (hypotes 3) fann studien att sjundeklassisternas dagliga skoltrivsel korrelerade negativt och signifikant med dagliga känslor av att känna sig ensam och positivt och signifikant med att känna sig populär, omtyckt av andra och trygg (Benner et.al., 2017; Rönkä, et.al., 2017; Ha, et.al., 2019; Kutsar & Kasearu, 2016). Därtill fann studien att daglig skoltrivsel även är negativt och signifikant korrelerad med att känna sig osynlig och missförstådd.

Därtill förväntades (hypotes 4) att diskrepanser mellan sjundeklassisters dagliga skoltrivsel-värden skulle vara negativt korrelerad med att känna sig populär och omtyckt av andra (Johnson & Swendsen, 2015; Rusby, et al., 2013). Denna studie kunde bekräfta att så var fallet.

Vidare fann studien att socialt stöd från vänner korrelerade positivt och signifikant med att känna sig populär, omtyckt av andra och trygg. Bland dessa dagliga känslor var det bara trygghet som korrelerade med skoltrivsel i sjuan på tvärsnittsnivån. Man kan således spekulera om trygghet är en dold nyckelfaktor för sambandet mellan socialt stöd från vänner och positiv förändring i skoltrivsel mellan sjätte och sjunde klass. Det vill säga, att stöttande vänner får sjundeklassister att känna sig trygga i sin anpassning till högstadiesituationen, vilket i sin tur visar sig i form av ökad skoltrivsel. Relaterat till detta visade sig trygghet och affektivt föräldrastöd vara positivt och signifikant korrelerade. Detta tyder möjligtvis på att föräldrarna influerar sjundeklassisternas känsla av trygghet i högstadiet (Waters, et.al., 2014; Muscarà et.al., 2018).

Daglig skoltrivsel var positivt korrelerad med stöd från vuxna i skolan, men vuxnas stöd var enbart signifikant korrelerad med en utav de dagligt mätta sociala emotionerna, nämligen att känna sig omtyckt av andra. Sambandet var negativt, vilket möjligen kan komma från att sjundeklassare som erfar problem med sociala relationer med jämnåriga har starkare kontakt med vuxna i skolan.

För att summera, såväl vänner som föräldrar verkar vara viktiga källor för sjundeklassisternas emotionella trygghet i skolan. I denna studie står trygghet ut som en nyckelkomponent när det kommer till social anpassning i högstadiet, men analyser som kunde ha avgjort detta kunde inte genomföras. Därav måste denna slutsats, med stöd för att trygghetens betydelse för skoltrivsel har påvisats i tidigare studier (Kutsar & Kasearu, 2016; Rönkä et.al., 2017), betraktas som en hypotes för framtida studier att testa.

Centrala fynd

Bland de fynd som detta kapitel redogjort för är det särskilt tre som stack ut. Det första var att socialt stöd från vuxna i skolan och föräldrars strukturella stöd predicerade sjundeklassisternas skoltrivsel på sex månaders tvärsnittsnivå. Det andra var att enbart socialt stöd från kompisar predicerade sjundeklassisternas positiva förändring i upplevd skoltrivsel mellan sjätte och sjunde klass. Därtill

fann studien att skoltrivsel på dagsnivå korrelerade signifikant och positivt med att känna sig populär, omtyckt av andra och trygg, och signifikant och negativt med att känna sig ensam, osynlig och missförstådd.

Diskussion

Härnäst följer ett sammandrag av diskussionen kring studiens metod, förslag på fortsatt forskning samt råd till fältet.

Metod

Denna studie valde att utforska sjundeklassisters skoltrivsel som fenomen genom att förena två metoder: den traditionella enkätmetoden och den ekologisk momentan bedömningsmetoden (EMA). I och med att denna studie kunde genomföras och resultatet från det blandade datamaterialet kunde analyseras, med flertalet fynd som resultat, kan valet av denna strategi anses vara lyckad.

Inom ramen för denna två-sättsmetod fanns en förväntan att det traditionella insamlade datamaterialet skulle vara påverkat av retrospektiva minnesförvrängningar och själv-tjänande partiskhet (se Rollins, 2018). I ett försök att exponera den förbisedda komplexitet som förväntades dölja sig i det traditionella datamaterialet, kontrasterades deltagarnas allmänna, subjektiva och retrospektiva uppfattning (i tvärsnittet) med deras dagliga uppfattningar (genom EMA). Som fynden från korrelationsanalyserna bekräftar, kunde de kombinerade datamaterialets två nivåer signifikant länkas med varandra på olika sätt. Slutsatsen är att två-sättsmetoden genererade ett rikt och spännande blandat datamaterial om sjundeklassisters skoltrivsel.

Med det nämnt har denna studie även en del begränsningar att rapportera om. För det första föll målsättningen att studera interaktionseffekter mellan variabler som kön, klass och andra potentiella grupperingsvariabler till korat på grund av att sampel Y blev för litet. Detta innebär även att denna studies resultat måste tolkas med försiktighet och att resultaten inte bör generaliseras. På grund av högt databorfall (20–38 %) bör särskilt de fynd som relaterar till de dagligt uppmätta sociala emotionerna tolkas med försiktighet.

Som denna författare har erfarit är eliminering av procedurmässiga flaskhalsar en av nyckelfaktorerna bakom lyckade smarttelefonbaserade metodologier. I processen att rekrytera deltagare kunde denna studie identifiera två sådana flaskhalsar. Den första infann sig när aktivt samtycke skulle samlas in från vårdnadshavarna. Det verkar som att alla föräldrar inte kunde nås via skolans kommunikationssystem, eftersom dom sällan använde det. För det andra uppstod problem av olika slag när deltagarna skulle ladda ner applikationen till sina telefoner under uppstartsessionerna. Dessa problem rörde sådant som långsam internetuppkoppling, inte tillräckligt med lagringsutrymme

på deltagarnas telefoner, av föräldrar installerade app-blockerare i deltagarnas telefon och att deltagare misstänkte att forskningsapplikationen innehöll virus.

När data samlades in under EMA-veckan uppstod en kumulativ avhoppareffekt. Detta är orsaken till den låga sampelstorleken för sampel Y. Möjligen kunde deltagarantalet ha blivit högre om EMA-studien hade fokuserat på enbart en-frågemått. Att fylla i multipel-fråge-skalor upprepningsvis i flera dagar uppfattas sannolikt som tråkigt och monotont, vilket i sin tur får deltagare att hoppa av studien. Som en lösning på detta borde EMA-frågor vara så korta och intuitiva som möjligt. Därtill kunde EMA-frågor gynnas av att efterlikna chatt-språk så mycket som möjligt, vilket skulle göra att deltagare kan uppfatta frågorna snabbt med minsta möjliga ansträngning.

En sista begräsning berör två-sätts tillvägagångssättet. I denna studie blev detta tillvägagångssätt klart formulerat först efter att datainsamlingen gjorts. Denna förvirring orsakade onödiga misstag som att tilldela en-fråge måtten för skoltrivsel på sex-månaders och dagsnivå med skalbredder som inte matchade varandra.

Hursomhelst, när nya metodologier utprövas förväntas misstag uppstå. I sin högst explorativa roll, bidrar denna studie till utvecklingen av smarttelefon-baserade metodologier genom att på detta sätt rapportera om de försök och misstag som gjorts.

Förslag för fortsatt forskning

Genom att undersöka unga tonåringars skoltrivsel genom EMA-metoden kunde denna studie påvisa ett signifikant samband mellan daglig skoltrivsel och sex olika sociala emotioner. Utav dessa var fyra förväntade, medan två var helt nya. Framtida forskning med EMA-metoden kan bidra till att den social emotionella bilden av högstadiet utökas med flera en-fråge indikatorer. Ett första steg är dock att utvärdera hur det epidemiologiska skoltrivselmättet förhåller sig till socialvetenskapliga koncept som skoltillhörighet och skoltillfredsställelse.

Vidare framstår EMA som ett kreativt och mångsidigt forskningsverktyg. EMA kan utnyttjas på många sätt. Till exempel för att identifiera exponeringar och företeelser i studerandes vardag i skolan med relevans för skoltrivsel. För att åstadkomma detta behövs större sampel samlas in än vad denna studie lyckades med. Detsamma gäller för att kunna genomföra analyser av potentiella skillnader mellan olika grupper av studerande när det kommer till skoltrivsel. Ett exempel på en tänkbar grupperingsvariabel skulle till exempel vara studerandes utsatthet för aggressioner från skolkamrater (Magallón-Neri et.al, 2018).

Därtill kan longitudinella undersökningar genomföras i syfte att utreda hur studerandes uppfattning av skoltrivsel utvecklas över tid. Detta vore särskilt lämpligt att utföra mellan årskurs 6 och årskurs

8. Utifall att skoltrivsel skulle visa sig vara ett verifierat, godtagbart mått på social anpassning, skulle målet med longitudinella studier kunna vara att undersöka huruvida sjundeklassister utvecklar olika profiler under tiden de anpassar sig till högstadiet.

Råd till fältet

Pedagoger kan överväga möjligheten att främja skoltrivsel i skolan i samarbete med EMA-forskare. Deltagande i EMA studier kan fungera som ett sätt att dagligen påminna studerande att stanna upp och reflektera över sina känslor och sitt välmående i skolan. I en finländsk kontext skulle en integrering av EMA-mätningar passa in i såväl elevvårdens som läroplanens agenda för skoltrivselfrämjande aktiviteter.

I fråga om utvecklandet av strategier för att främja unga tonåringars skoltrivsel i högstadiet, framhåller forskare att pedagoger och beslutsfattare begrundar ungas utvecklingsmässiga såväl som individuella behov (Smith et.al., 2016). Ett mycket viktigt sådant behov är att känna tillhörighet till andra elever (Muscarà, et.al, 2018; Benner et.al., 2017). För att tillmötesgå detta behov uppmanas lärare att skapa möjligheter för tonåringar att uppleva betydelsen av relationer till andra skolelever liksom betydelsen av att kommunicera med sina föräldrar om känslor (Muscarà, et.al, 2018). Ett förslag vore att skapa kollektiva inlärningsstrategier, med vars hjälp studerande hjälper varandra att lära sig nya koncept. Dessa kunde även utformas på ett sätt som involverar föräldrarna (Muscarà, et.al, 2018).

I linje med tidigare forskning fann denna studie att socialt stöd är en starkt predicerande faktor för sjundeklassisters skoltrivsel. Mer viktigare är dock att studien kunde bekräfta vuxnas makt att bana väg för en positiv skolupplevelse för unga.

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