



Girls' and Boys' Perceptions of the Transition from Primary to Secondary School

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Abstract

This study explores the expectations and experiences of the transition from primary to secondary school, using data from 98 Dutch primary education children. We focus on gender differences in the child's point of view on the ease of transition. The results show that, before the transition, children are mostly worried about the continuity of relationships. Boys mostly think it is important to know someone at secondary school, while girls are particularly interested in the social environment. After the transition most children realise that they have underestimated the social emotional aspect. Many felt unprepared to handle the new social environment independently and were dependent on external support to feel at home at their new school.

Keywords Transition primary- secondary school · Child-participation · Children's expectations · Children's experiences · Gender differences

1 Introduction

Every year, worldwide many children make the transition from primary to secondary school. Depending on the country of origin this transition may be experienced differently by children in different countries. This study is limited to the experiences of children in the Netherlands who make the transition from primary to secondary education at the age of twelve.

The transition from primary to secondary school is an important moment in a child's life and a major and sometimes complicated step in a child's development. During a relatively short period of time children experience many changes in their school and social environment. This can have both positive and negative effects on their cognitive,

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psychosocial and emotional development (Sirsch 2003). Up to 16% of children experience difficulties in the transition from primary to secondary school. Mostly they do not feel well prepared for it. This is particularly the case for children with learning, social emotional and behaviour problems (Evangelou et al. 2008; McGee et al. 2004). Moving from a small, familiar primary school, where they feel safe, to a much larger, unfamiliar secondary school where they feel more anonymous and repositioned as the youngest and smallest children. Once at secondary school they have to cope with a new and different school culture, with different teachers, new subjects and another place of learning and with new peers from different social, economic and cultural backgrounds (Pratt and George 2005). However, despite these challenges, there is also much to look forward to, such as the prospect of having more freedom, making new friends and the opportunity to participate in extra-curricular activities (Coffey 2013).

The literature shows that most children express some concerns and anxieties prior to the transition, about the school system and the informal system of peers (Anderson et al. 2000). There is less consistent evidence about the post-transition experiences, though there is a general consensus that the worries children experience mostly disappears during the first year at secondary school (West et al. 2010).

After one semester in secondary school, children express that the social environment predominates their concerns (Pratt and George 2005). They find continuity and development of peer group relations and friendships more important than issues about the curriculum because they more worry about being isolated or marginalised (Pratt and George 2005). Positive relationships can help them to address these challenges (Coffey 2013), whereas personal- and family characteristics can influence the process. Many authors have found gender differences in coping behaviour of children at secondary school. Girls cope better than boys. Girls socialise more in friendship groups and are more attentive at school (McGee et al. 2004), whereas boys tend to be more disruptive than girls and tend to socialise around sport connections.

Previous research has suggested that children are competent to communicate valuable views that are worthwhile to be taken into consideration (Mason and Danby 2011). Unfortunately, in research about the transition children seldom participate, and if they participate no attention is being paid to the effect of children's opinion on the transition. The aim of this paper is to investigate the expectations and the experiences of children themselves. We ask ourselves if their experiences confirm the findings in the literature, reported by adults. We expect that children's vision about the transition process can bring new insights to research that adults may not been aware of and can challenge educators to make changes in their classrooms. This assumption is confirmed by Lundqvist (2014) who found that children's participation in research enables them to influence policy and practice. Moreover, children's participation in research may also have a positive impact on children's well-being and development (Lundqvist 2014). We are interested in children's initial priorities and whether there are gender differences in the perceptions, expectations and experiences in the transition from primary to secondary education. For this we use data on 98 children in the final year in primary education from 32 schools in the Netherlands. Children's opinions are measured by two self-reporting questionnaires before and after the transition from primary school to secondary school.

Each child's pre transition expectations and perceptions are measured and compared with their perceived experiences eight weeks after the school transition to secondary

education. This allows us to determine which information children find important beforehand and which aspects of this information should be taken into account to prepare children for secondary school by the new school or class mentor. By comparing the responses from the before and after questionnaires, we are able to analyse whether children over- or underestimate the importance of certain aspects in the transition and obtain insight in what is really important to them. In a second step this is done for boys and girls separately. The key themes in the questionnaires the children filled in are their perceptions and experiences about school choice, preparing for secondary school, the role of the mentor, making the transition with peers, and differences in the context.

2 Literature Review of children's Expectations and Experiences with the Transition

Most studies on the transition to secondary school have been done relatively recently. Until the 1980's research on this theme tended to be concerned with academic attainment and curricula demands (Pratt and George 2005). Since The United Nations Convention on the Rights of the Child (UN, 1989) which gives young people the right to express their views and to be taken serious, the involvement of children in decision making has become an area of growing interest. In several studies children are considered to be competent enough to describe and share their experiences and perspectives. Doing so, children bring new perspectives that adults may not have been aware of (Lundqvist 2014). Despite this, in the literature about the transition from primary to secondary school, children can still not be considered as an equal partner. The absence of any direct consultation with the children during the transition process and the fact that children are rarely asked for feedback demonstrates the low priority of this (Pratt and George 2005; Van Rens et al. 2018). What we know about children's experiences and perceptions is largely based on empirical research among their parents. Below we review the literature regarding girls' and boys' perceptions and experiences, the role of the mentor and the formal and social context of the transition from primary to secondary education.

2.1 Children's Perceptions and Experiences

All stakeholders in the transition process - children (and their parents), and the feeding and the receiving schools - agree about the importance of a successful transition. However, their perspectives with respect to the most important aspects of the transition process are quite different. While teachers are focussed on curriculum problems and school strategies in order to prevent an attainment dip, children and their parents are mostly focused on the social emotional aspects of secondary school life (Topping 2011).

The views of the children and their parents about the transition are mostly similar (Zeedijk et al. 2003). At primary school children themselves think that academic ability is important to manage the transition to secondary school, and they are concerned about social emotional matters. Once at secondary school, academic skills are rarely mentioned. Instead, children emphasize that time management, the ability to focus on a task, good behaviour and social skills are

necessary. This suggests a mismatch between the fears and anxieties the children experience beforehand and the actual skills they need to address these fears and anxieties (Zeedijk et al. 2003).

From the children's perspective, the transition is complicated. They perceive it as both a challenge and a threat (Sirsch 2003). Children look forward to making new friends and at the same time they are concerned about being picked on and teased by older children or getting lost in the large building (Lucey and Raey 2000), as well as bullying, increased workload and peer relationships (Zeedijk et al. 2003). When peer relations from primary school can be continued at secondary school this is found to function as a buffer and can reduce stress (Topping 2011).

Boys and girls may be differently affected by the transition. Girls report significantly more concerns than boys but also express more positive attitudes towards school and teachers (Anderson et al. 2000; Rice et al. 2011). Driessen and Van Langen (2011) show that there are no differences in cognitive competences between boys and girls. However, they show that boys have lower non-cognitive competences, such as working attitude and social behaviour (Driessen and Van Langen 2011). According to Chung et al. (1998), in grade 6, boys' academic achievement decreases. Following the transition boys show a significant decline in academic achievement while there is no significant change in academic achievement among girls. Girls experience more psychological distress than boys, assessed by physical symptoms, which may indicate that girls express the stressfulness of transition via internalisation (Chung et al. 1998).

Parents and teachers need to be aware of the experiences the children will encounter in order to prepare them for the transition and to support them in their new school (Anderson et al. 2000). Some children, for example children with special educational needs, generally need and receive more support in comparison with typically developing children (Evangelou et al. 2008). Parents and teachers need to work together. Effective lines of communication between primary and secondary school are crucial (Coffey 2013). However, schools and parents focus on different aspects in the transition process (Topping 2011). In preparing children for secondary school, (head) teachers are focused on long term issues, such as behaviour, the curriculum and academic issues, paying little attention to the importance of social relationships in the transition process, which is what children and parents find more important (Pratt and George 2005).

According to Zeedijk et al., teachers, especially at primary school, are less interested in developing children's coping skills. Without learning children how to cope with stress they are dependent on organisational and external structures (Zeedijk et al. 2003). To help children to become independent learners, teachers should facilitate and support autonomy, competence and relatedness (Ryan and Deci 2000). This will also make them more able to accomplish a successful transition.

2.2 The Role of the Mentor

Anderson et al. (2000) found that the environmental context has a stronger effect on the school transition than developmental characteristics. This implies that successful school transitions can easily be facilitated by educators. Ryan and Deci (2000) conclude that educators can facilitate achievement and well-being at school supporting the three basic psychological needs: competences, autonomy and relatedness. However, excessive

control, non-optimal challenges and lack of connectedness may result in a lack of initiative and responsibility and also in distress and psychopathology (Ryan and Deci 2000). Although educators can help children getting involved in secondary school by developing a sense of belonging, few efforts are made to do so and the effectiveness of the efforts is seldom evaluated (Anderson et al. 2000). Secondary teachers are for example in doubt whether it is better to be well briefed or to know very little about the children to give them 'a fresh start' (McGee et al. 2004). The former seems more important because children who feel they get a lot of help from their secondary school to settle in, adapt and learn their way around school, are more likely to have a successful transition (Evangelou et al. 2008). Moreover, teachers have the opportunity to interpret and use information from children to change their pedagogical practice (Ferguson et al. 2011), and help children when they signal that they need help (McGee et al. 2004). Unfortunately, lower support from teachers is especially notable in secondary school. Having multiple teachers may make it more difficult to build personal relationships with all of them (Bokhorst et al. 2009). The literature shows that after the transition, perceptions of support, including close friend and school support, are higher for boys, but lower for girls. On the other hand, boys' self-perceived school problems are higher after the transition (Martínez et al. 2011).

2.3 Differences in the Formal and in the Social Context: Making the Transition with Peers

After the transition, children experience an organizational and a social discontinuity. Children are for example confronted with changes in school size, in teacher expectations and in relations with teachers and peers. The larger the discontinuity, the greater the support needed (Anderson et al. 2000). The less children are prepared for secondary school, the more support, from parents, teachers and peers, they will need (Topping 2011). Primary schools are preparing their pupils much more for school issues than for coping with peers (West et al. 2010) while for children transferring with existing friends is much more important than the structural arrangements of the school (Pratt and George 2005).

The transition to secondary school comes at a time that peer groups and friendships are very important to children. The transition can cause broken friendships when children either move to a different school or class, or when they develop new interests and identities after the transition (Weller 2007). At the end of primary school, children who have been classmates for years can become strangers (Pratt and George 2005). Peer relations are more important for girls. Therefore, they may find it more difficult to adjust to the disruption of friendship networks than boys (Anderson et al. 2000). Due to the new social circumstances at secondary school and as a result of the discrepancy between children's expected and perceived social acceptance, their self-esteem might change (Poorthuis et al. 2014).

A successful transition can be hindered by personal feelings or characteristics. Children who have experienced bullying or worry about their ability to perform well, about the new teachers or whether they can make friends, experience a poorer transition (Evangelou et al. 2008). The transition can be smoothed when the children have friends at their new school (Evangelou et al. 2008; West et al. 2010).

3 Theoretical Framework

Making the transition to secondary school has more or less an effect on all children (Anderson et al. 2000) and can affect children's academic performance as well as their sense of well-being and mental health (Bru et al. 2010; Chung et al. 1998; Waters et al. 2012). During the transition process the motivation and the academic performance declines (Bru et al. 2010; Waters et al. 2012; Zeedijk et al. 2003). Lower performance will lead to decreased wellbeing and to less motivation, which can lead to even lower performance, etcetera. Children may end up in a downwards spiral. This may initiate a disengagement process from school to poor academic improvement and even to school dropout (Anderson et al. 2000; Waters et al. 2012).

To prevent aforementioned negative consequences of the transition it is important to enhance children's intrinsic motivation, self-regulation and well-being. Motivation is an important driver to tackle children's concerns and worries (Ryan and Deci 2000), to influence their academic performance positively (Hattie and Timperley 2007) and to provide a way to break through the downwards spiral. The Self-Determination Theory (SDT) focusses on the social conditions that improve children's natural activity and curiosity, referred to as intrinsic motivation (Ryan and Deci 2000). The SDT differentiates three basic psychological needs: competence (I can do it), autonomy (I can do it independently) and relatedness (I am feeling to be connected and cared for). Fulfilment of these needs will lead to motivation and will result in well-being and enjoyment (Ryan and Deci 2000).

SDT is the underlying theoretical frame in this study. Active child participation, such as information exchange (Hart 2008) is one way to meet children's need for competence, autonomy and relatedness. Involving children in this research refers to children's descriptions, via questionnaires, of their views, experiences and expectations and the inclusion of these data in our research. Evidence is found that children's participation in research has a positive impact on the children themselves (Lundqvist 2014). Their self-confidence and social competence grows, they make new friends and learn to express their thoughts and discuss their ideas (Lundqvist 2014). This indicates that child participation has positive effects on children's competence to act autonomously. They notice that their contribution is appreciated and are able to make new friends which positively influences their sense of belonging.

4 The Context of the Study, Data and Methods

4.1 The Education System

In the Netherlands secondary education is divided into four separate ability tracks. At the end of primary school, children and their parents are advised, by the (head) teacher at primary school, which secondary school track is the most suitable. This advice is based on cognitive competences, non-cognitive factors and the teachers' judgements (Driessen et al. 2008).

Based on this advice parents choose a suitable school for their child. To ensure that children are well prepared, primary schools take steps to inform the children and their

parents about secondary education. Prior to the transition the children visit open days or days organised for whole classes by the secondary education school to obtain information about what the new school has to offer.

Compared to the educational systems in many other countries, the education system in the Netherlands uses a relatively early tracking age. The children are divided into separate tracks when they are in sixth grade and are about 12 years old. Schools in secondary education often offer a combination of tracks. Because the educational system has a hierarchical nature, it is crucial that the most suitable educational recommendation is provided for the transition from primary to secondary school (Driessen et al. 2008).

In secondary school, each class has a mentor who is the key individual in the contact with 'their' pupils and the parents, teachers and classmates. The mentor, usually is one of the teachers of the child, also has a social role for the class to ensure a challenging pedagogical environment and a safe class climate. Pupils, parents and teachers will first turn to the mentor when problems arise, and in practice mentors are responsible for addressing adjustment problems 7th graders might experience.

4.2 Data Collection

The data for the current study are collected in two waves, via two (identical) self-reporting questionnaires. The questionnaire was disseminated at all primary schools of a partnership in Venlo, a regional city in the Southern part of the Netherlands. The first wave was collected in late June 2015. During the second measurement the children were scattered in different secondary schools. Therefore 270 pupils who participated in the first wave were contacted via their home address for the second wave at the end of October 2015 when they were about two months in secondary school. Both waves had up until 3 reminders. Eventually 98 pupils filled out the questionnaires twice, for which the parents' consent was obtained. The sample of 98 children consists of 45 boys and 53 girls from 20 primary schools, including 2 schools for special education. The children had a mean age of almost 12 years at first interview. They are transferred to 14 different secondary schools.

Whether the sample loss caused a systematic bias on the second measurement was checked by a logistic regression test. The results of the test showed that, with one exception with a significance at the 5%-level, the children who did not fill in the second questionnaire did not differ on the observable characteristics included in the logistic regression from the children who did participate in the follow-up questionnaire. The exception concerns the children from special education. They more often filled out the questionnaire of the second wave than the children in the mainstream schools.

Lack of control by the researchers on the process during the second measurement would explain the decrease in the response rate. For the first measurement, the questionnaires are completed in class, under the supervision of the teacher. For the second measurement, the questionnaires were sent out via the home email address, so supervision may have been missing. Children from special education generally need and receive more support provided by their parents (Evangelou et al. 2008). Therefore we expect these parents have stimulated their child more to fill out the questionnaire than the parents of the children in the mainstream schools, leading to the significant difference in the share of children from special education schools in our sample.

The self-reporting questionnaire, designed for the research, is divided into two parts. The first part consists of three themes: school choice; preparing for secondary school and the role of the mentor. These themes are derived from a previous literature review (Van Rens et al. 2018). To get insight in the SDT theory with respect to children's experiences, the three basic psychological needs- competence, autonomy and relatedness- are processed as follows in the questionnaire.

In the literature the presence of old classmates, old friends from primary school or familiar children at secondary school is found to be very important for most children (Van Rens et al. 2018). The items that measure the need for the presence of familiar children at secondary school (Table 1) are related to the need for relatedness. This also applies to the role of the mentor (Table 3). The mentor has the job to take care of the children's well-being and to intervene if progress at school or children's well-being is wanting. Table 2 reports the extent to which children feel competent and able to handle autonomously in secondary school. The second part of the questionnaire consists of questions about the challenges and threats the children expect at secondary school. According to the SDT, challenges enhance the intrinsic motivation while threats are found to diminish intrinsic motivation. Challenges, in contrast to threats, offer opportunities for self-direction and therefore impact on autonomy and competence. We used the questionnaire "The Impending Transition to Secondary School Perceived as Challenge and Threat (ITCT)" (Sirsch 2003) because this questionnaire provides for the possibility to measure the perceived challenges and threats with regard to the transition. The questionnaire is translated and largely used.

All themes were used to assess children's opinions and to identify their strengths, interest and areas of need during the transition process. The themes refer to the children's needs for competence, autonomy and relatedness. The full questionnaires can be obtained via the corresponding author.

5 Results

Below we describe from a prospective as well as a retrospective viewpoint, per theme, the most important differences between the first and the second wave. Thereafter the results are summarised in terms of the SDT. The children answered the same questions before- and six weeks after the transition. The questionnaires are introduced twice in a different way. Before the transition the children are asked about their expectations and after the transition they are asked to look back on their experiences.

The results are presented in separate tables per theme. The Tables 1, 2, 3 and 4 present the mean scores per wave, for the total sample and for boys and girls separately. The extended tables including standard deviations and t-statistics can be found in the [Appendix](#).

5.1 School Choice

Because of the free school choice in the Netherlands parents and children compare schools before making a choice. Schools try to distinguish themselves by offering facilities, special classes or learning pathways. Table 1 shows the mean scores (by gender and for the total sample) before and after the transition, on 12 items that are relevant for the school choice. In the questionnaire, the children choose the three items

Table 1 The main reasons for school choice before and after the transition (share of pupils that chose each item)

	Pre transition (first wave)			Post transition (second wave)		
	Boys	Girls	Total	Boys	Girls	Total
The building	0.22	0.32	0.28	0.28	0.23	0.25
The distance	0.09	0.19	0.14	0.12	0.12	0.12
Classmates	0.20	0.13	0.16	0.28	0.13	0.20
Friends at the same school	0.27	0.23	0.24	0.30	0.31	0.31
Special classes (sport-dance-art-music)	0.09	0.15	0.12	0.07	0.12	0.09
Bilingual	0.02	0.06	0.04	0.02	0.02	0.02
Small school	0.16	0.04	0.09	0.09	0.04	0.06
Good guidance	0.62	0.68	0.65	0.70	0.60	0.64
I know somebody	0.51	0.47	0.49	0.33	0.50	0.42
Cycle with classmates	0.36	0.38	0.37	0.40	0.31	0.35
Education for special needs	0.04	0.04	0.04	0.07	0.04	0.05
Technasium/ technical education	0.09	0.04	0.06	0.07	0.02	0.04

that are most important to them (no ranking). The maximum mean score per item is 1 (1 = highly important), the minimum mean score is 0 (0 = highly unimportant).

The mean scores in Table 1 show that, before the transition, for 65% of the children a good guidance by the teachers at their new school, is the most important issue when they consider a secondary school. For almost half of the children it is important to know somebody at the new school. The children think it is important to go to the same school as their friends and classmates and to have someone to cycle to school with. In fact, 5% of the children do not go to the same school as their class mate(s) and 10% do not have a friend at secondary school (not included in the table). Whether a school is a bilingual school, or has education for children with special educational needs is found the least important by all children. The differences between the scores from the boys and the girls are only minor.

After the transition, all children ascribe more importance to classmates or friends going to the same school than they did before the transition. Once at secondary school, staying with their friends is more important than the children thought before. After the transition boys report that the presence of old classmates is more important and all children report higher mean scores on the item 'friends at the same school' However, these differences are not statistically significant.

Summarized in terms of SDT, before the transition nearly two thirds of the children report that they experience relatedness, in the sense of connectedness with the mentor and classmates, as the most important to consider in their school choice. After the transition the children do not change their mind. They even more appreciate the presence of friends.

5.2 Preparing for Secondary School

Table 2 shows the mean scores on 10 items about the extent to which children are prepared for secondary school. The children indicate all items that are applicable. The

maximum mean score per item is 1 (1 = highly important), the minimum mean score is 0 (0 = highly unimportant).

Table 2 shows that, in the preparation for secondary school, competence by means of school related tasks, such as workload and demands, receive the most attention at primary school. When children go to secondary school not only the school context but also the informal peer context will change. Surprisingly the changes in the social environment (learning how to make friends), receive little attention according to the children. After the transition the low mean score on this item even has decreased. The difference between the first and the second wave is not significant.

Girls seem to feel more competent and better prepared for secondary school than boys. They report after the transition to be better prepared for their homework, to do their work in time, and to have their material better in order, than they initially thought before the transition. After the transition the scores of boys on all items have decreased. There are no significant differences between mean results for boys and girls.

When comparing the pre- and post-transition wave, we do see significant differences. After the transition to secondary school the scores on the items 'work together' ($p = 0.00$), 'work independent' ($p = 0.00$), 'information' ($p = 0.05$) and 'practice cycling' ($p = 0.03$) decline significantly. When comparing the mean scores before and after the transition, paired by gender, the data also show significant differences. For all children the scores referred to competence and autonomy in the social context, 'work together' (girls $p = 0.00$; boys $p = 0.01$) and 'work independent' (girls $p = 0.03$; boys $p = 0.03$) significantly decline after the transition. For boys the scores on 'information' about secondary school ($p = 0.03$), referred to competence in the school context, also decline significantly. After the transition, children feel less well prepared to work together with school mates or to work independent. Boys afterwards experience that the information they received about secondary school was not as clear as they expected before the transition.

In terms of SDT children report, before as well as after the transition, they do not feel well prepared to handle autonomy and feel competent in the social context. While

Table 2 Used activities as a preparation for secondary school, op before and after the transition (share of pupils that chose each item)

	Pre transition (first wave)			Post transition (second wave)		
	Boys	Girls	Total	Boys	Girls	Total
Homework	0.82	0.72	0.77	0.81	0.85	0.83
Using calender	0.62	0.77	0.70	0.60	0.58	0.59
Work together	0.60	0.60	0.60	0.26	0.23	0.24
How to make friends	0.04	0.09	0.07	0.02	0.04	0.03
Work done on time	0.73	0.64	0.68	0.53	0.65	0.60
Stuff in good order	0.47	0.51	0.49	0.47	0.56	0.52
Work self regulating	0.69	0.72	0.70	0.47	0.52	0.49
Share information	0.64	0.58	0.61	0.49	0.52	0.51
Practice cycling	0.18	0.09	0.13	0.07	0.04	0.05
Meet with school	0.76	0.79	0.78	0.72	0.63	0.67

before the transition the scores already are low, after the transition they even are significantly lower. All children seem to feel competent to perform their school tasks autonomously, though the boys afterwards report to be informed significantly less well about secondary school than they thought they were before the transition.

5.3 The Mentor

Table 3 shows the mean scores on eight items about the mentor at secondary school. Children are asked to mark the three items they consider to be the most important. The maximum mean score per item is 1 (1 = highly important), the minimum mean score is 0 (0 = highly unimportant).

Table 3 shows that three items, referred to relatedness, are highly appreciated by both boys and girls. A mentor especially should be a nice person, who is accessible at school, and should be accessible for a good conversation. Boys' mean scores are, compared with girls, higher for 'is nice', while girls score higher on the items 'have a good conversation' and 'is present' at school. Girls score significantly higher on the item 'have a good conversation' than boys ($p = 0.000$).

Table 3 shows that, after the transition to secondary school, the children mention the same items as most important as before, although their priorities have shifted and their scores are more comparable between boys and girls. There are no significant differences between boys and girls. However, when considered per wave we do see significant differences on the items 'have a good conversation' ($p = 0.00$), and 'solve our problems' ($p = 0.02$) for the girls. Apparently afterwards girls attach more importance having their problems solved by the mentor than they assumed in advance. To have 'a good conversation with the mentor', becomes less important.

The SDT showed that a secure relational base is important for the expression of intrinsic motivation (Ryan and Deci 2000). Summarized in terms of SDT, with respect to their expectations of the mentor, girls as the boys are only occupied by the need for relatedness to the mentor. A mentor should be nice, accessible and helpful. The priorities the children mentioned before the transition did not change after the transition.

Table 3 Expectations about the mentor, before and after the transition (mean of pupils that mentioned this)

	Pre transition (first wave)			Post transition (second wave)		
	Boys	Girls	Total	Boys	Girls	Total
Is nice	0.69	0.51	0.59	0.52	0.53	0.53
Is present	0.51	0.64	0.58	0.52	0.55	0.54
Have a good conversation	0.42	0.77	0.61	0.57	0.51	0.54
Knowledge of school	0.16	0.06	0.10	0.12	0.06	0.09
Talking with parents	0.09	0.11	0.10	0.10	0.06	0.08
Solve our problems	0.40	0.36	0.38	0.40	0.53	0.47
Provide good atmosphere	0.31	0.32	0.32	0.38	0.43	0.41
Is our contact	0.36	0.21	0.28	0.33	0.25	0.29

5.4 The Formal and Social Context

Table 4 shows the mean scores on the 24 aspects of the transition in the social- and in the school context that children are concerned about, as well as to which aspects they are looking forward. The items are rated on a 4-points scale. The maximum average score per item is 4 (highly important), the minimum average score is 1 (highly unimportant).

Given the large number and the clear grouping of the items, the items are clustered into four subscales: 'fun at school', 'fun with peers', 'fear for school' and 'fear for peers'. To estimate the reliability, per subscale Cronbach's alpha's have been calculated. They are reported in Table 4. The subscales fun with peers (α 0.841), fear for school (α 0.801) and fear for peers (α 0.774) all have high reliabilities. However, the subscale fun at school (α 0.636) has lower reliability.

To measure the children's perception of the transition concerning well-being the items are clustered into two subscales: 'challenges/ fun' and 'threats/ fear'. For both subscales Cronbach's alpha's are calculated. They are reported in Table 4. The subscales 'challenges/ fun' (α 0.836) and 'threats/ fear' (α 0.826) have high reliabilities.

The SDT links challenges and threats, to intrinsic motivation. Challenges enhance the intrinsic motivation because they offer opportunities for self-direction, and create feelings of autonomy and competence. Threats, on the other hand, diminish intrinsic motivation. In response to social environments people experience differences in motivation and personal growth (Ryan and Deci 2000).

In this study, as the scores 'challenges' and 'threats' show, both before and after the transition, children are positive about the challenges and only a little concerned about the threats during the transition process. After the transition most scores decrease. Generally, afterwards, the children are less challenged and less concerned than they were before the transition. According to the SDT diminished challenges may indicate a decrease of intrinsic motivation.

The mean scores on the four subscales, show both before and after the transition no significant differences between the scores of the girls and the boys, although they put different emphasis. Girls are less looking forward to the challenges at secondary school and have more fear for secondary school than boys. The girls also have a higher mean score on the subscale fear for peers than the boys. On the other hand the girls expect to have more fun with their peers than the boys do. These findings are confirmed by the higher mean scores on the subscale challenges by the girls and their lower mean scores on the subscale threats.

Comparing the mean scores on the separate items by gender before the transition, we find that girls are significantly more worried than boys that they will not be able to find the classrooms ($p = 0.01$). Before the transition the girls are more worried than the boys that their new classmates will not like them, and that they might feel lonely, while the boys are more concerned to show what they have learned and that they perform well. Boys are less curious about the new subjects or the new teachers. The scores on the first wave show that, compared with girls, on the one hand boys look less forward to their new classmates but on the other hand they are less worried about the challenges in the social context. However, these differences are not statistically significant.

After the transition the scores on most items decrease. Finding their way around the school is also no longer an issue for the children. All children have become more afraid to perform poorly and girls have become more concerned about finishing their

Table 4 Threats and the challenges in the social- and the school context, before and after the transition; separately calculated and clustered pro subscale (4-point Likert scale 4= highly important, 1=not important; mean of pupils that mentioned this).

	Pre transition (first wave)			Post transition (second wave)		
	Boys	Girls	Total	Boys	Girls	Total
Challenges in the school context: I am looking forward to my secondary school because						
I can show what I have learned	2.71	2.60	2.65	2.71	2.61	2.66
I will learn new things	3.29	3.25	3.27	3.05	3.25	3.16
I am curious about new subjects	2.95	3.15	3.06	2.95	2.80	2.87
I can show I perform well	3.02	2.87	2.94	2.86	2.94	2.90
I quickly will know the way	2.98	2.90	2.94	3.26	3.04	3.14
I like different classrooms	2.74	2.92	2.84	2.79	2.78	2.78
Subscale 'fun at school': α 0.636	15.40	15.25	15.32	15.29	15.11	15.32
Challenges in the social context: I am looking forward						
to meet nice children to deal with	3.10	3.31	3.21	3.12	3.20	3.16
to have fun with the other children	3.17	3.37	3.28	3.15	3.22	3.19
to kids who will like me	3.00	3.00	3.00	2.98	2.98	2.98
to know many nice children	3.17	3.27	3.22	3.02	3.22	3.13
to get into a nice group	3.33	3.46	3.40	3.24	3.28	3.26
to the different teachers	2.74	2.98	2.87	2.85	2.84	2.85
Subscale 'fun with peers': α 0.841	16.21	16.90	16.59	15.98	16.37	16.19
Subscale 'challenges'/ 'fun': α .836	36.19	37.07	36.68	35.90	36.18	36.05
Threats in the school context: I am worried						
I will not understand the lessons	1.76	1.98	1.88	1.71	1.74	1.73
I cannot finish the schoolwork	1.76	1.81	1.79	1.61	1.84	1.74
my planning will be bad	1.90	1.88	1.89	1.56	1.74	1.66
to perform worse	1.52	1.65	1.60	1.56	1.68	1.63
to get lost in the building	1.57	1.88	1.74	1.22	1.26	1.24
I cannot find the classrooms	1.64	2.10	1.89	1.27	1.48	1.38
Subscale 'fear for school': α 0.801	8.79	9.56	9.21	7.86	8.50	8.21
Threats in the social context: I am worried						
classmates will not like me	1.49	1.65	1.58	1.32	1.44	1.38
I may find no nice friends	1.26	1.29	1.27	1.15	1.34	1.25
to find nobody in the breaks	1.26	1.29	1.27	1.15	1.26	1.21
the children are bullying me	1.28	1.37	1.33	1.12	1.28	1.21
I might feel lonely	1.21	1.40	1.32	1.12	1.20	1.16
I will not be accustomed to teachers	1.95	1.96	1.96	1.68	1.66	1.67
Subscale 'fear for peers': α 0.774	6.81	7.32	7.09	6.13	6.79	6.49
Subscale 'threats'/ 'fear': α .826	18.59	20.26	19.52	16.46	17.92	17.26

schoolwork. After the transition, girls are significantly more worried that they might not find friends than boys ($p = 0.05$). Compared with the first wave, the boys appreciate it more to be taught by different teachers in different classrooms with nice children.

After the transition, all children are significantly less curious about the new subjects ($p = 0.04$), they have become significantly less afraid they cannot find their classrooms ($p = 0.00$), get lost in the building ($p = 0.00$) or might feel lonely ($p = 0.01$). After the transition, the children are significantly more accustomed to their teachers ($p = 0.00$) than they expected before the transition.

Besides similarities about getting lost in the building and finding the classrooms we also see some significant differences by gender. Boys score after the transition significant lower on bad planning ($p = 0.05$), and girls have become less curious about new subjects ($p = 0.01$), less afraid that they will not understand the lessons ($p = 0.02$), less afraid that classmates will not like them ($p = 0.01$) and more accustomed to their teachers ($p = 0.01$).

6 Discussion and Conclusion

The present study is based on the theoretical assumptions of the Self-Determination Theory (Ryan and Deci 2000). According to the SDT the fulfilment of the need for autonomy, competence and relatedness is essential for motivation and for people's optimal functioning as well as for their social development and personal well-being. With active child participation we found a way to meet children's need for competence, autonomy and relatedness during the transition process.

This study has investigated boys' and girls' perceptions and experiences about the transition to secondary school before and after the transition. It examined how children experience the preparation for secondary school, and what their priorities are with respect to their school choice. There also is looked at expectations about the mentor and about the threats and challenges in the new social- and school context.

At the end of primary school, most children have a positive perception about the transition to secondary school. According to the children the environmental context has the strongest effect on the school transition. This finding is confirmed by Anderson et al. (2000). The SDT is consistent with the perceptions the children report. Ryan and Deci find especially social contexts cause differences in motivation and in personal growth between persons (Ryan and Deci 2000). The children are particularly interested in the social environment, which is in contrast with the (mostly school related) aspects they are prepared for at primary school. Their initial priorities when choosing a secondary school are a good guidance by their future teachers, the opportunity to bicycle to secondary school with classmates, and making the transition with friends or children they know. Girls report more pre-transition concerns about the school context and mixed feelings about the social context. Nevertheless, they are more optimistic about their future classmates than the boys. Before the transition, boys are more interested in the new things they will learn at secondary school (in a competitive way), the possibility to show what they already have learned at primary school and to show that they can perform well.

All children expect their new mentor to be a nice person, who is present at secondary school when you need him or her and to be competent and available for a good conversation with the pupils. Girls appreciate significantly more than boys to have the opportunity to talk with their mentor. This is confirmed by the literature where girls are found to have more positive attitudes towards schools and teachers (Rice et al.

2011) and perceive more support (Bokhorst et al. 2009). Nevertheless, the boys in our sample also score high on this item as well.

In line with previous research (Anderson et al. 2000; Rice et al. 2011; West et al. 2010) after eight weeks at secondary school most children have successfully coped with the transition and have found their way around school. The majority of the sample is less anxious and less worried about the challenges the transition involves than before. As confirmed by Sirsch (2003), having friends at the same school becomes important for all children, especially after the transition. Once at secondary school, the children realise they have underestimated the importance of the social-emotional aspects on the transition and are not sufficiently prepared for making friends and cooperating with classmates. The latter significantly differs with the expectations beforehand. In general, girls are still concerned, just like before the transition. Zeedijk et al. (2003), explain this as a mismatch between the fear children experience and the lack of skills they need to address this fear, i.e. a lack of social-emotional skills.

Overall, we conclude that children mostly focus on the social emotional aspects of the transition. They do not feel sufficiently prepared to cope successfully with the social environmental challenges during the transition. Zeedijk et al. (2003) found that children whose coping skills are not empowered will depend on others. We also find that the lack of coping skills in the social environment makes children dependent on support from their mentor, the key person in the transition process. This may explain why children emphasize the importance of good guidance at secondary school. Unfortunately for them, only little support is provided by teachers at secondary school (Martínez et al. 2011).

According to the SDT especially social contexts cause differences between children's motivation and personal growth and the children report they agree with this. During the transition process children are concerned about the social context, especially about the continuity of their peer group relations and friendships. Conditions that foster children's need for competence, autonomy and relatedness can contribute to the design of a social context that optimizes children's development, performance and well-being (Ryan and Deci 2000). All partners in the transition process can support this conditions. Both primary and secondary schools can help children by taking into account children's perspectives in their preparation for secondary school and in their guidance at secondary school. Children, especially girls, should be learned how to cope with broken and new friendships. Empowering coping skills related to the social environment will make all children less dependent on external support and more competent to handle autonomy the new challenges prior, during and after the transition process.

By being well briefed and asking the children for feedback about their transition process, the mentor at secondary school can support the children who experience adjustment problems. To make them feel more competent and give them more autonomy, the mentor can use and evaluate the information from the children to improve the pedagogical practice to keep the children motivated.

This study has some limitations. The relatively small sample size of this study may limit the generalisability of the findings to other populations. The study is also limited due to the regional bound location of the schools. A larger scale study, involving a range of schools is required for further explore the results.

Appendix

Table 5 Logistic regression

		<i>p</i>	<i>B</i>
	Gender (1)	0.155	-0.348
	Age	0.408	-0.206
Primary schooltype	SBO (special education)	0.046	1.409
Secondary schooltype	VMBO	0.112	-0.820
	HAVO	0.431	-0.434
	VWO	0.475	-0.379
	PrO	0.272	1.396
	Constant	0.588	1.647

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 6 Extended tables including standard deviations and t-statistics. School choice

School choice	N = 98	First wave				Second wave				Wave 2-1			
		Mean	SD	t	p	Mean	SD	t	p	Mean	SD	t	p
What is important?													
The building	45	0.22	0.42	-1.09	0.28	0.45	0.53	0.59	0.07	0.46	1.87	0.07	0.07
Girl N=	53	0.32	0.47		0.23	0.43			-0.10	0.41			0.22
The distance		0.09	0.29	-1.44	0.12	0.32	0.01	0.99	0.02	0.34	1.22	0.22	0.22
Boy		0.19	0.40		0.12	0.32			-0.08	0.44			0.50
Girl		0.20	0.41	0.90	0.28	0.45			0.07	0.55	0.68	0.50	0.50
Classmates		0.13	0.34	0.46	0.13	0.35	1.72	0.09	0.00	0.44	-0.53	0.60	0.60
Boy		0.27	0.45		0.30	0.47	-0.06	0.96	0.02	0.56			0.60
Girl		0.23	0.42		0.31	0.47			0.08	0.44			0.75
Friends at the same school		0.09	0.29	-0.93	0.07	0.26	-0.75	0.46	-0.02	0.15	0.32	0.75	0.75
Special classes		0.15	0.36		0.12	0.32			-0.04	0.28			0.75
(sport-dance-art-music)		0.02	0.15	-0.85	0.02	0.15	0.14	0.89	0.00	0.00			0.16
Bilingual school		0.06	0.23		0.02	0.14			-0.04	0.19	1.43	0.16	0.16
Small school		0.16	0.37		0.09	0.29			-0.05	0.21	-1.10	0.27	0.27
Boy		0.04	0.19	1.94	0.04	0.19	1.04	0.30	0.00	0.20			0.16
Girl		0.62	0.49	-0.59	0.70	0.47			0.09	0.53	1.42	0.16	0.16
Good guidance		0.68	0.47		0.60	0.50	1.03	0.31	-0.08	0.62			0.16
Boy		0.51	0.51	0.39	0.33	0.47			-0.16	0.69	-1.37	0.18	0.18
Girl		0.47	0.50		0.50	0.51	-1.73	0.09	0.02	0.61			0.18
I know somebody		0.36	0.48	-0.22	0.40	0.50	0.89	0.38	0.02	0.60	0.85	0.40	0.40
Boy		0.38	0.49		0.31	0.47			-0.08	0.55			0.40
Girl		0.04	0.21	0.17	0.07	0.26	0.68	0.50	0.02	0.27	0.08	0.94	0.94
I can cycle with classmates		0.04	0.19		0.04	0.19			0.02	0.24			0.94
Boy		0.09	0.29		0.07	0.26			-0.02	0.27	-0.10	0.93	0.93
Girl		0.04	0.19	1.02	0.02	0.14	1.16	0.25	-0.02	0.14	-0.10	0.93	0.93
Education for special needs		0.04	0.21		0.07	0.26			-0.02	0.27			0.93
Boy		0.04	0.19		0.04	0.19			-0.02	0.27			0.93
Girl		0.09	0.29		0.07	0.26			-0.02	0.27			0.93
Boy		0.04	0.19		0.02	0.14			-0.02	0.14			0.93
Girl		0.04	0.19		0.02	0.14			-0.02	0.14			0.93

*p < 0.05; **p < 0.01; ***p < 0.00

Table 7 School choice

Paired Samples Test: Total group first wave- second wave; boys wave 1-2; girls wave1-2

School choice		Mean	SD	t	p	Mean	SD	t	p	Mean	SD	t	p				
What is important?																	
Pair 1	The building	0.02	0.44	0.47	0.64	Boy	Pair 1	-0.07	0.46	-1.00	0.32	Girl	Pair 1	0.10	0.41	1.70	0.10
Pair 2	The distance	0.03	0.40	0.77	0.44	Pair 2	Pair 2	-0.02	0.34	-0.44	0.66	Pair 3	Pair 2	0.08	0.44	1.27	0.21
Pair 3	Classmates	-0.03	0.49	-0.62	0.53	Pair 3	Pair 3	-0.07	0.55	-0.83	0.41	Pair 4	Pair 3	0.00	0.44	0.00	1.00
Pair 4	Friends at the same school	-0.05	0.49	-1.04	0.30	Pair 4	Pair 4	-0.02	0.56	-0.27	0.79	Pair 5	Pair 4	-0.08	0.44	-1.27	0.21
Pair 5	Special classes (sport-dance-art-music)	0.03	0.23	1.35	0.18	Pair 5	Pair 5	0.02	0.15	1.00	0.32	Pair 6	Pair 5	0.04	0.28	1.00	0.32
Pair 6	Bilingua school	0.02	0.14	1.42	0.16	Pair 6	Pair 6					Pair 7	Pair 6				
Pair 7	Small school	0.02	0.21	1.00	0.32	Pair 7	Pair 7	0.05	0.21	1.43	0.16	Pair 8	Pair 7	0.00	0.20	0.00	1.00
Pair 8	Good guidance	0.00	0.58	0.00	1.00	Pair 8	Pair 8	-0.09	0.53	-1.16	0.25	Pair 9	Pair 8	0.08	0.62	0.89	0.38
Pair 9	I know somebody	0.06	0.65	0.95	0.35	Pair 9	Pair 9	0.16	0.69	1.55	0.13	Pair 10	Pair 9	-0.02	0.61	-0.23	0.82
Pair 10	I can cycle with classmates	0.03	0.57	0.54	0.59	Pair 10	Pair 10	-0.02	0.60	-0.26	0.80	Pair 11	Pair 10	0.08	0.56	1.00	0.32
Pair 11	Education for special needs	-0.02	0.25	-0.82	0.42	Pair 11	Pair 11	-0.02	0.27	-0.57	0.57	Pair 12	Pair 11	-0.02	0.24	-0.57	0.57
Pair 12	'technasium'/ 'techniekroute'	0.02	0.21	1.00	0.32	Pair 12	Pair 12	0.02	0.27	0.57	0.57		Pair 12	0.02	0.14	1.00	0.32

p* < 0.05; *p* < 0.01; ****p* < 0.001

Table 8 Preparing for secondary school

	First wave		Second wave				Wave 2-1						
	N=98	Mean	SD	t	p	Mean	SD	t	p	Mean	SD	t	p
How are you prepared?													
Homework	Boy N= 45	0.82	0.39			0.81	0.39	-.413	.680	-0.02	0.51	-1.48	0.14
	Girl N= 53	0.72	0.46	1.24	0.22	0.85	0.36			0.13	0.53		
Using calendar	Boy	0.62	0.49			0.60	0.50	.271	.787	0.00	0.76	1.36	0.18
	Girl	0.77	0.42	-1.62	0.11	0.58	0.50			-0.19	0.63		
Work together	Boy	0.60	0.50	-0.04	0.97	0.26	0.44	.281	.780	-0.37	0.66	-0.05	0.96
	Girl	0.60	0.49			0.23	0.43			-0.37	0.56		
How to make friends	Boy	0.04	0.21	-0.95	0.34	0.02	0.15	-.418	.677	-0.02	0.27	0.52	0.61
	Girl	0.09	0.30			0.04	0.19			-0.06	0.37		
Work done on time	Boy	0.73	0.45			0.53	0.51	-1.174	.243	-0.19	0.73		
	Girl	0.64	0.48	0.98	0.33	0.65	0.48			0.02	0.61	-1.47	0.15
Stuff in good order	Boy	0.47	0.51	-0.42	0.68	0.47	0.51	-.893	.374	0.00	0.65	-0.45	0.66
	Girl	0.51	0.51			0.56	0.50			0.06	0.61		
To work independent	Boy	0.69	0.47	-0.30	0.76	0.47	0.51	-.520	.604	-0.23	0.68	-0.30	0.77
	Girl	0.72	0.46			0.52	0.51			-0.19	0.63		
Information	Boy	0.64	0.48	0.60	0.55	0.49	0.51	-.296	.768	-0.19	0.55	-0.85	0.40
	Girl	0.58	0.50			0.52	0.51			-0.08	0.68		
Practice cycling	Boy	0.18	0.39			0.07	0.26	.675	.502	-0.12	0.39	-0.75	0.45
	Girl	0.09	0.30	1.18	0.24	0.04	0.19			-0.06	0.37		
Meet with school	Boy	0.76	0.44	-0.43	0.67	0.72	0.45	.887	0.38	-0.05	0.62	0.88	0.38
	Girl	0.79	0.41			0.63	0.49			-0.15	0.57		

p* < 0.05; *p* < 0.01; ****p* < 0.001

Table 9 Preparing for secondary school

Paired Samples Test: Total group wave1-2; boys wave1-2; girls wave 1-2																
Preparing for secondary school																
How are you prepared?	Mean	SD	t	p	Boy	Mean	SD	t	p	Mean	SD	t	p			
Pair 1	Homework	-0.06	0.52	-1.18	0.24	Pair 1	0.02	0.51	0.30	0.77	Pair 1	-0.14	0.53	-1.85	0.07	
Pair 2	Using callendar	0.11	0.69	1.48	0.14	Pair 2	0.00	0.76	0.00	1.00	Girl	Pair 2	0.19	0.63	2.21	0.03*
Pair 3	Work together	0.37	0.60	5.96	0.00***	Pair 3	0.37	0.66	3.72	0.00***	Pair 3	0.37	0.56	4.70	0.00***	
Pair 4	How to make friends	0.04	0.32	1.27	0.21	Pair 4	0.02	0.27	0.57	0.57	Pair 4	0.06	0.37	1.14	0.26	
Pair 5	Work done on time	0.07	0.67	1.07	0.29	Pair 5	0.19	0.73	1.67	0.10	Pair 5	-0.02	0.61	-0.23	0.82	
Pair 6	Stuff in good order	-0.03	0.63	-0.49	0.62	Pair 6	0.00	0.66	0.00	1.00	Pair 6	-0.06	0.61	-0.69	0.50	
Pair 7	To work independent	0.21	0.65	3.15	0.00***	Pair 7	0.23	0.68	2.23	0.03*	Pair 7	0.19	0.63	2.21	0.03*	
Pair 8	Information	0.13	0.62	1.98	0.05*	Pair 8	0.19	0.55	2.24	0.03*	Pair 8	0.08	0.68	0.81	0.42	
Pair 9	Practice cycling	0.08	0.38	2.18	0.03*	Pair 9	0.12	0.39	1.95	0.06	Pair 9	0.06	0.37	1.14	0.26	
Pair 10	Meet the new school	0.11	0.59	1.73	0.09	Pair 10	0.05	0.62	0.50	0.62	Pair 10	0.15	0.57	1.94	0.06	

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

Table 10 Mentor

First wave	N = 98	Second wave		t	p	Wave 2-1		t	p
		Mean	SD			Mean	SD		
What do you expect?									
Is nice	Boy N= 45 Girl N= 53	0.69 0.51	0.47 0.51	1.82	0.07	0.52 0.53	0.51 0.50	-0.05	0.96
Is present	Boy Girl	0.51 0.64	0.51 0.48	-1.30	0.20	0.52 0.55	0.51 0.50	-0.24	0.81
Have a good conversation	Boy Girl	0.42 0.77	0.50 0.42	-3.72	0.00***	0.57 0.51	0.50 0.51	0.59	0.56
Knowledge of school	Boy Girl	0.16 0.06	0.37 0.23	1.56	0.12	0.12 0.06	0.33 0.24	1.00	0.32
Talking with parents	Boy Girl	0.09 0.11	0.29 0.32	-0.39	0.70	0.10 0.06	0.30 0.24	0.66	0.51
Solve our problems	Boy Girl	0.40 0.36	0.50 0.48	0.42	0.68	0.40 0.53	0.50 0.50	-1.19	0.24
Provide good atmosphere	Boy Girl	0.31 0.32	0.47 0.47	-0.10	0.92	0.38 0.43	0.49 0.50	-0.49	0.63
Is our contact	Boy Girl	0.36 0.21	0.48 0.41	1.62	0.11	0.33 0.25	0.48 0.44	0.82	0.41

p* < 0.05; *p* < 0.01; ****p* < 0.001

Table 11 Mentor

Paired Samples Test: Total group wave 1- wave 2; boys wave 1-2; girls wave1-2

Mentor		Mean	SD	t	p	Gender	Mean	SD	t	p	gender	Mean	SD	t	p		
What do you expect?		Mean	SD	t	p	Gender	Mean	SD	t	p	gender	Mean	SD	t	p		
Pair 1	Is nice	0.07	0.59	1.06	0.29	Boy	Pair 1	0.17	0.62	1.74	0.09	Pair 1	-0.02	0.55	-0.26	0.80	
Pair 2	Is present	0.04	0.67	0.62	0.54		Pair 2	-0.02	0.72	-0.22	0.83		Pair 2	0.10	0.64	1.09	0.28
Pair 3	Have a good conversation	0.09	0.70	1.18	0.24		Pair 3	-0.12	0.77	-1.00	0.32		Pair 3	0.26	0.60	3.06	0.00***
Pair 4	Knowledge of school	0.02	0.42	0.50	0.62		Pair 4	0.05	0.54	0.57	0.57		Pair 4	0.00	0.28	0.00	1.00
Pair 5	Talking with parents	0.01	0.38	0.28	0.78		Pair 5	-0.05	0.38	-0.81	0.42		Pair 5	0.06	0.37	1.14	0.26
Pair 6	Solve our problems	-0.11	0.63	-1.64	0.11		Pair 6	0.00	0.70	0.00	1.00		Pair 6	-0.20	0.57	-2.47	0.02*
Pair 7	Provide good atmosphere	-0.09	0.67	-1.24	0.22		Pair 7	-0.07	0.71	-0.65	0.52		Pair 7	-0.10	0.64	-1.09	0.28
Pair 8	Is our contact	-0.01	0.63	-0.16	0.87		Pair 8	0.02	0.68	0.23	0.82		Pair 8	-0.04	0.60	-0.47	0.64

* $p < 0.05$; ** $p < 0.01$; *** $p <$

Table 12 Context

Context	N	Mean	SD	First wave		Second wave		Wave 2-1		t	p
				t	p	Mean	SD	Mean	SD		
To show what I have learned	Boy N=	2.71	0.71	0.72	0.47	2.71	0.74	-0.05	1.02	-0.34	0.74
	Girl N=	2.60	0.85	0.28	0.78	2.61	0.92	0.02	0.96	-0.34	
Learn new things	Boy	3.29	0.55			3.05	0.83	-0.26	0.91		
	Girl	3.25	0.65			3.25	0.69	0.00	0.76		
Curious about new subjects	Boy	2.95	0.83	-1.24	0.22	2.95	0.83	-0.03	0.90	1.61	0.16
	Girl	3.15	0.75			2.80	0.85	-0.32	0.82		0.11
Show I am good	Boy	3.02	0.60	1.17	0.24	2.86	0.72	-0.26	0.91	-1.92	0.06
	Girl	2.87	0.69			2.94	0.71	0.10	0.84		
Quickly know the way	Boy	2.98	0.84	0.40	0.69	3.26	0.77	0.26	0.97	0.45	0.65
	Girl	2.90	0.89			3.04	0.85	0.16	1.02		
Nice: different classrooms	Boy	2.74	0.80	-1.01	0.32	2.79	0.93	0.00	0.76		
	Girl	2.92	0.95			2.78	0.83	-0.12	1.08	0.61	0.54
Nice children to deal with	Boy	3.10	0.69	-1.50	0.14	3.12	0.64	0.00	0.70	0.39	0.70
	Girl	3.31	0.67			3.20	0.64	-0.06	0.75		
Have fun with the kids	Boy	3.17	0.62	-1.46	0.15	3.15	0.69	-0.05	0.73	0.29	0.78
	Girl	3.37	0.69			3.22	0.68	-0.10	0.85		
Kids do like me	Boy	3.00	0.70	0.00	1.00	2.98	0.69	0.00	0.81	-0.11	0.92
	Girl	3.00	0.71			2.98	0.82	0.02	0.97		
To know many nice children	Boy	3.17	0.76	-0.71	0.48	3.02	0.69	-0.11	0.89	-0.36	0.72
	Girl	3.27	0.63			3.22	0.68	-0.04	0.76		
Get into a nice group	Boy	3.33	0.65	-1.01	0.31	3.24	0.66	-0.11	0.86	0.44	0.66
	Girl	3.46	0.58			3.28	0.67	-0.18	0.78		
Different teachers	Boy	2.74	0.73	-1.54	0.13	2.85	0.82	0.16	0.79	1.65	0.10
	Girl	2.98	0.78			2.84	0.82	-0.12	0.78		

Table 12 (continued)

Context	N	First wave		Second wave		Wave 2-1		p					
		Mean	SD	t	p	Mean	SD		t	p			
Do not understand lessons	Boy	1.76	0.48	-1.55	0.12	1.71	0.72	-0.23	0.82	0.03	0.72	1.82	0.07
	Girl	1.98	0.80			1.74	0.66			-0.27	0.76		
Not finish schoolwork	Boy	1.76	0.58	-0.31	0.76	1.61	0.67	-1.55	0.13	-0.08	0.85	-0.64	0.53
	Girl	1.81	0.79			1.84	0.74			0.04	0.89		
Bad planning	Boy	1.90	0.69	0.13	0.90	1.56	0.63	-1.12	0.27	-0.26	0.79	-0.79	0.43
	Girl	1.88	0.83			1.74	0.85			-0.10	1.05		
Worse performance	Boy	1.52	0.55	-0.90	0.37	1.56	0.78	-0.72	0.47	0.05	0.87	0.06	0.95
	Girl	1.65	0.79			1.68	0.79			0.04	0.96		
To get lost in the building	Boy	1.57	0.70	-1.74	0.09	1.22	0.42	-0.40	0.69	-0.37	0.82	1.39	0.17
	Girl	1.88	0.98			1.26	0.53			-0.65	1.03	1.43	
Can not find classrooms	Boy	1.64	0.69	-2.66	0.01**	1.27	0.45			-0.39	0.75	1.09	0.28
	Girl	2.10	0.91			1.48	0.68	-1.78	0.08	-0.61	1.04		
Classmates do not like me	Boy	1.49	0.86	-1.11	0.27	1.32	0.61	-1.06	0.29	-0.05	0.86	1.12	0.27
	Girl	1.65	0.59			1.44	0.50			-0.22	0.59		
May find no nice friends	Boy	1.26	0.58	-0.31	0.76	1.15	0.42			-0.08	0.53	-1.02	0.31
	Girl	1.29	0.46			1.34	0.52	-1.96	0.05*	0.04	0.54		
Nobody in the breaks	Boy	1.26	0.66	-0.26	0.80	1.15	0.53	-1.12	0.27	-0.05	0.76	-0.21	0.84
	Girl	1.29	0.57			1.26	0.44			-0.02	0.63		
Children are bullying me	Boy	1.28	0.70	-0.63	0.53	1.12	0.40			-0.08	0.66	0.19	0.85
	Girl	1.37	0.63			1.28	0.50	-1.68	0.10	-0.10	0.59		
I might feel lonely	Boy	1.21	0.56			1.12	0.40	-0.92	0.36	-0.05	0.46	1.44	0.15
	Girl	1.40	0.63	-1.59	0.12	1.20	0.40			-0.20	0.54		
Accustomed to teachers	Boy	1.95	0.72	-0.06	0.96	1.68	0.69	0.17	0.87	-0.26	0.94	0.27	0.79
	Girl	1.96	0.66			1.66	0.63			-0.31	0.77		

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$

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