Interrelation Between Close Teacher-Student Relationships and Engagement: The Case of Finnish Preschools

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ABSTRACT


The study examined the interrelation between positive teacher-student relationships and teacher-reported level of engagement in Finnish preschool settings. Fifty preschool teachers working in Jyväskylä city area answered questionnaires in which they described 50 randomly selected students from their class (28 girls and 22 boys), one student for each teacher. Questionnaires consisted of two parts and measured the quality of teacher-child relationships and the level of children’s emotional and behavioural engagement. The results showed that quality of teacher-child relationships in the context of Finnish preschools is closely interrelated with the level of children’s engagement into the learning process. In other words, relationships high in closeness are characterized by significantly higher level’s of student engagement and vise versa. Gender of students, however, hasn’t been proven to have a significant influence on either relationships with teachers or engagement level.

Keywords: early childhood education; teacher-child relationships; engagement; preschool; kindergarten; Finland
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INTRODUCTION

Finnish educational system is a world acknowledged model of effective academic performance. As any complex system is involves numerous factors: curriculum, school norms and regulations, assessment etc. In the current research paper we will concentrate on emotional domain of teacher-child relationships starting as early as preschool. Vast number of researches indicate that preschool experiences keep influencing children’s lives for the entire period of school-time (Hamre & Pianta, 2001; DiLalla, Marcus, & Wright-Phillips, 2004; Jerome, Hamre, & Pianta, 2009) or even lifetime. It has been found though that after fifth grade, both dimensions of teacher-child relationships – conflict and closeness – begin to decline. The most probable reason can be significantly reduced amount of time spent in interactions with teachers since students have to change classroom for every new subject. And that is exactly why we are examining kindergarten (preschool) relationships between teachers and children as one of defining factors in relation to early childhood engagement.

Theoretical generalization of data on the field of teacher-student relationships shows that teachers have the opportunity to support the academic and social development of students at all levels of their education (Baker, 2006). It is known that a positive relationship between teacher and student allows students to feel psychologically secure in school educational environment, providing favourable conditions for the development of important social and academic skills (Baker, 2006; O’Connor, Dearing, & Collins, 2010; Silver, Measelle, Armstrong, & Essex, 2005). Besides, positive relationships with teachers contribute to the process of active social-emotional development of students, which includes peer relationships and development of self-esteem (Hughes & Kwok, 2006). In positive relationships with teachers students learn about proper behaviour, relevant rules and regulations adopted by society, and also form their own views on academic achievement (Hughes, Luo, Kwok, & Loyd, 2008).

It is important to note that according to the National Longitudinal Study of Adolescent Health, students who have close relationships with their teachers demonstrate lower rates of emotional exhaustion, suicidal ideation, suicidal behaviour, violence and drug addiction (Rey, Smith, Yoon, Somers, & Barnett, 2007). Thus, a positive relationship in the "teacher-student" domain is a form of relationships that, according to researchers, is characterized by mutual recognition, understanding, warmth,
intimacy, trust, care, cooperation and open communication (Pianta, 1998). Besides, positive relationship between teacher and student include showing respect, courtesy, and the division of responsibilities, which in turn allows students to be aware of their own importance in the class (Parsley & Corcoran, 2003).
2 TEACHER-STUDENT RELATIONSHIPS

2.1 Attachment theory

A vast number of researchers investigating on the issue of teacher-child relationships are framing their researches by theory of attachment (Buyse, Verschueren, & Doumen, 2010; Thijis & Koomen, 2008; Davis, 2003; Hamre & Pianta, 2001). Attachment theory originates from the work of John Bowlby (1982) and provides a descriptive framework for explaining human relationships from psychological, evolutionary and ethological point of view. In order to explain early attachments Bowlby revised numerous of other theories including control systems theory, evolutionary biology, ethology, cognitive psychology and, most importantly, psychoanalysis. Some preparatory papers on this issue were dated 1958 but the first official publication of the theory happened in 1969 in the book “Attachment and loss”. Since then attachment theory has become one of the leading approaches to understanding early social development of children and cause a true explosion of researches in the field of early childhood.

There are empirical studies showing an interrelation between a quality of attachment and cognitive abilities of the child (Song & Hattie, 1984; Yli-Luoma & Luoma, 1990). Children who experienced a reliable and secure attachment to their mothers at an early stage demonstrate the most advanced cognitive ability. Children deprived from such an attachment were experiencing some (sometimes very significant) difficulties in their cognitive development. Researchers explain this phenomenon in the following way: children with contradictory and ambivalent attachment dedicate all their energy to establish a stronger personal ties with a teacher (which could potentially substitute for the lack of a warm relationship with the mother) and that, in turn, prevents them from developing cognitive ability and exploratory behaviour.

Rejected children with anxious and insecure attachment quality generally tend to avoid any contact with the teacher, skip the classes, manifest high level of insecurity themselves and have no cognitive interests. In order to overcome these personal strains and contribute to the cognitive development of the child teacher must become “the attachment figure who is emotionally available and responsive” (Bowlby, 1982, p. 11) and to some extent compensate for the lack of family support. This attachment is an
indispensable condition for the cognitive development of the child and his adequate self-concept at school (Song & Hattie, 1984; Yli-Luoma & Luoma, 1990).

Research conducted by Buyse, Verschueren, & Doumen (2010) proves this point stating that “when relationships with teachers are close, children who are not attached to their mothers in a quality way, are out of significantly bigger risk for aggressive behaviour” (Buyse, Verschueren, & Doumen, 2010, p. 45). Therefore, teacher’s readiness to form warm relationships with students might serve as a protective factor for at-risk children. Out of all the qualities it is teacher’s sensitivity that helps those children to form close relationships. (Buyse, Verschueren, & Doumen, 2010). On the other hand, there is an opinion that children’s attachment to their teacher is not a substitute but the “extensions of parent-child relationship” (Davis, 2003, p. 209).

Emotional security, a key concept of attachment theory, was examined in the study of Thijs & Koomen (2008). Findings indicate that teacher’s support “shared a strong, positive link with children’s emotional security” (Thijs & Koomen, 2008, p. 191). This finding reaffirmed the notion that teachers can serve children as secondary attachment figures and provide emotional support in times of stress. Mediated by the effect of emotional security, teachers’ support also enhances task engagement of children (the effect that will be examined in the current research paper). Along with that, “children who displayed more emotional security showed more task persistence and also more independence” (Thijs & Koomen, 2008, p. 192).

STRS (Student-Teacher Relationship Scale), which will be used as a relationship quality measurement in the current research paper, was also derived from the attachment model (Pianta, 2001). The main advantage of this scale in light of the current research is the fact that it proved its’ validity in numerous researches on preschool children. Hamre & Pianta, (2001) in their research “Early trajectory of children’s school outcomes through eighth grade” introduce three dimensions of teacher—students relationships derived from attachment theory: closeness, conflict and dependency (Hamre & Pianta, 2001). Research has shown that third dimension, dependency, can be considered positive in the cases of cooperative participation and task-involvement so it was excluded from our instrument as not monosemantic.

To sum up, researchers who developed Bowlby’s attachment theory, view warm and supportive relationships with secondary caregiver (teacher in our case) as crucial in building children’s sense of security which, in its’ turn helps, them to actively engage
and participate in classroom activities (Buyse, Verschueren, & Doumen, 2010; Thijs & Koomen, 2008).

2.2 What makes a good teacher?

In general, favourable relationships between teacher and student stimulate and support child facing school requirements and rules of school life. In turn, negative attitude towards "teacher-student" system causes feelings of insecurity in the school environment and prevents children’s attempts to cope with school requirements (Howes, Matheson, & Hamilton, 1994; Rey, Smith, Yoon, Somers, & Barnett, 2007). In order to get more information on the nature of teacher-student relationships Julia Wilkins studied the behaviour of teachers and children in 8 large urban high schools with the purpose of identifying different types of teachers’ behaviour that promote formation of positive relationships in "teacher-student" domain (Wilkins, 2006). 274 students took part in the survey.

Analysis of the qualitative interview data, revealed 55 types of teachers’ behaviour, contributing to the formation of positive relationships between teachers and students, as reported by the latter. Varimax rotation was used in order to structure the material. As a result of factorization, seven basic factors defining a desirable teacher were revealed: 1) "providing academic and personal support for students"; 2) "showing concern for and interest in students"; 3) "motivating students and attending to their personal interests"; 4) "treating students with respect"; 5) "being compassionate to students"; 6) "being accessible to students"; 7) 'understanding and valuing students’ opinions and feelings" (Wilkins, 2006). Each of the seven factors in its turn consisted of a number of items (e.g. “explain things when I’m confused”, “be truly interested in me”, “have a sense of humour” etc.) Six level Likert-scale was used as a measuring instrument. After summing up all the subvariables with highest mean value, the following behaviours of teachers were seen by students as contributing to the formation of positive relationships. First, the teacher demonstrates care and concern, makes and effort to get to know his students better, talks to students outside of class, listens to their problems and encourages them. Second of all, teacher should always be ready to provide necessary help, manifest patience and have sense of humour.
### 2.3 What makes a good student?

Research question “What students’ behaviours contribute to the formation of good relationships?” was addressed to another party – teachers. Since teachers are considered the best of all possible informants on the current topic (Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012; Doumen et al., 2009) and since in the following research teachers’ reports of closeness/conflict and engagement/disaffection were used, we would concentrate closer on this side of the problem. Student-Teacher Relationships survey consisted of 42 items relating to student behaviours rated on 6-point Likert scale. The main three factors contributing to positive relationships with students, as reported by teachers are: 1) demonstrating engagement and interest in school work; 2) being respectful, rule-abiding and cooperative; 3) demonstrating positive social behaviour (Wilkins, 2006). Each factor consisted of a number of items (from 8 to 21) and after calculating mean value for all of them, the main desirable behaviours for teachers were defined (see Table 1).

<table>
<thead>
<tr>
<th>Student behaviours contributing to positive relationships</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>treat me with respect</td>
<td>96</td>
<td>4.00</td>
<td>6.00</td>
<td>5.32</td>
<td>.77</td>
</tr>
<tr>
<td>assume responsibility for their actions</td>
<td>94</td>
<td>3.00</td>
<td>6.00</td>
<td>4.98</td>
<td>.92</td>
</tr>
<tr>
<td>be honest</td>
<td>96</td>
<td>2.00</td>
<td>6.00</td>
<td>4.80</td>
<td>.92</td>
</tr>
<tr>
<td>be truthful</td>
<td>94</td>
<td>2.00</td>
<td>6.00</td>
<td>4.74</td>
<td>.93</td>
</tr>
<tr>
<td>follow classroom rules</td>
<td>93</td>
<td>3.00</td>
<td>6.00</td>
<td>4.68</td>
<td>.92</td>
</tr>
</tbody>
</table>

As we can see, five most desirable qualities that a student should carry relate mostly to positive social behaviours, such as being truthful, responsible and respectful. Those are the behaviours that can surely be expressed as early as preschool. An interesting dichotomy takes place here: teachers view engagement and interest in school as one of the factors defining good relationships with students and, at the same time, it’s the relationships with teachers that affect children’s engagement (Cadima, Doumen, Verschueren, & Buyse, 2015; Hughes, Luo, Kwok, & Loyd, 2008).
2.4 Interrelation between positive teacher-student relationships and academic performance

The advantages of positive teacher-student relationships of pupils is not limited by only social and emotional development. There is a range of evidence that positive relationships in "teacher-domain" domain are closely linked with growth of students’ academic achievement (Decker, Dona, & Christenson, 2007; Birch & Ladd, 1998; Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Cadima, Leal, & Burchinal, 2010). For example, Birch and Ladd (Birch & Ladd, 1998) found that students whose teachers expressed benevolence towards them, demonstrate good academic performance, a positive attitude towards school and were more independent in their learning. At the same time, students whose teachers showed malevolence were more likely to be lonely and withdrawn, less independent and perform low academically (Birch & Ladd, 1998). Many students from at-risk groups believe that their success is largely explained by the fact that teachers were interested in each one of them (McMillan & Reed, 1994). For a very long period of time researchers have been trying to understand how relationships in "teacher-student " system influence student achievement.

In this regard, it is important to mention Furrer and Skinner’s (Furrer & Skinner, 2003) suggestion that the interrelation between teacher-student relationships and academic performance is mediated by the amount of students’ participation in the learning process. Most students say that they enjoy feeling part of decision-making process in the classroom. This can be one of the mechanisms by which positive relationships with teachers contribute to positive academic results of students. According to Dörnyei (Dörnyei & Ushioda, 2014), it is teachers who carry full responsibility for creating an environment that is fostering students’ motivation, their academic performance, as well as the formation of positive self-esteem. Under such conditions, students tend to accept criticism easier, be more engaged into classwork, persistent and able to cope with stress better (Dörnyei & Ushioda, 2014). Interview data collected by M. Yunus, W. Osman and N. Ishak (Yunus, Osman, & Ishak, 2011) confirms it, proving that warm relationship between teachers and students eventually lead to a significant increase of motivation and academic achievement of students.

For example, it has been found that students showed a high degree of perseverance and diligence and received better marks in those subjects that were taught by their favourite teacher. Furthermore, respondents described learning process as a “more
inviting, easier and less stressful” (Yunus, Osman, & Ishak, 2011, p. 2639) with teachers who were “approachable”, “friendly” and helpful. Here are a few examples from the conducted interviews. “...it’s English...I got A1 for SPM...she encourages me...motivates me... we got closer” (Respondent 1). “For SPM, I got A1. She uses... not like the ordinary methods. She is more like a friend. She is very concerned about her students and not only about the grades... She was like a mother to us” (Respondent 3). Another respondent said that the teacher has to make process interesting and fun. “Because...she pays more attention to me. That is one of the reasons. I don’t know... But my teacher...basically, she teaches me in traditional way... not using games in class, but still, I love them. And still, I like her” (Respondent 5). Importantly, most positive relationships continue even after students finish school. When asked why is that so respondents put an emphasis on him/her being more of a friend than a teacher.

Positive teacher-child relationships play an important role in forming adequate self-esteem (Ryan, Stiller, & Lynch, 1994). According to Wentzel, older students often have poor academic self-image and are not so confident about their professional future (Wentzel, 1998). In this regard, a positive relationship with teacher may serve as a protective factor.

2.5 Subjective and objective factors affecting teacher-student relationships

Some researchers believe that the nature of teacher-student relationships that affects students’ learning may vary depending on the individual features of schoolchildren (age, gender, ethnicity, socio-economic status, learning difficulties) and teachers (gender, ethnicity, work experience) (Buhrmester & Furman, 1987; Cornelius-White, 2007; Garner & Waajid, 2008; Hargreaves, 2000; Lynch & Cicchetti, 1997; Cahill & MacCoby, 1999). There is evidence that positive relationships in "teacher-student" domain are associated not only with increased academic and social performance of primary school students but are also a predictor of future scientific accomplishments (Cataldi, Laird, & KewalRamani, 2009; Pianta, 1998). The need for a positive relationship with teachers does not reduce by time. Teacher’s support for students is especially important in the transition from elementary to middle school, as relationships quality inevitably
changes: children become more focused on peers and less emotionally connected with their teachers (Pianta & Hamre, 2009).

In this connection, relationships between teachers and students become less personal, more formal and even competitive (Lynch & Cicchetti, 1997). These changes may lead to a negative self-esteem and negative attitudes towards learning, in view of the fact that impersonal and strictly evaluation nature of the relationship in middle school does not correspond to the relational the needs of students. This discrepancy is especially true for students who have lower levels of intrinsic motivation. In this case negative relationship between teacher and student obviously can only aggravate the unfavourable situation. It is noteworthy that primary school teachers usually describe their relationships with students in terms of love and sympathy. At the same time middle and high school teachers describe them in words of recognition and respect stating that emotions here are not necessary.

On the other hand, there is strong evidence that high school teachers who maintain constant personal contact with students contribute to the formation of positive relational processes. These relationships help to support the aspirations of students, both in the academic and social field, which in its’ turn leads to even higher academic achievement and better relationships with their peers (Wentzel, 1998).

The source of support for children are not only teachers, they also get it from their parents and peers. In light of this, teacher support is especially important for children deprived in other sources of it, particularly at home (Buyse, Verschueren, & Doumen, 2010). When talking about the influence of teacher-child relationships on children’s learning it is important to pay attention to the impact of gender differences (Baker, 2006). According to some studies, girls are more than boys in need of social attachment and therefore create more close relationships with their teachers (Hughes, Wu, Kwok, Villarreal, & Johnson, 2012; Ewing & Taylor, 2009; Birch & Ladd, 1997). Girls more rarely involve into behavior-related conflicts with teachers.

Boys’ behaviour, on the contrary, is often characterized by manifestation of aggression or dominance, due to traditional views about masculinity (Ewing & Taylor, 2009). At the same time, it is believed that teacher-student relationships have a greater impact on boys’ academic performance than girls, due to the fact that boys are more prone to at risk of school failure (Buyse, Verschueren, Doumen, Van Damme, & Maes, 2008).
From Hamre and Pianta’s point of view (Hamre & Pianta, 2001), good teacher-student relationships play an especially important role in providing a key to academic success for students at-risk of school failure. Statistically this group includes students from ethnic minorities, students whose families come from low socio-economic background as well as students who experience difficulties in learning. However it is important to note that results vary from study to study. Thus, a number of researchers are adherents of a strong impact of teacher-child relationships on achievement of students of ethnic minorities (Pallock & Lamborn, 2006; Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002). Other researchers did not see any conclusive evidence of such connection (Ewing & Taylor, 2009; Cornelius-White, 2007).

It is known that a positive relationship between teacher and student has a tremendous impact on students with low socioeconomic status. There is data indicating that positive and supportive relationships with teachers can serve as protective factor for the negative consequences associated with low socio-economic situation, such as a high risk of school dropout, low self-esteem, self-doubt, etc. (Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002). Analysis shows that students from low-income families who have a strong relationship with their teachers demonstrate higher academic performance than their peers who do not have such a relationship (Murray & Greenberg, 2000).

Whatsoever, research conducted by Catherine Worley (Worley, 2007) did not reveal a significant effect of teacher-student relationships on academic performance of children at-risk. In her study Worley tried to determine whether there is indeed a link between independent variables (relationships between teacher and student; relationships between student and parents (legal guardian), motivation, low economic status, peer influence) and academic performance of students at-risk due to school underachievement. Academic achievement was determined by the GPA (grade point average) (Worley, 2007). It was found that students who participated in this study generally have positive relationships with their teachers.

Out of 242 participating students 83.1% believe their teachers care about them; 71.5% are looking forward to communicating with the classroom teacher; 82% easily ask questions to teacher; 76.1% believe that teachers are important for their success in school; and 80.1% say that teachers provide help after school. 70.6% of students believe teachers create positive learning environment in the classroom. In addition, 67% of students claimed to receive permanent feedback from teachers on their learning (Worley, 2007). After analysing factors identified as key ones influencing academic
outcomes (relationships between teacher and student; relationships between student and parents (legal guardian), motivation, low economic status, peer influence) it was found that teacher-student relationships is not a determining factor in predicting students success at school. Along with other research, there is data proving that female teachers are perceived as more favourable by students than male teachers (Cornelius-White, 2007).

2.6 Positive teacher-student relationships and student motivation

Special attention is drawn to the effect of the teacher-student relationship quality on the formation of learning motivation. It is believed that quality of communication between teacher and student has a significant impact on the quality of learning motivation. In a number of studies the key role of motivation in the relationship between teacher and pupil and its’ impact on academic achievement is demonstrated (Fan & Williams, 2010; Wentzel, 1998; Bandura, 1997; Pajares, 1996; Ryan, Stiller, & Lynch, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992). Motivational theorists suggest that students’ perception of their relationship with teachers plays an essential role in forming interest to the subject and motivating students to learn better (Fan & Williams, 2010; Wentzel, 1998; Bandura, 1997; Pajares, 1996; Ryan, Stiller, & Lynch, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992). Thus, students who perceive their relationships with the teacher as positive, actively participated in the school life and had a higher level of academic performance (Hughes & Cavell, 1999).

Therefore it can be concluded that relationships between teachers and students is a powerful motivational factor (either positive or negative) influencing not only actual student performance but also development of learning motivating in future. However, success in learning depends not only on the level of student’s motivation and his or her views on their own academic competency, but also on the way students explain (or attribute) their successes or failure at school (Tuckman, 1991).

Attribution theory proposed by Bernard Weiner (Weiner, 1980) is aiming at explaining motivation from the standpoint of perceived reasons for interpreting particular outcomes as failure and success. In addition to perceived reasons attribution model includes personal expectations and emotional reactions (one’s own and others around), which has a significant impact on human behaviour and motivation. In this regard, non-
verbal manifestations of feelings and emotions are seen as equally important as verbal and behavioural reactions of teachers towards students’ results. For example, teacher’s feelings of pity or sympathy can tell a student that he is not so smart or capable, while teacher’s wrath indicates that a student is not putting enough effort (Tuckman, 1991).

Weiner (1980) recognizes the great role of teacher in motivating students. He believes that teachers are not only facing the challenge of helping students to succeed but, most importantly, to believe that it is their ability and effort that made this success possible (Weiner, 1980).

2.7 Teachers’ expectations and students’ performance

The interrelation between teachers’ expectations and students’ academic success is no less important. Teachers’ view on students’ is obviously correlated with students’ achievement: teacher carries a good opinion about a student who demonstrates engagement into learning. This is mainly a result of teacher’s proper perception of student’s abilities and accomplishments (Rosental & Jacobson, 1968). It is well known that teacher’s behaviour towards good and bad achievers tend to differ. According to Rosenthal (1968) and other researchers, teachers mainly look at those students with high potential during the class, they are more likely to smile and nod approvingly to them. They often challenge them, make them face more serious goals, and give them more time to reflect upon the answers (Rosental & Jacobson, 1968).

Contrariwise, teachers are far less demanding towards poorly performing students. They pay less attention to them in class but, however, may provide help and assistance which they weren’t even asked for. This attitude of the teacher combined with a sense of pity sends students a signal that their poor results are due to the lack of overall ability, which is very likely to worsen situation in the future. Excessive praise from the teacher for a successfully done easy task is also seen as ineffective pedagogical tool since this praise can be interpreted by student as a mark of insufficient learning skills (Seligman, 1975). Flattering opinion of a teacher about a student may not only be the result of academic success, but also its’ cause. The results of correlational study by Crano and Mellon (1978) and the results of experiment conducted by Rosenthal and Jacobson (1968) confirm this assumption (Crano & Mellon, 1978; Rosental & Jacobson, 1968).
It follows that teachers’ perceptions of students affect the process of assessment. Positive teachers’ attitude towards students makes them feel and perform better comparing to other students who were lacking such attitude. Therefore teacher’s encouragement of children that manifests itself in a smile, nod of approval, elevated interest is able to reassure students, make them believe in themselves and reach a higher levels of learning efficiency, and hence academic performance. A friendly and welcoming face of a teacher is by itself a significant contribution into forming student’s learning motivation.

To conclude, there are six main points regarding the impact of teacher-student relationship quality on students’ learning outcomes. First, the nature of relationships in "teacher-student" domain affects the development of important social and academic skills. Positive relationships between a teacher and a student contribute to the process of social and emotional development; while relationships characterized by conflict or increasing distance between students and teachers can lead to the emergence of school anxiety, disaffection, poor academic performance, behavioural disorders, etc. (Baker, 2006; O’Connor, Dearing, & Collins, 2010; Silver, Measelle, Armstrong, & Essex, 2005). Second, positive relationships between teachers and students are associated with increased academic achievement of students. Strong and friendly relationships serve as a stimulus for students: they show high degree of perseverance and diligence, demonstrate interest in school and achieve high academic results (Decker, Dona, & Christenson, 2007; Birch & Ladd, 1998; Burchinal, Peisner-Feinberg, Pianta, & Howes, 2002; Cadima, Leal, & Burchinal, 2010).

Third, a set of personal characteristics and behaviours of teachers has a significant impact on children’s learning process. Students tend to appreciate teachers who demonstrate care, listen to students, are ready to provide necessary assistance, encourage, praise, show patience, allow children to make decisions in the classroom and respect their opinions (Wilkins, 2006). Fourth, the nature of relationships between teacher and student is defined by a number of subjective and objective factors. Thus, this relationships may vary depending on personal characteristics of both students (age, gender, ethnicity, social and economic status, learning difficulties) and teachers (sex, ethnicity, work experience) (Buhrmester & Furman, 1987; Cornelius-White, 2007; Garner & Waajid, 2008; Hargreaves, 2000; Lynch & Cicchetti, 1997; Cahill & Maccoby, 1999).

Fifth, teacher-student relationship quality has a significant impact on learning motivation. Positive relationships foster the formation of student’s interest in the subject,
help them believe in themselves and motivate students to learn better (Fan & Williams, 2010; Wentzel, 1998; Bandura, 1997; Pajares, 1996; Ryan, Stiller, & Lynch, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992). Finally, teachers’ attitudes towards students affect the way students’ are being assessed. Children whose teachers demonstrate positive attitude are perceived generally more successful and engaged (Crano & Mellon, 1978; Rosental & Jacobson, 1968). Thus, theoretical generalization of data suggests that emotional support of teachers is a crucial factor in one’s school life. Consequently, measures aimed at improving academic achievement, motivation and engagement of students must, above all, contribute to improving the quality of teacher-child relationships.
3 ENGAGEMENT IN EARLY CHILDHOOD

3.1 Motivational theory

Merriam-Webster dictionary defines engagement as “emotional involvement or commitment”. Hughes, Kwok and their peers (2012) see psychological engagement in educational context as “liking for and interest in school, a sense of school belonging, and perceived opportunities for self-direction and choice” along with perceived academic competence. Skinner, Kindermann, & Furrer (2008) view engagement as “the quality of a student’s connection or involvement with the endeavour of schooling and hence with the people, activities, goals, values, and place that compose it” (Skinner, Kindermann, & Furrer, 2008, p. 2).

Connell’s, Wellborn’s and Skinner’s (1990) self motivation theory frames and supports the assumption about the effect of child-teacher relationships on early childhood engagement by stating that children experiencing teacher’s support show greater commitment to school rules, larger effort as well as construct positive sense of school membership. A vast number of researches (Roorda, Koomen, Spilt, & Oort, 2011; Hughes, Luo, Kwok, & Loyd, 2008; Hughes & Kwok, 2006) go in accordance with this standpoint. The motivational model aims at explaining “linkages among individuals' experience of the social context, their self-system processes (e.g., control beliefs), their patterns of action, and the actual outcomes of performance” (Skinner, Wellborn, & Connell, 1990, p. 22). According to this model, involvement experienced on the early stages influences his “perceived control” which in its’ turn results in either engaged or disaffected styles of learning.

In order to better understand the interrelation between motivational and attachment theories in the context of early childhood education few researches will be addressed. Thereby, Hughes & Kwok (2006) found out that teacher’s affective behavior and support in the 1st year of school resulted in greater peer acceptance and higher levels of engagement in the 2nd year (Hughes & Kwok, 2006). Another research by Hughes and his colleagues (Hughes, Luo, Kwok, & Loyd, 2008) indicated that quality of teacher-child relationships during the first year of school has lead to the increase in effortful
engagement during 2\textsuperscript{nd} school year (which lead to 3\textsuperscript{rd} year high reading and math achievement). Research conducted by Cadima, Doumen, Verschueren, & Buyse (2015) has shown a big general support to the model, implying that teacher-child closeness contributed to behavioral engagement in kindergarten which lead to higher engagement in 1\textsuperscript{st} grade, as reported by both teachers and observers. Searle, Miller-Lewis, Sawyer, & Baghurst (2013) in their research, framed by motivational theory, found out that increased engagement is mediated by higher levels of child self-concept (high self-esteem and self-efficacy).

What for engagement in preschool classrooms, it is believed that it directly affects the development of self (or behavioural) regulation (Williford, Vick Whittaker, Vitiello, & Downer, 2013). Boykin & Noguera (2011) in their book come to the conclusion that quality of teacher-child relationships on the early stages “shapes children’s patterns of engagement in learning” (Boykin & Noguera, 2011, p. 75).

![Figure 1. Attachment and motivation theories cross-influence](image)

### 3.2 Types of engagement

Researchers working on the field subdivide three types of engagement: behavioural, emotional and cognitive engagement (Skinner, Kindermann, & Furrer, 2008; Fredricks, Blumenfeld, & Paris, 2004).

- Behavioural engagement in based on the notion of participation and involves inclusion in academic as well as social or extracurricular activities. It is characterized by effort, attention, persistence, concentration. Behav-
Journal engagement is considered very important in light of academic performance and prevention of missing out.

- Emotional (or affective) engagement embodies a variety of possible children’s reactions towards school environment including teachers, peers etc. This type of engagement includes interest, enjoyment, enthusiasm and is responsible for creating bonds with an educational institution and influencing desire to learn.

- Cognitive engagement encompasses “thoughtfulness and willingness to exert the effort necessary to comprehend complex ideas and master difficult skills” (Fredricks, Blumenfeld, & Paris, 2004, p. 60) as being ready to invest into learning (see Table 2).

In researches on engagement of kindergarten and preschool children only behavioural engagement is usually being measured (Cadima, Doumen, Verschueren, & Buyse, 2015; Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012; Skinner, Kindermann, & Furrer, 2008). The reasons behind it are difficulties with interviewing very young children on the topic of their emotional engagements as well as lack of assessment methods to approach cognitive development (preschool children are not assigned with any class or homework). On the other hand, behavioural engagement into the learning process manifests itself in a comprehensible for preschool teachers’ way. Therefore, their reports here serve as the most reliable sources of data. It has been proven that teachers’ perspective matter the most in terms of predicting behavioural engagement in preschools (Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012).

### 3.3 Engagement vs Disaffection

Motivational perspective of engagement sometimes defines the concept through contraposing it to the opposite notion, referred to as passivity, alienation, disengagement or disaffection. It implies the absence of engagement and is characterized by lack of effort, persistency, helplessness, boredom and disinterest. In emotional domain disaffection usually leads to loosing ties with educational institution and lacking willingness to do work. It is typically accompanied by the feelings of sadness, apathy or even anger and frustration.
Cognitively disengaged student often demonstrates feeling and behaviors of avoidance, resisting extra pressure, unwillingness and helplessness. Behavioural disaffection may lead to a drastic drop in academic performance and even drop-out since it is followed by passivity, withdrawal, restlessness, lack of attention and focus and procrastination (Skinner, Omas, Kindermann, Connell, & Wellborn, 2009). Table 2 provides a motivational conceptualization of both engagement and disaffection.

<table>
<thead>
<tr>
<th>Behaviour</th>
<th>Engagement</th>
<th>Disaffection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Action initiation</td>
<td></td>
<td>Passivity, Procrastination</td>
</tr>
<tr>
<td>Effort, Exertion</td>
<td></td>
<td>Giving up, Withdrawal</td>
</tr>
<tr>
<td>Working hard</td>
<td></td>
<td>Restlessness</td>
</tr>
<tr>
<td>Attempts</td>
<td></td>
<td>Half-hearted</td>
</tr>
<tr>
<td>Persistence</td>
<td></td>
<td>Unfocused, Inattentive</td>
</tr>
<tr>
<td>Intensity</td>
<td></td>
<td>Distracted</td>
</tr>
<tr>
<td>Focus, Attention</td>
<td></td>
<td>Mentally disengaged</td>
</tr>
<tr>
<td>Concentration</td>
<td></td>
<td>Burned out</td>
</tr>
<tr>
<td>Absorption</td>
<td></td>
<td>Unprepared</td>
</tr>
<tr>
<td>Involvement</td>
<td></td>
<td>Absent</td>
</tr>
<tr>
<td>Emotion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enthusiasm</td>
<td></td>
<td>Boredom</td>
</tr>
<tr>
<td>Interest</td>
<td></td>
<td>Disinterest</td>
</tr>
<tr>
<td>Enjoyment</td>
<td></td>
<td>Frustration/anger</td>
</tr>
<tr>
<td>Satisfaction</td>
<td></td>
<td>Sadness</td>
</tr>
<tr>
<td>Pride</td>
<td></td>
<td>Worry/anxiety</td>
</tr>
<tr>
<td>Vitality</td>
<td></td>
<td>Shame</td>
</tr>
<tr>
<td>Zest</td>
<td></td>
<td>Self-blame</td>
</tr>
<tr>
<td>Cognitive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purposeful</td>
<td></td>
<td>Aimless</td>
</tr>
<tr>
<td>Approach</td>
<td></td>
<td>Helpless</td>
</tr>
<tr>
<td>Goal strivings</td>
<td></td>
<td>Resigned</td>
</tr>
<tr>
<td>Strategy search</td>
<td></td>
<td>Unwilling</td>
</tr>
<tr>
<td>Willing participation</td>
<td></td>
<td>Opposition</td>
</tr>
<tr>
<td>Preference for challenge</td>
<td></td>
<td>Avoidance</td>
</tr>
<tr>
<td>Mastery</td>
<td></td>
<td>Apathy</td>
</tr>
<tr>
<td>Follow-through, care</td>
<td></td>
<td>Hopeless</td>
</tr>
<tr>
<td>Thoroughness</td>
<td></td>
<td>Pressured</td>
</tr>
</tbody>
</table>

Source: Skinner, Omas, Kindermann, Connell, & Wellborn (2009)

Motivation theory conceptualizes engagement as the quality of student’s participation in academic as well as social and extracurricular activities at school. When present, it fosters students to make an effort, be interested and involved, concentrate and accept challenges. Disaffection is conceptualized by contradiction: students alienate, withdraw themselves from activities, refuse to put an effort in order to succeed. Disaffected student can easily be detected as aloof, detached, inattentive and not concentrated. It is important to note that taking emotional manifestations into the account when describing
disaffection is very important since “patterns of action differ depending on whether withdrawal is based on anxiety, boredom, shame, frustration, or sadness”. (Skinner, Omas, Kindermann, Connell, & Wellborn, 2009, p. 227). A sensitive teacher should be familiar with all the possible manifestations of disaffection and be ready to involve a child into studying process in the most efficient way. It has been mentioned numerous times how teacher’s support and sensitivity may serve as a protective factor for children at-risk of withdrawal and disengagement.
4 RESEARCH QUESTIONS

4.1 Research questions

The scales used in the present study have proven to be an effective tool to measure the correlation between student-teacher relationship quality and engagement. However, they have never been applied to the setting of Finnish preschools, which constitute the beginning of children’s academic and social development within the school environment. A better understanding of how certain aspects in the relationships between the teacher and the child are interrelated with the child’s engagement might help us to intervene on a rather early stage into the formation of adjustment problems in school. This research aims at filling this gap by setting the following research questions:

1) Is there an interrelation between teacher-child relationships, which include closeness and conflict, and children’s level of engagement in Finnish preschools?

2) Does gender of the students affect the quality of teacher-student relationships or level of engagement as reported by teachers?
5 METHOD

5.1 Participants

In total 50 preschool teachers working in kindergartens in Jyväskylä participated in the study. 47 of them (94%) were females and 3 (6%) were males. Each teacher in his/her questionnaire was describing a randomly selected child from his group (50 children in total). In order to provide random selection each teacher had to pick first student on the list. In case preschool group had two teachers they were offered to pick first and last student on the list respectively. All of the children were preschool students aged 6 years old. 28 children (56%) out of 50 were girls and 22 (44%) were boys.

Participants of the study took part in the research voluntarily and did not receive any compensation. In total 62 questionnaires were delivered in printed form to kindergartens in Jyväskylä. After 3-7 days they were collected. Out of 62 questionnaires 50 (80.6%) were completed and returned on time. 49 teachers were native Finnish speakers working in Finnish. One participant was working with bilingual children in English speaking group, and had only basic command of Finnish. In order to increase the response rate and decrease misunderstanding of the questions questionnaires were translated into Finnish by a person having similar command of both languages. It is important to bear in mind that all kindergartens participating in the study were free public ones. Since the absolute majority of kindergartens situated in the city were covered we can assume that the data is representative of current situation in the field of preschool education. Those kindergartens that were not willing to participate in the research were excluded.

5.2 Data collection

23 kindergartens located in Jyväskylä were visited during two months of fall semester – October and November. 55 printed copies of questionnaires were distributed and later collected. 7 copies were sent to preschool teachers by email upon their request. Out of 55 printed copies 45 were returned, out of 7 questionnaires send electronically 5 were filled and sent back. Data collection involved arriving to kindergartens in order to intro-
duce myself and the questionnaire to the preschool teachers. Absolute majority of them were willing to participate. In case of positive response the instructions were presented. In order to maintain sample random each preschool teacher was to take first child on the list and describe him when filling in the questionnaire. The situation when one preschool group had two teachers was rather common: in this case second teacher was offered to pick last child on the list and describe him/her in responses. Each teacher was given as much time to complete the questionnaire as he/she requested (an average of 3 days to 1 week).

5.3 Research design

A questionnaire consisting of two parts, namely Closeness and Conflict and Engagement versus Disaffection, was answered by 50 preschool teachers.

5.3.1 Student-Teacher Relationships Scale (STRS)

The first part of the questionnaire consisted of two dimensions: closeness and conflict. To measure relationship quality 14 out of 28 items were used from the Student-Teacher Relationships Scale (STRS) developed by Robert Pianta (Pianta, 2001), which was applied after getting permission by the professor via electronic correspondence. The Student-Teacher Relationship Scale (STRS) measures the quality of teacher-child interactions inside and outside the classroom. In particular, items 1, 2, 3, 5, 7, 9, 11, 15, 18, 20, 22, 23, 26, 27 were used from the original scale. The word “child” was replaced by “student” (see Wilcken, 2013). The following modification has proven to be unnecessary in Finnish settings where preschool children are not yet called “students”. However, considering that only teacher’s reports were used in the current study this change of words cannot be seen as an important limitation.

While the original scale had 28 items, only 14 that were deemed most relevant to the preschool context of this study were chosen. Moreover, while the original scale had three subscales, i.e. Closeness, Conflict and Dependency, the latter subscale was excluded from the present study on the grounds of it being considered negative in some cases, but positive in others, i.e. the cases of cooperative participation and task-involvement, hence not monosemantic.
According to the STRS Professional Manual (Pianta, 2001), reliability for subscales was Closeness $a = .88$, Conflict $a = .92$ and Dependency $a = .76$. In terms of validity, all correlations between subscales were statistically significant, indicating that the expected directions among the scale in its totality and its subscales were quite strongly associated.

In the STRS Professional Manual, Closeness was measured with 11 items; Conflict was measured with 12 items. In the present study, both Closeness and Conflict were measured with 7 items each (see Table 3) using a 5-point Likert-scale (0=definitely does not apply; 1=not really; 2=neutral; 3=applies somewhat; 4=definitely applies). Items relating to conflict (e.g. “This student easily becomes angry with me”; “Dealing with this student drains my energy” etc.) were later recoded (4=0, 3=1, 2=2). The sum variable “relationships” was comprised of all of the items altogether (see Table 3). Cronbach Alpha for the “relationships” sum variable was calculated ($a= .873$) and has shown to be very high, indicating close interrelation between Closeness and Conflict dimensions.

Based on inter-item correlation one item (The student spontaneously shares information about himself/herself) was dropped from subscale “relationships”.

**TABLE 3 Factors and items from Student-Teacher Relationships Scale (Pianta, 2001)**

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Closeness</td>
<td>1</td>
<td>I share a warm, positive relationship with this student</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>If upset, this student will seek comfort from me</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>This student values his/her relationship with me</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>When I praise this student, he/she beams with pride</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>This student spontaneously shares information about himself/herself</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>It is easy to be in tune with what this student is feeling</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>This student openly shares his/her feelings and experiences with me</td>
</tr>
<tr>
<td>Conflict</td>
<td>1</td>
<td>This student and I always seem to be struggling with each other</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>This student easily becomes angry with me</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>This student remains angry or is resistant after being disciplined</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td>Dealing with this student drains my energy</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>When this student is in a bad mood, I know we’re in for a long and</td>
</tr>
<tr>
<td></td>
<td></td>
<td>difficult day</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>This student's feelings towards me can be unpredictable or can change</td>
</tr>
<tr>
<td></td>
<td></td>
<td>suddenly</td>
</tr>
<tr>
<td></td>
<td>7</td>
<td>This student is sneaky or manipulative with me</td>
</tr>
</tbody>
</table>

**5.3.2 Engagement versus Disaffection Scale**

The Engagement versus Disaffection scale included specific items relating to behavioural and emotional engagement and behavioural and emotional disaffection, as found
in Skinner, Kindermann, & Furrer (2008). Engagement versus Disaffection in Learning (Teacher Report), in the original study consisted of 20 items altogether (Skinner, Kindermann, & Furrer, 2008) with emotional engagement, emotional disaffection, behavioral engagement and behavioral disaffection being measured by 5 items each. From this questionnaire, 17 items were used (see Wilcken, 2013).

Both Engagement and Disaffection were measured with 7 and 10 items respectively (See Table 4). Emotional engagement was comprised of 2 items (“When we start something new in class, the student is enthusiastic” and “In my class this student seems interested”); emotional disaffection was comprised of 6 items (including “In my class, this student is angry” and “When I explain new material this student doesn’t seem to care”). Behavioral engagement was comprised of 5 items (including “When working on classwork in my class, this student appears involved” and “When I explain new material, this student listens carefully”); finally, behavioral disaffection was comprised of 4 items (including “When we start something new in class, this student doesn’t pay attention” and “When we start something new in class, this student thinks about other things”) (see Table 4).

The original study (Skinner, Kindermann, & Furrer, 2008) used both student and teacher reports on engagement and disaffection. However, the present study concentrates on teacher reports on engagement, without complimentary student reports. It was difficult to collect data on this matter from preschool-age children. As far as reliability is concerned, the cross-year stability of teacher-report assessments for behavioural engagement was $a = .82$, for emotional engagement $a = .65$, behavioral disaffection $a = .82$, and emotional disaffection $a = .67$. Cronbach Alpha for teacher-reported “engagement vs disaffection” was $a = .93$ for fall semester and $a = .94$ for spring semester.

To evaluate engagement level 3-point scale (0=never; 1=sometimes; 2=always) was applied. Items relating to disaffection (e.g. “When we start something new in class, this student doesn't pay attention”; “In my class, this student seems unhappy” etc.) were recoded (2=0; 1=1) and joined, along with items relating to engagement (see Table 4), into sum variable “engagement”. Since only certain items were selected from original scales (Pianta, 2001; Skinner, Kindermann, & Furrer, 2008), it was deemed that it would facilitate the data analysis if the items were grouped according to more utilitarian approach. Some researchers (Wilcken, 2013) have also understood disaffection as lack of engagement and engagement as an absence of disaffected behaviour, hence treated “engagement” as a unidimensional construct. Empirical data supports the assumption
that two dimensions, namely engagement and disaffection, are closely related with Cronbach Alpha being $a = .858$ for the sum variable.

TABLE 4 Factors and Items for Engagement versus Disaffection Scale

<table>
<thead>
<tr>
<th>Factor</th>
<th>N</th>
<th>Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engagement</td>
<td></td>
<td>When we start something new in class, this student participates in discussions</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 In my class, this student works as hard as he/she can</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 When I explain new material, this student listens carefully</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 In my class, this student does more than required</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 When we start something new in class, this student is enthusiastic</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 When working on classwork in my class, this student appears involved</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 In my class, this student seems interested</td>
</tr>
<tr>
<td>Disaffection</td>
<td></td>
<td>1 When we start something new in class, this student doesn't pay attention</td>
</tr>
<tr>
<td></td>
<td></td>
<td>2 When we start something new in class, this student thinks about other things</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3 In my class, this student does just enough to get by</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4 In my class, this student comes unprepared</td>
</tr>
<tr>
<td></td>
<td></td>
<td>5 In my class, this student seems unhappy</td>
</tr>
<tr>
<td></td>
<td></td>
<td>6 When I explain new material, this student doesn’t seem to care</td>
</tr>
<tr>
<td></td>
<td></td>
<td>7 In my class, this student is angry</td>
</tr>
<tr>
<td></td>
<td></td>
<td>8 When working on classwork in my class, this student appears frustrated</td>
</tr>
<tr>
<td></td>
<td></td>
<td>9 When we start something new in class, this student seems restless</td>
</tr>
<tr>
<td></td>
<td></td>
<td>10 When working on classwork in my class, this student seems uninterested</td>
</tr>
</tbody>
</table>

5.4 Data Analysis

The mean score and standard deviation for two sum variables, namely relationships (including conflict and closeness) and engagement (including engagement and disaffection), were calculated. Independent sample T-test was conducted for the matter of defining whether there are differences between gender of children, engagement and the quality of their relationships with teachers.
6 RESULTS

6.1 Teacher-student relationships and student engagement

Pearson correlation between the “relationships” and “engagement” sum variables was $R = .641$, $p<0.001$, which is high in magnitude. In other words, the closer the relationships between a teacher and a student, the higher the engagement level becomes.

In terms of descriptive statistics, mean value for sum variable “relationships” was 3.3 (SD = .582) in the Likert-scale variation from 0 to 4 (0=definitely does not apply; 1=not really; 2=neutral; 3=applies somewhat; 4=definitely applies), which means that generally there is a positive outlook regarding teachers’ perception of their relationships with students. Mean value for sum variable “engagement” was 1.6 (SD = .293) in the Likert-scale variation from 0 to 2 (0=never; 1=sometimes; 2=always) which can as well be considered as a positive trend. The answers of the participants are represented in the tables below. 5-point Likert-scale in the first part of the questionnaire was transformed into 3-point one in order to facilitate the understanding.

<table>
<thead>
<tr>
<th>TABLE 5 Conflict-Related Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>This student and I always seem to be struggling with each other</td>
</tr>
<tr>
<td>This student easily becomes angry with me</td>
</tr>
<tr>
<td>This student remains angry or is resistant after being disciplined</td>
</tr>
<tr>
<td>Dealing with this student drains my energy</td>
</tr>
<tr>
<td>When this student is in a bad mood, I know we’re in for a long and difficult day</td>
</tr>
<tr>
<td>This student's feelings towards me can be unpredictable or can change suddenly</td>
</tr>
<tr>
<td>This student is sneaky or manipulative with me</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 6 Closeness-Related Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>This student and I always seem to be struggling with each other</td>
</tr>
<tr>
<td>This student easily becomes angry with me</td>
</tr>
<tr>
<td>This student remains angry or is resistant after being disciplined</td>
</tr>
<tr>
<td>Dealing with this student drains my energy</td>
</tr>
<tr>
<td>When this student is in a bad mood, I know we’re in for a long and difficult day</td>
</tr>
<tr>
<td>This student's feelings towards me can be unpredictable or can change suddenly</td>
</tr>
<tr>
<td>This student is sneaky or manipulative with me</td>
</tr>
</tbody>
</table>
I share a warm, positive relationship with this student
If upset, this student will seek comfort from me
This student values his/her relationship with me
When I praise this student, he/she beams with pride
This student spontaneously shares information about himself/herself
It is easy to be in tune with what this student is feeling
This student openly shares his/her feelings and experiences with me

<table>
<thead>
<tr>
<th>TABLE 7 Items Relating to Engagement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>When we start something new in class, this student participates in discussions</td>
</tr>
<tr>
<td>In my class, this student works as hard as he/she can</td>
</tr>
<tr>
<td>When I explain new material, this student listens carefully</td>
</tr>
<tr>
<td>In my class, this student does more than required</td>
</tr>
<tr>
<td>When we start something new in class, this student is enthusiastic</td>
</tr>
<tr>
<td>When working on classwork in my class, this student appears involved</td>
</tr>
<tr>
<td>In my class, this student seems interested</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TABLE 8 Items Relating to Disaffection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Item</td>
</tr>
<tr>
<td>When we start something new in class, this student doesn’t pay attention</td>
</tr>
<tr>
<td>When we start something new in class, this student thinks about other things</td>
</tr>
<tr>
<td>In my class, this student does just enough to get by</td>
</tr>
<tr>
<td>In my class, this student comes unprepared</td>
</tr>
<tr>
<td>In my class, this student seems unhappy</td>
</tr>
<tr>
<td>When I explain new material, this student doesn’t seem to care</td>
</tr>
<tr>
<td>In my class, this student is angry</td>
</tr>
<tr>
<td>When working on classwork in my class, this student appears frustrated</td>
</tr>
<tr>
<td>When we start something new in class, this student seems restless</td>
</tr>
<tr>
<td>When working on classwork in my class, this student seems uninterested</td>
</tr>
</tbody>
</table>
6.2 Influence of students’ gender

Independent sample T-test showed no statistical significance \( t(48) = 1.16, p = .251, t(48) = 1.93, p = .060 \) in either relationships or engagement with regard to gender of the students (see Table 5). For girls, the mean value in the “relationships” sum variable was 3.384 (SD = .519), while for boys it was 3.192 (SD = .651). In terms of the “engagement” sum variable, the mean value for girls was 1.68 (SD = .243), while for boys it was 1.52 (SD = .331). However, Levene’s Test for Equality of Variances showed that there was no statistically significant difference between the variances of boys and girls in terms of relationships \( (p = .273) \) with teachers and engagement \( (p = .120) \). T-test for Equality of Means showed that for “relationships” variable there is no mean difference between boys and girls \( (t(48)=1.16, p=.251) \). However, in engagement T-test \( (t(48) = 1.93, p=.060) \) indicated a significance of 0.060, which is close to being statistically significant and could have been such in case of a larger sample. For a sample in this study statistical significance could be interpreted as teachers viewing girls as more engaged.

<table>
<thead>
<tr>
<th>Item</th>
<th>Gender</th>
<th>N</th>
<th>Mean</th>
<th>SD</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationships</td>
<td>male</td>
<td>22</td>
<td>3.192</td>
<td>.652</td>
<td>1.162</td>
<td>.251</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>28</td>
<td>3.384</td>
<td>.519</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engagement</td>
<td>male</td>
<td>22</td>
<td>1.524</td>
<td>.332</td>
<td>1.925</td>
<td>.060</td>
</tr>
<tr>
<td></td>
<td>female</td>
<td>28</td>
<td>1.681</td>
<td>.244</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
DISCUSSION

The research was aiming at examining two research questions. First question was positioned in order to find out if there is an interrelation between teacher-child relationships, which include closeness and conflict, and children’s level of engagement in Finnish preschools. Second research question was aiming at figuring out if gender of the students affects the quality of their relationships with teachers and their level of engagement as reported by teachers.

In answer to the first research question it was found that quality of teacher-child relationships in the context of Finnish preschools is closely interrelated with the level of children’s engagement into the learning process. In other words, relationships high in closeness are characterized by significantly higher level’s of student engagement. On the contrary, relationships higher in conflict have a potential to prevent children from becoming fully engaged into the learning process. In answer to the second research question regarding the influence of students’ gender on relationships with teachers and engagement it was found that gender does not define either relationships with teachers or engagement level. However, in case of larger sample gender could have shown an interrelation with engagement, with girls being generally more engaged into the learning process comparing to boys.

In this section the findings are discussed in light of theories used in this study, limitations are addressed and suggestions are made for future research.

7.1 Implications of the study

Researchers define positive relationships between teachers and students as relationships characterized by warmth, intimacy, care, trust, understanding, mutual recognition, cooperation and open communication (Pianta, 1998). The study showed that there is an interrelation between teacher-student relationships and student’s level of engagement on the stage as early as preschool. Results indicated that teacher-rated closeness in relationships with students had a positive association with teacher-rated level of engagement, while teacher-rated conflict demonstrated negative association with teacher-rated level of engagement. This findings go in line with previous studies (Wilcken, 2013; Hamre & Pianta, 2005; Birch & Ladd, 1997), proving that positive relationships in the teacher-
student domain allow students to feel more secure, which in its’ turn creates favourable environment for fostering motivation and learning engagement, as well as developing important social and academic skills in the future (Baker, 2006; O’Connor, Dearing, & Collins, 2010; Silver, Measelle, Armstrong, & Essex, 2005).

Researchers elaborating on Bowlby’s (1982) attachment theory viewed warm and supportive relationships with secondary caregiver (teacher in our case) as crucial in building children’s sense of security which, in its’ turn, helps them to actively engage and participate in classroom activities (Buyse, Verschueren, & Doumen, 2010; Thijs & Koomen, 2008). In light of theory of attachment (Bowlby, 1982), findings prove that teachers are empowered to become reliable secondary attachment figures, sensitive and available, and, when needed, compensate for the lack of family support (Song & Hattie, 1984; Yli-Luoma & Luoma, 1990). A key notion of attachment theory is emotional security. Previous research has found evidence that teacher’s support is strongly and directly interrelated with children’s sense of emotional security (Thijs & Koomen, 2008). Findings from this study reaffirm the notion about teachers being secondary attachment figures that can and should provide support in times of stress, which becomes possible only in relationships characterized by high closeness.

However, the findings of this study may be interpreted from two different perspectives. Previous research has shown that warm and positive relationships with students contribute to the increasing of engagement level (Buyse, Verschueren, & Doumen, 2010; Thijs & Koomen, 2008), but, at the same time, there is evidence that it is learning engagement that shapes teacher’s perceptions of the students, hence the relationships between the two (Wilkins, 2006). Considering this dichotomy, the interrelation between the two variables, engagement and relationships, found in this research can be bidirectional.

Results has shown that teachers generally hold positive perceptions of their relationships with preschool students, with 98% of participants agreeing to some extent with the statement that they “share a warm, positive relationship” with the student (see Table 6). 90% of teachers agreed that their students value their relationships with them. Previous research by Worley (2007) has indicated that students also generally estimate their relationships with teachers as positive. Thus, 70.6% of students believed that teachers managed to create positive learning environment in the classroom; 83.1% reported to believe that teachers care about them (Worley, 2007). According to some researches, teachers are not only the most reliable informants when it comes to classroom
climate and engagement level (Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012; Doumen et al., 2009), but also fully responsible for creating productive, fruitful and positive learning environment that facilitated the formation of students’ motivation and, ultimately, engagement (Dörnyei & Ushioda, 2014).

Connell’s, Wellborn’s and Skinner’s (1990) self motivation theory and other researches elaborating on it frame and support the assumption about the effect of child-teacher relationships on early childhood engagement by stating that children experiencing teacher’s support show greater commitment to school rules, larger effort as well as construct positive sense of school membership (Roorda, Koomen, Spilt, & Oort, 2011; Hughes, Luo, Kwok, & Loyd, 2008; Hughes & Kwok, 2006). Motivational theorists claim that positive students’ perceptions of their relationships is an essential part of the formation of interest towards the subject and, ultimately engagement (Fan & Williams, 2010; Wentzel, 1998; Bandura, 1997; Pajares, 1996; Ryan, Stiller, & Lynch, 1994; Zimmerman, Bandura, & Martinez-Pons, 1992). Unfortunately, it was not possible to question children as young as preschoolers about their perceptions of relationships with teachers. However, previous research suggests that teachers can be considered the best possible informants on this matter (Doumen, Koomen, Buyse, Wouters, & Verschueren, 2012). In light of attachment (Bowlby, 1982) and motivational (Connell’s, Wellborn’s and Skinner’s, 1990) theories considered together, findings prove that healthy attachment to secondary caregivers, in our case teachers, facilitates the provision of emotional support from teachers, contributes to the formation of children’s perceived control and, ultimately, results in increased levels of engagement.

Teacher’s readiness to put effort into forming close relationships with students might serve as a protective factor for children at-risk of school maladjustment (Buyse, Verschueren, & Doumen, 2010). Thus, attachment becomes more important when we consider children’s emotional and behavioural engagement. Theoretical generalization of gathered data suggests that measures aiming at improving early childhood engagement, motivation and achievement cannot be efficient without measures for improving the quality of teacher-child relationships.

This findings imply that teachers should be more aware of the importance of effort out into building strong and positive relationships with students as young as preschoolers, as it as the potential to affect engagement and achievement throughout their schooling (Hamre & Pianta, 2001). At the same time, simply improving relationships might as well not be enough. An educational professional much be observant and, most
importantly, familiar with all the possible manifestations of disaffection, including lack of effort, persistency, helplessness, boredom and disinterest, in order to involve a child into learning in the most efficient and suitable way.

Regarding the influence of gender effect on quality of teacher-student relationships and level of engagement, findings contradict previous research on the matter. According to some studies, girls often form closer relationships with their teachers because they are believed to be more in need of social attachment (Hughes, Wu, Kwok, Villarreal, & Johnson, 2012; Ewing & Taylor, 2009; Birch & Ladd, 1997). This study, however, didn’t find evidence to this statement. There was no statistically significant difference in teachers’ perceptions of their relationships with girls comparing to boys. Considering engagement, previous research has also found female students to manifest higher levels of classroom behavioural engagement as opposed to male students (Cadinha, Doumen, Verschueren, & Buyse, 2015). Researchers’ often characterize boys behavior by manifestations of aggression of aloofness, due to traditional views about masculinity (Ewing & Taylor, 2009).

In this research T-test for “engagement” sum variable indicated a significance of 0.060, which is close to being statistically significant and could have been such in case of a larger sample. Unfortunately it was not possible to question preschool children about their perceived level of emotional and behavioural engagement. However, an interesting finding has been made by Skinner, Kindermann, & Furrer (2008), who found out, after examining children’s behavioral and emotional participation, that students with no regards to gender generally estimate their engagement level as significantly higher than do teachers. For a sample in this study statistical significance could be interpreted as teachers viewing girls as more engaged but generally appraising group engagement level as relatively high with mean value 1.6 (SD = .293) for the “engagement” sum variable in the Likert-scale variation from 0 to 2.

7.2 Limitations

There were several limitations to the study. Although the reliability was proven to be good, the results cannot be generalizable. More studies could be conducted with more participants, while qualitative approach could highlight certain dimensions of teacher-student relationships and the reasons behind engagement or disaffection in the context of Finnish early childhood education. Another important limitation is insufficient
diversity in regards to the gender of the teachers. Only three our of fifty preschool teachers who took part in the study were males. Gender ratio of the students also was not entirely equal, 56% of children described in the questionnaire were girls and 44% were boys. The issue of social desirability in responses of teachers also cannot be overlooked, since relationships with students and their level of engagement can be viewed as essential features of professionalism. Some teachers emphasized the problem of time spent with students. Data was collected in the fall semester, hence teachers had only few months to adapt and establish connection with new preschool students. More detailed information on the issue of early childhood engagement and relationships with students could have been gathered by applying mixed methods research and therefore letting teachers speak in the format of in-depth interviews on the matter of their bonds with students and students’ participation.

7.3 Conclusion

Practical implications for this study suggest that close relationships in “teacher-student” domain play a crucial role in fostering early childhood engagement. The causal connection has not been proved but the two notions, teacher-child relationships and engagement, in preschool settings has shown to be closely interrelated, leastwise, from the teachers’ point of view. Findings indicate that measures aiming at improving engagement and participation cannot be considered complete in conditions of neglect towards psychological component of emotional support and closeness. The thoughts provoked by the findings add to the sense of awareness of the importance of effort out into building strong and positive relationships with students as young as pre-schoolers, especially the ones with who it could be difficult to establish ones, since teachers’ sensitivity and support are especially beneficial for at-risk children. Emotional availability along with familiarity with most common manifestations of early childhood disaffection may be “half the battle” on the way to educational excellence.
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Wilkins, J. (2006). An examination of the student and teacher behaviors that contribute to good student-teacher relationships in large urban high schools. Retrieved from https://www.academia.edu/677678/An_examination_of_the_student_and_teacher.behaviors_that_contribute_to_good_student-teacher_relationships_in_large_urban_high_schools


APPENDICES

Appendix 1

Questionnaire in English

1. Your name is ________________________________
2. The STUDENT’S first and last names are __________________________
3. The STUDENT’s gender is _________________
4. Please report the STUDENT's ethnicity.
   a. White
   b. African
   c. Hispanic, Latino or Spanish origin
   d. Asian
   f. Other

FIRST SECTION: CLOSENES AND CONFLICT.

   Put a number after each question: Definitely does not apply (0), Not really (1), Neutral (2), Applies somewhat (3), Definitely applies (4).

5. I share a warm, positive relationship with this student
6. This student and I always seem to be struggling with each other
7. If upset, this student will seek comfort from me
8. This student values his/her relationship with me
9. When I praise this student, he/she beams with pride
10. This student spontaneously shares information about himself/herself
11. This student easily becomes angry with me
12. It is easy to be in tune with what this student is feeling
13. This student remains angry or is resistant after being disciplined

14. Dealing with this student drains my energy

15. When this student is in a bad mood, I know we’re in for a long and difficult day

16. This student's feelings towards me can be unpredictable or can change suddenly

17. This student is sneaky or manipulative with me

18. This student openly shares his/her feelings and experiences with me

SECOND SECTION: STUDENT ENGAGEMENT VS. DISAFFECTION

Put a number after each question: Never (0), Sometimes (1) and Always (2).

19. When we start something new in class, this student participates in discussions

20. In my class, this student works as hard as he/she can

21. When I explain new material, this a student listens carefully

22. In my class, this student does more than required

23. When we start something new in class, this student doesn't pay attention

24. When we start something new in class, this student thinks about other things

25. In my class, this student does just enough to get by

26. In my class, this student comes unprepared

27. When we start something new in class, this student is enthusiastic

28. When working on classwork in my class, this student appears involved

29. In my class, this student seems interested

30. In my class, this student seems unhappy

31. When I explain new material, this student doesn’t seem to care

32. In my class, this student is angry
When working on classwork in my class, this student appears frustrated

When we start something new in class, this student seems restless

When working on classwork in my class, this student seems uninterested

Appendix 2

Questionnaire in Finnish

1. Nimenne _______________________________
2. Oppilaan nimi _________________________________
3. Oppilaan sukupuoli ____________
4. Oppilaan etninen tausta.
   a. valkoinen
   b. afrikkalainen
   c. latino
   d. aasialainen
   f. muu

ENSIMMÄINEN OSA: LÄHEISYYS JA RISTIRIIDAT.

Vastatkaa jokaiseen kysymykseen numeroin 0-4: Täysin eri mieltä (0), Jokseenkin eri mieltä (1), Ei samaa eikä eri mieltä (2), Jokseenkin samaa mieltä (3), Täysin samaa mieltä (4)

5. Minin ja oppilaan suhde on lämmin ja positiivinen
6. Minun ja oppilaan välillä vaikuttaa aina oleva jonkinlaista kärhämää
7. Järkytynenä oppilas hake minulta lohdutusta
8. Oppilas arvostaa meidän välistä suhdettamme
9. Kun kehun oppilasta, tämä hehkuu ylpeydestä
10. Oppilas kertoo minulle spontaanisti itsestään
11. Oppilas suuttuu minulle helposti
12. Minun on helppo tietää miltä oppilaasta tuntuu
13. Oppilas pysyy suuttuneena tai vastahakoisena saatuaan kurinpalautusta
14. Oppilaan kanssa toimiminen kuluttaa energiaani
15. Kun oppilas on huonolla tuulella, tiedän että on tulossa pitkä ja vaikea päivä
16. Oppilaan tunteet minua kohtaan voivat olla arvaamattomia tai vaihtua nopeasti
17. Oppilas on ovela ja manipuloiva minua kohtaan
18. Oppilas jakaa avoimesti tunteensa ja kokemuksensa kanssani

**TOINEN OSA: OPPILAAN SITOUTUNEISUUS VS. TYYTYMÄTTÖMYYS**

**Vastaa kysymykseen: Ei koskaan (0), Joskus (1), Aina (2)**
19. Kun aloitamme luokassa jotain uutta, oppilas ottaa osaa keskusteluun
20. Loukassani oppilas työskentelee aina niin kovasti kuin osaa
21. Kun opetan uutta asiaa, oppilas kuuntelee tarkkaavaisesti
22. Luokassani oppilas tekee enemmän kuin hänetä pyydetään
23. Kun aloitamme luokassa jotain uutta, oppilas ei ole kiinnostunut
24. Kun aloitamme luokassa jotain uutta, oppilas ajattelee muita asioita
25. Luokassani oppilas tekee vain välttämättömät asiat
26. Oppilas tulee tunnille valmistautumatta
27. Kun aloitamme luokassa jotain uutta, oppilas on innostunut
28. Oppilas vaikuttaa osallistuvan luokkatyöskentelyyn
29. Luokassani oppilas vaikuttaa kiinnostuneelta
30. Luokassani oppilas vaikuttaa onnettomalta
31. Kun opetan uutta asiaa, oppilasta ei vaikuta kiinnostavan
32. Luokassani oppilas on vihainen
33. Oppitunneilla oppilas vaikutta turhautuneelta

34. Kun aloitamme luokassa jotain uutta, oppilas vaikuttaa turhautuneelta

35. Oppitunneilla oppilas ei vaikuta olevan kiinnostunut
Appendix 3

Codebook