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APPLIED PSYCHOLOGY | RESEARCH ARTICLE

Teacher perceptions of student social competence and school adjustment in elementary school

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Abstract: This study examined teacher perceptions of social competence and school adjustment in a Lithuanian sample of 403 elementary school children followed from the 1st to the 2nd grade. All children were aged 7 or 8 years in the 1st grade. The teacher–reported school adjustment indicators measured concurrently in the 1st and 2nd grade included academic achievement, student–teacher relationships, and school anxiety. Results indicated that in the 1st and 2nd grade both interpersonal and learning-related aspects of social competence as reported by teachers were significantly correlated with all aspects of teacher-assessed school adjustment measured in this study. Further analysis using structural equation modeling revealed that both aspects of social competence together accounted for about a third of variance in academic achievement in the 1st and 2nd grade. Learning-related social competence alone accounted for a similar amount of variance in student–teacher conflict, while interpersonal social competence was moderately linked to social anxiety in school and student–teacher closeness.

Subjects: Social Sciences; Behavioral Sciences; Development Studies; Education

Keywords: social competence; student–teacher relationship; school adjustment; elementary school; school anxiety; academic achievement

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The research reported here is part of a larger longitudinal study concerned with effects of initial student social competence and subsequent school adjustment in elementary school.

PUBLIC INTEREST STATEMENT

Teachers' perceptions of their students affect their behaviors towards those students, including ways in which teachers conduct instruction and provide feedback. It has been known that perceptions of various aspects of a person manifest a "halo effect" i.e. tend to be interlinked rather than independent. However, the nature, strength, and temporal stability of those links in case of teacher perceptions of elementary school students have not been studied. The present study examined the links between teacher perceptions of student social competence and school adjustment in elementary school. Results revealed that perceptions of student social competence were linked to perceptions of all aspects of school adjustment, including academic achievement, school anxiety, and student–teacher relationship. Similar pattern of links were observed in both the 1st and the 2nd grade. Results suggest that student social competence may be an important factor affecting school adjustment in elementary school.

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1. Introduction

Research conducted to date suggests that lack of social competence makes successful functioning at school difficult and in the long-term increases of serious school adjustment problems, including dropping-out, substance abuse, delinquency, and psychopathology (e.g. Denham, Ji, & Hamre, 2010; Fox & Boulton, 2005). Though various studies suggest that maladjustment at elementary school is linked to adjustment difficulties in adolescence, yet few studies examine psychological factors in elementary school adjustment (Giallo, Treyvaud, Matthews, & Kienhuis, 2010). While school adjustment studies are abundant, yet most of them are conducted with adolescent and high-risk samples, such as immigrants, minorities, disabled students, and those with learning difficulties. Furthermore, no attempts have been made to follow dynamics of any concurrent links between teacher-perceived social competence and school adjustment indicators throughout elementary school years.

Social competence is a totality of social skills, effective application of which results in achievement of goals relevant to particular social situations (McFall, 1982; Rose-Krasnor, 1997; Sheridan & Walker, 1999). It had been suggested that over one-half of preschoolers did not have sufficient social competence to provide for good and productive functioning in school environment (Webster-Stratton, Reid, & Stoolmiller, 2008). Another study found that as many as 25% of boys in the first grade have significant difficulties in complying with instructions given by their teachers (Ponitz, McClelland, Matthews, & Morrison, 2009). This problem seems to cut across cultural boundaries, as studies highlighting importance of social competence in elementary school are conducted across the world, including such countries as Australia (Giallo et al., 2010), Belgium (Buyse, Verschueren, Verachtert, & Van Damme, 2009), Iran (Hatamizadeh, Ghasemi, Saeedi, & Kazemnejad, 2008), Latvia (Surikova, 2007), Norway (Ogden, Sorlie, & Hagen, 2007), and Turkey (Kabasakal & Celik, 2010).

The particular set of social skills constituting social competence depends on a number of factors. These factors include the *situation* in which skills are being applied (Dirks, Treat, & Weersing, 2007; Dodge, Pettit, Mcclaskey, & Brown, 1986; Monnier, 2015; Rose-Krasnor, 1997), the *cultural environment* (Lim, Rodger, & Brown, 2013; Malik & Shujja, 2013; Uba, Hassan, Mofrad, Abdulla, & Yaacob, 2012), *developmental stage* (Denham, 2005; McClelland, Acock, & Morrison, 2006; McClelland & Morrison, 2003) and the *evaluator* (Dirks et al., 2007; Kwon, Kim, & Sheridan, 2012; Lillvist, Sandberg, Björck-Åkesson, & Granlund, 2009). Child social competence is usually assessed by peers, teachers, or parents, who identify somewhat different skills constituting social competence depending on the context of evaluation (home, class, play) (Dirks et al., 2007; Kwon et al., 2012; Lillvist et al., 2009). However, it is the teachers, whose perceptions of social competence are the most consequential in elementary school, as they may become a source of a potent halo effect affecting multiple other assessments teachers make (Hughes, Gleason, & Zhang, 2005).

Researchers studying elementary school samples (Cooper & Farran, 1988; Lim et al., 2013; McClelland & Morrison, 2003; McClelland et al., 2006) have identified two kinds of social competence important for successful adjustment in school environment. Cooper and Farran (1988) suggested that social competence should be divided into interpersonal skills and learning-related skills. Learning-related skills included those skills necessary for successful performance of learning activity (e.g. ability to hear and follow instructions, ability to participate in group activities, ability to complete assignments). Interpersonal skills included the skills required for good functioning in a social group in which the learning activity was taking place (e.g. positive communication with peers, ability to share). This concept of school social competence was also applied by Lim et al. (2013), McClelland and Morrison (2003), as well as by McClelland et al. (2006) who were studying social competence in kindergarten and elementary school.

Previous research suggested that such distinction within social competence is meaningful, as the two aspects of social competence seemed to be differentially related to various school adjustment indicators. For example, McClelland, Morrison, and Holmes (2000) found that learning-related social competence predicted academic achievement both at the start of school and at the end of the second grade, even controlling for kindergarten achievement and socioeconomic variables. Similarly,

McClelland et al. (2006) reported that learning-related social competence uniquely predicted both mathematics and reading achievement from kindergarten to the 6th grade. The authors also suggested that teachers were the best source of information for assessment of learning-related social competence. On the other hand, interpersonal social competence seems to be more closely linked to relational aspects of school adjustment, such as student–teacher relationships (Sette, Baumgartner, & Schneider, 2014) and acceptance among peers (Surikova, 2007).

2. Social competence and school adjustment

Early research in school adjustment tended to operationalize school adjustment as academic achievement (Birch & Ladd, 1997). However, recent research (Raižiene, Gabrialavičiūtė, Ruzgaitė, & Garckija, 2015; Ratelle & Duchesne, 2014; Zhang et al., 2015) conceptualizes school adjustment as a multifaceted phenomenon, which should be studied taking into account at least 3 aspects—academic, social, and emotional.

The academic aspect of school adjustment indicates child's ability to cope with academic demands. This concept reflects the school's role as an agent of transfer of knowledge necessary for a productive functioning in a society. Academic achievement may be measured by standardized test scores, if those are available (Ponitz et al., 2009). Alternatively, ratings provided by teachers are often used (McClelland et al., 2000).

The social adjustment reflects ability of a child to meet communication requirements at school, including relationships with teachers and peers. Various peer relationship measures are widely used as indicators of social adjustment (Buyse et al., 2009). On the other hand, despite its' overwhelming importance, student–teacher relationship is less widely studied in elementary school contexts (Spilt & Koomen, 2009).

Finally, the emotional aspect of school adjustment relates to child's ability to cope with stress posed by school environment (Ratelle & Duchesne, 2014). This aspect of school adjustment is often assessed using instruments aimed at measuring subjective well-being at school (e.g. Buyse et al., 2009), questionnaires focusing on emotional and behavioral difficulties (e.g. Goodman, 1997), including school anxiety (Cartwright-Hatton, Tschernitz, & Gomersall, 2005). However, there have been no studies assessing possible links between teacher-perceived social competence and school anxiety in the initial grades of elementary school.

2.1. Academic achievement

While the concept of school adjustment seems to be ever-expanding, academic achievement remains one of its important aspects. Better academic results are linked to more positive attitudes to school, less stress, better mental health, and lower absenteeism (e.g. Caprara, Barbaranelli, Patorelli, Bandura, & Zimbardo, 2000; Malik & Shujja, 2013). Furthermore, these links seem to persist throughout school years (Denham et al., 2010).

Although academic achievement is intimately linked to both intelligence and family background (Hung & Marjoribanks, 2005; Jacobs & Harvey, 2005), social competence of a child is crucial for making the best of his/her intellectual potential. This is particularly important at the time of entry to the formal learning environment constituted by an extensive web of social relationships. Thus, links between social competence and academic achievement has been receiving significant research attention in the recent years (e.g. Caprara et al., 2000; Konold, Jamison, Stanton–Chapman, & Rimm-Kaufman, 2010; Malik & Shujja, 2013; McClelland et al., 2000, 2006; Valiente et al., 2011).

As Konold et al. (2010) emphasize, children at elementary school have difficulties in mastering academic content, if they not good at controlling negative emotions, following directions, and communicating with other actors in the school environment. McClelland et al. (2006) note that teachers are increasingly unhappy about different levels of social maturity of first graders, which reflects on

their learning results. Teachers believe that cooperation skills, self-control, ability to follow task requirements, self-confidence, and attentiveness are important for good academic achievement.

This opinion is supported by results of numerous studies (Konold et al., 2010; McClelland & Morrison, 2003; McClelland et al., 2000, 2006; Ponitz et al., 2009; Valiente et al., 2011). Researchers are particularly interested in learning-related aspects of social competence, such as ability listen to listen attentively, behavioral self-control, ability to move from one activity to another successfully, and cooperation skills. A series of studies conducted by McClelland and colleagues found social competence at the first grade to be predictive of early academic achievement (McClelland & Morrison, 2003; McClelland et al., 2000, 2006; Ponitz et al., 2009).

We see direct and indirect links between social competence and academic achievement. The direct link is based on learning-related social competence as one of the primary tools for academic achievement. Indeed, children, who are able to hear and follow instructions given by their teachers, successfully move from one activity to another, fully complete their assignments, and control their behavior are more successful in learning (Elias & Haynes, 2008; McClelland et al., 2006; Valiente et al., 2011). Social competence promotes various cognitive and motivational processes providing for higher academic achievement even in the context of interferences from the environment (Barbarin et al., 2013; Elias & Haynes, 2008; Valiente et al., 2011). In contrast, when learning-related social competence is lacking, this makes learning unpleasant and difficult, as concentration and following instructions becomes a challenge creating frictions in relationships with teachers and peers alike (Valiente et al., 2011).

Thus, the indirect link between academic achievement and social competence rests on interpersonal social competence; insofar academic success is linked to ability to maintain positive relationships with teachers and peers (Trentacosta & Izard, 2007). Interpersonal social competence helps a child to elicit assistance from more competent peers and adults in a face of learning difficulties. Competent children tend to develop a strong social support network providing for better school adjustment, including higher academic results (Caprara et al., 2000). Furthermore, social sensitivity of competent children promotes equivalent reactions from others, which may be used for obtaining academic assistance (Chen, Li, Li, Li, & Liu, 2000). Thus, good interpersonal social competence may be helpful to elicit assistance from peers, promote positive attitudes towards school, more interest in academic work, and higher achievement motivation. Furthermore, socially competent children get along with teachers better, which in turn provides for more positive and useful academic feedback and more assistance in tackling difficult assignments.

On the other hand, disruptive in-class behavior promotes conflicts with teachers, resulting in stress, which in turn has a negative effect on academic achievement (Duncan et al., 2007). Furthermore, child–teacher conflict tends to be linked with poorer peer relationships (Troop-Gordon, 2015). Poor peer relationships hamper group work and performance on cooperative tasks, which are particularly important in educational systems of today (Konold et al., 2010).

2.2. Student–teacher relationship

The student–teacher relationship represents another important school adjustment indicator (Birch & Ladd, 1997; Ping, 2009; Shavega, Brugman, & van Tuijl, 2014; Vu, 2015) reflecting child's well-being at school. Also, this relationship acts as a protective factor closely linked to other school adjustment indicators (Spilt & Koomen, 2009). The student–teacher relationship is particularly important at the transitional period of starting school (Buyse et al., 2009).

Research on the student–teacher relationship usually focuses on two aspects of this relationship—closeness and conflict (e.g. Hamre & Pianta, 2001; Howes, 2000; Mashburn & Pianta, 2006; Pianta & Stuhlman, 2004; Shavega et al., 2014; Zee, Koomen, & Van der Veen, 2013). A close relationship means positive interaction, open communication, and warm feelings between a child and a teacher (Buyse et al., 2009; Howes, 2000; Ladd, Herald, & Kochel, 2006; Mashburn & Pianta, 2006; Pianta &

Stuhlman, 2004). It also indicates how safe and comfortable a child feels about approaching a teacher, talking about his/her feelings and experience, and using a teacher as a source of comfort. On the other hand, a conflict-ridden relationship is characterized by lack of communication, negative interactions, and emotions (Buyse et al., 2009; Shavega et al., 2014). Student–teacher relationship conflict is a source of stress for a child, which has a negative impact on wider school adjustment (Birch & Ladd, 1997; Buyse et al., 2009).

A study by Harkness et al. (2007) revealed that when asked to describe characteristics of ideal student teachers overwhelmingly focused on good social skills. Other authors (Bustin, 2007; Denham, 2005; Mashburn & Pianta, 2006) suggested that in order to have positive relationships with their teachers, students must have at least a level of social competence allowing them to listen to and to understand task requirements and to comprehend and to follow the main rules, to refrain from aggression against peers and teachers, to exercise self-control, and to cooperate. These skills were found to be linked to school adjustment (Denham, 2005).

Indeed, lack of social competence seems to be linked to higher conflict in the student–teacher relationship (Birch & Ladd, 1997; Garner & Mahatmya, 2015; Henricsson & Rydell, 2004; Spilt & Koomen, 2009). On the other hand, higher social competence results in being liked by a teacher (Blankemeyer, Flannery, & Vazsonyi, 2002) and in better relationships from perspectives of both children (Vu, 2015) and teachers (Brock & Curby, 2014). Leung (2015) found that implementation of a social skills program resulted in both improved social competence and better student–teacher relationships. Other research (Bustin, 2007; Magelinskaitė, 2011) found that higher social school readiness resulted in better student–teacher relationship at school, which further extended to better grades, more positive attitudes towards school, lower school anxiety, and stronger feelings of connectedness with school.

There might be several ways, how higher social competence results in a better student–teacher relationship. First, teachers find such pupils easier to work with. They pose more trouble during classes, get along with class-mates better, and are less likely to provoke conflict with a teacher (Lillvist et al., 2009). Second, by conforming to requirements and order set by a teacher, such children strengthen teacher's authority. Socially competent children are not likely to contribute to higher teacher stress levels, which makes it easier for teachers to like them. Also, having more positive attitudes towards school and teachers, these children are more likely to share their feelings and experiences with teachers which in turn promote closer relationships. Socially competent children are bolder and more skilled at initiating communication with adults. They feel safer, thus display more adequate reactions to difficulties and teachers' remarks encountered in the process of learning (Bustin, 2007; Konold & Pianta, 2005; Ladd & Burgess, 2001).

2.3. School anxiety
In early childhood play is the key vehicle for learning (Havu-Nuutinen & Niikko, 2014). During this period a child is mostly engaged in relatively free activity, which in Lithuania at least is characterized by little structure and no systematic evaluation, regardless whether the child is at home or at a kindergarten. Thus, for many children a school represents the first context in which activities become systematically structured, requiring regular effort, and resulting in structured evaluative feedback. Encounter with such regular evaluation and experiences of emotional and social consequences of negative evaluation may produce anxiety (Duchesne, Vitaro, Larose, & Tremblay, 2008) result in turning school environment in general and specific situations related to that environment (e.g. public speaking in class, communication with a teacher, tests, communication with peers) in particular into a source of anxiety. Such anxiety has a negative impact on psychological well-being of a child and may be considered as one of school adjustment indicators (e.g. Junttila, Vauras, Niemi, & Laakkonen, 2012; Margetts, 2005).

While there have been no studies focusing on possible links between social competence and school anxiety at the start of elementary school, a number of studies have found a link between low

social competence and various aspects of anxiety (Burt, Obradović, Long, & Masten, 2008; Gur, Kocak, Demircan, Uslu, & Sirin, 2015; Junttila et al., 2012; Letcher, Sanson, Smart, & Toumbourou, 2012). A study by Junttila et al. (2012) found that low cooperation and self-regulation skills as reported by children in the 4th grade were linked to higher social anxiety in the 5th grade. Sneider reported that 10–12 year-old children, which were rated as anxious, were also rated as unassertive and having poor communication skills. Gur et al. (2015) found that low social competence of 4–5 year-olds was linked to higher anxiety and introversion. A longitudinal study by Letcher et al. (2012) revealed that for children followed from the age of 11 to the age of 17, higher anxiety was closely linked to lack of social skills, shyness, more behavioral difficulties, as well as poor relationships with peers. Burt et al. (2008) demonstrated that a link between lower social competence and higher social anxiety measured at the age of 8 still persisted 20 years later.

3. The present study

It is fairly well established that social competence is linked to various school adjustment indicators. However, few studies seek to contrast strength of links between teacher perceptions of social competence and various adjustment indicators. Identification of the strongest links between aspects of teacher-perceived social competence and school adjustment indicators could help identifying key adjustment risk areas for children, who come to elementary school with underdeveloped social competence. Such identification would provide for more targeted efforts not only in terms of promotion of social competence, but also in terms of adjustment risk mitigation.

Also, little is known on how links between teacher perceptions of social competence and school adjustment indicators evolve through elementary school. The school is supposed to be a powerful socializing agent; thus, social experience at school should stimulate growth of social competence and attenuate any initial differences of social competence and resulting differences in adjustment. Alternatively, differences in social competence of pupils at the time they start attending elementary school may be robust and resistant to change, persisting through elementary school and continuing their impact on school adjustment. In order to address these contrasting assumptions, we are conducting a longitudinal study, which at present allows us to see how links between social competence and school adjustment change from the 1st grade to the 2nd grade.

Thus, in the present study, we sought to answer the following research questions:

(1) Are interpersonal and learning-related aspects of teacher-perceived social competence linked to academic achievement, school anxiety, and student–teacher relationships in the 1st and 2nd grades of elementary school in Lithuania?

(2) Do patterns of associations between teacher-perceived social competence and school adjustment indicators differ for interpersonal social competence and learning-related social competence?

(3) Do patterns of within-grade associations between teacher-perceived social competence and school adjustment indicators differ between the 1st grade and the 2nd grade?

4. Method

4.1. Participants and procedure

Data were collected in a course of an ongoing larger longitudinal study. The first wave of measurement was conducted at the second semester of the first grade. The second wave of measurement was conducted in the second semester of the second grade. The second semester was chosen for a number of reasons. First, by that time most children would have completed initial phase of adjustment at school, which would provide for more accurate assessment of both social competence and school adjustment. Second, class teacher would have come to know each child better, resulting in more accurate scoring on study variables.

The study was conducted in 14 schools in Kaunas, second largest city of Lithuania. Schools, in which data were collected, accounted for 28 percent of all schools conducting elementary education in Kaunas. To ensure higher representativeness of the sample, we sought to have at least one school from each of 11 administrative districts of Kaunas. However, there were two districts, in which we were unable to find any schools consenting to participate in the study.

A total of 42 classes with the same number of teachers participated. All teachers were female and had university education. Class sizes ranged from 18 to 24 pupils per class. All classes were mixed-gender. None of the teachers had teacher aides.

During the first wave of measurement a total of 962 parent consent forms were distributed. Out of this number 446 (46.3 percent) forms were returned containing written consent. That represented 15.8 percent of 1st graders in Kaunas. We found 38 significantly incomplete forms, bringing down the sample in the first wave of measurement to 408 (183 boys and 225 girls) were obtained.

Some 61.8% of parents, who gave their consent, had university education, while further 15.7% had some post-secondary education and 21.6% had only secondary education. No detailed information about parent income was collected. Instead parents were asked to respond to provide an assessment, how sufficient was their income to meet family needs. Most parents (65.9%) responded that their income was sufficient to meet most of their family needs, while further 16.9% stated that their income was sufficient to meet all needs. In terms of marital status, 82% of children participating in the study were living with both parents, while 15% had experienced divorce of their parents. Another 3% of parents failed to indicate their marital status.

Age of all participants during the first wave of measurement was either 7 or 8 years, and in the second wave of measurement either 8 or 9 years. In the second wave of measurement further 5 children (one boy and four girls) dropped out of the study due to parents refusing to continue participation, moving to another school or long-term sick leaves. The data analysis was conducted on 403 participants, for whom complete information from both waves of measurement was available.

4.2. Measures

4.2.1. Teacher perceptions of social competence
Teacher perceptions of social competence were measured by a 7-item Elementary School Social Competence Scale (Short Version) developed for the present study. The scale was completed by class teachers. Items for this instrument were selected based on their theoretical relevance and internal consistency from a larger pool of items used in a pilot study (Magelinskaitė, Kepalaitė, & Legkauskas, 2014). Three of the items were aimed at measuring interpersonal social competence. These items were "1. Plays and works cooperatively with other children", "2. Tries to stop a quarrel or conflict between other children", and "3. When playing a game invites others to join in". The remaining 4 other items measured learning-related social competence. These items were formulated as follows: "1. Is able to move from one activity to another without additional reminders by a teacher", "2. Listens attentively during a class", "3. Completes simple instructions without additional reminders", and "4. First listens to the tasks and then performs it". All items were scored on a 6-point Likert scale (from 1 = very rarely to 6 = very often).

4.2.2. Teacher perceptions of elementary school adjustment
We measured three aspects of teacher perceptions of elementary school adjustment—academic achievement, school anxiety, and student–teacher relationships.

4.2.3. Academic achievement
In Lithuania grades are not used for assessment of academic progress and achievement in elementary school. Formal feedback systems differ from school to school. For example, in some schools achievement is assessed by means of verbal description of performance. In most schools,

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however, achievement of students is assessed in terms of levels—higher, main, satisfactory, or unsatisfactory.

Taking into account different systems of academic achievement assessment applied in various schools, it was decided to implement a standard system of assessment across all participating schools. For each participating child a class teacher was asked to assess academic achievement in mathematics and native language (Lithuanian) on a 5-point scale from "poor" (1) to "very good" (5). In further data analysis, we used a single aggregate academic achievement score obtained by summing-up mathematics and native language scores. This kind of measurement procedure was also used in other studies involving academic achievement of children, for example, by Valiente et al. (2011).

Native language and mathematics were selected for assessment because these two subjects reflect both verbal and non-verbal skills of children and are the most widely used to measure academic achievement in elementary school (e.g. Barbarin et al., 2013; McClelland et al., 2006; Oades-Sese, Esquivel, Kaliski, & Maniatis, 2011). Also, these two subjects are always taught by the class teacher, while other subjects in some schools are taught by specialized subject teachers. Subject teachers change from time to time and hence their assessment is more prone to fluctuation.

4.2.4. School anxiety

School Anxiety Scale—Teacher Report (SAS-TR) developed by Lyneham, Street, Abbott, and Rapee (2008) was used to measure school anxiety. The scale was designed for children aged 5 to 12 years old. This instrument was used to assess the level of child's general and social anxiety in school environment from the perspective of a teacher. The General Anxiety Subscale consisted of 9 items (e.g. "This child hesitates in starting tasks or asks whether they understood the task before starting"), while the Social Anxiety Subscale included 7 items (e.g. "This child does not volunteer answers or comments during class"). Items were scored on the 4-point Likert-type scale (from 1 = very rarely/never to 4 = very often). Higher score meant higher anxiety.

A pilot study conducted with 124 children (including 63 first graders and 61 s-grader) revealed that 4 items of the SAS-TR failed to differentiate subjects, i.e. displayed ceiling effect. Such significant number of non-differentiating items would have reduced sensitivity of the instrument. Thus, for the present study 12 items were used, including 5 for social school anxiety and 7 for general school anxiety.

4.2.5. Student–teacher relationship

The Student–Teacher Relationship Scale—Short Form (STRS-SF) developed by Pianta (2001) was used for assessment of relationships between children and their teachers. The scale was designed for children aged 3 to 12 years old. This 15 item scale is completed by teachers to assess perceived closeness and conflict with individual students. The Relationship Closeness Subscale consists of 7 items (e.g. "This child openly shares his/her feelings and experiences with me"), while the Relationship Conflict Subscale consisted of 8 items (e.g. "This child remains angry or is resistant after being disciplined"). Items were scored on the 4-point Likert-type scale (from 1 = very rarely/never to 4 = very often). Higher score meant higher closeness, while on the conflict scale, scores were recorded so higher score meant lower conflict.

4.3. Analytic strategy

The initial analysis of the links between the two aspects of social competence and the three school adjustment indicators was conducted using non-parametric Spearman correlations, as all of the variables measured had non-normal distributions. Next, structural equation modeling was conducted using Mplus statistical package (Version 7.1; Munthén & Munthén, 1998–2012). Taking into account non-normal distribution of our variables, parameters of our models were estimated using

Table 1. Descriptive statistics for study variables in the 1st and 2nd wave of measurement*

Variable	M	SD	Cronbach α	Range
Interpersonal social competence	12.51 (12.94)	3.68 (3.53)	0.85 (0.85)	3–18
Learning-related social competence	18.58 (19.13)	4.42 (4.15)	0.91 (0.90)	4–24
Student–teacher relationship closeness	22.27 (22.33)	3.96 (3.84)	0.78 (0.87)	10 (9)–28
Student–teacher relationship conflict	29.10 (29.37)	3.84 (3.71)	0.85 (0.94)	13 (10)–32
Social school anxiety	10.62 (10.54)	3.62 (3.59)	0.81 (0.82)	5–20
General school anxiety	14.56 (14.36)	4.70 (4.75)	0.86 (0.88)	7–27 (28)
Academic achievement	8.12 (7.92)	1.92 (1.89)	n/a	2–10

Note: Where no numbers are provided in parentheses, values in the second wave of data collection were the same as in the 1st wave of data collection.

*Relevant values for the 2nd wave of data collection provided in parentheses.

maximum likelihood estimation with standard errors, as these are relatively robust in relation to non-normal distributions. We used the MLR estimator to estimate model parameters.

We used five indicators to assess goodness-of-fit of our models: the ratio of chi-square to degrees of freedom, the Tucker-Lewis index (TLI), the comparative fit index (CFI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). As chi-square statistic is highly sensitive to sample size and multivariate non-normality, we chose the ration of chi-square to degrees of freedom instead and interpreted ratios bellow 3:1 as indicating a good model fit (Carmines & McIver, 1981). CFI and TLI values above 0.95, SRMR values bellow 0.05, and RMSEA values of up to 0.06 were also interpreted as indicating a good model fit (Table 1).

5. Results

First, Spearman correlations were calculated to assess links between social competence and school adjustment indicators (see Table 2). To establish relative contribution of the two aspects of social competence to the student–teacher relationship, school anxiety, and academic achievement, in the 1st and 2nd grade structural equation modeling was employed. To achieve more accurate results both interpersonal social competence and learning-related social competence were treated as latent variables in structural equation models constructed using Mplus 5.1.

The structural model (Figure 1) constructed using the data collected in the 1st grade demonstrated a good fit—$\chi^2/\mathrm{d}f = 1.85$; CFI = 0.99; TLI = 0.97; RMSEA = 0.05; SRMR = 0.02. The same model constructed on the data collected in the 2nd grade (Figure 2) had weaker model fit indices; however, they were still within acceptable range ($\chi^2/\mathrm{d}f = 2.69$; CFI = 0.98; TLI = 0.95; RMSEA = 0.06; SRMR = 0.03).

Table 2. Spearman correlations between social competence and school adjustment indicators in the 1st and 2nd grades[a]

	Social competence***	
	Learning-related	**Interpersonal**
Relationship closeness	0.212 (0.296)	0.400 (0.484)
Relationship conflict[b]	0.444 (0.460)	0.339 (0.395)
Social school anxiety	−0.183 (−0.205)	−0.394 (−0.456)
General school anxiety	−0.360 (−0.284)	−0.255 (−0.200)
Academic achievement	0.606 (0.563)	0.404 (0.372)

[a]Relevant values for the 2nd wave of data collection provided in parentheses.

[b]Higher score means lower conflict.

***All correlations significant at $p < 0.01$.

Figure 1. Structural model of associations between social competence and school adjustment indicators in the 1st grade.

Notes: Standardized solution, only significant associations are shown. *p < 0.05; **p < 0.01; ***p < 0.001.
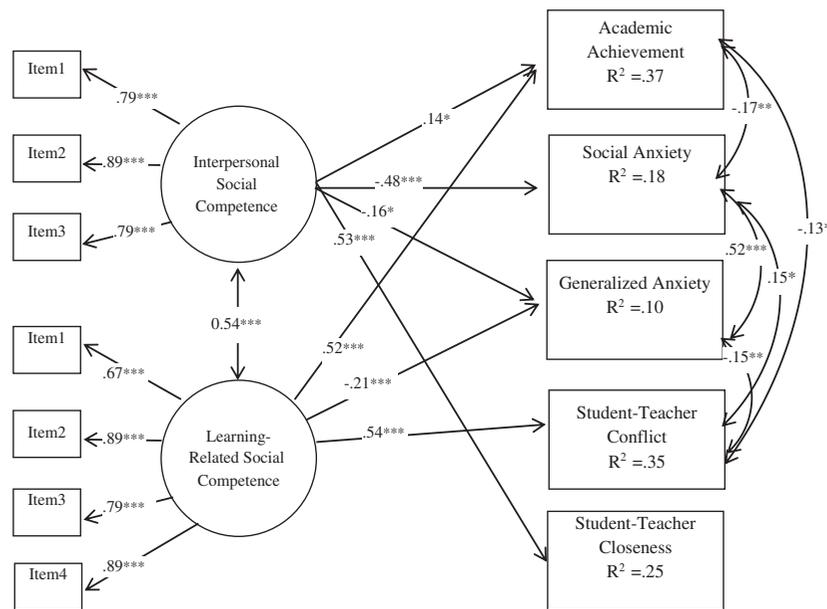
Figure 2. Structural model of associations between social competence and school adjustment indicators in the 2nd grade.

Notes: Standardized solution, only significant associations are shown. *p < 0.05; **p < 0.01; ***p < 0.001.
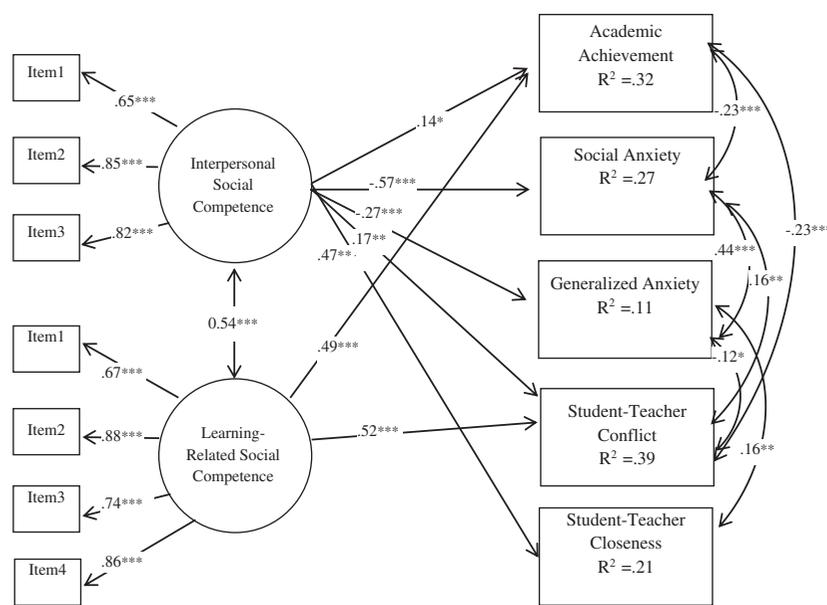
Results of measurements conducted in both the 1st and the 2nd grade indicate that teacher perceptions of social competence played a significant role in teacher perceptions of all school adjustment indicators measured, including academic achievement, the student–teacher relationship, and school anxiety. However, the pattern of relationship was different for learning-related social competence and interpersonal social competence. Learning-related social competence strongly predicted both academic achievement and student–teacher conflict, while interpersonal social competence had a strong positive link to student–teacher closeness and a medium negative link to social anxiety. Some weaker links were also observed, including a negative link between both aspects of social competence and general anxiety, and a weak link between interpersonal social competence and academic achievement.

6. Discussion

Overall, results of the present study indicate that teacher perception of social competence is an important factor in teacher perceptions of school adjustment in the 1st and 2nd grades of elementary school. We found strong links between both interpersonal and learning related social competence and academic achievement in both the 1st and 2nd grade. Previous studies also indicated links between interpersonal social competence and academic achievement, but mostly in adolescent samples (Caprara et al., 2000; Chen et al., 2000; Wentzel, 1991). On the other hand, the link between learning-related social competence and academic achievement is much better established by earlier research (e.g. Barbarin et al., 2013; Konold et al., 2010; McClelland & Morrison, 2003; McClelland et al., 2000, 2006; Ponitz et al., 2009; Valiente et al., 2011).

Indeed, ability to listen attentively to instructions given by the teacher, move from one activity to another independently, complete instructions, and control own behavior makes the process of learning easier and increases chances of higher academic results (Elias & Haynes, 2008; Konold et al., 2010; McClelland et al., 2006; Valiente et al., 2011). It has been suggested that learning-related social competence activates motivational and cognitive processes which assist in shielding oneself from external and internal distractions, thus facilitating academic progress (Barbarin et al., 2013; Elias & Haynes, 2008; Valiente et al., 2011). Furthermore, children with higher learning-related social competence in particular and higher social competence in general tend to have more positive attitudes towards school and learning (Konold et al., 2010).

We may speculate that the link between interpersonal social competence and academic achievement is indirect and operates via the student–teacher relationship, but the size of our sample did not allow us to formulate a comprehensive model of structural equations including both direct and indirect effects of all variables studied. Schooling is a very social process and in case of difficulties higher interpersonal social competence makes it more likely that a child will receive assistance from competent adults and peers. Those with higher social competence tend to be more liked by their peers and have wider social networks, which may provide social support and encouragement in case of school difficulties or a stimulus to keep up with high-achieving peers. Furthermore, children, which find it more difficult to communicate and cooperate with peers, also experience more trouble in performing group assignments, which are particularly valued in contemporary educational system (Konold et al., 2010).

It was found that for the 1st graders higher interpersonal social competence was linked to higher student–teacher relationship closeness, while higher learning-related social competence was linked to lower conflict. Similar result was obtained in the second grade concerning closeness, while student–teacher relationship closeness was predicted by both interpersonal and learning-related social competence. These findings supplement results of previous studies, which also found links between social competence and student–teacher relationships, albeit with samples of preschoolers (Blankemeyer et al., 2002; Garner & Mahatmya, 2015; Vu, 2015; Zhang, 2011).

The link between higher learning-related social competence and lower student–teacher relationship conflict may reflect more adequate classroom behaviors by more socially competent children, which make it easier and pleasurable for teachers to work with such children without experiencing additional stress at work (Lillvist et al., 2009). Being able to understand and willing to follow classroom rules such children strengthen teacher's authority, which results in lower student–teacher conflict. On the other hand, children with higher interpersonal social competence tend to be bolder and more confident in their interactions with adults, which is conducive for higher student–teacher relationship closeness. Socially competent children have favorable attitudes towards school environment, which also help them to form positive relationships with class teachers (Konold & Pianta, 2005; Ladd & Burgess, 2001). Such children tend to feel more secure (Mashburn & Pianta, 2006), thus are able to use teacher's remarks for improvement of learning activities and avoid transferring such feedback into their relationships with teachers (Bustin, 2007; Konold & Pianta, 2005; Ladd & Burgess, 2001).

Analysis of links between teacher perceptions of social competence and school anxiety revealed significant relationship between those two variables in both the 1st and 2nd grades. Higher interpersonal social competence in the 1st grade was linked to both lower social anxiety and lower general anxiety, while higher learning-related social competence was linked to lower general anxiety. These finding mirror results of previous studies conducted mostly with adolescent samples (e.g. Gur et al., 2015; Junttila et al., 2012; Letcher et al., 2012). The present study extends understanding of the links between social competence and school anxiety, as it was found that interpersonal social competence predicted social anxiety, while learning-related social competence predicted general anxiety in school. These results suggest that while social competence as a whole predicts school adjustment, more detailed analysis of links between different aspects of social competence and school adjustment indicators may be warranted in order to formulate more effective interventions for promotion of well-being of students in elementary school.

7. Limitations of the study

The main limitation of the present study is that it is based on teacher perspective. As the same source is giving assessment on a number of adjustment indicators, there is a danger that such assessments will be under-differentiating due to the halo effect, i.e. the same child will be scored similarly (high or low) on different indicators, even though scoring would be different, if different sources of information would be involved. Furthermore, as teachers scored both the independent variable (social competence) and the dependant variables (adjustment indicators) this might result in artificial links between variables, which would not have appeared if independent and dependent variables were scored by different evaluators.

Nevertheless, we believe that selection of teachers, as sources of information on both social competence and adjustment indicators, is a meaningful one. Regardless of the origin of teacher's opinion about a child, in elementary school such opinion tends to become a self-fulfilling prophecy in both student–teacher relationships and academic achievement. We believe that social competence of a child is one of important sources of teacher's opinion about a child and hence, study of the links between social competence and other adjustment indicators viewed from the teacher's perspective is both meaningful and important.

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References
Barbarin, O., Iruka, I. U., Harradine, C., Winn, D. C., McKinney, M. K., & Taylor, L. C. (2013). Development of social-emotional competence in boys of color: A cross-sectional cohort analysis from pre-K to second grade. *American Journal of Orthopsychiatry, 83*(2–3), 145–155. https://doi.org/10.1111/ajop.12023

Birch, S. H., & Ladd, G. W. (1997). The teacher-child relationship and children's early school adjustment. *Journal of School Psychology, 35*(1), 61–79. https://doi.org/10.1016/S0022-4405(96)00029-5

Blankemeyer, M., Flannery, D., & Vazsonyi, A. (2002). The role of aggression and social competence in children's perceptions of the child-teacher relationship. *Psychology in the School, 39*(3), 293–304. https://doi.org/10.1002/(ISSN)1520-6807

Brock, L. B., & Curby, T. W. (2014). Emotional support consistency and teacher–child relationships forecast social competence and problem behaviors in prekindergarten and kindergarten. *Early Education and Development, 25*(5), 661–680. https://doi.org/10.1080/10409289.2014.866020

Burt, K. B., Obradović, J., Long, J. D., & Masten, A. S. (2008). The interplay of social competence and psychopathology over 20 years: Testing transactional and cascade models. *Child Development, 79*(2), 359–374. https://doi.org/10.1111/j.1467-8624.2007.01130.x

Bustin, C. (2007). *The development and validation of a social emotional school readiness scale* (Doctoral Thesis). University of the Free State, Bloemfontein.

Buyse, E., Verschueren, K., Verachtert, P., & Van Damme, J. (2009). Predicting school adjustment in early elementary school: Impact of teacher-child relationship and classroom climate. *The Elementary School Journal, 110*(2), 119–141. https://doi.org/10.1086/605768

Caprara, G. B., Barbaranelli, C., Patorelli, C., Bandura, A., & Zimbardo, P. G. (2000). Prosocial foundations of children's academic achievement. *Psychological Science, 11*(4), 302–306. https://doi.org/10.1111/1467-9280.00260

Carmines, E. G., & McIver, J. P. (1981). Analyzing models with unobserved variables. In G. W. Bohrnstedt & E. F. Borgatta (Eds.), *Social measurement: Current issues* (pp. 65–115). Beverly Hills: Sage.

Cartwright-Hatton, S., Tschernitz, L., & Gomersall, J. (2005). Social anxiety in childhood: The relationship with self and observer rated social skills. *Journal of Child Psychology and Psychiatry, 44*(5), 737–742.

Chen, X., Li, D., Li, Z., Li, B., & Liu, M. (2000). Sociable and prosocial dimensions of social competence in Chinese children: Common and unique contributions to social, academic, and psychological adjustment. *Developmental Psychology, 36*(3), 302–314. https://doi.org/10.1037/0012-1649.36.3.302

Cooper, D. H., & Farran, D. C. (1988). Behavioral risk factors in kindergarten. *Early Childhood Research Quarterly, 3*(1), 501–521.

Denham, S. A. (2005). *Assessing social-emotional development in children from a longitudinal perspective for the National Children's Study*. Report prepared for the National Children's Study.

Denham, S. A., Ji, P., & Hamre, B. (2010). *Compendium of preschool through elementary school social-emotional learning and associated assessment measures*. Chicago, IL: Collaborative for Academic, Social, and Emotional Learning and Social and Emotional Learning Research Group, University of Illinois at Chicago.

Dirks, M. A., Treat, T. A., & Weersing, V. R. (2007). Integrating theoretical, measurement, and intervention models of social competence. *Clinical Psychology Review, 27*(3), 327–347. https://doi.org/10.1016/j.cpr.2006.11.002

Dodge, K. A., Pettit, G. S., Mcclaskey, C. L., & Brown, M. M. (1986). Social competence in children. With commentary by J.N.M. Gottman. *Monographs of the Society for Research in Child Development, 51*(2), 1-85.

Duchesne, S., Vitaro, F., Larose, S., & Tremblay, R. E. (2008). Trajectories of anxiety during elementary-school years and the prediction of high school noncompletion. *Journal of Youth & Adolescence, 37*(9), 1134–1146. https://doi.org/10.1007/s10964-007-9224-0

Duncan, G., Dowsett, C. J., Claessens, A., Magnuson, K., Huston, A. C., & Klebanov, P. (2007). School readiness and later achievement. *Developmental Psychology, 43*(6), 428–446.

Elias, M., & Haynes, N. (2008). Social competence, social support, and academic achievement in minority, low-income urban elementary school children. *School Psychology Quarterly, 23*(4), 474–495. https://doi.org/10.1037/1045-3830.23.4.474

Fox, C. L., & Boulton, M. J. (2005). The social skills problems of victims of bullying: Self, peer and teacher perceptions. *British Journal of Educational Psychology, 75*(2), 313–328. https://doi.org/10.1348/000709905X25517

Garner, P., & Mahatmya, D. (2015). Affective social competence and teacher-child relationship quality: Race/ethnicity and family income level as moderators. *Social Development, 24*(3), 678–697. https://doi.org/10.1111/sode.12114

Giallo, R., Treyvaud, K., Matthews, J., & Kienhuis, M. (2010). Making the transition to school: An evaluation of a transition program for parents. *Australian Journal of Educational & Developmental Psychology, 10*, 1–17.

Goodman, R. (1997). The strengths and difficulties questionnaire: A research note. *Journal of Child Psychology and Psychiatry, 38*, 581–586. https://doi.org/10.1111/jcpp.1997.38.issue-5

Gur, C., Kocak, N., Demircan, A., Uslu, B., & Sirin, N. (2015). The study of 48–60 month-old preschool children's social competence and behavior evaluation conditions. *Educations and Science, 40*(180), 13–23.

Hamre, B. K., & Pianta, R. (2001). Early teacher–child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development, 72*(2), 625–638. https://doi.org/10.1111/cdev.2001.72.issue-2

Harkness, S., Blom, M., Oliva, A., Moscardino, U., Zylicz, P. O., Bermudez, … Super, C. M. (2007). Teachers' ethnotheories of the "Ideal student" in five western cultures. *Comparative Education, 43*(1), 113–135. https://doi.org/10.1080/03050060601162438

Hatamizadeh, N., Ghasemi, M., Saeedi, A., & Kazemnejad, A. (2008). Perceived competence and school adjustment of hearing impaired children in mainstream primary school setting. *Child: Care, Health and Development, 34*(6), 789–794.

Havu-Nuutinen, S., & Niikko, A. (2014). Finnish primary school as a learning environment for six-year-old preschool children. *European Early Childhood Education Research Journal, 22*(5), 621–636. https://doi.org/10.1080/1350293X.2014.969084

Henricsson, L., & Rydell, A. M. (2004). Elementary school children with behaviour problems: Teacher–child relations and self-perception. A prospective study. *Merill – Palmer Quaryerly, 50*(2), 111-138. https://doi.org/10.1353/mpq.2004.0012

Howes, C. (2000). Social-emotional classroom climate in child care, child-teacher relationships and children's second grade peer relations. *Social Development, 9*(2), 191–204. https://doi.org/10.1111/sode.2000.9.issue-2

Hughes, J. N., Gleason, K. A., & Zhang, D. (2005). Relationship influences on teacher's perceptions of academic competence in academically at risk-minority and majority first grade students. *Journal of School Psychology, 43*(4), 303–320. https://doi.org/10.1016/j.jsp.2005.07.001

Hung, C.-L., & Marjoribanks, K. (2005). Parents, teachers and children's school outcomes: A Taiwanese study. *Educational Studies, 31*(1), 3–13. https://doi.org/10.1080/0305569042000310921

Jacobs, N., & Harvey, D. (2005). Do parents make a difference to children's academic achievement? Differences between parents of higher and lower achieving students. *Educational Studies, 31*(4), 431–448. https://doi.org/10.1080/03055690500415746

Junttila, N., Vauras, M., Niemi, P. M., & Laakkonen, E. (2012). Multisource assessed social competence as a predictor for later loneliness, social anxiety, and social phobia. *Journal for Educational Research Online, 4*(1), 73–98.

Kabasakal, Z., & Celik, N. (2010). The effects of social skills' training on elementary school students' social adjustment. *Elementary Education Online, 9*(1), 203–212.

Konold, T. R., Jamison, K. R., Stanton – Chapman, T. L., & Rimm-Kaufman, S. E. (2010). Relationships among informant based measures of social skills and student achievement: A longitudinal examination of differential effects by sex. *Applied Developmental Science, 14*(1), 18–34. https://doi.org/10.1080/10888690903510307

Konold, T. R., & Pianta, R. C. (2005). Empirically-derived, person-orientedpatterns of school readiness in typically developing children: Description and prediction to first grade achievement. *Applied Developmental Science, 9*(4), 174–187. https://doi.org/10.1207/s1532480xads0904_1

Kwon, K., Kim, E. M., & Sheridan, S. M. (2012). A contextual approach to social skills assessment: Who is the best judge? *School Psychology Quarterly, 27*(3), 121–133. https://doi.org/10.1037/a0028696

Ladd, G. W., & Burgess, K. B. (2001). Do relational risks and protective factors moderate the linkages between child-hood aggression and early psychological and school adjustment? *Child Development, 72*(5), 1579–1601. https://doi.org/10.1111/cdev.2001.72.issue-5

Ladd, G. W., Herald, S. L., & Kochel, K. P. (2006). School readiness: Are there social prerequisites? *Early Education and Development, 17*(1), 115–150. https://doi.org/10.1207/s15566935eed1701_6

cogent ·· psychology

Letcher, P., Sanson, A., Smart, D., & Toumbourou, J. W. (2012). Precursors and correlates of anxiety trajectories from late childhood to late adolescence. *Journal of Clinical Child and Adolescent Psychology, 41*(4), 417–432. https://doi.org/10.1080/15374416.2012.680189

Leung, C. (2015). Enhancing social competence and the child-teacher relationship using a child-centered play training model in Hong Kong preschools. *International Journal of Early Childhood, 47*(1), 135–152. https://doi.org/10.1007/s13158-014-0117-6

Lillvist, A., Sandberg, A., Björck-Åkesson, E., & Granlund, M. (2009). The construct of social competence: How preschool teachers define social competence in young children. *International Journal of Early Childhood, 41*(1), 51–68.

Lim, S. M., Rodger, S., & Brown, T. (2013). Model of social competence in an early childhood environment. *Occupational Therapy in Mental Health, 29*(2), 114–133. https://doi.org/10.1080/0164212X.2013.788975

Lyneham, H. J., Street, A., Abbott, M. J., & Rapee, R. M. (2008). Psychometric properties of the school anxiety scale – Teacher report (SAS-TR). *Journal of Anxiety Disorders, 22*(2), 292–300. https://doi.org/10.1016/j.janxdis.2007.02.001

Magelinskaitė, Š. (2011). Pirmaklasių mokinių socialinio subrendimo ir adaptacijos mokykloje rodiklių sąsajos. *Pedagogika: Mokslo Darbai, 103*, 45-51.

Magelinskaitė, Š, Kepalaitė, A., & Legkauskas, V. (2014). Relationship between social competence, learning motivation, and school anxiety in primary school. *Procedia: Social and Behavioral Sciences, 116*, 2936-2940.

Malik, F., & Shujja, S. (2013). Social competence and school system as a predictor of academic achievement in high and low achieving school children. *Journal of Behavioural Sciences, 23*(1), 77–92.

Margetts, K. (2005). Children's adjustment to the first year of schooling: Indicators of hyperactivity, internalizing and externalizing behaviours. *International Journal of Transitions in Childhood, 1*, 36–44.

Mashburn, A. J., & Pianta, R. C. (2006). Social relationships and school readiness. *Early Education & Development, 17*(1), 151–176. https://doi.org/10.1207/s15566935eed1701_7

McClelland, M. M., Acock, A. C., & Morrison, F. J. (2006). The impact of kindergarten learning-related skills on trajectories at the end of elementary school. *Early Childhood Research Quarterly, 21*(4), 471–490. https://doi.org/10.1016/j.ecresq.2006.09.003

McClelland, M., & Morrison, F. J. (2003). The emergence of learning-related social skills in preschool children. *Early Childhood Research Quarterly, 18*(2), 206–224. https://doi.org/10.1016/S0885-2006(03)00026-7

McClelland, M., Morrison, F. J., & Holmes, D. L. (2000). Children at risk for early academic problems: The role of learning-related social skills. *Early Childhood Research Quarterly, 15*(3), 307–329. https://doi.org/10.1016/S0885-2006(00)00069-7

McFall, R. M. (1982). A review and reformulation of the concept of social skills. *Behavioral Assessment, 4*(1), 1–33.

Monnier, M. (2015). Difficulties in defining social-emotional intelligence, competences and skills – A theoretical analysis and structural suggestion. *International Journal for Research in Vocational Education and Training, 2*(1), 59–84.

Muthén, L. K., & Muthén, B. O. (1998-2012). *Mplus user's guide* (7th ed.). Los Angeles, CA: Muthén & Muthén.

Oades-Sese, G. V., Esquivel, G. B., Kaliski, P., & Maniatis, L. (2011). A longitudinal study of the social and academic competence of economically disadvantaged bilingual preschool children. *Developmental Psychology, 47*(3), 747–764. https://doi.org/10.1037/a0021380

Ogden, T., Sorlie, M.-A., & Hagen, K. A. (2007). Building strength through enhancing social competence in immigrant students in primary school. A pilot study. *Emotional & Behavioural Difficulties, 12*(2), 105–117. https://doi.org/10.1080/13632750701315508

Pianta, R. C. (2001). *Student–teacher relationship scale: Professional manual.* Odessa, FL: Psychological Assessment Resources, Inc.

Pianta, R. C., & Stuhlman, M. (2004). Teacher-child relationships and children's success in the first years of school. *School Psychology Review, 33*(3), 444–458.

Ping, D. (2009). Factors influencing students' adaptability in school. *Chinese Education and Society, 41*(5), 21–35.

Ponitz, C. C., McClelland, M. M., Matthews, J. S., & Morrison, F. J. (2009). A structured observation of behavioral self-regulation and its contribution to kindergarten outcomes. *Developmental Psychology, 45*(3), 605–619. https://doi.org/10.1037/a0015365

Raižienė, S., Gabrialavičiūtė, I., Ruzgaitė, U., & Garckija, R. (2015). Suvoktas psichologinių poreikių patenkinimas mokykloje: Kaip tai prognozuoja 13-18 metų mokinių prisitaikymą mokykloje? *Ugdymo psichologija, 26*, 44–56. https://doi.org/10.15823/up.2015.04

Ratelle, C. F., & Duchesne, S. (2014). Trajectories of psychological need satisfaction from early to late adolescence as a predictor of adjustment in school. *Contemporary Educational Psychology, 39*(4), 388–400. https://doi.org/10.1016/j.cedpsych.2014.09.003

Rose-Krasnor, L. (1997). The nature of social competence: A theoretical review. *Social Development, 6*(1), 111–135. https://doi.org/10.1111/sode.1997.6.issue-1

Sette, S., Baumgartner, E., & Schneider, B. H. (2014). Shyness, child-teacher relationships, and socio-emotional adjustment in a sample of Italian preschool-aged children. *Infant & Child Development, 23*(3), 323–332. https://doi.org/10.1002/icd.v23.3

Shavega, T. J., Brugman, D., & van Tuijl, C. (2014). Children's behavioral adjustment in pre-primary schools in Tanzania: A multilevel approach. *Early Education and Development, 25*(3), 356–380. https://doi.org/10.1080/10409289.2013.807722

Sheridan, S. M., & Walker, D. (1999). *Social skills in context: Considerations for assessment, intervention, and generalization.* In C. R. Reynolds & T. B. Gutkin (Eds.), *The Handbook of school psychology* (3rd ed., pp. 686–708). New York, NY: Wiley.

Spilt, J. L., & Koomen, H. M. (2009). Widening the view on teacher – child relationships: Teachers' narratives concerning disruptive versus nondisruptive children. *School Psychology Review, 38*(1), 86–101.

Surikova, S. (2007). Socio-educational transaction approach to development of social competence for primary school students at risk of social exclusion. *Tiltai, 3*(40), 73–94.

Trentacosta, C. J., & Izard, C. E. (2007). Kindergarten children's emotion competence as a predictor of their academic competence in first grade. *Emotion, 7*(1), 77–88. https://doi.org/10.1037/1528-3542.7.1.77

Troop-Gordon, W. (2015). The role of the classroom teacher in the lives of children victimized by peers. *Child Development Perspectives, 9*(1), 55–60. https://doi.org/10.1111/cdep.2015.9.issue-1

Uba, I., Hassan, S. A., Mofrad, S., Abdulla, R., & Yaacob, S. N. (2012). Redefining social competence and its relationship with authoritarian parenting. *Procedia – Social and Behavioral Sciences, 46*, 1876–1880. https://doi.org/10.1016/j.sbspro.2012.05.395

Valiente, C., Eisenberg, N., Haugen, R. G., Spinrad, T. L., Hofer, C., Liew, J., & Kupfer, A. (2011). Children's effortful control and academic achievement: Mediation through social functioning. *Early Education and Development, 22*(3), 411–433. https://doi.org/10.1080/10409289.2010.505259

cogent ·· psychology

Vu, J. A. (2015). Children's representations of relationships with mothers, teachers, and friends, and associations with social competence. *Early Child Development and Care, 185*(10), 1695–1713. https://doi.org/10.1080/03004430.2015.1022538

Webster-Stratton, C., Reid, M. J., & Stoolmiller, M. (2008). Preventing conduct problems and improving school readiness: Evaluation of the incredible years teacher and child training programs in high-risk schools. *Journal of Child Psychology and Psychiatry, 49*(5), 471–488. https://doi.org/10.1111/j.1469-7610.2007.01861.x

Wentzel, R. (1991). Relations between social competence and academic achievement in early adolescence. *Child Development, 62*(5), 1066–1078. https://doi.org/10.2307/1131152

Zee, M., Koomen, H. M. Y., & Van der Veen, I. (2013). Student–teacher relationship quality and academic adjustment in upper elementary school: The role of student personality. *Journal of School Psychology, 51*(4), 517–533. https://doi.org/10.1016/j.jsp.2013.05.003

Zhang, X. (2011). Parent-child and teacher-child relationships in Chinese preschoolers: The moderating role of preschool experiences and the mediating role of social competence. *Early Childhood Research Quarterly, 26*(2), 192–204. https://doi.org/10.1016/j.ecresq.2010.09.001

Zhang, G., Zhao, S., Liang, Z., Li, D., Chen, H., & Chen, X. (2015). Social interactions with familiar and unfamiliar peers in Chinese children: Relations with social, school, and psychological adjustment. *International Perspectives in Psychology: Research, Practice, Consultation, 4*(4), 239–253.

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