How does Students with and without Disabilities Perceive Student–Teacher Relationship in Inclusive Elementary Classrooms?

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Abstract

This investigation aims to examine the differences in perceived Student–Teacher Relationship (STR) among students with mild intellectual disabilities (SMID), low academic achievement (SLAA) and high academic (SHAA) achievement in Turkish inclusive elementary classrooms. Student participants were interviewed to complete a scale. Teacher participants completed teacher demographic information, student and classroom information forms. The findings indicate that except students' gender, teachers and students demographic characteristics do not affect the students' perceptions of the STR. Girls appear to be more satisfied in STRs than boys. SMID and SLAA are less satisfied in STRs than high achieving group. The satisfaction levels of the child participants in the emotional, informational and closeness dimensions of the STR were significantly different for SMID. The results demonstrate that the participants' ratings of closeness significantly differ from the emotional and informational support dimensions.

Keywords: Student–teacher Relationship, Inclusive Classroom, Intellectual Disability, Academic Achievement, Student Perception.

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INTRODUCTION

In the last two decades, there has been a philosophical shift with regards to the educational placements of children with disabilities in Türkiye. This change highlights that children with special needs to be included in regular classrooms. Inclusive school models were developed, and the standards and principles of inclusive education were determined (Minisity of National Education [MNE] , General Directorate of Special Education and Guidance Services, 2013). Consequently, parallel with the international developments in the field of special education, more students with mild intellectual disabilities (SMID) found their places in general education classrooms next to their typically developing peers (Hallahan & Kauffman, 2003; Klang et al., 2020). Regardless of the large number of SMIDs in the school system (Bowe, 2005; Salend, 2005), and scientific evidence demonstrating the invaluable benefits of inclusive education for all parties involved, the desired levels of full participation of individuals with disabilities in schools and social life have not yet been achieved (Smith, 1998), only a small percentage of them were able to take their rightful place in the classroom (United States [US] Department of Education, 1994).

Teachers are among the most important elements of the successful inclusive education (De Boer et al.,2011; Stronge et al., 2011). The positive attitudes of classroom teachers play a significant role in the social acceptance of SMID in inclusive classrooms. In inclusive classrooms, the teacher-perceived student-teacher relationship (STR) is positively correlated with the involvement in peer relationships and the level of the social inclusion of children with disabilities (Robertson et al., 2003). Previous studies demonstrate that the sense of belongingness, perceived pedagogical caring and strong STR are critical elements of the school success of children (Pianta, 1999; Wentzel, 1998). A positive STR and a caring atmosphere result in higher levels of engagement in school activities and higher grades (Christiansen, 1982; Fraire et al., 2013; Pianta et al., 1997).

Student-Teacher Relationship (STR)

The STR is a multidimensional and dyadic construct; so, it is affected by the demographic features and characteristics of the teachers and students with and without disabilities (Murray et al., 2008; Prino et al., 2016). The resources, organizational structure and culture of the school (Baker, 2006; İpek, 1999; Murray & Malmgren, 2005; Pigott & Cowen, 2000), classroom structure and instructional practices (Hamre & Pianta, 2005; Jordan & Stanovich, 2001; Pieratt, 2011), and, beliefs and behaviors of teachers (Sutton & Wheatley, 2003) affect the STRs. The effects of the STR quality are greater on children at risk for academic failures, such as students with special needs and low socioeconomic and ethnic minority status (Hamre & Pianta, 2001).

Although it is an important construct for all students, the impact of STR on children with special needs is even more palpable. To illustrate; an analysis of 99 previous studies, conducted between 1990 and 2011, reveals that negative STRs diminish the school engagement and achievement of students with learning difficulties (Roorda et al., 2011). Although a strong STR is notably important for students with Learning Disabilities (LDs), Emotional Behavioral Disorders (EBDs) and MIDs academically, mentally, socially and emotionally (Murray & Pianta, 2007), some features of their disabilities, such as difficulties with self-regulation and organization (Salend, 2005), language and communication issues, internalizing and externalizing problems (Browe, 2005) may be preventing them from establishing and benefiting from the social relationships with others (Tekinarslan & Kucuker, 2015).

The disability type and magnitude play a role in the STR (Baker, 2006; Prinoet al., 2016; Thijs & Koomen, 2009). Prino et al. (2016) compared the effect of different disability statuses such as no-disability, Autism Spectrum Disorder (ASD),LD, Attention Deficit and Hyperactivity Disorder (ADHD) and Down Syndrome (DS) on the teachers' and teacher aids' perceptions regarding the STR. The perception of teachers and teacher aids of the quality of the STR with their typically developing students and students with DS were comparable. Students with LDs were reported to be more dependent than their high and low achieving classmates. However, the relationship with the students

with ASD and ADHD were perceived less close and more conflictual, i.e. less warm and affectionate with fewer occasions of sharing emotions and conversations. Another study revealed the relationship between the perceptions of the STR of teachers and the behavioral characteristics of children with ASD in inclusive classrooms, which demonstrated that the inattentiveness, impulsivity and opposition of students were associated with the perception of teachers of conflicted relationships. Likewise, the teachers viewed the children who exhibited hyperactivity/impulsivity and oppositional behaviors in more dependent relationships with their teachers (Robertson et al., 2003).

The teachers feel frustrated particularly when their teaching is interrupted by factors such as behavior problems of the students, not adhering to the classroom rules or out-of-class factors (Amstad, & Müller, 2020; Emmer, 1994; Haydon et al.,2018; Hargreaves, 2000). In sort, the type and severity of students' disabilities may have an impact on teachers' emotions and thus their perception of STR. The next section focuses on the child's, the other part of bilaterally structured STR, understanding of the teacher's emotions.

The positive and negative emotions of individuals are conveyed through psychological vocal (Johnson & Scherer, 2000) and physical changes, such as facial expressions, (Cacioppo et al., 2000; Planalp, 1999). Students at various grades can understand and be affected by negative and positive teacher emotions (Thomas & Montomery, 1998). They may learn more about these emotions by observing these positive and negative exchanges, while their teachers interact with other students. In fact, Hughes et al., (2001) suggest that when children make a decision about a peer's likeability and characteristics, they consider the quality of teacher support provided to the peer in question along with their direct experiences with the peer and his/her social standing. A positive classroom atmosphere formed by the combination of emotional and instructional support may be even more important for the young children who demonstrate behavioral, attention, social and/or academic problems (Hamre & Pianta, 2005). Thus, the relationship between teachers and students with disabilities (SWD) is notably important in terms of peer acceptance inclusive settings.

The previous studies confirm the positive effects of STR for the students with and without disabilities and provide information on the factors that affect the STR (Hughes et al., 2001). However, there is limited information on designing and examining the intervention programs that target the STR particularly for students at risk (Murray & Malmgren, 2005). A recent study was conducted with 90 students aged between eight and eleven to determine the mediating effect of daily progress reports, coach-student, student-teachers and teacher–student relationships and their interaction on the behavioral outcomes of the students who participated in a one-year behavioral intervention program. Forty participants had a type of disability, such as LDs, ADHD, intellectual disabilities (IDs) and ASD. The findings indicate that regardless of the opinions of teachers, the positive student's perception of the STR moderates the intervention results with a decline in problem behaviors (Stage & Galanti, 2017). Another study investigated the effects of a teacher–student relationship program on the school competence, school adjustment, internalizing and externalizing behaviors, classroom engagement and academic grades of African–American high school students in a high-poverty school setting, where 25% of the students were identified with special needs (Murray & Malmgren, 2005). Although the researchers did not observe a change in social and emotional adjustment, an increase in grade point averages of high school students was noted.

A strong theoretical (Pianta & Steinberg, 1992) and empirical foundation (Murray & Malmgren, 2005; Sakız, 2017) that provides evidence for the importance of the STR was built. Research on typically developing children has demonstrated that a well-established STR increases the self-esteem of students, decreases the levels of depression (Reddyet al., 2003), improves motivation and school engagement (Rosenfeldet al., 2000), increases positive attitudes towards school (Longobardiet al., 2021) and contributes to their academic achievement (Murray & Malmgren, 2005; Sethi, & Scales, 2020). Comparable findings were reported by the researchers for students with disabilities. To illustrate, when students with high incidence disabilities have an accepting, satisfying and constructive relationship with their teacher, they experience less loneliness (Al-Yagon & Mikulincer, 2004) and lower levels of anxiety and conduct problems (Murray & Greenberg, 2001).

Positive relationships with teachers act as a buffering factor for children with disabilities (Baker, 2006). However, compared with their typically developing peers, the children with special needs feel less content in their relationship with teachers (Al-Yagon & Mikulincer, 2004; Murray & Greenberg, 2001). These differences in perceptions were also noted by the teachers. For example, Prino et al. (2016) have demonstrated that the perceptions of STR of Italian teachers change based on the disability status of the student and are affected by the type of disability.

In summary, the STR has been comprehensively examined for typically developing children (Eisenhoweret al., 2007), specifically from the teachers' perspective (Fraire et al., 2013; Koomen et al.,2012; Tsigilis & Gregoriadis, 2008), using the STRS developed by Pianta (2001). However; after synthesizing 119 studies, which were conducted in the US, Canada, Philippines, Brazil, Germany and the UK in the years from 1948 to 2004, Cornelius-White (2007) concluded that the views of STR of the students and observers were actually more predictive of the students' success. Despite the importance of understanding the internal judgments of children in terms of relationships (Lynch & Cicchetti, 1997; Olson, 1977; Reid, Landesman, Treder, & Jaccard, 1989), few studies focused on the student perceptions (Mantzicopoulos & Neuharth-Pritchett, 2003; Murray et al., 2008; Oz & Dolapcioglu, 2019; Williams, 2012). Additionally, there is a scarcity of research that focuses on the STR through the entire elementary school period (Baker, 2006). Despite its relevance to the emotional, social and academic well-being (Murray & Pianta, 2007) and the social inclusion of students with special needs in regular classrooms (Robertson et al., 2003), there are even fewer studies on the relationship between teachers and students with developmental vulnerabilities (Elsenhoweret al.,2007; Prino et al., 2016; Roorda et al., 2011). Further, previous research rarely incorporates SWD as participants (Losh, at all., 2022).

The present study aims to expand the purview of research on relationships between teachers and students in two ways. First, the STRs in Turkish inclusive elementary education classrooms from the students' standpoint will be examined. Secondly, the differences in perceived STR among the three different group of students with MID (SMID), low academic achievement (SLAA) and high academic achievement (SHAA) will be presented.

METHODS

Participants

The sample consisted of 126 students with and without disabilities and 42 teachers. All teacher participants had a bachelorette degree in elementary education. The participating children included 60 girls and 66 boys. These children were in first (23,8%), second (14%), third (26%) and fourth (35,7%) grades between the ages six and 11. All children were enrolled in 30 inclusive classrooms in public schools in different districts of Hatay, Türkiye. Among these 126 children, 42 were SMID; the others were typically developing students with low academic achievement (n = 42) and high academic achievement (n = 42). The academic achievement statuses of typically developing students were determined by the classroom teachers using a 3-point Likert scale (1 = low academic achievement, 2 = average academic achievement, 3 = high achievement). The student participants with MID in this study were diagnosed and placed in inclusive classrooms by the Guidance and Research Centers in the city. In congruence with the fifth edition of The Diagnostic and Statistical Manual of Mental Illnesses (DSM-V), the Special Education Services Regulation in Türkiye defines IDs as a 'developmental condition that is characterized by significant deficits in both intellectual functioning and adaptive behavior, including conceptual, social and practical skills that are present before the age of 18 (American Psychiatric Association [APA], 2013). According to DSM-IV-TR, individuals with MID have an IQ score ranging between 50, 55 and 70, which are associated with deficits in adaptive functioning (APA, 2000).

Data Collection Tools

My teacher and I-Child scale (MTI-C). The My Family and Friends (MFF) instrument was first developed by Reid et al., (1989). This study demonstrated that using MFF, the perception about social support can be measured reliably and validly from early childhood through adolescence. The original MFF was transformed into the My Family and Friends-Child scale (MFF-C) by Murray et al. (2008) and was used to understand the ability of kindergarteners to provide reliable information on STRs.

MFF was modified by C. Murray, K. Murray, Was (2008) based on the STR. The scale contains a two-stage structure for each item. The first stage of each question requires the student to answer in the form of 'yes' and 'no'. This first section assesses whether the child has received a certain type of support from his teacher. If the child says 'no', the score is given as '0'. If the child gives a 'yes' answer, they move to the second stage. The second stage requires the students to state their ratings for the perceived support level. These support types are listed as four different factors in the scale: informational support, emotional support, closeness and conflict. The children must answer the second part of the question with a feeling barometer that contains four levels: I feel no happiness, I feel very little happiness, I feel a little happy, I feel very happy. The information support factor of the scale contains three items and accounts for 24.9% of the total variance ($\alpha = .65$). The emotional support factor contains four items and accounts for 11.4% of the total variance ($\alpha = .51$). The Closeness Factor contains three items and accounts for 10.9% of the total variance ($\alpha = .46$). The conflict factor contains one item and accounts for 9.6% of the total variance ($\alpha = 0.67$).

The MFF-C scale was adapted to the Turkish culture by Oz and Dolapcioglu (2019). Since the adapted form of the scale only focused on the STR, it was renamed 'My Teacher and I-Child Scale (MTI-C)' to fit the scale's content. The My Teacher and I- Child form was perfectly consistent in terms of the model fit indices (RMSA: .033, RMR: .011, SRMR: .050 and CFI: .91), and it was concluded that the scale had model fit. Although the $\chi2 /df$, RMSEA, RMR, SRMR, GFI and AGFI values are at a perfect level of fit, the fit indices of the model related to the CFI and IFI values are at an acceptable level (Kline, 2005; Ullman, 2001). In the analyses for the reliability study of the scale, the internal consistency Cronbach value was .59. My Teacher- I scale includes ten items and three factors: emotional support, informational support and closeness, which include 3, 3 and four items, respectively.

Although Reid et al., (1989) reported that MFF was appropriate for evaluating young children with IDs, kindergarteners, atypical populations and special adolescents that could not be evaluated with other readily available tools, to use the MTI-C with elementary students with MID, an additional CFA and reliability analysis was conducted. Cronbach alpha value was found to be .61, which indicates acceptable scale reliability (Özdamar, 1999). To conduct the CFA, 80 students (who were not involved in the actual study) diagnosed with MIDs were selected from inclusive classrooms in 206 schools in nine different districts in the city of Hatay. The CFA results revealed that the My Teacher and I- Child form was perfectly consistent in terms of the model fit indices for using with students with MIDs [$\chi2 /df = 30.01$; RMSA: .000; RMR:.011; SRMR:.065; CFI:.1.00; NNFI:1,23].

Information forms. To collect data, three different information forms were used as follows: teacher demographic information form, student form and classroom information form. The teacher demographic information form includes questions related to the gender, age, years of experience, major, previous experience in inclusive classrooms, level of knowledge on inclusive education, experience of having taken classes related to the characteristics of SWD and inclusive education in college; and participation in in-service trainings on inclusive education of the teachers. The questions in the student information form were about age, gender and students' grade-levels. The last form was used to gather information on the classroom size and number of SWD in the classroom.

Data Collection Procedures and Analysis

At the beginning of the 2016–2017 school-years, necessary permissions to collect data from public elementary schools in the entire city were secured. After identifying schools with inclusive classrooms in each district, the number of SWD in each classroom and the disability type were determined. A list of elementary schools with at least three included students with MID was created. Although no formal information on socioeconomic profiles for schools or districts was available, the school locations demonstrated a wide variety from rural to urban; and from the low-socioeconomic status to upper middle class. 30 elementary schools were randomly selected from this final list.

Before the data collection began, the school principals and classroom teachers were visited to provide information on the study. The list of included students with MID provided by the Provincial National Education Directorate and school records were compared and confirmed. After randomly selecting classrooms with students with MID, the classroom teachers completed a teacher and classroom information sheet and rated the academic achievement of their students using a 3-point scale (1 = low; 2 = medium; 3 = high academic achievement) on a class roster. For each SMID, two typically developing children (one low achieving and one high achieving) were randomly selected from this list.

To ensure that the children and teachers had time to develop relationships, all data were collected during an eight-week period at the end of the spring semester. MTI-C was individually administered in a quiet room outside of the classroom, designated by the school principles. All participants were informed that their answers were confidential, and they could withdraw from the study at any time. Before beginning the actual assessment, each child was required to demonstrate an understanding of the four levels of the feeling barometer. All child participants had an opportunity to explore the materials and ask questions. When the assessment was completed, each child was escorted to the classroom.

Prior to the actual data analysis, fundamental tests, such as missing values and outlier identification, were conducted. LISSREL 9.1 and the SPSS-20 Statistics programs were used for the data analysis, and the significance threshold was determined as .05 and .01. Mann-Whitney U, Kruskal-Wallis, Chi-square, Independent t-tests and One Way ANOVA were used to detect the differences among the groups.

RESULTS

Analysis of the Demographic Variables

Tables 1, 2 and 3 summarize the findings related to the differences in STR ratings based on the demographic characteristics of the participants.

Table 1. Mann-Whitney U Test Results for Elementary Education Students' STR Ratings

Variable		n	Mean Rank	Sum of Ranks	U	p
Gender	Female	30	19.98	579.5	144.5	.40
	Male	12	23,46	281.5		
Years of experience	6–15 years	10	24,05	240.5	134.5	.46
	16 years +	32	20,70	662.5		
Had an inclusion student earlier	Yes	32	20,55	657.5	129.5	.37
	No	10	24,55	245.5		
Level of knowledge in inclusion	Yes	22	20,09	442	189	.43
	No	20	23,05	461		
Course taken on SWD during undergraduate education	Yes	16	17,25	276	140	.11
	No	25	23,40	585		
Course taken on inclusion during undergraduate education	Yes	9	16,28	146	101	.18
	No	32	22,33	714		
Attended an in-service training on special education	Yes	18	19,89	358	187	.60
	No	23	21,87	503		

According to the results, the students' perceptions of STR did not differ with respect to the demographic characteristics of teachers, such as gender, age, years of experience, prior experience of having an inclusion student, level of knowledge on inclusion, having taken courses on SWD and inclusion during undergraduate education and attending in-service training on special education (p > .05). Thus, the demographic characteristics of the teachers do not meaningfully affect the STR according to the student judgments.

Table 2. Mann-Whitney U Test Results for Elementary Education Students' STR Ratings

Variable		n	Mean Rank	Sum of Ranks	U	p
Number of inclusion students	1	32	20,17	645,5	117,5	.72
	2-4	8	33,52	174,5		
Classroom size	10-20	9	20,28	182,5	137,5	.74
	20-40	33	21,83	720,5		

The results indicate that the students' ratings related to the STR do not differ based on the classroom size and number of SWD (p > .05). Of the 30 classes randomly selected for the study, the largest number of students in one classroom was between 30 and 40. In each classroom, there were two to four SWD. Neither the classroom size nor the number of students with special needs in the classroom had a meaningful effect on students' perceptions of STR.

Table 3. Independent t-Test and Mann-Whitney U Test Results for the STR Ratings of Elementary Education Students

Variable		n	$\bar{x}$/Mean Rank	SS	sd	t/x^2	p
Gender	Girls	60	34,47	6,04			
	Boys	66	31,61	7,33	115	2,29	.02*
Grades	1	30	70,27	-			
	2	18	54,06	-			
	3	33	65,80	-	3	2,57	.46
	4	45	61,08	-			

The results of this analysis indicate a statistically significant difference in the ratings between boys and girls of STR t (115) = 2,29, and p< .05. The student grades are not a differentiating factor. Girls appear to be more satisfied in STRs (X = 34,47) than boys (X = 31,61). This finding demonstrates the meaningful association between the students' gender and their ratings of the STR. The STR ratings of the male students with their teachers are weaker.

Analysis of Differences in the STR among Student Participants

The student participants of this study rated their STR based on their satisfaction level with the type of social support that they received from the teachers using the MTI-C scale. This section presents the differences observed in the ratings of the entire MTI-C Scale and MTI-C Subscales in three different student groups: SMID, students with high academic achievement (SHAA) and students with low academic achievement (SLAA).

Table 4. One Way ANOVA Results for the MTI-C Subscales Ratings of Elementary Education Students

	Variable	n	$\bar{x}$	SS	sd	F	p
Informational Support	SMID	42	8,65	2,90			
	SLAA	42	9,18	2,20	123	2,73	.07
	SHAA	42	8,95	2,47			
Emotional Support	SMID	42	9,60	2,76			
	SLAA	42	9,44	2,49	123	.540	.58
	SHAA	42	10,00	2,33			
Closeness	SMID	42	11,07	3,17			
	SLAA	42	11,25	2,73	123	3,00	.05
	SHAA	42	12,40	2,07			
Total MTI-C	SMID	42	32,09	8,07			
	SLAA	42	32,37	5,82	123	3,15	.04*
	SHAA	42	35,38	5.83			

According to Table 4, when the student ratings of the STR are investigated, a significant difference among three student groups is observed (F (2,123) = 3,15; p < .05). A post hoc Tukey test shows that the SHAA group was significantly different from both SMID and SLAA groups at p < .05. These findings indicate that the SMID and SLAA groups were less satisfied in STRs than the SHAA group. To investigate this significant difference, chi-square tests for each subscale was conducted based on three different student groups.

Table 5. Chi-Square Results for the Closeness Factor in STR Based on the Student Groups

Items	Ratings	Student Groups						Chi-Square		
		SMID		SLAA		SHAA		χ^2	sd	p
		%	f	%	f	%	f			
3a. Does your teacher say things that make you feel good about yourself? 3b. How good does (teachers' name) make you feel about yourself?	0 (No)	7,3	3	9,3	4	0	0			
	1	2,4	1	0	0	0	0			
	2	7,3	2	2,3	1	2,4	1	9,15	.8	.33
	3	14,6	6	9,3	4	9,5	4			
	4	68,3	29	79,1	33	88,1	37			
	T	100	42	100	42	100	42			
5a Do you get upset or angry with your teacher, even if you don't show it to him/her? 5b. How angry or upset do you get with your teacher, even if you don't show it?	0 (No)	36,6	15	37,2	16	35,7	15			
	1	7,3	3	4,7	2	9,5	4			
	2	9,8	4	11,6	5	19	8	3,57	8	.89
	3	22	9	18,6	8	19	8			
	4	24,4	11	27,9	11	16,7	7			
	T	100	42	100	42	100	42			
6a. When you do something good at school that makes you feel really happy, such as making a beautiful picture, do you tell (teachers' name)? 6b. If you tell your teacher about these good things, how happy does it make you feel?	0 (No)	17,1	7	7	3	0	0			
	1	0	0	0	0	0	0			
	2	2,4	1	4,7	2	0	0			
	3	4,9	2	14	6	16,7	7	12,53	6	01*
	4	75,6	32	74,4	31	83,3	35			
	T	100	42	100	42	100	42			
10a. Do you ever feel like (teachers' name) really understands you or really knows you? 10b. How much does your teacher really understand or know you?	0 (No)	26,8	11	34,9	15	14,3	6			
	1	0	0	2,3	1	0	0			
	2	2,4	1	4,7	2	2,4	1	8,88	8	.30
	3	26,8	11	30,2	13	38,1	16			
	4	43,9	19	27,9	13	45,2	19			
	T	100	42	100	42	100	42			

According to Table5, the differences in student perceptions of item 6 varied based on the disability and achievement status of the children: χ^2 (sd=6, n=126)= 12,53, p≤.05.It appeared that 17%

of students with MID did not tell their teacher when they did something good at school. Compared to the SLAA (7%) and SHAA (0%) groups, they have a higher inclination of not sharing pleasant occurrences with teachers, although 75,6% felt 'a lot' of happiness if they did. No students in the SHAA group responded 'No' to item 6a; they felt either 'pretty happy' or 'a lot' of happiness because of their sharing with their classroom teacher. In other words, SHAA reported higher levels of satisfaction on item 6 than their peers in other groups.

Although no significant differences were detected, the responses to other items may have an importance to practitioners. To illustrate, 7,3% of SMID and 9,3% of SLAA did not hear things from their teachers that make them feel good about themselves. Further, 88,1% SHAA reported that their teachers made them feel notably good about themselves; SMID (24,6%) and SLAA (27,9) reported that they feel notably angry/upset with their teachers even if they did not show it; 34,9% of SLAA, 26,8 % of SMID and 14,3% of SHAA felt that their teachers did not know or understand them.

Table 6. Chi-Square Results for the Informational Support Factor in STR

Items	Ratings	Student Groups						Chi-Square		
		SMID		SLAA		SHAA		x^2	sd	p
		%	f	%	f	%	f			
2a. When you need help with doing your school work, such as learning the alphabet, do you ask (teachers' name) for help? 2b. If you go to your teacher for help with school work, how helpful is he/she?	0 (No)	14,6	6	11,6	5	7,1	3	10,19	8	.25
	1	4,9	2	0	0	2,4	1			
	2	12,2	5	4,7	2	4,8	2			
	3	14,6	6	20,9	9	7,1	3			
	4	53,7	23	62,8	26	78,6	33			
	T	100	42	100	42	100	42			
4a. When you want someone to help you learn how things work, such as how to build something, do you ask (teacher' name) to tell you? 4b. How much do you learn about how things work from your teacher?	0 (No)	12,2	5	11,6	5	4,8	2	12,19	8	.14
	1	4,9	2	0	0	0	0			
	2	9,8	4	7	3	4,8	2			
	3	19,5	8	39,5	17	23,8	10			
	4	53,7	23	41,9	17	66,7	28			
	T	100	42	100	42	100	42			
7a. When you need help putting on your shoes or coat, do you go to your teacher for help? 7b. If you go to your teacher for help putting on your shoes or coat, how helpful is he/she	0 (No)	22	9	16,3	7	16,7	7	41,13	8	.84
	1	2,5	1	0	0	0	0			
	2	0	0	4,7	2	0	0			
	3	19,5	8	30,2	13	31	13			
	4	56	24	48,8	20	53,4	22			
	T	100	42	100	42	100	42			

The chi-square results indicate that the differences in the students' ratings regarding the informational support subscale were not statistically meaningful ($p \geq 05$). Table 6 shows that 14,6 %, 12,3 and 22% of SMID did not go to their teachers for help when they needed assistance with school work, understating how things work and putting on their coats or shoes, respectively. In terms of perceived support for school work and learning about how things work, the SHAA had higher satisfaction levels than the other two student groups.

Table 7. Chi-Square Results for the Emotional Support Factor in STR

Items	Ratings	Student Groups						Chi-Square		
		SMID		SLAA		SHAA		x^2	sd	p
		%	f	%	f	%	f			
1a. When you want to share your feelings, for example when you feel happy or sad, do you share them with your [teacher's name] teacher? 1b. How much better do you feel when you share your feelings with your teacher?	0 (No)	7,3	3	14	6	4,8	2			
	1	2,4	1	0	0	0	0			
	2	2,4	1	0	0	7,1	3			
	3	14,6	6	25,6	11	21,4	9	9,53	8	.30
	4	73,2	31	60,5	25	66,7	28			
	T	100	42	100	42	100	42			
9a. If you want to be with someone who makes you happy, would you go to your teacher? 9b. How happy do you feel if you are with your teacher?	0 (No)	19,5	8	16,3	7	16,7	7			
	1	0	0	0	0	0	0			
	2	7,3	3	0	0	0	0	8,77	6	.16
	3	12,2	5	16,7	7	16,7	7			
	4	61	26	66,7	27	66,7	28			
	T	100	42	100	42	11	42			
11a. Do you want help from your teacher when there is something that you do not know much about? 11b. If you go to your teacher for help, how much do you learn from him/her?	0 (No)	9,8	4	9,3	4	7,1	3			
	1	2,4	1	2,3	1	0	0			
	2	4,9	2	7	3	7,1	3	2,21	8	.97
	3	22	9	25,6	11	19	8			
	4	61	26	55,8	23	66,7	28			
	T	100	42	100	42	100	42			

The chi-square results indicate that the differences in the students' ratings regarding the emotional support subscale were not statistically meaningful ($p \geq 05$).

Table 8. One Way ANOVA Results for the MTI-C Ratings of Different Student Groups

Student Groups	Variable	n	$\bar{x}$	SS	sd	F	p
SMID	Informational Support	42	8,65	2,90			
	Emotional Support	42	9,60	2,76	120	6,96	00*
	Closeness Support	42	11,07	3,17			
SLAA	Informational Support	42	9,14	2,21			
	Emotional Support	42	9,42	2,51	123	8,80	00*
	Closeness Support	42	11,26	2,76			
SHAA	Informational Support	42	9,95	2,47			
	Emotional Support	42	10,00	2,33	123	15.58	00*
	Closeness Support	42	12,40	2,07			

The satisfaction levels of child participants in the emotional, informational and closeness dimensions of STR significantly vary for SMID (F (2,120) = 6,96; p<.01), SLAA (F (2,123) = 8,80; p<.01) and SHAA (F (2,123) = 15,58; p < .01). A post hoc Tukey test shows that the ratings of closeness of the participants significantly differ from the emotional and informational support dimensions. Regardless of the disability or academic achievement status, the children's views of the STR may be more affected by their perception of closeness that they experience with the teachers.

DISCUSSION AND CONCLUSIONS

The purpose of this investigation was to examine the differences in perceived STR among SMID, SLAA and SHAA. This investigation focused on students who are attending inclusive classrooms. The findings indicate that except students' gender, the demographic characteristics of teachers and students do not affect the students' perceptions of STR. Confirming Murray et al.'s (2008) findings on kindergarteners; teacher's gender was not found as an influential factor in STR for elementary students in this study. However, the female student participants had more positive perceptions of STR than their male counterparts. This finding may be resulted from the conflicting relationships between boys and their teachers as it was revealed by Mantzicopoulos and Neuharth-Pritchett's (2003) work focusing on STR during the early childhood years. Zee et al., (2020) reported that female elementary education SWD felt more closeness and less conflict with their teachers across

Netherland. Teachers also reported higher levels of dependency and closeness with girls and more conflicts with boys (Fraire et al., 2013).

When teachers gain experience in their work, they adjust to their profession and master the art of teaching; therefore, an association between the years of experience of the teachers and their relationship with students was expected (Rivkin, Hanushek, & Kain, 2005). Although Kesner (2000) suggested a relationship among the personality, experience, personal relationship history and ability to form relationships with children in classrooms of the teachers, the student participants in this study did not report a statistically significant difference in their STR in terms of teachers' experience. Moreover, teacher-related factors, such as a previous experience of having an inclusion student, level of knowledge on inclusion, courses taken on SWD and inclusion during undergraduate education and participation in in-service training on special education do not affect the STRs.

Although a decreasing tendency appeared in previous research in the scores of closeness as students gets older (Baker, 2006) and move towards upper grades (Zee, et al., 2020) during elementary education years, the students' perceptions in this study did not vary based on the grade. International studies that were conducted with typically developing children report differentiating findings on the effect of the grade levels or ages of the students. To illustrate, teachers report more conflict and dependency in their relationships with early childhood education children than primary school age students in Italy. The authors explain this decrease in conflict and dependency using the cognitive, emotional and social developments during the transition from kindergarten to elementary school (Fraire et al., 2013).

The present findings indicate that SMID and SLAA groups were less satisfied in STRs than the SHAA group. The effect of the school performance on the levels of closeness and conflict perceived by the teachers was also reported by Prino et al. (2016). They found that teachers tended to perceive a more affectionate and less hostile relationship with the students who had better school performance. Parallel with our findings, previous studies demonstrated that teachers provided lower levels of emotional support and reinforcements and higher levels of criticism, ignoring and negative behaviors to low achieving students than to their high archiving peers (Montague & Rinaldi, 2001). This type of teacher behavior may result in lower levels of self-concept and motivation and a higher level of alienation feeling for SWD (Murdock, 1999). Differential teacher beliefs towards high and low achieving students with and without LDs' have also been demonstrated since the eighties (Brattesani, et al., 1984). Teachers perceive their relationships with children with autism and attention deficit disorder, where behavioral problems are more prominent; to be more conflicted than with students with learning disabilities (Zee et al., 2020).

The results indicate that the student-perceived closeness has a differentiating effect on the satisfaction levels of students in STRs regardless of the disability or academic achievement status. A positive classroom atmosphere formed by the combination emotional and instructional support may be even more important for the young children who demonstrate behavioral, attention, social and/or academic problems. Research demonstrates that the emotional support provided by teachers who knew and attended to the individual needs of the students more significantly affects the academic achievement of the first graders than the instruction support, which involves specific instructional practices and conversations (Hamre & Pianta, 2005).

The findings and conclusions of this study should be considered with certain limitations. All data came from students in inclusive classrooms. These results reflect the perceptions of students with MID and high and low academic achievement on the STR in inclusive settings. The findings may not represent the perceptions of students with MID who attend self-contained classrooms, private special education and rehabilitation centers. Including in-class observations and teacher ratings would have strengthened the study; these dimensions will be pursued in future research. Similar to its original from (Murray et al., 2008; Reid et al., 1989), the items in the MTI-C scale do not represent a comprehensive assessment of the social needs of children and only focus on the support received from

teachers. Moreover, only a few items evaluate the negative events that occur between the student and the teacher.

The results of this study have practical and policy implications for teachers, researchers, teacher educators. Although the skill deficits of students with conduct problems may be considered an important source of peer rejection, the perceived teacher support appears to be a better predictor of the peer liking of students who are behaviorally at risk than the peer- and teacher-rated aggression (Hughes et al., 2001). Therefore, it is imperative to develop efficient intervention programs to improve the effective qualities of STR to support inclusive education. Considering previous studies, when one designs intervention programs that will increase the peer acceptance of students (who are at risk in inclusive classrooms) instead of focusing on only social-skill training for the children at risk, the incorporation of affective features of teacher-student interactions may be more meaningful.

Moreover, when one designs the pre-service and in-service teacher training programs, building strong relationships with students can be included as an important component. The growing national and international research background on the positive effect of the STR on the academic, social, behavioral and mental well-being of the students with and without disabilities should be considered. In addition, methods and strategies to increase the quality of STR at schools in Türkiye, such as decreasing school sizes and creating instructional settings where students and teachers can have one-on-one interaction, should be discussed.

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