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School-Related Social Support Is Associated With School Engagement, Self-Competence and Health-Related Quality of Life (HRQoL) in Turkish Immigrant Students

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This study examines how school-related social support from teachers and classmates is related to the health-related quality of life (HRQoL), school engagement, and self-competence of Turkish immigrant students in Germany. We used data from the SIMCUR study with a longitudinal and cohort-sequential design. The study included a total of 216 Turkish immigrant children and adolescents. Complete longitudinal data was available for 161 participants. Students rated their perceived teachers and classmate support, HRQoL, school engagement, and self-competence in math and reading in 4th ($n = 136$), 5th ($n = 110$), and 6th grades ($n = 100$) (middle/ M-cohort), or in 7th ($n = 73$) and 8th ($n = 69$) grades (older/ O-cohort). Multiple regression analysis revealed that school-related social support had positive effects on all outcomes in 4th grade. In 5, 6, and 7th grades, higher classmate support was associated with higher HRQoL but not with school engagement and self-competence, whereas higher teacher support was associated with higher school engagement and self-competence but not with HRQoL. In 8th grade, only a positive effect of teacher support on school engagement was found. Girls were more likely to report higher school-related social support, but this reached significance only for the M-cohort. Boys in 5, 7, and 8th grades reported higher self-competence in math than girls. We found hardly any effects of maternal education level on HRQoL and school outcomes of students. Only for 4th grade students was higher maternal education level associated with higher school engagement. Our findings indicate that for younger children especially in elementary school, teacher, and classmate support has positive effects on both HRQoL and school-related variables; for students at the beginning of middle school, classmate support only has an influence on HRQoL. Regarding school matters, students in these grades profit from teacher support as from classmates. During adolescence, school-related social support loses significance in terms of HRQoL and self-competence. However, teacher support still seems to have a significant impact on students' school-engagement. From an applied perspective, interventions aimed at HRQoL and academic achievement of children and adolescents should include a focus on social support by teachers and classmates.

Keywords: Turkish immigrant children and adolescents, school-related social support, teacher and classmate support, health-related quality of life (HRQoL), KINDL-R, school engagement, perceived self-competence

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INTRODUCTION

Children's and adolescents' perceived social support represents an important resource in their lives and is associated with a wide range of psychological outcomes (Aydin et al., 2016; Münzer et al., 2017). Malecki and Demaray defined social support as "an individual's perceptions of general support or specific supportive behaviors (available or enacted upon) from people in their social network, which enhances their functioning and/or may buffer them from adverse outcomes" (Malecki and Demaray, 2002, p. 2).

Among the most important settings in childhood and adolescence are schools and classrooms, where social interactions with teachers and classmates take place. School-related social support (i.e., social support from teachers and classmates) influences the perception of school lives directly. Students' perceived school-related social support was found to be associated with their academic initiative (Danielsen et al., 2010), short- and long-term school satisfaction (Jiang et al., 2013; Liu et al., 2016), school-related subjective well-being (Tian et al., 2016), and intrinsic valuation of school work, school adjustment, motivation, academic self-efficacy, as well as academic efforts for learning and mastery orientation (Vedder et al., 2005; Wentzel et al., 2017).

Perceived school-related social support can also influence the individual development and well-being of students. It has been found that school-related social support has a direct effect on school-related stress and an indirect effect on global health, with higher perceived support predicting lower levels of stress and higher global health (García-Moya et al., 2013). High levels of school-related social support can have positive effects on students' adaptive and social skills, self-concept, internalizing, and externalizing behavior problems, and life satisfaction (Demaray and Malecki, 2002; Stewart and Suldo, 2011). An additional important finding is that low levels of support from classmates are associated with higher levels of depression and social anxiety, lower levels of self-esteem (Wit et al., 2011), and higher risk of emotional and conduct problems (Noam et al., 2014). Furthermore, perceived school-related social support can protect adolescents from health-related risk behaviors such as cigarette smoking, marijuana use, drinking until getting drunk, and weapon-related violence (McNeely and Falci, 2004; Hargreaves, 2012).

School-related social support seems to be one of the most important resources in the positive development of children and adolescents. In this regard, it is especially important to consider that immigrant children and adolescents reported lower levels of social support and higher psychological distress and mental health disorders when compared to their native peers (Janssen et al., 2004; Oppedal and Røysamb, 2004; Frankenberg et al., 2013). A study with 10-13 year old Turkish and Moroccan immigrant students in the Netherlands showed that emotional support from teachers was positively associated with students' school adjustment (Vedder et al., 2005). A further finding is that school stress and low school-related social support is associated with emotional and conduct problems for immigrant and non-immigrant students (Noam et al., 2014). In addition, school-related social support was found to be directly connected to mental health outcomes and risk-taking behavior in immigrant students when compared to native students (Walsh et al., 2010). Teacher and peer support was also related to academic motivation in Latino immigrant students in the USA (Stanton-Salazar and Tai, 2001; Alfaro et al., 2006).

In the current study, we focus on the effects of perceived school-related social support on Turkish immigrant students' health-related quality of life (HRQoL), as well as on their school engagement and perceived self-competence.

HRQoL is defined as perceived health and is not only understood as the absence of somatic diseases but comprises physical, emotional, mental, social, and behavioral aspects of well-being and functioning (World Health Organization, 1948; Ravens-Sieberer et al., 2007). Previous studies with immigrants in Germany have found that when compared to natives, immigrant children and adolescents show lower levels of HRQoL (Ravens-Sieberer et al., 2008). In addition, compared to native German students, immigrant students show less academic achievement (Riphahn, 2003), score lower on performance tests (Müller and Stanat, 2006), and have a higher probability of attending lower middle school types (Bos et al., 2003). The low educational achievement of immigrants in Germany has a lifelong impact causing lower social status later in life and is passed on to the next generation (Frick and Wagner, 2001). In addition to these results, recent studies found high academic aspirations in Turkish immigrant students and their parents, in some cases even higher than for native Germans or for other immigrant minorities (Kristen and Dollmann, 2010; Relikowski et al., 2012; Salikutluk, 2016). The discrepancy between the high academic aspirations and the overall lower educational status of the Turkish minority seems to be due to the lack of support, participation, and responsibility of parents in students' scholastic lives (Kohl et al., 2014). Parental support is restricted by low level of knowledge about the German educational system, the parents' own low education level, and insufficient language skills (Relikowski et al., 2012; Kohl et al., 2014). Therefore, the school-related social support of immigrant students is of particular importance in reducing the discrepancy between high academic aspirations and low academic achievement.

Turkish immigrant children and adolescents are part of the largest minority population in Germany. In the 1960s, laborers migrated from Turkey to Germany until the official moratorium on labor immigration in 1973. Many of these immigrant workers also began bringing their families, which led to a growing number of Turkish immigrants in Germany. Today, Turkish immigrants comprise about 2.86 million people and represent 16.7% of the immigrant population in Germany (Bundesministerium des Innern, 2016). In comparison to the non-immigrant population, this population is more likely to be younger on average (Destatis, 2011). Furthermore, 31% of the students in Germany have a migrational background with Turkish students representing the largest minority at 7% (Krüger-Hemmer, 2016). Therefore, a closer examination of their psychological well-being and functioning is warranted.

Even though the relationship between school-related social support and well-being and academic outcomes is well-documented, no longitudinal data on the effects of

school-related social support on school engagement, perceived self-competence, and HRQoL exists for Turkish immigrant children and adolescents in Germany. In this study, we address the question of whether or not school-related social support has an impact on school engagement, perceived self-competence, and HRQoL of Turkish immigrant students. We examined two cohorts of children and adolescents: a middle cohort (M-cohort, 9–12 years) and an older cohort (O-cohort, 12–14 years). With regard to related studies, we expected (1) that students with higher school-related social support would report higher HRQoL, higher school engagement, and higher perceived self-competence, and (2) effects of gender, i.e., girls to have higher scores on school-related social support (Bokhorst et al., 2010). In addition, our aim was (3) to investigate whether maternal level of education as an indicator of the socioeconomic status (SES) would be a protective factor and increase children's and adolescents' HRQoL, school engagement, and perceived self-competence (Rajmil et al., 2014).

METHOD

Procedure

Turkish immigrant families were recruited through the longitudinal and cross-sectional project SIMCUR (Social Integration of Migrant Children—Uncovering Family and School Factors Promoting Resilience), which was carried out in the Ruhr area, an industrialized area in the northwestern region of Germany. To distribute information about the project, school administrations were asked for permission. We attended formal and informal meetings with parents in order to increase the acceptance of the project. Additionally, posters, information stands, articles in German and Turkish-language newspapers, leaflets in the offices of pediatricians, and presentations in mosques and at meetings of associations of Turkish parents were provided in order to familiarize the target population with the project and to gain their acceptance of it. We also asked community leaders and organizations for their endorsements. Because parents heard of the project through multiple channels and repeatedly, it is difficult to identify how exactly families were recruited.

Participants were screened via telephone by bilingual research assistants. The inclusion criteria were: (1) students' mother, father, or grandparents had been born in Turkey, (2) students had to be born after 32 weeks of gestational age, (3) could not be living in a foster family, (4) could not have a referral to a special needs school. Data were assessed by bilingual research assistants in the families' homes or at the Ruhr University in Bochum. Students were interviewed and asked to fill out questionnaires in German. Confidentiality was ensured, and consent forms were signed by both the student and at least one of the student's parents. Families received €25 compensation.

Study Sample

A total of 216 Turkish students participated in the study. We differentiated between the middle/ M- cohort ($n = 141$) and older/ O-cohort ($n = 75$). Longitudinal data was available for 94 students of M-cohort and for 67 students of O-cohort. The participating students were between 9 and 15 years of age. Data from the M-cohort were collected at the end of 4th grade (T1), 5th grade (T2), and 6th grade (T3). Data from the O-cohort were collected at the end of 7th grade (T1) and 8th grade (T2). See **Table 1** for sample sizes by point-in-time and sociodemographic information.

Study Measures

School-Related Social Support

Students' perceived teacher support was measured by means of the teacher subscale of the Child and Adolescent Social Support Scale (CASSS, Malecki and Demaray, 2002). The questionnaire consists of seven items measuring perceived emotional, informational, appraisal, and instrumental teacher support. Each item (e.g., "My teacher spends time when I need help.") is scored on a five-point Likert-type scale ranging from 1 = *never* to 5 = *always* ($\alpha = 0.86$).

Students' perceived support by classmates was measured by eight items which were adapted from the social support scale of Ystgaard (1997). These items (e.g., "My classmates accept me as I am.") are each scored on a four-point Likert-type scale ranging from 1 = *totally disagree* to 4 = *totally agree* ($\alpha = 0.88$).

HRQoL

Students' health-related quality of life was measured by means of the KINDL-R questionnaire (Ravens-Sieberer and Bullinger, 2003). Students self-reported via the questionnaire. It consists of 24 items referring to the last week and measuring physical well-being (e.g., "I felt sick."), emotional well-being (e.g., "I felt fearful or insecure."), self-esteem (e.g., "I was happy with myself."), well-being in family (e.g., "I felt comfortable at home."), well-being related to friends/ peers (e.g., " I got along with friends."), and school-related well-being (e.g., "I was afraid of getting bad grades."). The items are each scored on a five-point Likert-type scale ranging from 1 = *never* to 5 = *always* ($\alpha = 0.79$). We calculated the mean scores of all items for both cohorts and all time points.

School Engagement

The 15-item-scale "What I think about school" from the NICHD Study of Early Child Care and Youth Development (Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2010) was used to assess students' perceived school competence and their school-related motivation. Items (e.g., "I like going to school") were scored on a 4-point Likert scale ranging from 1 = *not at all true* to 4 = *very true* ($\alpha = 0.80$). We formed the means of all items for both cohorts and all time points.

Perceived Self-Competence

The 10-item-scale "How I do in math/reading" (Eunice Kennedy Shriver National Institute of Child Health and Human Development, 2010) was used to assess students' perception of efficacy and competence in math (5 items, $\alpha = 0.74$) and reading (5 items, $\alpha = 0.73$). The scale focuses on their perceived current skills, expectations for success, and the subjective value they assigned to both subjects. Items (e.g., "I am good at

TABLE 1 | Demographic characteristics of the study participants.

	M-cohort (grade 4-6)			O-cohort (grade 7–8)	
	t1, *n* = 136	**t2, *n* = 110**	**t3, *n* = 100**	**t1, *n* = 73**	**t2, *n* = 69**
Students' gender (male)	64 (47.1%)	50 (45.5)	46 (46.0%)	27 (37.0%)	27 (39.1%)
Age of child at t1 (years)	9.98 (.58)	9.99 (.60)	10.01 (.58)	12.99 (.63)	13.01 (.68)
Mothers' education level					
lower	110 (80.9%)	87 (79.1%)	79 (79.0%)	58 (79.5%)	56 (81.2%)
higher	26 (19.1%)	23 (20.9%)	21 (21.0%)	15 (20.5%)	13 (18.8%)

Data is presented as mean (SD) for continuous variables and frequencies (%) for categorical variables.

TABLE 2 | School support measures by cohort and gender.

Cohort and scales		**t1**	**t2**	**t3**
M-Cohort (*n* = 94)				
Teacher Support	Male (*n* = 43)	4.17 (0.81)	4.13 (0.92)	3.99 (0.89)
	Female (*n* = 51)	4.45 (0.57)	4.48 (0.57)	4.35 (0.63)
	Total (*n* = 94)	4.32 (0.70)	4.32 (0.77)	4.18 (0.78)
Classmate Support	Male (*n* = 43)	3.31 (0.56)	3.39 (0.62)	3.36 (0.52)
	Female (*n* = 51)	3.60 (0.37)	3.55 (0.50)	3.52 (0.51)
	Total (*n* = 94)	3.46 (0.49)	3.47 (0.56)	3.45 (0.52)
O-Cohort (*n* = 67)				
Teacher Support	Male (*n* = 25)	4.09 (0.69)	3.93 (0.69)	-
	Female (*n* = 42)	4.33 (0.56)	4.10 (0.59)	-
	Total (*n* = 67)	4.24 (0.62)	4.04 (0.63)	-
Classmate Support	Male (*n* = 25)	3.54 (0.44)	3.44 (0.48)	-
	Female (*n* = 42)	3.45 (0.50)	3.51 (0.55)	-
	Total (*n* = 67)	3.49 (0.48)	3.48 (0.52)	-

Data is presented as mean (SD).

math/reading") were scored on a 5-point Likert scale ranging from 1 = *not at all true* to 5 = *very true*. We formed the means of all items for both cohorts and all time points.

Maternal Education Level

The distribution of educational attainment was based on the International Standard of Classification of Education (ISCED; UNESCO, 2006). 6.9% of the mothers had no degree; 27.3% had primary education; 46.8% had lower secondary education (*Hauptschule*, *Realschule*, *Lise*); 13% had upper secondary education; 6% had tertiary education (university). For the regression analysis, mothers were categorized into just about evenly divided groups of either lower education (primary education or *Hauptschule* indicating up to 9 years of schooling) or higher education (*Realschule*, *Lise,* or higher indicating at least 10 years of schooling). In Germany, *Hauptschule* is the lowest school track, whereas *Realschule* is the more demanding intermediate school track. According to this definition, 81% of the mothers were lower-educated.

Statistical Analyses

All statistical analyses were performed using SPSS 24 for Windows. The expectation maximization technique was used to impute missing data as it produces more accurate and efficient parameter estimates than list-wise deletion (SPSS version 24, Missing Value Analysis, SPSS Inc. Chicago, IL). This method computes missing values based on maximum-likelihood estimates by using observed data in an iterative process (Dempster et al., 1977). The total percentage of imputed missing data was 0.50%.

First, we examined students' school-related social support over the time points and between gender via repeated-measures ANOVAs. Next, we analyzed the effect of school-related social support on Turkish immigrant students' HRQoL, school engagement, and perceived self-competence. For this analysis, multivariate linear regression models were conducted. We included students' gender and maternal education level in these analyses as well.

RESULTS

Students' School-Related Social Support

For the M-cohort, students' perceived support was relatively stable over time. However, we found a significant decrease in teacher support within the O-cohort between T1 and T2 [$F_{(1,\ 65)} = 6.38$, $p = 0.014$, $\eta p^2 = 0.089$]. In addition, girls

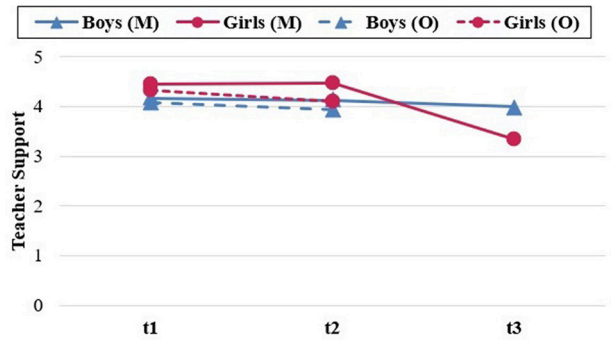

FIGURE 1 | Turkish students' teacher support over time separated by cohort and gender.

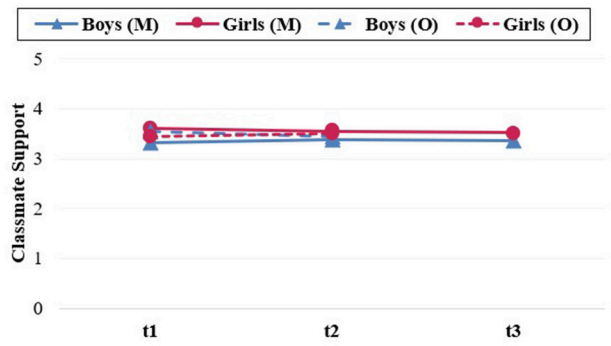

FIGURE 2 | Turkish students' classmate support over time separated by cohort and gender.

reported overall higher levels of school-related social support (teacher/classmate) than did boys. Within the M-cohort, these gender differences were significant for teacher support in T2 and T3. Descriptive statistics for social support scales are presented for all cohorts and all time points in **Table 2**. Gender effects are illustrated in **Figures 1**, **2**.

Effects of School-Related Social Support on HRQoL, School Engagement, and Self-Competence

Overall, students with higher school-related social support scored higher on total KINDL-R score, school engagement, and self-competence. In contrast, we found only few effects of students' genders and maternal education levels (see **Table 3**). **Figure 3** illustrates the contributions each individual factor made to explain variance in students' total KINDL-R scores.

M-cohort

At T1, students with higher teacher and classmate support reported significantly higher scores on the KINDL-R total score, on school engagement, and on self-competence in math and reading. At T2 and T3, higher classmate support is only associated with higher KINDL-R scores, whereas higher teacher support is associated with higher school engagement and self-competence in math and reading.

In addition, at T1, higher maternal education is associated with higher school engagement in students. The results showed gender effects only at T2 for self-competence in math, with boys having higher scores than girls did.

O-cohort

At T1, students with higher classmate support reported significantly higher levels on the KINDL-R score, and students with higher teacher support reported higher school engagement and self- competence in math. At T2, teacher support only had a significant effect on school engagement.

Parallel to the M-cohort, we found only a few effects of students' gender with boys reporting higher self-competence in math than girls did. In the O-cohort, we found no effects of maternal education level.

DISCUSSION

The present study investigated the association between perceived school-related social support and HRQoL, school engagement, and perceived self-competence within a large sample of two cohorts of Turkish immigrant students in Germany. The cohort sequential design included students from 4 to 8th grades.

Effects of School Support

Our results show that elementary school teacher support has a positive impact on quality of life as well as on school-related engagement and self-concept. In contrast, for middle school students, teacher support is found to have an effect only on school-related factors. These results can be attributed to the fact that in elementary school the class teacher principle applies. Class teachers teach most of the subjects and are predominantly present for the students for 4 years and thus are influential figures for students. In contrast, in middle school, the subject teacher principle applies. This structure means that different subjects are usually taught by different teachers. Thus, class teachers are less present, teach fewer subjects, and play less prominent roles in students' lives. Therefore, the teacher-student relationship in elementary school is more pronounced than in middle school, and teachers, as important role models, can have a greater impact on students' general life quality. Furthermore, teacher support, both in primary and secondary education, is a relevant resource for school-related engagement and in the self-concept of the students. These findings are in line with previous studies (see meta-analysis by Roorda et al., 2011), which show that the student-teacher relationship has a positive impact on students' development in school performance, academic self-concept, and motivation. However, teacher support was not significantly associated with school engagement and self-competence in 8th grade. These findings suggest that teacher support might be better suited to serve as a protective factor for younger than for older students.

Furthermore, our results indicate that classmate support in elementary school has positive effects on quality of life as well as on school-related engagement and self-concept. However, in

TABLE 3 | Results of multivariate regression analyses predicting students' HRQoL and school outcomes.

	KINDL-R		School engagement		Math self-competence		Reading self-competence	
	β	*p*	*β*	*p*	*β*	*p*	*β*	*p*
M-COHORT								
***t*1 (*n* = 136)**								
Teacher support	0.41	0.000	0.39	0.000	0.29	0.002	0.21	0.033
Classmate support	0.24	0.008	0.34	0.000	0.27	0.004	0.22	0.029
Gender	−0.08	0.253	0.09	0.162	−0.09	0.226	0.08	0.396
Maternal Education	−0.06	0.425	0.20	0.003	0.11	0.157	0.13	0.101
R^2	0.34		0.46		0.24		0.17	
F	16.61	0.000	27.83	0.000	10.45	0.000	6.56	0.000
***t*2 (*n* = 110)**								
Teacher support	0.23	0.074	0.51	0.000	0.47	0.000	0.40	0.002
Classmate support	0.32	0.012	0.19	0.093	0.14	0.250	0.02	0.865
Gender	−0.13	0.126	0.01	0.932	−0.22	0.010	0.09	0.304
Maternal Education	−0.03	0.151	0.01	0.859	−0.03	0.710	−0.02	0.865
R^2	0.26		0.43		0.33		0.20	
F	9.05	0.000	19.58	0.000	12.92	0.000	6.73	0.000
***t*3 (*n* = 100)**								
Teacher support	0.20	0.070	0.51	0.000	0.47	0.000	0.25	0.058
Classmate support	0.47	0.000	0.06	0.625	−0.03	0.839	0.13	0.312
Gender	−0.05	0.568	0.09	0.273	−0.15	0.112	0.18	0.066
Maternal Education	−0.02	0.779	−0.04	0.630	−0.10	0.260	0.17	0.075
R^2	0.39		0.34		0.22		0.19	
F	14.87	0.000	12.00	0.000	6.65	0.000	5.54	0.000
O-COHORT								
***t*1 (*n* = 73)**								
Teacher support	0.08	0.517	0.47	0.000	0.37	0.005	0.11	0.452
Classmate support	0.48	0.000	0.02	0.866	0.00	0.996	0.15	0.286
Gender	−0.16	0.125	−0.09	0.410	−0.24	0.041	0.04	0.778
Maternal Education	0.20	0.071	0.19	0.099	−0.02	0.878	0.07	0.575
R^2	0.30		0.21		0.18		0.04	
F	7.17	0.000	4.42	0.003	3.70	0.009	0.76	0.557
***t*2 (*n* = 69)**								
Teacher support	0.24	0.71	0.43	0.001	0.13	0.313	0.14	0.311
Classmate support	0.13	0.353	−0.19	0.153	0.05	0.695	0.04	0.782
Gender	−0.18	0.154	−0.12	0.304	−0.25	0.047	0.06	0.634
Maternal Education	0.08	0.541	0.03	0.785	−0.02	0.892	0.13	0.331
R^2	0.11		0.16		0.08		0.04	
F	1.90	0.122	3.04	0.023	1.41	0.240	0.71	0.588

Data is presented as β coefficient unless indicated otherwise.
Gender (0 = male, 1 = female), maternal education (0 = low, 1 = high).

middle school, this support only has a positive impact on quality of life and has no significant impact on school-related factors. One possible explanation may be the change in friendships during the transition from elementary school to middle school. The restructuring of the class community and the loss of the elementary school class association is an importantadjustment for pupils. The transition from elementary to middle school is characterized as a break in social relations (Hardy et al., 2002). Peer relationships are challenging for students during this transitional period (Sirsch, 2000). Above all, for students with a migrational background, this change in social contacts represents a greater burden. A study by Rahn and Chassé (2009) shows that children from socially disadvantaged families find it harder to make new friends. At the same time, peer relationships at this age are quite fluid and linked to the intensity of contact. This characteristic makes it possible for most children to make new friends in their new classes, even if old peer relationships from elementary school subside (Krüger et al., 2007). Our results make it clear that along with the change in school and the change in the friendship structure, there is another relationship quality of

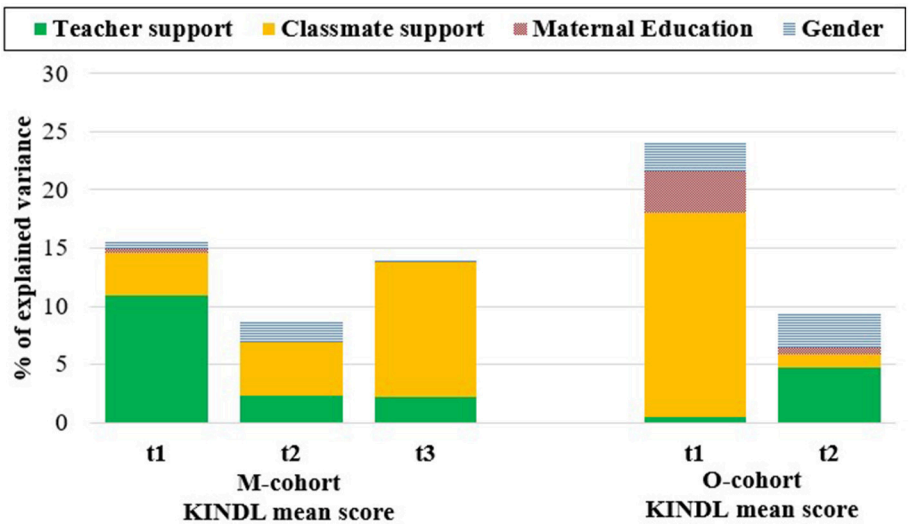

FIGURE 3 | Unique percentage of variance explained in Turkish students' total KINDL-R scores by teacher support, classmate support, maternal education and child gender.

the student-classmate relationship. All in all, this factor seems to influence quality of life but has no effect on school-related factors. Eighth grade students differed from students in all other grades in that classmate support was found to have no effect. Possibly at these ages other factors outside of the school gain importance in their lives. Furthermore, the sample size in this group is smaller so that possible effects could not be illustrated in this study.

All in all, our findings are partly in line with previous studies, which show that school-related social support has a positive impact on children's and adolescents' life satisfaction (DuBois and Silverthorn, 2005) and mental health (Wit et al., 2011). In addition to previous findings, our study reveals the relationship between school-related social support and HRQoL, which comprises various aspects of well-being and its functioning. Regarding the increased risk of immigrant children developing mental health problems and lower well-being with lifelong impacts (e.g., Janssen et al., 2004; Frankenberg et al., 2013), social support from teachers and classmates seems to be an important protective factor in the positive development of immigrant children and adolescents.

Furthermore, we found that higher teacher support was associated with higher levels of school engagement and perceived self-competence in math and reading. This pattern of results is partly in line with previous findings (Vedder et al., 2005; Wentzel et al., 2017) demonstrating the positive effects of teacher and classmate support on various school-related aspects, i.e., intrinsic valuation of schoolwork, adjustment, motivation, self-efficacy, and efforts toward learning and mastery orientation. These relationships seem to hold true for the Turkish immigrant population in Germany as well. A study by Distelbrink and Pels (2000) showed that, related to school matters, Turkish immigrant students in the Netherlands felt more supported by their teachers and peers than by their parents. This perception may be due to parents' limited knowledge about the host school system and to the language difficulties these families encounter. Nonetheless, our findings suggest that school-related social support can act as a protective factor in school matters and promote better academic engagement and self-competence for children and adolescents from immigrant families.

Effects of Gender and Maternal Education

As described in the introduction, previous studies reported relationships between children's and adolescents' gender (Helseth et al., 2015), SES, and HRQoL (Rajmil et al., 2014). Our results reveal no gender effects and thus are not in line with other findings indicating that boys show higher HRQoL than girls (Helseth et al., 2015). To investigate the role of SES on students' HRQoL, we relied on mothers' level of education as an indicator of SES. We found no relationship between maternal education level and children's HRQoL in either cohort. However, around 81% of the mothers had a low education level, so the lack of statistical significance between mothers' education and children's HRQoL must be interpreted carefully. Nevertheless, these findings suggest that school-related social support can act as a protective factor and promote well-being, irrespective of students' SES.

We also examined the effects of students' gender and maternal education on school-related engagement and self-competence. We found no gender effects on school-engagement. However, in 5, 7, and 8th grades, gender was a significant predictor of self-competence in math; boys reported higher self-competence in math than did girls. These gender effects are in keeping with previous studies showing that boys report higher self-competence in math than girls (Passolunghi et al., 2014). Maternal education level has a significant effect on students' school engagement only in 4th grade, as demonstrated by the finding that students with high maternal education reported higher school engagement than students with medium/low

maternal education. Considering the school transition after 4th grade, this result reveals an important resource for children since transitional times are marked by school stress, for example, due to difficult curricula or higher expectations from teachers and parents (Suldo et al., 2009). In addition, students' perceived self-competence in math and reading was not affected by maternal education level. This result is in line with findings of Ammermueller (2007) who reported that parental education could not explain the gap between German and immigrant students in PISA test scores.

Effects of Gender on School-Related Social Support

As found in previous studies (Bokhorst et al., 2010), girls reported higher school-related social support than did boys. However, we found significant effects only in teacher support. These findings became only marginally significant for students in 4th grade and significant in 5 and 6th grades (M-Cohort) but not for girls in 7 and 8th grades (O-cohort). Possible explanations for this finding could be either that in the O-cohort the school-related social support scores were lower in general so that gender differences disappeared or that the protective factor, school-related social support, applies to younger girls but loses importance in adolescence.

Strengths, Limitations, and Future Directions

Overall, our longitudinal, cohort-sectional study shows that school-related social support by teachers and classmates contribute to the HRQoL of students, as well as to their school engagement and perceived self-competence in math and reading. We relied on widely established measurements. Nevertheless, some limitations of the study should be acknowledged. One limitation concerns the sample sizes of both cohorts. A larger sample size would have allowed for investigation of longitudinal effects with more sophisticated statistical models. Another limitation concerns the amount of contextual variables. Information from teachers (e.g., gender of teacher) or socio-demographic data on peers and on target students' social networks, both within and outside of the classroom, were not included in the study. For future research, it would be interesting to investigate whether such factors mediate students' perceived school-related social support or HRQoL and school-related factors. In addition, we only used self-reports from students in order to measure their HRQoL, and we don't know how accurately they described their well-being. We relied on students' self-reports because studies with parents suggest that they tend to overestimate children's and adolescents' HRQoL (Upton et al., 2008; Ellert et al., 2011). Another limitation of the study is that we used self-reports concerning school-related factors. It would be interesting to collect students' exam grades in math and language as more objective data instead of self-reported self-competence.

To the best of our knowledge, the present study represents the first longitudinal study to date that uncovers cumulative school-related factors supporting HRQoL, school engagement, and competence of Turkish immigrant children and adolescents in Germany. A particular strength of the study is the cross-sectional and longitudinal design within two different cohorts, which investigates cross-sectional and developmental differences. Above all, immigrants are likely to face greater burdens (Morrison and Bennett, 2012) and yet to have lesser resources, both in terms of quality and quantity (Wiking et al., 2004). Therefore, it is important to uncover factors supporting the individual development of immigrant children and adolescents. Early adolescence may be an especially advantageous time to enhance well-being and to prevent negative outcomes in later stages of life. Our study shows that school-related social support is a relevant protective factor for immigrant children's and adolescents' overall well-being since it seems to be relatively stable over time and explains variance in total HRQoL of about 12% on average. Schools, and especially classrooms, are one of the most important places social interactions take place, and perceived social support from teachers and classmates influences a large part of students' well-being and academic achievement. From an applied perspective, our data suggest that it is essential to ensure that children and adolescents grow up in encouraging and supportive school environments.

ETHICS STATEMENT

This study was carried out in accordance with the recommendations of the ethical guidelines of the DGPs (German Psychological Society). The protocol was approved by the ethics committee of the DGPs. All research participants and their parents/legal guardians gave written informed consent in accordance with the Declaration of Helsinki.

AUTHOR CONTRIBUTIONS

MD analyzed the data and wrote the paper. BL was responsible for the design of the SIMCUR study and collaborated in the writing and editing of the final manuscript. All authors contributed to manuscript revision, read, and approved the submitted version.

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