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Published in:
International Journal of Public Health

DOI:
[10.1007/s00038-020-01477-1](https://doi.org/10.1007/s00038-020-01477-1)

IMPORTANT NOTE: You are advised to consult the publisher's version (publisher's PDF) if you wish to cite from it. Please check the document version below.

Document Version
Publisher's PDF, also known as Version of record

Publication date:
2020

[Link to publication in University of Groningen/UMCG research database](#)

Citation for published version (APA):

Horanicova, S., Husarova, D., Madarasova Geckova, A., Klein, D., van Dijk, J. P., de Winter, A. F., & Reijneveld, S. A. (2020). Teacher and classmate support may keep adolescents satisfied with school and education. Does gender matter? *International Journal of Public Health*, 65(8), 1423-1429. <https://doi.org/10.1007/s00038-020-01477-1>

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Teacher and classmate support may keep adolescents satisfied with school and education. Does gender matter?

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Received: 8 May 2020 / Revised: 27 August 2020 / Accepted: 3 September 2020
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Abstract

Objectives To examine the associations of teacher and classmate support with school satisfaction in adolescents, and whether gender modifies these associations.

Methods Data were used from the cross-sectional Health Behaviour in School-aged Children study collected in 2018 among Slovak 15-year-old adolescents ($N = 931$; 50.6% boys). School satisfaction was measured by school engagement and attitudes towards education leading to three groups of adolescents: satisfied, inconsistent and indifferent. We used multinomial logistic regression to examine the associations of teacher and classmate support with school satisfaction and its modification by gender.

Results Adolescents who experienced support from teachers and classmates were less likely to feel indifferent (OR/95% CI: 0.77/0.70–0.85; and 0.76/0.67–0.85, respectively) or inconsistent (OR/95% CI: 0.84/0.77–0.92; and 0.73/0.65–0.81, respectively) than to feel satisfied than adolescents who did not experience such support. Adolescents who experienced support from teachers were less prone to feel indifferent than to feel inconsistent (OR/95% CI: 0.92/0.87–0.97). Gender did not modify the associations of social support with school satisfaction.

Conclusion Teacher and classmate support keep adolescents satisfied with school and education and might increase their chances for a healthy development.

Keywords Classmate support · Teacher support · School satisfaction · Adolescence

This article is part of the special issue “Adolescent health in Central and Eastern Europe”.

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Introduction

A school context enabling a successful trajectory through the educational system is essential for healthy development and upward socio-economic mobility. First and foremost, school plays a crucial role in young people's development and contributes to adolescents' self-reflection, self-actualization (Baker et al. 2003) and overall well-being (Hui and Sun 2010). The experiences that young people gain at school may determine their general contentment, which is why liking school and feeling happy there is part of overall life satisfaction (Elmore and Huebner 2010).

Second, a supportive environment at school may lead to further personal growth and academic development, influencing long-term outcomes, such as increased opportunities on the labour market and better employability (Ashby and Schoon 2010). Engagement during the education process at a younger age could therefore lead to a more privileged occupation in the future, followed by possible higher income and influential status (Ashby and Schoon 2010).

In comparison with other European countries, Slovak children rank at the bottom in liking school, and the proportion of pupils who like school has been steadily declining since 2010 (Madarasová Gecková 2019). This regards a major societal problem that provides a platform to fully assess the effect of the school environment on chances for healthy development. However, the majority of young adolescents report that they care a lot about their education (Madarasová Gecková 2019). This combination may lead to a certain inconsistency in their school engagement and attitudes towards education. Those who have positive experiences at school in combination with positive attitudes towards education may experience positive outcomes in the form of higher life satisfaction, health-enhancing behaviours and further occupational status (Ashby and Schoon 2012; Freeman et al. 2018). However, those who feel that the school does not fulfil their educational needs may be at a higher risk of health and mental difficulties, possible lower employability and socio-economic status (Ashby and Schoon 2012; Ottova et al. 2012; Arguera 2015).

Relationships at school are among the main sources of help and support for adolescents' satisfaction towards school and education. Perceived support from teachers and peers has an important impact on school satisfaction (Rororda et al. 2017; Gutiérrez et al. 2017; Li et al. 2011). Further, the experiencing of perceived social support at school seems to differ between genders. The previous research has shown that 15-year-old girls are more sensitive to their teachers' and peers' feedback than boys (Danielsen et al. 2010; Wang et al. 2014), who do not

particularly depend on support from their classmates. Another factor potentially contributing to adolescents' attitudes towards school and education may regard the socio-economic status of the families (Alemán-Díaz et al. 2016). Social structures and economic inequalities across family backgrounds of the adolescents (Viner et al. 2012; Alemán-Díaz et al. 2016) may result in inequity concerning adolescents' access to schooling and education, performance at school which might impact their attitudes and beliefs and their expectations for the future (OECD 2018, 2019).

Evidence is lacking on how support from teachers and classmates may impact adolescents' intention to pursue their education and how such support may reduce the inconsistency between their feelings towards school and education simultaneously. Moreover, evidence is quite scarce on how the relations between social support and satisfaction at school may be modified by gender. Therefore, the aim of this study was to explore the associations of perceived teacher support and classmate support with school satisfaction and whether gender modifies these associations.

Methods

Sample and procedure

We used data from the Health Behaviour in School-aged Children (HBSC) study conducted in 2018 in Slovakia. This regards a population-representative sample based on a two-step sampling. In the first step, 140 elementary schools located in rural and urban areas from all regions of Slovakia were asked to participate. In the end, 109 schools agreed to participate in our survey. School response rate (RR) was thus 77.85%. In the second step, we obtained data from 8405 adolescents from the fifth to ninth grades of these elementary schools, aged 11 to 15 years old (50.9% boys). In this study, we used data from 15-year-old adolescents ($N = 1293$) who answered questions connected to attitude towards education. The item measuring attitudes towards education was answered by 15-year-old adolescents only. This was due to the development of abstract and hypothetical thinking and the ability to think and making plans for the future that are crucial during this age (Huitt and Hummel 2003). Moreover, respondents with missing responses were excluded ($N = 362$), leading to a final sample of 931 adolescents (50.6% boys).

The study was approved by the Ethics Committee of the Medical Faculty at P.J. Safarik University in Kosice (16 N/2017). Parents were informed about the study via the school administration and could opt out if they disagreed with their child's participation. Participation in the study

was fully voluntary and anonymous with no explicit incentives provided for participation.

Measures

School satisfaction regarded school engagement and attitudes towards education. *School engagement* was measured using the item: “How do you feel about school at present?” with four-point Likert-type responses (I like it a lot; I like it a bit; I don’t like it very much; I don’t like it at all) (Inchley et al. 2018). *Attitudes towards education* was measured using the item “Do you care what kind of education you will have?” with three-point Likert-type responses (I care a lot; I care about it, but not too much; I could not care less) (Bosáková et al. 2020). Both variables were dichotomized into two categories. Next, a composite variable school satisfaction was created with three groups of adolescents: (1) indifferent—adolescents who do not like school a lot and do not care about their education a lot, (2) inconsistent—adolescents who do not like school a lot and care about their education a lot or adolescents who like school a lot and do not care a lot about their education, and (3) satisfied—adolescents who like school a lot and care a lot about their education.

Teacher support was measured using three items: “I feel that my teachers accept me as I am”; “I feel that my teachers care about me as a person”; and “I feel a lot of trust in my teachers”, with five-point Likert-type responses (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree) (Inchley et al. 2018). The resulting score of these three items (in this sample Cronbach’s α was 0.83) ranges from 3 to 15. A higher score indicates higher levels of perceived teacher support.

Classmate support was measured using three items: “The students in my class(es) enjoy being together”; “Most of the students in my class(es) are kind and helpful”; and “Other students accept me as I am”, with five-point Likert-type responses (strongly agree, agree, neither agree nor disagree, disagree, strongly disagree) (Inchley et al. 2018). The resulting score of three items (Cronbach’s α was 0.76) ranged from 3 to 15. A higher score indicates higher levels of perceived classmate support.

Socio-economic status (SES) was measured using the Family Affluence Scale III (FAS-III), which consists of six questions: “Does your family own a car, van or truck?” (No/Yes, one/Yes, two or more), “Do you have your own bedroom for yourself?” (Yes/No), “How many computers does your family own?” (None/One/Two/More than two), “How many bathrooms (room with a bath/shower or both) are in your home?” (None/One/Two/More than two), “Does your family have a dishwasher at home?” (Yes/No), “How many times did you and your family travel out of your country for a holiday/vacation last year?” (Not at all/

Once/Twice/More than twice). We computed the sum score, which we converted to a score ranging from 0 to 1. We then created tertile categories of low (0 to 0.333), medium (0.334 to 0.666) and high (0.667 to 1) socio-economic position (Elgar et al. 2015).

Statistical analyses

First, we described the background characteristics of our sample. Next, we assessed the association of gender, teacher support and classmate support with school satisfaction using a multinomial logistic regression model adjusted for SES, leading to odds ratios (ORs) and 95% confidence intervals (CIs). Third, we assessed the degree to which gender moderated the association of teacher and classmate support with school satisfaction by adding their interactions to the multinomial logistic regression model. All analyses were performed using IBM SPSS Statistics 21 for Windows.

Results

Baseline characteristics

Table 1 shows the baseline characteristics of the study population. Almost 30% of the adolescents reported that they were indifferent (don’t like school and don’t value education), nearly 60% felt inconsistent (don’t like school but value education) and only approximately 12% felt satisfied (like school and value education).

Table 1 Descriptive statistics of the sample (Slovakia 2018, 15-year olds, $N = 931$)

	<i>n</i> (in %)
<i>Gender</i>	
Boys	471 (50.6)
Girls	460 (49.4)
<i>Socio-economic status</i>	
Low	318 (34.2)
Middle	272 (29.2)
High	341 (36.6)
<i>School satisfaction</i>	
Indifferent	270 (29.0)
Inconsistent	551 (59.2)
Satisfied	110 (11.8)
	Mean (standard deviation)
<i>Social support (3–15)</i>	
Teacher support	10.1 (2.89)
Classmate support	10.7 (2.47)

Associations of school satisfaction and teacher and classmate support

Regarding chances of being indifferent or inconsistent vs. satisfied with school and education, adolescents who perceived a higher level of social support from teachers and classmates were less likely to report being indifferent or inconsistent than being satisfied with school and education than their peers who perceived less social support from teachers and classmates (Table 2, Model 1). Moreover, adolescents who perceived a higher level of social support from teachers but not classmates were less likely to report being indifferent than inconsistent with regard to school and education (Table 2, Model 2).

Boys had a higher chance than girls of reporting that they were indifferent with regard to school and education than reporting that they were satisfied or inconsistent with regard to school and education (Table 2, Model 1-2).

Finally, we assessed the moderation by gender of the association of social support from teachers and from classmates with school satisfaction. This showed that none of the tested interactions of the effect of social support with gender on school satisfaction was significant (results not shown).

Discussion

We explored the association of social support from teachers and classmates with school satisfaction among adolescents and a possible moderating effect of gender. We found that adolescents who receive more social support from teachers or classmates feel less indifferent and inconsistent

and more satisfied towards school and education. Gender did not modify this association. Moreover, adolescents who perceived a higher level of teacher support specifically were less likely to feel indifferent than to feel inconsistent with school and education.

We found that both teacher and classmate support increased the chance to be satisfied rather than inconsistent or indifferent towards school and education. These results are in line with previous research, indicating that teacher support contributes to school satisfaction (Gutiérrez et al. 2017; Saleh et al. 2019) and well-being at school (Chu et al. 2010). An underlying reason may be that satisfactory relationships with classmates are generally important for adjusting to school, due to the companionship and entertainment (Wentzel et al. 2009). Solid feedback and positive relationships at school may increase adolescents' school satisfaction by helping them feel more safe, respected and heard (Persson et al. 2016; Wang et al. 2014). Moreover, a supporting school climate has a positive impact on the overall life satisfaction, well-being and health (Baker and Maupin 2009; Inchley et al. 2018). Thus, satisfying relationships with teachers as well as schoolmates may be considered as important factors contributing to positive attitudes towards school and education in general and therefore to the overall mental and physical health (Inchley et al. 2018).

Our results showed that a considerable proportion of adolescents was inconsistent (59.2%) in their attitudes towards school and education. Only 12% of the adolescents were satisfied with regard to school and education. These low levels of school satisfaction might be due to economic factors at the national level. The educational system in Slovakia is struggling with low funding and low

Table 2 Association of school satisfaction with teacher support, classmate support and gender: results from multinomial logistic regression adjusted for socio-economic status (Slovakia 2018, 15-year olds, N = 931)

	Model 1		Model 2
	Indifferent versus Satisfied OR (95% CI)	Inconsistent versus Satisfied OR (95% CI)	Indifferent versus Inconsistent OR (95% CI)
<i>Gender</i>			
Boys	2.17 (1.34–3.51)**	1.35 (0.87–2.10)	1.61 (1.19–2.17)**
Girls	Ref.	Ref.	Ref.
<i>Social support</i>			
Teacher support	0.77 (0.70–0.85)***	0.84 (0.77–0.92)***	0.92 (0.87–0.97)**
Classmate support	0.76 (0.67–0.85)***	0.73 (0.65–0.81)***	1.04 (0.98–1.11)

*** $p < 0.001$; ** $p < 0.005$

Model 1: The reference category is Satisfied

Model 2: The reference category is Inconsistent

Note: We did not separately report the category Satisfied vs. Inconsistent in Model 2, as it is the reverse of the findings presented in the second column of this table

investments in schooling and training, and with salary of the teachers (Schraad-Tischler 2015; European Union 2019). This might be one of the reasons for the difficulties in adjusting the schooling and curriculums to the adolescents' altering educational needs and attitudes, being a part of the digitalized generation (Generation Z) (Cilliers 2017). The vast majority of the "inconsistent" adolescents valued education, but did not like school and not vice versa ($n = 536$ vs $n = 15$). Next, we also found that only teacher support, not classmate support, contributed to a higher chance of at least valuing education, despite not liking school. This seems to confirm the core role of the teacher in the educational process. It also aligns with the previous research showing that teacher support is an important gate for upward social mobility via increased chances in the educational system (Melkman et al. 2016; Van den Broeck et al. 2020). Recent research has shown that experiences with disrupted social context such as separation of the parents due to work abroad, moving to another place/city or transfer to a different school and living in a low affluence family decreases satisfaction with school significantly (Bosáková et al. 2020, submitted). In low SES families, parents may not be as available as a teacher, who as supportive mentor may constitute a resource of cultural capital and thus provide an important asset for positive and healthy development (Lerner 2005). Thus, providing children with opportunities for their personal growth at school, especially if they lack it in their domestic background, may strengthen their academic journey, leading to more equal opportunities for employability, higher income and social status (Tilak 2002; Tarabini 2010; Iqbal and Awan 2015).

Regarding the moderating effect of gender, we found that gender did not modify the associations of teachers nor classmate support. Evidence on this topic is inconsistent, however. While some studies in line with our findings indicate that experiencing social support at school is equally beneficial for all adolescents regardless of gender (Huebner and McCullough 2000; Elmore and Huebner 2010), others have shown that girls are more sensitive to teachers and peer support (Danielsen et al. 2010; Wang et al. 2014). This topic therefore evidently requires a further study.

Strengths and limitations

The strengths of this study are that we used a relatively large and nationally representative sample of 15-year-old adolescents and internationally comparable and validated measures. We also followed the protocol of Health Behaviour of School-aged children survey (Inchley et al. 2018), which allows comparison between countries. Another strength is that we used a composite variable enabling inconsistency in attitudes towards school and education to

be assessed. However, some limitations need to be considered, as well. First, the cross-sectional study design prevents assessment of causality; therefore, our findings need to be confirmed in longitudinal studies. Another limitation is possible bias induced by self-reported and one-item measures, which may be solved by using more complex items focused on more aspects of school satisfaction, including school climate, school connection or school attachment.

Implications

Our findings extend knowledge about factors contributing to the school satisfaction of adolescents, whereas the previous research mostly assessed liking school and attitudes towards education separately (Gustafsson et al. 2010; Roorda et al. 2017; Danielsen et al. 2011). They show the importance of combining attitudes towards school and education and differentiating between the inconsistent and indifferent groups of adolescents and focusing on those groups that are at higher risk of being vulnerable. Regarding such vulnerable groups, teachers and schools should pay particular attention to better detection and better training for teachers in providing support, based on the previous research showing that being a boy, having experience with learning difficulties or disruption in social context and living in a low affluence family significantly decreased the chances of being satisfied at school (Bosáková et al. 2020).

Future research could shed more light on possible causes of school dissatisfaction and possible mechanisms for how to strengthen the healing potential of teacher support. For exploring the causality of these findings, using a longitudinal approach may be beneficial. A qualitative approach may also be useful for better understanding methods and practices regarding teacher support.

Conclusion

Teacher and classmate support helps adolescents to like school in addition to valuing education. Feeling supported at school helps them feel more satisfied at school, which may increase their chances for healthy development and success in their further educational trajectory.

Acknowledgements This work was supported by the Research and Development Support Agency under Contract No. APVV-18-0070 and No. APVV-17-0568. This work was also supported by the Scientific Grant Agency of the Ministry of Education, Science, Research and Sport of the Slovak Republic and the Slovak Academy of Sciences, Reg. No. 1/0427/17.

Compliance with ethical standards

Conflict of interest The authors declare that they have no conflict of interests.

Ethical approval All procedures performed in the study were in accordance with the 1964 Declaration of Helsinki and its later amendments or comparable ethical standards. The study was approved by the Ethics Committee of the Medical Faculty at the P. J. Safarik University in Kosice (No: 16/2017). Parents were informed about the study via the school administration and could opt out if they disagreed with their child's participation. Participation in the study was fully voluntary and anonymous with no explicit incentives provided for participation.

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