



Utrecht University

Explaining the link between immigration and adolescent truancy

*Gender as moderator and perceived discrimination and social support
as mediators in the association between immigration and truancy*

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Abstract

Both international and national studies show that adolescents with a migration background are more often truant than adolescents without a migration background. This cross-sectional study investigated the phenomena that can explain the link between migration background and truancy by exploring how perceived discrimination and social support mediate this association. Furthermore, we investigated if the impact of immigration varies for boys and girls. Data from the Health Behavior in School-aged Children study (HBSC, 2017) was used. 6,718 adolescents from secondary education participated in the study ($Mean = 13.8$, $SD = 1.4$). Logistic Regression Analyses revealed that immigrant adolescents reported higher levels of truancy than non-immigrant adolescents after controlling for age and education level. Our findings indicate that the higher levels of perceived discrimination and slightly lower levels of teacher support could explain the impact of migration on immigrant adolescents' truancy compared to those of non-immigrant adolescents. No relationship was found between classmates' support and truancy. Furthermore, our results found an effect of immigration on truancy for immigrant girls. The current findings highlight the importance of interventions aimed at reducing perceived discrimination among adolescents with a migration background and the need for social support from teachers to reduce truancy among adolescents with a migration background.

Keywords: immigration, truancy, perceived discrimination, social support, gender

In 2019, 13,4 % (AlleCijfers.nl) of the population in the Netherlands had a migration background. Nowadays, a school without students with a migration background can no longer be imagined, as, in 2018/19, approximately 25% of school-going adolescents have a background of immigration (CBS, 2019). Having a migration background has been found to affect health and health behaviors and social relations of immigrant adolescents because of various disadvantages, such as their low social position (Adriaanse, Veling, Doreleijers & Domburgh, 2014; Suárez-Orozco, Rhodes & Milburn, 2009). A significant proportion of adolescents' lives are spent at school, and having a supportive school environment is an asset to their wellbeing, school-enhancing behavior, while a non-supportive school environment may pose a risk. With regard to immigrant adolescents and their wellbeing and school behavior, a possible risk concerns the relationship between immigration and truancy. To illustrate, research has shown that immigrant adolescents are more likely to be truant compared to their non-immigrant peers (HBSC, 2017). More specifically, in 2017, 16% of immigrant adolescents skipped more than 1 hour in four teaching weeks compared to 12% of non-immigrant adolescents (HBSC, 2017). Truancy is a problem because it is associated with many problems throughout the life course (Garry, 1996). Adolescents who skip class are more likely to drop out (De Witte & Csillag, 2014; Ekstrand, 2015; Garase, 2017; Gastic, 2008; Maynard, Salas-Wright, Vaughn, Peters, 2012; Virtanen, Lerkkanen, Poikkeus & Kuorelahti, 2014), be unemployed, use substances and engage in delinquency and crime (Garry, 1996; Maynard et al., 2012).

The following aspects are considered in explaining the link between immigration and truancy; gender (moderator), perceived discrimination, and social support (mediators). Since no studies have yet examined this phenomenon in combination with these aspects, this study has the potential to make an essential contribution to better understanding the effect of immigration-specific contexts in the school development of immigrant adolescents.

Perceptions of perceived discrimination

As outlined above, having a migration background has been associated with disadvantages. One of these disadvantages is perceived discrimination. Studies show that immigrant adolescents more often experience discrimination than non-immigrant adolescents (Andriessen, Nieverse, Dagevos & Faulk, 2012; Li & Xia, 2018; Verkuyten & Thijs, 2010). Verkuyten and Thijs (2010), for instance, showed in their cross-sectional research that immigrant adolescents are more likely to experience name-calling and social exclusion. Other studies have shown that perceived discrimination has a substantial impact on how immigrant adolescents experience their school career (GarciaColl et al., 1996; 2012; Marks & Coll,

2018; Orom, Semalulu & Underwood, 2013). One explanation for the association between perceived discrimination and school development of immigrant adolescents comes from the so-called Integrative Model Theory for the Study of developmental competencies in minority children (GarciaColl, 1996).

The Integrative Model theory (1996) assumes that minority groups, such as immigrant adolescents, are assessed based on social position factors. These position factors are characteristics that societies use to group individuals from places in the social hierarchy and that relate to minority youth. Position factors create potentials to intervene in such a way as to increase or decrease the importance of the factors. One of these position factors is ethnicity, explicitly referred to; migration background. Moreover, the theory assumes that the social position is not only of direct influence on the individual development of immigrant adolescents but is also mediated by the ubiquitous social mechanisms, such as racism, oppression, prejudice, and discrimination, and distinguish thereby immigrant adolescents from non-immigrant adolescents (GarciaColl, 1996; Marks & GarciaColl, 2018). When immigrant adolescents experience discrimination, their social position as an immigrant is negatively emphasized. Perceived discrimination then creates unique conditions for immigrant adolescents, such as a threatening school environment that influence their development processes at school. Immigrant adolescents may respond to this threat by disengaging from school (e.g., lower grades, lower educational expectations, and lower academic motivation (Marks & GarciaColl, 2018; Wong, Eccles & Sameroff, 2003) which in turn may increase their likelihood of truancy.

In their longitudinal study, Alfaro and colleagues (2009) emphasize that perceived discrimination leads to problem behavior among immigrant adolescents. Following the Integrative Model Theory, Alfara and colleagues (2009) and other studies showed that perceived discrimination manifests itself in lower grades, lower academic motivation, and truancy (Stone & Han, 2005; Wong et al., 2003). Thus, because immigrant adolescents may experience higher levels of perceived discrimination, which is likely to be associated with truancy, immigrant adolescents are more likely to be truant than non-immigrant adolescents (Figure 1, Hypothesis 1).

Perceptions of social support

The quality of social support, conceptualized as teacher support and classmate support, is associated with health outcomes, school enhancement, and truancy (Henderson & Kearney, 2016; Wang & Eccles, 2013). In terms of social support, immigrant adolescents experience less support from their classmates and teachers than their non-immigrant peers (classmate: 85

vs. 80%; teacher: 58 vs. 65%, HBSC, 2017). Furthermore, several studies showed that immigrant adolescents are more at risk of rejection in class (Von Grünigen, Kochenderfer-Ladd, Perren & Alsaker, 2010; 2012; Walsh et al., 2016). To illustrate, a Swiss study showed that classmates were less likely to accept immigrant children than Swiss children (Von Grünigen et al., 2012). However, most studies suggest that although classmate support and teacher support are both necessary, teacher support is more of importance concerning school enhancement and truancy (Henderson & Kearney, 2016; Ishak & Fin, 2013; Walsch et al., 2016).

The Social Control- and Self Control Theory (Veenstra, Lindenberg, Tinga & Ormel, 2010) can explain the effect of social support on truancy among immigrant adolescents. According to the theory, truancy reduces if there is a positive attachment with the significant other, and this significant other rejects truancy. Significant other refers to adults as a possible role model. More specifically, the theory assumes that adolescents want to meet the expectations of a significant other, such as a teacher. The theory, therefore, expects adolescents to adopt the social norms, rules, and expectations that teachers represent. The theory has also examined whether peers play a role when it comes to truancy. According to the theory, the probability of truancy does not depend on the type of relationship with peers and whether peers reject truancy.

Virtanen and colleagues (2014; 2015) supported the aforementioned theoretical importance of a positive relationship between teacher and student. Supportive relations with teachers may increase adolescents' school interest and satisfaction and may lead to more engagement in classroom activities and, to a lesser extent, to truancy. In addition, several other studies have shown a link between social support and truancy (Henderson & Kearney, 2016; Valiente, Lemrey-Chalfant, Swanson, & Resier, 2008). To illustrate, feelings of belonging and acceptance are beneficial to the positive development of adolescents (Weinstein, 2002), while the feeling of not being accepted because of your migration background has negative consequences for the wellbeing of adolescents in the class (Walsh et al., 2016). These negative consequences can lead to truancy, especially if it concerned teacher support (Ishak & Fin, 2013). Even though the above example refers to feelings of belonging and acceptance and not specifically social support, it could be that it similarly influences truancy because it all occurs in the class setting.

Ladd, Herald and Andrews (2006) suggest that classmate support is as equally important as teacher support and that classmates' rejection is linked to problems with adjustments at school. Although, class group rejection appears to have the most negative

impact on school engagement (Buhs, Ladd & Herald, 2006). For example, low acceptance by classmates is linked to school avoidance through truancy (Ladd, Herald & Andrews, 2006; Buhs, Ladd & Herald, 2006; Weinstein 2002). Therefore, it is expected that immigrant adolescents experience less social support than their non-immigrant peers, which is associated with truancy (see Figure 1, Hypothesis 2).

Does the impact of immigration on truancy vary for boys and girls?

Research on gender differences in truancy shows inconsistencies (Maynard et al., 2017; Van Dorsselaer et al., 2010; Vaugh, Maynard, Salas-Wright, Perrion & Abdon, 2013; Sánchez, Colón & Esparza, 2005). For example, Weden and Zabin (2005) found in their longitudinal study, in gender and ethnic differences of adolescents' behavior, that more boys than girls participated in externalizing risk behaviors, such as truancy. The results are in line with several other studies which reported that boys show more externalizing risk behavior, such as truancy, compared to girls; this also applies for immigrant adolescents (Brittain, Toomey, Gonzales & Dumka, 2013; Leadbeater, Kuperminc, Blatt & Hertzog, 1999; Umaña-Taylor, Wong, Gonazales & Dumka, 2012). Maynard and colleagues (2017), found in their longitudinal study in the United States that girls were more likely to report truancy than boys. However, Sánchez and colleagues (2005) examined gender differences in Latino adolescents' academic outcomes; they found that adolescents who do not feel accepted, important, and cared for by teachers are more likely to be truant, but no significant gender differences were found. Similarly, in his large-scale study, Henry (2007) reported no gender differences concerning truancy. Thus, it is expected that if a gender difference in truancy occurs, immigrant boys run an exceptionally higher risk of truancy than girls. (see Figure 1, Hypothesis 3).

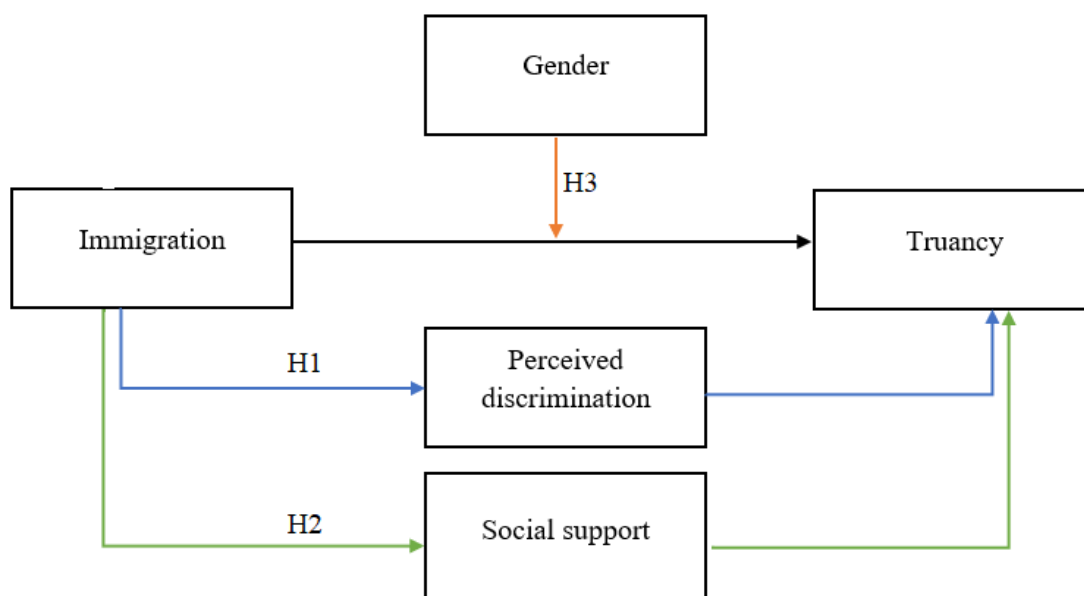


Figure 1. Display of expected hypotheses as mediators and moderator combined in a model.

Method

Participants and procedure

The current study used data from the Health Behavior in School-aged Children study in the Netherlands (HBSC, 2017). HBSC is a nationally representative study on the health, wellbeing, and social context of school-aged adolescents (Stevens et al., 2018). The sample unit consisted of primary and secondary school students. The HBSC study used a step-by-step approach. The first step involved the sample of schools. For good geographical distribution, schools were divided into urban and rural areas. Subsequently, within the schools, 3-5 classes were selected for participation in the study. The data includes self-completion questionnaires that were administered anonymously. Data were collected through a digital questionnaire in October and November of 2017. Active, informed consent was obtained from students, and passive consent was obtained from their parents. 8,981 participants took part in the survey. In the current study, only adolescents from secondary education were included in the age category of 11 to 16 years ($M_{age} = 13.8$, $SD = 1.4$). 85 secondary schools (37%) participated in the current study. Of the 6,718 participants from secondary schools, 52% were girls ($n = 2,731$) and 48% were boys ($n = 2,557$). 1,058 adolescents in secondary education had a migration background: the largest groups with a migration background were from Morocco (27.2%) and Turkey (16.8%). More information about the data collection procedure can be found in the HBSC report (Stevens et al., 2018).

Measurement

Truancy was measured with the question: "How many hours have you skipped a class in the past 4 weeks?". Answer possibilities were measured on a 6-point Likert scale, running 1 '0 lessons', 2 '1 teaching hours', 3 '2 teaching hours', 4 '3 or 4 teaching hours', 5 '5 or 6 teaching hours' and 6 '7 teaching hours or more'. Responses were dichotomized with 0 = if a student did not skip any days of school in the last 4 weeks and 1 = if a student skipped at least 1 day in the past 30 days.

Migration background was measured with two questions: "In which country were you born" and "In which country were your father and mother born?". Answer possibilities were 1 'Dutch', 2 'Moroccan', 3 'Turkish', 4 'Surinamese', 5 'German', 6 'Antillean', 7 'In another country, namely:...'. In line with the CBS (2019) criteria, participants were considered immigrants if at least one parent was not born in the Netherlands (regardless of the country of birth of the adolescents). Responses were dichotomized with 0 = Native Dutch and 1 = Non-Western).

Perceived discrimination was measured with the question: "How often did the

following people treat you unfairly or badly because of the country where you, your parents, or your grandparents are born?'. "Following people" refers to teachers, classmates, and other adults outside school. Items were measured on a 5-point Likert scale, from 1 'never' to 5 'very often.' The reliability of the scale was high, with a Cronbach's Alpha of .80. This question has been converted to a continuous variable. A higher score of this continuous variable symbolizes higher levels of perceived discrimination. Previous studies reported a good internal consistency and a well-fitting factor structure for this instrument (Berry, Phinney, Sam, & Vedder, 2006; Greene, Way & Pahl, 2006).

Social support was measured with the Teacher and Classmate Support scale (Torsheim, Wold & Samdal, 2000). Classmate support and teacher support were measured by three questions: An example question for classmate support was: "Other classmates accept me as I am" and for teacher support: "My teachers accept me as I am." Answer possibilities were measured on a 5-point Likert scale, from 1 'completely agree' to 5 'totally disagree.' The reliability of the scales were high, with a Cronbach's Alpha of .82 and .85. This question has been converted to a continuous variable. A higher score of this continuous variable symbolizes higher levels of social support.

Gender was measured with the question: "Are you a boy or a girl?" Where answer categories are subdivided into 1 'boy' and 2 'girl'.

Data analysis

Before analysing the hypotheses, descriptive analyses were performed. The assumptions, the missing values, and the outliers were checked. Firstly, it was checked whether the assumptions for the Logistic Regression analyses were met. After running a Chi-square test for truancy and gender, it was found that our data meets the assumption that a maximum of 20% of the variable pairings can have expected frequencies less than 4; the power of the analyses is not compromised (see Table 1a). An independent sample t-test to compare the means of immigrant and non-immigrant adolescents on perceived discrimination and social support was used (see Table 1b). It was found that our data meets the assumptions, as assessed by the Shapiro- Wilk statistic. Shapiro- Wilk statistic for perceived discrimination and social support was not statistically significant, indicating that the assumption of normality was not violated. In addition, Leven's test for equality of variances was statistically significant; thus, equal variances cannot be assumed, and therefore, the Welch's t-test was used. Welch's test was statistically significant; there were differences between the means of the two groups. Furthermore, it was tested whether the assumptions for the Logistic Regression Analyses had been met for perceived discrimination and teacher support. Hosmer

and Lemeshow test results confirmed that the model regarding teacher support was a good fit for the data, $\chi^2 (df = 8, N = 6243) = 5.77, p > .673$. Hosmer and Lemeshow test results showed that the model regarding perceived discrimination didn't fit the data well $\chi^2 (df = 8, N = 6233) = 15.87, p < .04$. According to Hosmer and Lemeshow (1989), this is not a problem because the sample size in the study is large.

After testing the assumptions, the analyses were performed. Firstly, using Logistic Regression Analyses, we examined the extent to which immigration was related to truancy after controlling for education level and age and whether the impact of immigration on truancy would vary for boys and girls. Linear Regression Analyses tested the association between immigration and the mediation effects (e.g., perceived discrimination and social support). Thirdly, the link between the mediators and truancy was tested using Logistic Regression Analyses. Finally, using Logistic Regression Analyses, we tested whether the association between migration background and truancy decreased when including the mediators in the model.

Results

Descriptive analyses

To provide an indication of the associations between immigration and truancy, for truancy and gender, we used a Chi-square test for Independence (Table 1a). Besides, an Independent Sample T-test was used to compare the means of immigrant and non-immigrant adolescents on perceived discrimination and social support (Table 1b). The Chi-square test results showed that immigrant adolescents were more likely to be truant than non-immigrant adolescents. Besides, the results also showed that immigrant girls were more likely to be truant than immigrant boys and their non-immigrant peers (although whether or not percentages are significantly different has not been tested). Results of the Independent T-test showed that immigrant adolescents did not differ from non-immigrant adolescents on classmate support and age, but immigrant adolescents did differ from non-immigrant adolescents concerning teacher support, perceived discrimination, and education level. More specifically, immigrant adolescents reported less teacher support and more perceived discrimination.

In addition, to assess the associations between all study variables, Spearman's/Pearson correlation coefficients were conducted. The results are presented in Table 2. Correlations between migration background and the study variables were in line with the previous concerning truancy, teacher support, and perceived discrimination between immigrant

adolescents and non-immigrant adolescents. Furthermore, the correlations showed that older adolescents more often truant and that perceived discrimination and teacher support were positively associated with truancy. The correlations also suggest that adolescents at higher education levels were less likely to be truant. Because age and education level were associated with almost all mediators and the outcome variable, they were included as control variables in further analyses.

Table 1a

Differences between non-immigrants and immigrant adolescents on study variables

	Non-immigrants			Immigrants		
	<i>n</i>	%	χ^2	<i>n</i>	%	χ^2
<i>Moderator</i>						
Girls****	2,702	51%		582	55%	
Boys	2,609	49%		476	45%	
			1368,575***			1474,777***
<i>Dependent variable</i>						
	<i>Girls</i>			<i>Girls</i>		
Didn't truant	2,386	73%		477	83%	
Truant	278	9%		95	17%	
	<i>Boys</i>			<i>Boys</i>		
Didn't truant	2,212	87%		401	86%	
Truant	340	13%		65	14%	
			17,595***			,133***

Note. % = percentage chi-square test sample, χ^2 = Chi-square test, * = $p < 0.05$,

** = $p < 0.01$, *** = $p < .001$, **** reference category = girls

Table 1b

Differences between non-immigrant and immigrant adolescents on study variables

	Non-immigrant		Immigrant		<i>t</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	
<i>Mediators</i>					
Classmate support	4,04	0,7	4	0,8	1,62
Teacher support	3,73	0,83	3,6	1	4,10**
Perceived discrimination	1,09	0,36	1,5	0,77	16,70**
<i>Control variables</i>					
Education level	2,7	1,06	2,5	1,09	4,98**
Age	13,83	1,39	13,93	1,37	2,13

Note. *M* = mean; *SD* = standard deviation; *t* = *t*-test statistic; * = $p < 0.05$, ** $p < 0.01$; *** $p < .001$

Table 2

Correlation matrix of study variables

	1	2	3	4	5	6	7	8
1 Immigrants								
2 Truancy	.04**							
3 Classmate social support	-.02	-.08**						
4 Teacher social support	-.06**	-.17**	.46**					
5 Perceived discrimination	.32**	.13**	-.14**	-.20**				
6 Gender***	-.03*	.03*	.01	.01	.04**			
7 Education level	-.06**	.06**	.09**	-.04**	-.13**	-.01		
8 Age	.03*	.20**	-.11**	-.15**	.05**	-.01	.02	

Note. * = $p < 0.05$, ** = $p < 0.01$ *** reference category = girls

Association between immigration and truancy, and gender as a moderator

Firstly, we assessed the main effect of immigration on truancy. Results were in line with the descriptive findings in Tables 1a, 1b, and 2. The model was statistically significant, $\lambda^2 (df = 2, N = 6,254) = 275,76, p < .001$, Cox and Snell $R^2 = 0,05\%$, Nagelkerke $R^2 = 0,09\%$), indicating that the model was able to distinguish between adolescents who reported and did not report truancy. Coefficients for the model's predictor are presented in Table 3. As demonstrated in Table 3, model 1, adolescents with a migration background are compared to non-immigrant adolescents, 1,27 times more likely to report truancy when controlling for gender, education level, and age.

Secondly, we tested whether the association between migration background and truancy was different for boys than for girls. In the first step: the interaction term between migration background and gender were included in the model, which showed variance in truancy $p < .02$ (Table 3, model 2). In the second step: an examination of the interaction separately for boys and girls was done. Results were in line with the descriptive finding in Table 1a. The model was statistically significant for girls, $p < .001$, indicating that immigrant girls were compared to non-immigrant girls 1.59 times more likely to report truancy. The boys' model was not statistically significant, $p > .734$, indicating that there were no differences in truancy between immigrant and non-immigrant boys. In sum, the impact of immigration on truancy varies for boys and girls. Unexpectedly, it was only there for girls and not for boys.

Perceived discrimination and social support as mediators in the effects of immigration on truancy

To test the indirect effects of immigration on truancy via the predisposed mediators, we first examined whether immigration was associated with the three mediators. Almost all results were consistent with the descriptive results outlined above. Immigrant adolescents reported higher levels of perceived discrimination ($b = ,41, \beta = ,32, p < .001$) and reported slightly less teacher support ($b = -,14, \beta = -,06, p < .001$). There were no significant differences between immigrant adolescents and non-immigrant adolescents for classmates' support ($b = -,04, \beta = -,02, p > .07$), and therefore this potential mediator was excluded in further analyses.

Subsequently, the associations of the mediators with truancy were examined. Adolescents who reported higher levels of perceived discrimination and lower levels of teacher support reported more truancy. The omnibus models for the logistic regression analysis were statistically significant for the effect of perceived discrimination and teacher support on truancy, $\lambda^2 (df = 1, N = 6,570) = 103,14, p < .001$, Cox and Snell $R^2 = ,02\%$,

Nagelkerke $R^2 = .03\%$ and $\lambda^2 (df = 1, N = 6,582) = 169,90, p < .001$, Cox and Snell $R^2 = .02\%$, Nagelkerke $R^2 = .05$). The models were 88% and 87% accurate in the predictions of the effect of the mediators on truancy. As demonstrated in Table 3, models 3 and 4, the strongest predictor of reporting truancy was perceived discrimination, indicating that immigrant adolescents compared to non-immigrant adolescents were over 1.69 times more likely to experience discrimination, which leads to truancy. In sum, both perceived discrimination and teacher support were related in the predicted direction to adolescents' truancy behavior.

Finally, it was examined whether the association between immigration and truancy were mediated by perceived discrimination and teacher support. The models for perceived discrimination and teacher support were statistically significant ($p < .001$ and $p < .001$) The models were both 88% accurate in their predictions on truancy. As can be seen in Tables 3 and 4, the effect of immigration on truancy disappears sharply when including perceived discrimination, and the effect of immigration on truancy decreases when including teacher support. In conclusion, our results show that both perceived discrimination and teacher support are mediators in relation to truancy.

IMMIGRATION AND ADOLESCENT TRUANCY

Table 3

The relation between immigration and truancy moderated by gender, mediated by teacher social support and perceived discrimination

	Truancy															
	Model 1				Model 2				Model 3				Model 4			
	<i>b</i>	<i>SE (b)</i>	<i>p</i>	<i>EXP (B)</i> [95% <i>CI</i>]	<i>b</i>	<i>SE (b)</i>	<i>p</i>	<i>EXP (B)</i> [95% <i>CI</i>]	<i>b</i>	<i>SE (b)</i>	<i>p</i>	<i>EXP (B)</i> [95% <i>CI</i>]	<i>b</i>	<i>SE (b)</i>	<i>p</i>	<i>EXP (B)</i> [95% <i>CI</i>]
<i>Constant</i>	-8,26				-8,31				-6,10				-8,81			
Immigrant	0,24	,10	,02	1,27 [1,05; 1,55]	,46	,13	,001	1,58 [1,22; 2,05]	,16	,10	,12	1,17 [,.96; 1,42]	-,03	,10	,809	,97 [79; 1,20]
Gender***	0,19	,08	,01	1,21 [1,04; 1,41]	,28	,09	,001	1,33 [1,12; 1,58]								
<i>Control variables</i>																
Education level	-,19	,04	,001	,83 [,.77; ,89]	-,19	,04	,002	,83 [,.77; ,90]	-,20	,04	,001	,82 [,.76; ,88]	-,16	,04	,001	,86 [79; 92]
Age	0,47	,03	,001	1,60 [1,50; 1,70]	,47	,03	,001	1,60 [1,50; 1,70]	,45	,03	,001	1,56 [1,47; 1,66]	,47	,03	,001	1,60 [1,51; 1,70]
<i>Moderator</i>																
Immigration*Gender					-,47	,20	,02	,63 [,.43; ,93]								
<i>Mediators</i>																
Teacher support									-,48	,04	,001	,62 [,.57; ,67]				
Perceived discrimination													,52	,07	,001	1,69 [1,48; 1,92]

*Note. B = beta; β = standardised coefficient; CI = confidence interval; *** reference category = girls*

Discussion

Both international and national studies show that adolescents with a migration background are more often truant than adolescents without a migration background. However, to the best of our knowledge, this is the first study that investigated the phenomena that can explain the link between migration background and truancy, by exploring the extent to which perceived discrimination and social support mediate this association and whether the impact of immigration on truancy varies for boys and girl.

Effect of migration on truancy, moderated by gender

Our results showed a higher risk of truancy of adolescents with migration than without a migration background. Although the difference in truancy between immigrant adolescents and non-immigrant adolescents was not very large (31% vs. 22%), the fact that longer-term risks of truancy can be substantial, still makes this difference relevant. Having a migration background in itself is already accompanied by risk factors, such as lower social status and rejection (Andriaanse et al., 2014). By adding the negative consequences of truancy such as, drop out and unemployment (Ekstrand, 2015; Garase, 2017; Garry, 1996; Gastic, 2008; Maynard et al., 2012;2017; Virtanen et al., 2014) only adds to their obstacles to healthy and happy development.

Contrary to what was expected, the current study did not support the hypothesis that the impact of migration is higher for boys than for girls. Our results show the opposite, an effect of immigration on truancy is only found for girls, not for boys. Our results contradict previous research that found no significant differences in truancy between boys and girls, and previous research found a higher prevalence for boys (Brittain et al., 2013; Leadbeater et al., 1999; Umaña-Taylor et al., 2012). One reason for such differences may be that the literature used on gender differences on immigration comes mainly from international studies (Brittain et al., 2013; Umaña-Taylor et al., 2012; Vaugh et al., 2013; Sánchez et al., 2005). Furthermore, according to the Dutch HBSC (2017), there were no differences in truancy among immigrant adolescents found in the Netherlands. Another possible explanation for this finding might be that girls are displaying more externalizing risk behaviors, such as truancy compared to the past, which is consistent with the results of a recent meta-analyses study of Gubbels, Van der Put and Assink (2019).

Effect of immigration on truancy, mediated by perceived discrimination and support

In line with our expectations, Dutch immigrant adolescents showed remarkably higher levels of perceived discrimination. The integrative model (GarcíaColl et al., 1996; 2012) is an important perspective in supporting our results because it is considered by many to be a

milestone in the health and behavioral development of minority children. Over the last 20 years, the integrative model has helped shape a generation of research and new perspectives regarding the development and adaptation of immigrant adolescents (GarciaColl et al., 2012; Marks & GarciaColl, 2018; Perez-Brena et al., 2018; Suárez-Orozco, Motti-Stefanidi, Marks & Katsiaficas, 2018). Specifically, in their systematic review, Perez-Brena and colleagues (2018) found a link between the experiences and competences of immigrant adolescents in school and the integrative model. Altogether, the findings of the current study and previous studies and the perspectives from the Integrative Model Theory help to demonstrate that mechanisms, such as discrimination, play an important role in the wellbeing and development of immigrant adolescents. It may be clear that perceived discrimination is such a risk enhancer that it negatively impacts the development of immigrant adolescents during their school career and possibly thereafter (GarciaColl et al., 1996; 2012; Marks & Garcia Coll, 2018). For example, Alfaro and colleagues (2009) and several other researchers (Stone & Han, 2005; Wong et al., 2003)) demonstrate in their study that perceived discrimination leads to behavioral problems, such as lower grades, lower academic motivation, and truancy, among immigrant adolescents. In summary, immigrant adolescents experience more discrimination based on their social position, which is characterized by their migration background, which subsequently seems to lead to negative consequences, such as truancy.

Studies focusing on immigrant adolescents' development show that social support is essential in the development of immigrant adolescents (Von Grünigen et al., 2010; 2012; Walsh et al., 2016). Our results are in line with previous studies; immigrant adolescents experience less support from their teachers than their non-immigrant peers' (Henderson & Kearney, 2016; Ishak & Fin, 2013). In contrast to the study by Von Grünigen and colleagues (2010; 2012), we found no differences between immigrant adolescents and non-immigrant adolescents in classmates' support. Our result of classmate support may be explained by the fact that while social support studies report that both forms of support are important in the development of adolescents, most studies emphasize that in the case of immigrant adolescents, support from teachers is more necessary concerning school engagement and truancy (Henderson & Kearney, 2016; Ishak & Fin, 2013; Teuscher & Makarov, 2018).

According to previous studies, adolescents reporting lower teacher support indicated less positive well-being and more school behavior problems, such as truancy (Teuscher & Makarov, 2018; Wang & Eccles, 2013). Furthermore, the Social Control- Self Control Theory (Veenstra et al., 2010) posits that social support should function as an active control mechanism against risk factors at school, such as truancy (Hirschi, 1969). Previous studies

have already shown that teachers play an essential role in promoting student school behavior (Henderson & Kearney, 2016; Ishak & Fin, 2013; Wang & Eccles, 2013). We emphasize again, in addition to subject matter specialists, teachers act as mentors, role models, and emotional resources and can, therefore, give their students a connected, accepted and supported feeling, which is an important behavioral involvement of the development of adolescents. However, our results provide partial support for the hypothesis of social support. It should be noted that while no effect of immigration on classmate support has been found, a correlation was found (Table 2) that suggests there is a small relation between classmates' support and truancy.

Our results cannot be interpreted without considering the limitations of this study. Firstly, this study did not take into account the differences between ethnic minority groups, and no differentiation is made between adolescents born in the country of origin and adolescents born in the host country. Previous studies, such as those of Bécaries, Nazroo and Stafford (2009), indicate that minority groups may differ in their reasons for migration and their adaptability. Secondly, the measures of truancy, perceived discrimination, and social support were obtained through self-reports. Inevitably, this can involve some degree of social desirability (Krumpal, 2013). However, the questionnaires are treated anonymously, which reduces the chance of socially desirable answers (Krumpal, 2013). Including other sources of information such as school administrative data and teachers' perspectives could provide a clearer picture of truancy. Finally, a major strength of this study is the national representativeness of the sample.

Conclusion

All in all, this study shows that attention for truancy among immigrant adolescents continues to be necessary. Our results showed that immigrant adolescents reported more truancy than non-immigrant adolescents. Contrary to what was expected, the current study did not support the hypothesis that the impact of migration is higher for boys than for girls. Our results show the opposite, an effect of immigration on truancy is only found for girls, not for boys. Furthermore, our results support the hypothesis that immigrant adolescents, compared to non-immigrant adolescents, experience higher levels of perceived discrimination and experience a bit less teacher social support, which in turn, were associated with a higher likelihood of truancy.

There is still a need for more research with immigration-specific contexts to understand the school development of immigrant adolescents better (see Suarez-Orozco et al., 2018). More research is needed into the mechanism of perceived discrimination and externalizing

behaviors into maladaptive coping mechanisms. More research is also needed to better understand gender differences in truancy, especially among immigrant adolescents.

Furthermore, when developing interventions, the priority should lie primarily in the prevention of perceived discrimination and rejection of immigrant adolescents, because by far, the wins can be achieved here. Finally, it is imperative to consider the role of the student-teacher relationship as a key competence of pedagogical practice to develop interventions.

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