EMPIRICAL RESEARCH

Why and When is Ethnic Harassment a Risk for Immigrant Adolescents' School Adjustment? Understanding the Processes and Conditions

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Abstract Ethnically harassed immigrant youth are at risk for experiencing a wide range of school adjustment problems. However, it is still unclear why and under what conditions experiencing ethnic harassment leads to school adjustment difficulties. To address this limitation in the literature, we examined two important questions. First, we investigated whether self-esteem and/or depressive symptoms would mediate the associations between ethnic harassment and poor school adjustment among immigrant youth. Second, we examined whether immigrant youths' perception of school context would play a buffering role in the pathways between ethnic harassment and school adjustment difficulties. The sample (n = 330; $M_{age} = 14.07$, SD = .90; 49 % girls at T1) was drawn from a longitudinal study in Sweden. The results revealed that experiencing ethnic harassment led to a decrease in immigrant youths' self-esteem over time, and that youths' expectations of academic failure increased. Further, youths' relationships with their teachers and their perceptions of school democracy moderated the mediation processes. Specifically, when youth had poor relationships with their teachers or perceived their school context as less democratic, being exposed to ethnic harassment led to a decrease in their self-esteem. In turn, they reported low school satisfaction and perceived themselves as being unsuccessful in school. Such indirect effects were not observed when youth had high positive relationships with their teachers or perceived their school as offering a democratic environment. These findings highlight the importance of understanding underlying processes and conditions in the examination of the effects of ethnic devaluation experiences in order to reach a more comprehensive understanding of immigrant youths' school adjustment.

 $\begin{tabular}{ll} Keywords & Immigrant youth \cdot School adjustment \cdot \\ Ethnic harassment \cdot Ethnic victimization \cdot Depression \cdot \\ Self-esteem \end{tabular}$

Introduction

Adjustment and success in academic life is a key factor for immigrant youths' integration into the host culture and their future prospects (Health et al. 2008). Thus, this issue has become one of the policy priorities for immigrant-receiving countries, and extensive efforts have been made to identify the factors that may play a role in the school adjustment and performance of immigrant youth. Experience of ethnic harassment (i.e., negative treatments or derogatory comments in relation to ethnic background) is one of the major contextual stressors for immigrant youth (Garcia Coll et al. 1996) and poses a threat to their school adjustment.

Research on ethnic minority adolescents in the U.S. and Europe has shown that a substantial number of youth are treated badly and victimized by their peers, teachers, and neighbors, at school and in other contexts (e.g., Huynh and Fuligni 2010; Liebkind et al. 2004; Verkuyten and Thijs 2002). Such negative experiences have been linked to a wide range of school outcomes. Youth who are harassed on the basis of their ethnic origin tend to develop negative beliefs about their academic competence and rewards of schooling (Eccles et al. 2006; Wong et al. 2003), display

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low academic motivation, persistence, and curiosity (Alfaro et al. 2009; Smalls et al. 2007), and show problem behaviors at school, such as getting into fights with peers (Smalls et al. 2007). In addition, they are more likely to develop negative attitudes towards school (Sellers et al. 2006), show poor academic performance (Benner and Graham 2011; Huynh and Fuligni 2010), and drop out of school (Martinez et al. 2004).

Despite the evidence that ethnic harassment has negative consequences, the current literature fails to provide a comprehensive understanding of the associations between experiences of harassment and poor school adjustment. Specifically, it is still unclear why ethnic harassment is related to increased school adjustment difficulties. An understanding of the mechanisms that link experiences of ethnic harassment to school adjustment is clearly needed to advance theory development and develop strategies that may reduce the negative consequences of harassment. In addition, there is a limited understanding of the *conditions* under which ethnic harassment places immigrant adolescents at risk for poor school adjustment. The present study used a longitudinal dataset to examine both the processes and the conditions that might explain the link between ethnic harassment and school adjustment difficulties (conceptualized as low school satisfaction, perceived academic failure, and cutting class) among immigrant youth in Sweden.

Why Do Ethnically Harassed Youth Have School Adjustment Difficulties?

The existing literature presents two possible explanations for the link between experiences of harassment and poor school adjustment. The first explanation highlights the role of self-processes, capitalizing on the premises of Social Identity Theory (Tajfel and Turner 1986). The Social Identity Theory emphasizes that youth form their identities during adolescence on the basis of social categories such as ethnicity and nationality. Ethnic identity comprises an important part of youth's self-concept. Thus, negative appraisals or treatment directed at young persons' social group might interfere with the basic human drive to feel valued (Ryan and Deci 2000), and in turn may damage how they see themselves and reinforce negative self-evaluations. Supporting this argument, empirical findings suggest that experiences of ethnic devaluation have harmful effects on the self-processes of minority and immigrant adolescents. For example, experiencing or worrying about discrimination is linked to low self-efficacy (Mesch et al. 2008), global self-worth (Verkuyten and Thijs 2006), and self-esteem (Harris-Britt et al. 2007; Rivas-Drake et al. 2008). Importantly, these detrimental effects last over time (Greene et al. 2006; Zeiders et al. 2012). In a 5-year longitudinal study, Greene et al. (2006) demonstrated that experiencing ethnic insults lowered feelings of self-esteem among African, Latino, and Asian American youth.

Furthermore, a number of studies show that poor selfconcept negatively impacts youths' academic functioning and school adjustment. Adolescents with low self-esteem are at risk of developing negative attitudes towards school and having low educational aspirations and GPA (Kiuru et al. 2007; Lopez and Dubois 2005). Similarly, they develop failure expectations, engage in task-irrelevant behaviors (Aunola et al. 2000), and tend to cut classes (Lopez and Dubois 2005). These findings demonstrate that impaired self-esteem is associated with school-related problems. Given the damaging effect of ethnic devaluation on young persons' self-perception, a damaged self due to ethnic devaluation can explain the association between ethnic harassment and poor school adjustment. However, to date, there has been no examination of the mediating role of the self-concept in the effect of ethnic harassment on school adjustment.

The second approach highlights the role of psychological health processes in explaining the link between ethnic harassment and school adjustment difficulties based on the interpersonal relationships literature. This line of research shows that experiencing stressful interpersonal interactions (e.g., being picked on, laughed at, teased, or harassed by peers) creates burdens for youth's well-being and takes a toll on their psychological functioning. As a result, youth become more likely to experience problems at schools, such truancy and low GPA (Juvonen et al. 2000; Nishina et al. 2005). Similar to other stressful interpersonal experiences, exposure to ethnic harassment in day-to-day social interactions may also impede youths' academic functioning and school adjustment by deteriorating their psychological health.

In line with this idea, evidence shows that ethnic minority and immigrant youth report high levels of helplessness (Nyborg and Curry 2003) and exhibit anxiety, psychosomatic and depressive symptoms in the face of ethnic devaluation (Neto 2009; Rivas-Drake et al. 2008). Moreover, the harmful effects of experiences with ethnic devaluation, especially on youths' psychological mood, continue over time (Brody et al. 2006; Greene et al. 2006). Importantly, poor psychological health, specifically feeling depressed, may further encourage immigrant youth to focus on the negative aspects of their lives, and to exaggerate their weaknesses (Rudolph 2004). Such tendencies may lead to emotional distress, which may impact youth's enjoyment of the school setting and may result in higher truancy. In sum, immigrant youths' poor psychological health might be the intervening factor between ethnic harassment and school adjustment difficulties. However, to date, no researchers have tested this argument empirically.

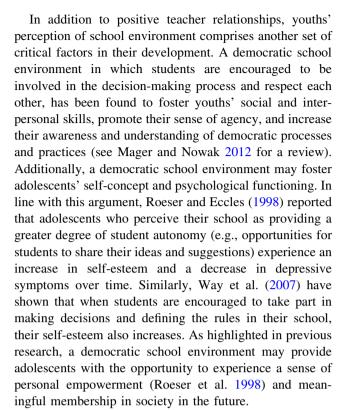


Does Immigrant Youths' Perception of School Context Matter?

During adolescence, youth have increased desires to be autonomous, to take a role in decision-making, and to be valued by non-parental adults, such as their teachers (Roeser and Eccles 1998). The school context constitutes an important everyday setting that may be responsive to these desires. Schools in which students feel respected and supported by teachers, and can voice their concerns, desires, and expectations, may facilitate positive development in youth. Indeed, the literature on student-teacher relationships reveals that when adolescents perceive support from their teachers, they also have high subjective well-being (Suldo et al. 2009; see Wentzel 2010 for a review) and selfworth (Kuperminc et al. 1997). Their self-esteem increases over time (Reddy et al. 2003), and they exhibit a decline in depressive symptoms (Roeser and Eccles 1998). In addition, teachers' positive appraisals and support have been associated with increased academic achievement (O'Connor and McCartney 2007), and lower rates of early school dropout (Barile et al. 2012). Jointly, these findings suggest that teachers' provision of support may facilitate students' wellbeing and foster their academic success.

Positive student—teacher relationships may be particularly important for at-risk children, such as those from low-income or immigrant families. For example, in their longitudinal study of newcomer immigrant youth in the U.S., Suarez-Oronzco et al. (2009) showed that supportive relationships with teachers enhance immigrant youths' feelings of efficacy and keep them engaged in school, both behaviorally (e.g., attending and participating in courses, and completing homework) and intellectually (e.g., being interested in learning). The authors argue that supportive relationships with teachers may provide immigrant youth with a safe context in which to learn the norms of the host culture, and to enhance the feeling of belonging in the school setting.

In light of these findings, supportive relationships with teachers directly promote youths' adjustment, including those with minority and immigrant background. However, we positive student—teacher relationships may not only have a direct effect on immigrant youths' adjustment, but may also have a protective role, especially for those who are exposed to certain risks such as ethnic harassment. Specifically, it is plausible that a positive relationship with teachers may convey ethnically harassed youth that they are valued and accepted. These feelings may help them cope with the stressful experiences of ethnic devaluation and ensure the continuation of a positive self-concept and psychological health. In turn, ethnically harassed immigrant youth may be less vulnerable to school adjustment difficulties.



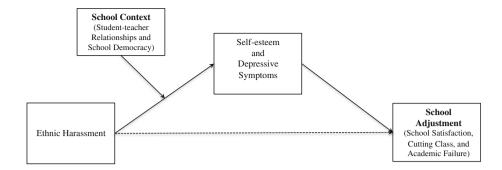
The positive effects of a democratic school environment might be even more salient among youth who face migration-related challenges. In particular, when immigrant youth are exposed to ethnic devaluation, they receive the message that their ideas, suggestions, and input are not well accepted or taken seriously by the majority group. Such thoughts may lead them to perceive themselves as devalued and suppressed. However, when the school context emphasizes the importance of including everyone and valuing every voice, it may prevent in-group/out-group distinctions and promote social cohesion. Thus, immigrant youth may feel themselves to be integrated. Taken together, a democratic school context might diminish the negative effect of ethnic harassment on youths' self-processes and psychological health, consequently lowering the risk of school adjustment difficulties.

The Present Study

The present study aimed to further our understanding of the link between ethnic harassment and school adjustment difficulties among immigrant youth. We examined two theoretically important questions. First, we simultaneously tested the two alternative conceptual arguments reviewed above in order to identify whether self-related (i.e., self-esteem) and/or psychological-health related processes (i.e., depressive symptoms) explain why experiencing ethnic harassment is associated with poor school adjustment



Fig. 1 Proposed conceptual model



among immigrant youth. The conceptual basis of testing this mediation model is based on the premises of the Social Identity Theory (Tajfel and Turner 1986) and findings from the interpersonal relationships literature (Juvonen et al. 2000; Nishina et al. 2005). Second, we investigated whether immigrant youths' perceptions of school context would play a buffering role in the pathways between ethnic harassment and poor school adjustment. We expected that the aforementioned mediating processes would be altered depending on how youth perceive their school context. Specifically, we argued that when immigrant youth have positive relationships with their teachers and perceive their school context as democratic, their self-esteem and mental health would be less vulnerable to the detrimental effects of ethnic harassment. In turn, they would be less likely to experience school adjustment difficulties.

To address the first question, we used longitudinal data to contrast two alternative approaches to the mediating processes. To address the second question, we tested the possible moderating roles of student-teacher relationships and their perception of school democracy on the proposed mediating mechanisms (see Fig. 1 for the conceptual model). In the assessment of study constructs, we relied on youths' own perceptions. As other researchers have highlighted (Bandura 2001; Harris-Britt et al. 2007), individuals tend to react their subjective experiences of events rather than the objective experience itself. Relatedly, we believe that youths' perceptions of their experiences may have a greater influence on their developmental processes than the experiences themselves.

Methods

Participants

The sample was drawn from a longitudinal study of youths' experiences inside and outside school, and of their relationships with parents, peers, and teachers. The study was conducted in a medium-size town in central Sweden, where seven public schools were selected from different neighborhoods to match the general socio-demographic

characteristics of the city. Students in 7th to 9th grades were targeted in each school. Overall, 1,649 students in 69 classrooms (6-15 classrooms in each school) comprised the target sample. Of the target sample, 94.3 % of adolescents (N = 1,555) participated at Time 1 (T1). Data collection at T1 was completed in the spring semester of the school year. Time 2 (T2) assessments took place a year after the first data collection, allowing a 1-year time interval between two measurement occasions. Among the students who participated at T1, 367 had parents born outside Sweden or another Nordic country (i.e., Finland, Norway, or Denmark). The sample for the current study comprised the first- and secondgeneration immigrant youth with data on ethnic harassment available at T1 (n = 330; $M_{age} = 14.07$, SD = .90, range = 12-17; 51 % boys at T1). To ensure that the exclusion of immigrant youth without data on ethnic harassment variable would not influence the model results, we compared this group (n = 37) to the analytic sample (n = 330) on all study variables. There were no statistically significant differences.

About 38 % of the adolescents were first-generation immigrants, and 69 % had been living in Sweden for more than 5 years. About one-third of them (28 %) reported that they spoke a language other than Swedish at home. Their parents had migrated from 54 different countries around the world, including Middle Eastern, East African, Asian, and South American countries, and parts of the former Yugoslavia. A majority of the adolescents were in intact families (71 %), had employed parents (59 and 72 % for mothers and fathers, respectively), and perceived their financial situation to be as good as other families in their neighborhood.

We conducted a logistic regression analysis to examine whether attrition from T1 to T2 was systematic. Specifically, we regressed attrition (dropout = 1, retention = 0) on demographic characteristics of the adolescents [i.e., adolescents' age and gender, generation status, and family structure (intact versus non-intact)], and the study variables. The results revealed that those who dropped out at T2 were more likely to cut classes than those retained at T2 (OR 1.53, 95 % CI 1.02–2.31; Nagelkerke $R^2 = .14$). None of the other variables significantly predicted the



attrition; thus, we concluded that there was a minimal effect of attrition on the results.

Procedure

Trained research assistants collected data from the students during regular class hours. The students were informed that their participation was voluntary, and assured that their responses would be confidential. Only the students whose parents did not decline their children's participation and those who were willing to participate (only a handful did not want to participate) took part in the study. On average, it took 90 min for the students to complete each questionnaire. The questionnaire was administered in Swedish, but children with language difficulties (less than 5 %) received help from the research assistants in reading the questions, in the same language as the student. In cases where there was no bilingual research assistant available, they received help in Swedish. The Regional Ethics Review Board approved the study procedures.

Measures

Predictor Variable

Ethnic Harassment We conducted a focus group interview prior to the study to identify the typical negative experiences that immigrant youth attribute to their ethnic background. A 6-item ethnic harassment scale was developed on the basis of the themes identified during this interview (e.g., "Has anyone looked at you in a way that makes you certain they have a negative attitude towards you, just because you or your parents come from another country?" "Has anyone said anything derogatory about your origin, for example words like nigger, darky, damned immigrant, inkface, ching-chong, or something else?" and "Has anyone made fun of you in a derogatory way because you come from another country?"). The youth were asked to respond to each question on a 5-point scale, ranging from "1" (Never) to "5" (Daily). In order to test the factor structure of the ethnic harassment scale, we estimated a confirmatory factor analysis (CFA) as we had a priori hypothesis about indicator-factor correspondence. Specifically, we expected that all items that were developed based on the themes that emerged in the focus group interview would represent a single factor (i.e., harassment experiences of youth due to their ethnic background). Supporting our expectation, the CFA model with 6 indicators, and a correlated error between two items revealed good fit, $\chi^2(8) = 16.99, \quad p = .03,$ Comparative Fit (CFI) = .98, Root Mean Square Error of Approximation (RMSEA) = .05, 95% CI for RMSEA .01-09, Standardized Root Mean Square Residual (SRMR) = .03. The standardized factor loadings ranged between .43 and .69, and Cronbach's alpha was .76.

Mediator Variables

Depressive Symptoms The Center for Epidemiological Studies Depression Scale for Children (CES-DC; Faulstich et al. 1986) was used to measure youths' depressive moods. The CES-DC includes 20 items, of which 16 are negatively phrased to measure depressive feelings (e.g., "During the last week, I was bothered by things that usually do not bother me" and "During the last week, I felt like people did not like me"), and 4 of them are positively phrased to measure well-being (e.g., "During the past week, I felt like I was just as good as other friends" and "I was happy") (Marshall et al. 2013). In the current study, we only used items measuring depressive feelings. The adolescents rated each item on a 4-point scale, ranging from "1" (Not at all) to "4" (Often). The CES-DC has been shown to have good internal consistency and be validity across different cultural groups. For instance, Olsson and von Knorring (1997) provided evidence for the convergent validity of the CES-DC in a Swedish sample, demonstrating a high correlation (r = .81) between children's CES-DC scores and their scores on the Beck Depression Inventory. In the present study, Cronbach's alphas were .92 and .94 at T1 and T2, respectively.

Self-esteem The 10-item Rosenberg Self-Esteem Scale (RSES; Rosenberg 1979) was used to assess the youths' self-esteem (e.g., "On the whole, you are satisfied with yourself" and "You feel that you have a number of good qualities"). Students responded to each statement on a 4-point scale, ranging from "1" (Do not agree at all) to "4" (Completely agree). The RSES is one of the most commonly used measures of global self-esteem. A recent crossnational study (Schmitt and Allik 2005) showed that the RSES has similar factor structure across 53 nations, and has criterion and discriminant validity. In the current study, inter-item reliability values for this scale were .85 and .84 at T1 and T2, respectively.

Moderator Variables

Positive Relationships with Teachers Students answered 6 questions about their relationships with teachers at T1 assessment (Kerr and Stattin 2000). Sample items were: "If you have a problem at school, do you feel as if you could go to your teachers about it?" "Are your teachers there for you if you want to talk about things that are not school-related?" Students responded to each question on a 4-point scale, ranging from "1" (No, hardly any of them) to "4" (Yes, almost all of them). Past literature provided evidence



Table 1 Correlations, means, and standard deviations for the study variables

				,									
	1	2	3	4	5	9	7	8	6	10	11	12	13
1. Ethnic harassment-T1	ı	.24***	.21***	21***	32***	27**	18**	.24***	.22***	.14*	60.	26**	19**
2. Depression-T1		1	.52***	57***	39***	36***	30***	.39***	.26***	.21***	.22***	23***	10
3. Depression-T2			ı	39***	53***	31***	38***	.32***	.39***	.15*	.29***	19**	14*
4. Self-esteem-T1				1	.53***	.37***	.41**	33***	35***	16**	15*	.11	.10
5. Self-esteem-T2					I	.36***	.42***	30***	41***	09	24**	.19**	.16**
6. School satisfaction-T1						ı	***29.	42***	40***	26***	30***	***74.	.41**
7. School satisfaction-T2							ı	25***	43***	13*	23***	.27***	.24**
8. Academic failure-T1								ı	.40***	***	.21**	15**	16**
9. Academic failure-T2									ı	.11	.43***	12	13*
10. Cutting classes-T1										ı	.30***	13*	11
11. Cutting classes-T2											1	26***	22***
12. Pos. teacher relT1												1	.59***
13. School democracy-T1													1
M	1.51	1.61	1.77	3.18	3.09	3.88	3.87	1.52	1.61	1.27	1.39	2.99	3.40
SD	.47	.55	99.	.58	09.	.74	.71	09.	.63	09:	.71	89.	.84
	,												

0 < .05; ** p < .01; *** p < .001



for the concurrent validity of this scale by demonstrating a positive association between relationships with teachers and school liking among adolescents (Aunola et al. 2000). In the current study, positive relationships with teachers were also significantly correlated with the school adjustment outcomes in the expected directions (see Table 1), and the scale had a strong inter-item reliability ($\alpha = .85$).

School Democracy Six questions were posed to the students at T1 assessment to examine their experiences of active participation in decision-making processes at school. These questions were developed on the basis of a previous study assessing democratic functioning within the family (Stattin et al. 2011). The sample questions included: "Are students allowed to take part in planning and discussing what you will be taught at school?" "Do you think that the teachers and the students respect each other and listen to each other's opinion?" and "If students have objections about things, do the teachers take them into account?" The response scale ranged from "1" (Not at all) to "5" (Yes, absolutely). The CFA model for this scale showed good fit, $\gamma^{2}(8) = 10.78, p = .21, CFI = .99, RMSEA = .03, 95 \%$ CI for RMSEA .00-03, SRMR = .02. The standardized factor loadings ranged from .60 to .74, and Cronbach's alpha was .81.

Outcome Variables

School Satisfaction Students answered 5 questions on the extent to which they were satisfied with and comfortable at school both at T1 and T2 (Kerr and Stattin 2000). Sample items are: "How do you like school?" and "How would you describe the relationship between yourself and school?" The response scale ranged from "1" (Not at all/ As enemies) to "5" (A lot/As best friends). This scale has been found to have acceptable internal consistency reliability across multiple studies (e.g., Svenson et al. 2011). Consistent with the previous research, the inter-item reliability of this scale was acceptable in the current study (i.e., .72 and .70 at T1 and T2, respectively). In addition, our preliminary analyses provided evidence for the criterion validity of this scale by demonstrating significant negative correlations between school satisfaction and other school adjustment outcomes, including perceived academic failure and cutting class.

Cutting Class A single item was used to measure this construct (i.e., "I have cut class in many subjects this semester"). This item was presented to the adolescents both at T1 and T2, and the adolescents gave ratings on this item on a 4-point scale, ranging from "1" (Do not agree at all) to "4" (Completely agree). The test–retest reliability of this item was moderate (i.e., r = .30 for the association

between cutting class at T1 and T2). Students' scores in this item were significantly correlated with the other school adjustment outcomes in the expected directions, demonstrating criterion validity (see Table 1).

Perceived Academic Failure Adolescents were presented with 4 statements to assess their judgments about their academic performance both at T1 and T2 (e.g., "I have been failing in school this semester" and "I have had a hard time keeping up with the work this semester"). They rated each statement on a 4-point scale, ranging from "1" (Do not agree at all) to "4" (Completely agree). Cronbach's alphas for this scale were .71 and .76 at T1 and T2, respectively. The significant negative correlations between perceived academic failure and school satisfaction provided preliminary evidence for the criterion validity of this scale.

Data Analysis

To test the first research question (i.e., Do self-esteem and/ or depressive symptoms mediate the associations between ethnic harassment and poor school adjustment among immigrant youth?), we fitted a mediation model in MPlus (Muthén and Muthén 1998-2010). In this model, we controlled for T1 assessments of the mediators and outcome variables. For the second research question (i.e., Does immigrant youths' perception of school context play a buffering role in the pathways between ethnic harassment and school adjustment difficulties?), we fitted moderatedmediation models. In line with our research question, we tested moderated-mediation models where the association between the independent variable (i.e., ethnic harassment) and mediators (i.e., depression and self-esteem) is moderated by a third variable (i.e., positive student-teacher relationship or school democracy) (Preacher et al. 2007). Before testing the proposed models, we checked the collinearity diagnostics to identify whether the inclusion of depression and self-esteem simultaneously into regression equations would cause any problems. Craney and Surles (2002) suggested that variance inflation factor (VIF) exceeding 5 indicates multicollinearity, which requires treatment. In the current data, the highest VIF was 1.84 implying that the inclusion of depression and self-esteem simultaneously into the same regression equations would not lead to multicollinearity problems.

The model fits were evaluated on the basis of the CFI (>.95), RMSEA (<.06), and SRMR (<.08) (Hu and Bentler 1999; Tabachnick and Fidell 2001). In addition, the bootstrapping technique was used to test for both mediation and moderated-mediation effects. Such testing is more robust than traditional indirect testing (e.g., using the Sobel test), since it does not require the assumption of normality of the



sampling distribution (Preacher and Hayes 2008), and is effective in eliminating Type I error (MacKinnon et al. 2002). The full information maximum likelihood (FIML) estimation approach was employed to fit the models with missing data. FIML provides more reliable standard errors than mean imputation, or listwise or pairwise deletion (Little and Rubin 2002; Schafer and Graham 2002). Muthén and Muthén (2010) suggest that minimum covariance coverage should be .10 in data sets with missing information. In the current study, covariance coverage ranged between .80 and 1.00. Further, the Little's MCAR test yielded a nonsignificant result, $\chi^2(151) = 175.68$, p = .083, suggesting that the missingness in the data was at random. Thus, using FIML was a proper method of missing data handling technique in the current study.

Results

Descriptive Statistics and Preliminary Analyses

Table 1 presents bivariate correlations, means, and standard deviations for the study variables. Around 80 % of the immigrant youth reported that they had experienced at least one type of harassment due to their ethnic background during the past year. Youths' experiences of ethnic harassment did not significantly differ across the genders, t(328) = .87, p = .38, or first- and second-generation immigrants, t(328) = .26, p = .79. Bivariate correlations suggested that the more ethnic harassment youth reported, the more likely they were to report depressive symptoms, academic failure, cutting classes, low self-esteem, and poor school satisfaction. In addition, self-esteem and depressive symptoms were associated with school adjustment difficulties concurrently (see Table 1).

Experiences of Ethnic Harassment and Changes in Selfesteem and Depressive Symptoms

We tested whether there were significant direct effects of ethnic harassment on changes in youths' self-esteem and depressive symptoms from T1 to T2. The results showed that experience of ethnic harassment led to a significant decrease in youths' self-esteem, $\beta = -.25$, z = -4.83, p < .001, and an increase in their depressive symptoms, $\beta = .12$, z = 2.25, p < .05. We imposed equality constraints on the paths from ethnic harassment to self-esteem and to depressive symptoms in order to test whether the effects of ethnic harassment were equivalent. A Chi square change test suggested that the effect of ethnic harassment on changes in youths' self-esteem ($\beta = -.25$) was larger than its effect on changes in depressive symptoms ($\beta = .12$), $\Delta \chi^2(1) = 15.99$, p < .001. In sum, the results

suggest that ethnic harassment is a more important risk factor for adolescents' self-esteem than for their depressive symptoms.

Why Do Ethnically Harassed Youth Have School Adjustment Difficulties?

Our first research question concerned whether youths' self-esteem and/or depressive symptoms explained why ethnic harassment led to poor school adjustment. We fitted a mediation model, which showed good fit, $\chi^2(23) = 49.04$, p < .01, CFI = .96, RMSEA = .05, 95 % CI for RMSEA .04–.08, SRMR = .05 (see Fig. 2). Tests of indirect effects revealed that when adolescents were exposed to ethnic harassment, their self-esteem decreased over time, and in turn, their expectations of academic failure increased, $\beta_{\text{ind.}} = .06$, z = 2.71, p = .01, 95 % CI .02–.10. Depressive symptoms, by contrast, did not significantly mediate the associations between ethnic harassment and any of the school adjustment outcomes. In sum, these findings suggest that ethnic harassment negatively affects immigrant youths' school adjustment by damaging their self-esteem.

Does Immigrant Youths' Perception of School Context Matter?

Our second research question concerned whether the mediating role of self-esteem and depressive symptoms changes depending on immigrant youths' perception of school context. Thus, we tested the moderating effects of youths' relationships with their teachers and their perceptions of school democracy in the mediation model described above. We fitted separate models for each moderator variable to eliminate the possibility of poor statistical power due to a low ratio of number of parameter estimates to the sample size (Kline 2011). In the first model, we tested whether youths' positive relationships with their teachers moderated the indirect effects of ethnic harassment through self-esteem. The model fitted the data well, $\chi^2(31) = 62.54, p < .01, CFI = .95, RMSEA = .06, 95 \%$ CI for RMSEA .04-.08, SRMR = .05. The moderated mediation model showed that when immigrant youth were at *low* levels of positive relationships with their teachers (i.e., one SD below the mean), being exposed to ethnic harassment led to a decrease in their self-esteem, and, in turn, they reported low satisfaction with school, β_{ind} = -.04, z = -2.07, p = .04, 95 % CI -.08 to -.01, and regarded themselves as unsuccessful at school over time, $\beta_{\text{ind}} = .05$, z = 2.71, p = .01, 95 % CI .02–.10. By contrast, at high levels of positive relationships with teachers (i.e., one SD above the mean), none of the indirect effects were statistically significant, which suggests that having positive relations with teachers may serve as a protective



Fig. 2 The mediating roles of self-esteem and depressive symptoms on the associations between ethnic harassment and school adjustment outcomes. *Note:d1, d2, d3, d4*, and *d5* refer to the disturbances of the outcome variables. T1 assessments of the mediators and outcome variables were controlled for in all T2 assessments

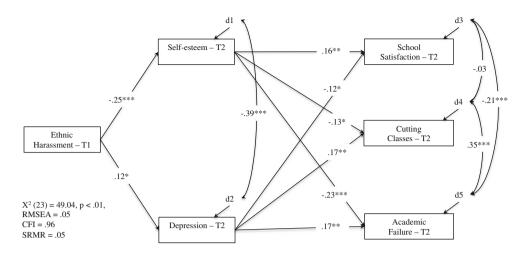


Table 2 Indirect effects at different levels of student-teacher relationships

relationships		
Moderator	Pathway	95 % confidence interval
At low levels of STR	$EH \rightarrow SE \rightarrow SS$	[08 to01]
	$EH \rightarrow SE \rightarrow CC$	[.00 to .08]
	$EH \rightarrow SE \rightarrow AFE$	[.02 to .10]
	$EH \to DS \to SS$	[02 to .02]
	$EH \to DS \to CC$	[03 to .02]
	$EH \to DS \to AFE$	[03 to .02]
At high levels of STR	$EH \rightarrow SE \rightarrow SS$	[03 to .01]
	$EH \rightarrow SE \rightarrow CC$	[01 to .04]
	$EH \rightarrow SE \rightarrow AFE$	[02 to .03]
	$EH \to DS \to SS$	[.00 to .08]
	$EH \to DS \to CC$	[.00 to .10]
	$EH \to DS \to AFE$	[06 to .00]

STR student-teacher relationships, EH ethnic harassment, SE self-esteem, DS depressive symptoms, SS school satisfaction, CC cutting classes, AFE academic failure expectations

factor against the risk of ethnic harassment. The 95 % confidence intervals of the conditional indirect effects are presented in Table 2.

In the second model, we tested whether the indirect effects of ethnic harassment through depressive symptoms varied at different levels of youths' positive relationships with their teachers. The model fitted the data, $\chi^2(31) = 65.34$, p < .001, CFI = .95, RMSEA = .06, SRMR = .05. However, youths' positive relationships with their teachers did not significantly moderate the association between ethnic harassment and depressive symptoms. In addition, none of the conditional indirect effects were statistically significant.

In the third model, we tested whether youths' perceptions of school democracy moderated the indirect effects of

Table 3 Indirect effects at different levels of school democracy

Moderator	Pathway	95 % confidence interval
At low levels of SD	$EH \rightarrow SE \rightarrow SS$	[08 to01]
	$EH \rightarrow SE \rightarrow CC$	[.00 to .09]
	$EH \rightarrow SE \rightarrow AFE$	[.02 to .11]
	$EH \rightarrow DS \rightarrow SS$	[01 to .03]
	$EH \rightarrow DS \rightarrow CC$	[04 to .01]
	$EH \rightarrow DS \rightarrow AFE$	[04 to .01]
At high levels of SD	$EH \rightarrow SE \rightarrow SS$	[04 to .01]
	$EH \rightarrow SE \rightarrow CC$	[01 to .04]
	$EH \rightarrow SE \rightarrow AFE$	[02 to .04]
	$EH \rightarrow DS \rightarrow SS$	[07 to .00]
	$EH \rightarrow DS \rightarrow CC$	[01 to .11]
	$EH \rightarrow DS \rightarrow AFE$	[01 to .09]

SD school democracy, EH ethnic harassment, SE self-esteem, DS depressive symptoms, SS school satisfaction, CC cutting classes, AFE academic failure expectations

ethnic harassment through self-esteem. The model had good fit, $\chi^2(31) = 62.95$, p < .01, CFI = .95, RMSEA = .06, SRMR = .05. Tests of conditional indirect effects showed that at *low* levels of school democracy (i.e., one SD below the mean), being exposed to ethnic harassment led to a decrease in their self-esteem, and in turn, their school satisfaction decreased, $\beta_{\text{ind.}} = -.04$, z = -2.06, p = .04, 95 % CI -.08 to -.01, while their perceptions of academic failure increased, $\beta_{ind.} = .06$, z = 2.70, p = .01, 95 % CI .02-.11. On the other hand, at high levels of school democracy (i.e., one SD above the mean), none of the indirect effects were statistically significant, which implies that perceiving school environment as democratic may reduce the negative consequences of ethnic harassment. The 95 % confidence intervals of the conditional indirect effects are presented in Table 3.



In the final model, we tested whether the indirect effects of ethnic harassment through depressive symptoms varied at different levels of youths' perceptions of school democracy. The model fitted the data, $\chi^2(31) = 61.04$, p < .001, CFI = .95, RMSEA = .05, SRMR = .05. However, youths' perception of school democracy did not significantly moderate the association between ethnic harassment and depressive symptoms. In addition, none of the conditional indirect effects were statistically significant. Taken together, the results suggest that immigrant youths' relationships with their teachers and their perceptions of school democracy decrease the detrimental effect of ethnic harassment on youths' perceptions of self, and, in turn, protect them from the debilitating effects of ethnic harassment on their school adjustment.

Discussion

European counties are becoming more ethnically diverse, and integration of immigrants has become a critical policy priority. However, immigrant youth face harassment due to their ethnic origins (Liebkind et al. 2004; Verkuyten and Thijs 2002). Such negative experiences pose a threat to their school adjustment and educational success, which are regarded as key factors to promoting upwards economic and social mobility among minority populations. In the present study, we aimed to understand why ethnic harassment leads to school adjustment difficulties among immigrant youth, and under what conditions the processes involved might be influenced. Specifically, we tested two alternative explanations, based on self-processes and psychological health, to explain the link between immigrant youths' experiences of harassment and school adjustment difficulties. In addition, we investigated whether youth's perception of school context plays a buffering role in these processes.

Our findings suggest that experiences of ethnic devaluation negatively impact both the self-processes and psychological health of immigrant youth over time, which is in line with previous research (e.g., Brody et al. 2006; Harris-Britt et al. 2007; Greene et al. 2006). Interestingly, we also found that the negative impact of ethnic harassment on adolescents' self-concept is significantly higher than its effect on their psychological functioning. This finding can be related to the formation of ethnic identity during adolescence and the vulnerability of self-processes to negative social circumstances during this developmental period. As Phinney has emphasized in her body of research, ethnic identity is formed and becomes an important component of the self-concept during adolescence. It influences how young people see themselves within the social world (Phinney 1992; Phinney and Chavira 1992). Ethnic harassment may communicate to immigrant youth the devaluation of their social status, and thus poses a threat to their ethnic identity (Verkuyten and Thijs 2002). Such a threat may invalidate youths' feelings of self-worth and damage their perceptions of themselves, consequently affecting their school adjustment.

The present study serves as one of the first empirical examination of the processes through which ethnic harassment affects school adjustment difficulties. Supporting an argument built on the premises of Social Identity Theory (Tajfel and Turner 1986), our results suggest that part of the relation between experiences of ethnic devaluation and subsequent school adjustment difficulties (e.g., academic failure expectations) can be explained by immigrant youths' self-perceptions. Being exposed to derogatory comments due to ethnic origin may interfere with youths' perceptions of themselves in the social world, and may convey to immigrant youth that they do not matter, and are not as valued as youth in other group. Thus, they may start to internalize their negative social circumstances as reflective of their self-worth (Graham et al. 2009). These feelings and thoughts may block immigrant youths' academic aspirations, lead them to overestimate their weaknesses, and thereby lead to the development of failure expectations.

The bivariate associations of depressive symptoms with both ethnic harassment and school adjustment difficulties in the present study were consistent with previous research (e.g., Alfaro et al. 2009; Rivas-Drake et al. 2008; Eccles et al. 2006). However, our findings demonstrated that depressive symptoms did not significantly mediate the association between ethnic harassment and school adjustment difficulties, contrary to the conceptual argument highlighting the role of mental-health related processes. Two alternative explanations could be proposed for this finding. First, as highlighted earlier, ethnic harassment is directly related to one's self and identity. Thus, these experiences may take a greater toll on how individuals feel about themselves than their feelings of overall psychological well-being. Hence, self-esteem, not depressive symptoms, emerged as the critical mediating factor when we account for the overlapping variance between self-esteem and depressive symptoms by simultaneously testing their mediating roles.

Second, this finding may be related to the nature of ethnic harassment and how it was assessed. In the present study, we measured the frequency of ethnic harassment experiences. In fact, ethnic devaluation experiences may take a greater toll on youths' psychological functioning if they have experienced them recently and intensively. In a recent study, Huynh and Fuligni (2010) asked ethnic minority youth in the U.S. to keep a diary of their experiences of discrimination during the last 14 days. They found that the more adolescents reported daily



discrimination, the more they felt depressed. However, global measures of ethnic discrimination (e.g., "How often have you felt that other kids threaten or harass you because of your race or ethnicity?") did not predict depressive symptoms after controlling for daily discrimination, which suggests that there are detrimental effects of recent discrimination on adolescents' psychological moods. If our measure had captured different aspects of harassment experiences such as immediacy and intensity, we might have observed a stronger effect of ethnic harassment on depressive symptoms similar to Huynh and Fuligni's (2010) findings. In turn, depressive symptoms might have emerged as a significant mediator similar to self-esteem. To sum, replication of the current findings using ethnic harassment measures with higher specificity is warranted.

A noteworthy finding in the present study is that positive student-teacher relationships buffer the negative effects of ethnic harassment on youths' self-processes, and, in turn, have implications for their school adjustment. Specifically, immigrant youths' self-esteem is more vulnerable to debilitating comments due to their ethnicity when they have poor relationships with their teachers. In turn, youth show a decrease in their school satisfaction, and expect failure in their academic work. However, such indirect effects were not observed among youth with highly positive relationships with their teachers. These findings confirm developmental theories that highlight the role of supportive teachers in fostering the academic adjustment of their students (e.g., Barile et al. 2012). In addition, the findings contribute to the current literature by providing empirical evidence that there is a possible mechanism through which relationships with teachers impact ethnically vulnerable youths' academic adjustment. When immigrant youth encounter obstacles in their relationships with the members of the host culture, they may develop negative beliefs about how much they are valued by the majority group. However, having supportive teachers may counteract the development of such a possibly biased way of thinking. Positive teacher relationships may provide immigrant youth with feelings of safety and help them build a sense of confidence and efficacy (Suarez-Oronzco et al. 2009). Thus, youth are empowered to restore their self-worth and self-esteem, which have been damaged as a result of harassment. Such feelings may keep them more engaged in school and prevent them from underestimating their own competence.

Importantly, our findings also show that ethnically harassed adolescents' perceptions of the school environment are important for their school adjustment. Specifically, a democratic school environment diminishes the negative effect of ethnic harassment on immigrant youths' self-esteem, and thus their satisfaction with school and academic expectations. These findings are in line with studies that highlight the importance of youths' perception of

school context for their self-processes (Roeser and Eccles 1998; Way et al. 2007) and satisfaction with school (Samdal et al. 1998). More importantly, our findings also contributed by showing that immigrant youths' perception of school context might not only foster their positive development, but also help them deal with the negative circumstances. As Baumeister and Leary (1995) highlighted, individuals need to feel a sense of belonging in a social group in order to function productively. In the context of ethnic harassment for immigrant youth, when immigrant youth perceive that everyone is treated fairly in school and observe that they can get involved in decisionmaking processes, they might feel that their values and opinions are as important as those of native youth. They may feel a greater sense of belonging to school community, and develop greater connectedness to school, rather than feeling alienated. In fact, a recent study has shown that the more students participate in the processes of decisionmaking and organizing school events, the more they felt connected to their school (Vieno et al. 2005). Sense of belongingness and connectedness may help immigrant youth overcome their negative perceptions of themselves, and reflect on their academic functioning. Relatedly, a growing body of research has shown that a sense of belongingness and connectedness in school communities is an important precursor of favorable health and academic outcomes among young people (see Juvonen 2006 for a review; Walton and Cohen 2011). To conclude, our findings emphasize the need to take school context into account in efforts to reduce the detrimental effect of ethnic harassment on immigrant youths' adjustment.

Despite its important contributions to the literature, several limitations of the present research need to be acknowledged. First, we considered immigrant youth as a homogenous group, and did not take into account the possible variations among them due to their ethnic background. As stated above, our data set included immigrant youth from 54 different countries, and we had only a small number of youth representing each country. Therefore, it was not possible to examine whether the proposed conceptual model worked similarly across distinct ethnic groups. As shown in previous research, children in some immigrant groups are more likely to be ethnic victimization or discrimination than those in other groups (e.g., Verkuyten and Thijs 2002). Thus, the effects of ethnic harassment on adjustment outcomes might be more pronounced in certain immigrant groups. Future studies with large sample sizes, in which immigrant youth can be grouped on the basis of their ethnic background, are needed to test whether the conceptual model proposed in the present study is consistent across different ethnic groups.

Second, we only focused on one type of harassment experiences. However, immigrant youth may not only



experience aversive interactions due to their ethnic background. They may also face with physical, personal, and sexual harassment in their everyday life settings as nativeborn youth (Volk et al. 2006). These harassment experiences may also put them at risk for developing psychological and school adjustment difficulties. Thus, it is essential to examine harassment experiences of immigrant youth as multi-dimensional and test the unique role of each harassment type on their developmental outcomes. Such an approach may provide us with better information on the unique role of ethnic harassment experiences on immigrant youths' adjustment.

Third, we used youths' self-reports to measure all of our study variables since we were interested in understanding youths' own perceptions. This approach, however, raises two concerns. First, we do not know, for instance, how adolescents' perceptions about school context might compare with the actual characteristics of the school environment. Second, heavily relying on self-report measures might have inflated the relationships between the variables in our models due to common method variance. Thus, future studies using objective measures of school context, and assessing the impacts of ethnic harassment on objective outcomes, such as school grades, degree completion, and educational attainment, may contribute to the literature.

Fourth, we used individual level analysis to examine the role of perceived school context in ethnically harassed immigrant youth's adjustment processes. As stated before, our data were collected from 7 different schools. According to a simulation study, a group size of at least 40 is required to obtain reliable between-level estimates, even in relatively simple between-level models (Meuleman and Billiet 2009). Thus, it was not possible to apply multilevel analysis in our data. In order to differentiate whether the school environment itself or whether immigrant adolescents' perception of it plays a role in their adjustment, the conceptual model proposed in the present study should be tested using large data sets that include sufficient number of schools and school level measurements.

Finally, we tested a particular sequence in our mediation model—from ethnic harassment to school adjustment via self-processes and psychological functioning—based on conceptual explanations in the literature. However, other sequences are surely plausible. For example, it is likely that youths' self-processes or psychological moods might affect how they perceive their environment, and thus have implications for their school adjustment. Future studies are needed to test the alternative explanations.

Conclusions

The present research sheds light on our understanding of the processes underlying the association between experiences of ethnic harassment and immigrant youths' school adjustment difficulties. Specifically, it shows that when immigrant youth experience ethnic harassment, their self-esteem decreases over time, and in turn they tend to experience school adjustment difficulties. Our findings also suggest that a supportive and democratic school context has a critical role in diminishing the negative impact of harassment on youths' self-esteem, and consequently their school adjustment. The information obtained from the present research should be used to inform school-based programs aiming to foster social and school adjustment among ethnic minority youth. In particular, by adopting a broad systems approach, intervention programs might focus on changing systems and dynamics within schools by fostering positive teacher-student relationships, and fostering a democratic school environment in which all students can participate in decision-making. By adopting this approach, we may be able to create a system that promotes youths' feelings of belongingness and enhances socialintegration processes.

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Authors' contributions SBÖ developed the research idea for this study, performed the analysis, and drafted the manuscript. HS designed the original longitudinal study, collaborated with SBO in structuring the conceptual bases of the study, and worked on the interpretation of the findings. All authors read and approved the final manuscript.

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