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School, friends, or a matter of personality?

A multidimensional approach to exploring sources of
tolerance among students

Erik Lundberg

School of Education, Health and Social Studies

Dalarna University, Falun, Sweden

SE-791 22 Falun, Sweden

+46(0)709562324

elb@du.se

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Abstract

The school is often emphasized as the societal institution with a universal mandate for promoting democratic values such as tolerance among the younger generation. This study explores the role of a positive school context for tolerance among Swedish students between 14 and 20 years old, simultaneously taking into account competing explanations such as social networks and personal traits. Results show that factors at the school level are associated with tolerance. However, socioeconomic factors and social networks tend to play a more important role. The study concludes by drawing attention to the role of schools as inclusive communities for students from different ethnical and social backgrounds.

Key words: tolerance, youth, school climate, intergroup attitudes, prejudice

Introduction

Tolerance is often said to be a basic quality for people facing pluralism, diversity, and the necessity of constructing a harmonious society. During the last few decades, the importance of tolerance has intensified as increasing social heterogeneity, political instability and refugee migration has highlighted the need for strategies to handle cultural diversity and strengthen social cohesion in the population. The school is often referred to as one of the societal institutions with a universal mandate for promoting democratic values, interpersonal relationships, and tolerance among the younger generation (e.g. Ehman, 1980; Gutmann, 1987; Torney-Purta, 2002; Amnå, 2012; Langmann 2011, 2013). This trend is evident in the Nordic countries, where tolerance appears as a central value in the school curriculumⁱ and in many political documents.

Previous research has approached the link between school and tolerance from various perspectives. Following the attention assigned to the concept in the literature, tolerance has been discussed as an educational value and as part of the basic principles of the school curriculum (Afdal, 2005; Nykänen, 2008; Orlenius, 2008; Englund & Englund, 2012). In addition, research has provided theoretical insights on the potential and perils of education for tolerance (Burwood & Wyeth, 1998; Kumashiro, 2002; Stevens & Charle, 2005; Weissberg, 2011; Edling, 2012; Langmann, 2011, 2013). Moreover, plenty of studies have considered the relationship between education and tolerance and the claim that higher education produces stronger tolerance and commitment to democratic norms (Jackman, 1978; Nie, Junn, & Stehlik-Barry, 1996; Borgonivi, 2012; Meeusen, de Vroome, & Hooghe, 2013).

Although these studies provide valuable insights, empirical analyses on the extent to which schools predict tolerance is sparse (see however Miklikowska, 2016; Özdemir & Bayram Özdemir, 2017). In addition, no studies have been identified that examine factors regarding the

school in relation to other competing explanations (see, however, Miklikowska, 2016 for a notable exception). The school is not the only factor with a potential to influence tolerance, even though it is frequently charged with these responsibilities. Studies in the field of political psychology have emphasized personality traits as an explanation for why some are more tolerant (Freitag & Rapp, 2015; Dinesen, Klemmensen, & Nørgaard, 2016). In addition, sociological literature stresses the role of social networks such as friends and voluntary association activities (Coté & Erickson, 2009; van der Meer, 2016). Therefore, this study addresses the following research question: What role does experience with respect to the school, social networks, and personality traits play in explaining students' levels of tolerance?

This study contributes to answering that research question by exploring the role of the school, social networks, and personality traits in explaining students' tolerance toward five minority groups: immigrants, the LGBTQ community, Muslims, Roma, and Jewish people. Empirical evidence is drawn from an extensive dataset of 6,854 adolescents and young adults between 14 and 20 years old, and includes measurements of all explanations and various background variables such as gender, immigrant background, and socioeconomic factors. The data come from Sweden, a nation known to perform well with regard to tolerance (Borgonovi, 2012, p. 148; Wallman-Lundåsen, 2017). In addition, Sweden has a far-reaching aim in the school curriculum to promote tolerance. As such, if factors at the school level predict tolerance in Sweden, then their applicability as predictors may also be the case in other contexts and, thereby, give emphasis to the role of the school in enhancing tolerance. In doing so, the current study contributes to the literature by providing one of the first quantitative analyses on factors at the school level that predict tolerance, while simultaneously considering other factors.

This paper is structured as follows: After this introductory section, Section 2 defines tolerance and presents the theoretical framework of the role played by personal traits, social

networks, and factors at the school level. In Section 3, the paper explains the research design, including descriptions of the method and research strategy. Section 4 presents the results and describes the roles of various factors. In conclusion, Section 5 summarizes the results and discusses their implications for research.

Theoretical Framework

Tolerance: The dependent variable

Tolerance is generally understood as a willingness to accept or endure the beliefs, actions, values, ideas, worldviews, or ethnicity of people who are different (Sullivan, Piereson, & Marcus, 1979; Orlenius, 2008). Tolerance is thus sometimes presented as a sequential or dual concept that includes elements of rejection and acceptance. In that sense, to be tolerant, an individual first recognizes and possibly rejects what he or she perceives to be problematic, unacceptable, or intolerable, only later to accept, welcome, and tolerate what he or she once deemed intolerable (Langmann, 2013).

Another way of determining the nature of tolerance is to relate it to the appreciation and affirmation of diversity, pluralism, and difference. Researchers and theorists have pointed out that the concept of tolerance encompasses understandings and opportunities for interpretations other than solely permitting that which is perceived to be problematic or unacceptable (Afdal, 2010; Forst, 2013). Such an interpretation of tolerance, leveraged as the more positive part of the traditional conceptualization (cf. Langmann, 2013, p. 70), means embracing an open-minded and affirmative attitude to diversity and pluralism in all of its forms.

Tolerance can apply to the ideas, opinions, and individuals of certain groups, as well as their fundamental values and behaviors (Sullivan et al., 1979; Orlenius, 2008, p. 469). Thus, political (i.e. institutional) tolerance and social (i.e. interpersonal) tolerance are sometimes

differentiated. In that distinction, political tolerance applies to phenomena such as the individual's right to participate actively in political life and to the principles of freedom of expression, voting rights, and the right to stand for election. By contrast, social or interpersonal tolerance, which is the focus of the study reported here, applies to the relationships between individuals or groups of individuals. In this study, *tolerance* refers to the actual willingness to accept ethnic and sexual differences in society and to tolerate the content of their expression. In line with that demarcation, this study focuses on students' social tolerance of different minority groups in society: immigrants, the LGBTQ community, Muslims, Roma, and Jewish people.

Given the different ways of clarifying the concept of tolerance, different ways of making tolerance empirically measurable have become available, as discussed in the literature (Mondak & Sanders, 2003; Gibson, 2005). In studies, a common way of measuring tolerance is to have participants identify one or two of the least liked groups in their society and ask them questions about the extent to which that group or those groups should have various rights (Widmalm, Oskarsson & Hulterström, 2010). This strategy corresponds to the ways in which tolerance is discussed in pedagogical-philosophical literature that acknowledges the transformative potential of education and the student-teacher relationship with respect to students' tolerance (Afdal, 2005; Langmann, 2013).

Another way of measuring tolerance that has been used in the study reported here is to examine participants' explicit attitudes or the degree of their positive attitudes (Weldon, 2006; Kirchner, Freitag, & Rapp, 2011; Miklikowska, 2016). That approach is often used in psychological and sociological literature, in which tolerance relates to the appreciation and affirmation of diversity, pluralism, and difference—that is, the more positive aspect of the concept of tolerance.

The abundance of possible ways to conceive of tolerance sometimes creates confusion about what the term means. Furthermore, criticism has been leveled against the concept, according to some definitions, when it requires a certain amount of resistance, rejection, or intolerance, which is then permitted or accepted. Tolerance has thereby been interpreted as an expression of a hierarchical relationship between, for example, individuals representing different groups, and as derogatory and insulting. The study presented here acknowledges that criticism but maintains the usefulness of the concept, especially given the growing number of immigrants who contribute to an increasingly ethnic and culturally diverse population, along with the resultant conflicts in society that can challenge the acceptance of multiculturalism within it.

Theories on the causes of tolerance

Research has addressed various causes and factors of tolerance, with explanations largely influenced by theoretical points of departure and centered on factors at the individual, group, and system levels, as well as a range of contextual factors. The theoretical framework of the study reported here draws upon psychological and sociological literature and insights derived from education literature. First, personality psychologists claim that basic personal characteristics influence a variety of important behaviors and life outcomes, ranging from political attitudes to social relations and positions (Ekehammar & Akrami, 2003; John, Naumann, & Soto, 2008). There are various ways to describe the dimensions of personality, in which individuals differ with respect to their emotions, attitudes, and interpersonal relations. The hitherto most complete description is the Big Five framework, which distills personality into five distinct dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience (Goldberg, 1990; Mondak, 2010). Extraverted individuals are characterized as being assertive and social instead of reserved and quiet, whereas agreeable

individuals are cooperative and polite instead of antagonistic and rude. Conscientious individuals are task-focused and orderly instead of distractible and disorganized. Neurotic individuals are prone to experiencing negative emotions such as anxiety, depression, and irritation instead of being emotionally resilient. Lastly, open individuals have a broad range of interests, are sensitive to art and beauty, and prefer novelty to routine.

Studies indicate that agreeableness and openness are important factors in predicting tolerance. For example, using a large and representative sample of the Dutch population, Gallego and Pardos-Prado (2014) confirmed the importance of agreeableness when measuring the impact of the Big Five personality traits on attitudes toward immigrants. Furthermore, Jackson and Poulson (2005) found that people who are especially agreeable and open are more likely to initiate intergroup contact and interpret contact experiences favorably, as well as that such experiences lead to positive intergroup attitudes. With respect to political tolerance, studies from the Swiss population show that low agreeableness and high extroversion relate to negative attitudes toward immigrants and that high openness relates to high tolerance (Freitag & Rapp, 2015). Similarly, in a systematic review of research on which personality dimensions relate to prejudice, Sibley and Duckitt (2008) found that individuals with low openness and low agreeableness more often hold prejudiced ideas (Ekehammar & Akrami, 2003). Taken together, previous research indicates that openness and agreeableness may positively relate to tolerance.

Apart from personal traits, the literature suggests that being in a social network can also predict tolerance (Cote & Erickson, 2009; Putnam, 2001). Two forms of networks have been debated in particular: interactions with friends, and voluntary association activities. The general claim is that the opportunity to communicate with others allows people to better understand and appreciate different perspectives on life. Such thinking builds on the contact theory, which

holds that interpersonal contact can reduce intolerance between majority and minority group members (Allport, 1954; Green & Wong, 2008). However, certain conditions need to be fulfilled before interpersonal contact can reduce intolerance. In particular, contact that is personal, positive, of equal status, voluntary, and that includes shared goals, can enhance tolerance (Coté & Erickson, 2009, p. 1666).

In Sweden, voluntary associations constitute the fundamental character of society. Ever-greater expectations, especially from the public sphere, have been placed upon voluntary associations with regard to their contribution to resolving challenges in society—for example, in promoting confidence-creating relationships and tolerance. However, the claim that voluntary associations play a role in the generation of tolerance has been criticized on the grounds of relatively weak evidence (Cote & Erickson, 2009; Rapp & Freitag, 2015; van der Meer, 2016; Lundberg & Abdelzadeh, 2017b). Instead, several studies suggest that friends are important sources of information for peer norms regarding political and social attitudes (Sigelman, Bledsoe, Welch, & Combs, 1996; Hjerm, 2005). For example, Freitag and Rapp (2013) found that contact with immigrants might moderate intolerance, for example, for people who view rising immigration to mean a loss of economic privileges and an erosion of national cultural values. However, findings also suggest that friendship may enhance similarity in attitudes, since individuals seek friends who share similar attitudes (Selfhout, Denissen, Branje, & Meeus, 2009). Stark (2015) found that more prejudiced members of the majority group tend to avoid individuals who have friends in the minority group, which subsequently limits their potential to be introduced to people in minority groups. Instead, they become friends with members of the majority group who are friends of their friends. However, there are reasons to expect that individuals are more likely to be tolerant of minority groups if they have friends from that minority group.

School is often referred to as a societal institution with a universal mandate for enhancing democratic values, interpersonal relationships, and tolerance among younger generations (Ehman, 1980; Gutmann, 1987; Torney-Purta, 2002; Amnå, 2012). Schools not only convey knowledge and skills to students, but also function as environments that socialize them and prepare young people in all aspects of democratic life. Scholars have argued that latent aspects of the school curriculum, including school climate and personal relationships, play a key role in shaping students' social and political attitudes (Ehman, 1980; Berman, 1997). Thus, the environment in which learning takes place is critical to creating a healthy democratic culture and enhancing young people's beliefs in and respect for other intercultural relationships (Flanagan et al., 2007). Research suggests that a positive school climate relates to various aspects of interpersonal relations (Thapa, Cohen, Guffey, & Higgins-D'Alessandro, 2013; Cohen, McCabe, Michelli, & Pickeral, 2009). Hahn (1998) found that students' reports on wellbeing in school relate positively to tolerance. In addition, evidence indicates that a positive school climate promotes group cohesion, respect, and mutual trust (Ghaith, 2003; Cohen et al., 2009). Similarly, Wilson (2004) noted that variations in school climate and the amount of connectedness experienced by students contribute to predicting the likelihood of aggression and victimization among students.

It is important to note that proximity relationships in school are often put forward as an important aspect of school climate (Torney-Purta, 2002; Hamre & Pianta, 2006; Frelin, 2010; Aspelin & Persson, 2011). Thus, teachers are uniquely positioned to promote students' norms regarding citizenship and their commitment to values that sustain democracy. A mechanism through which teachers can affect students' tolerance is influence (Bandura, 1977). The influence theory holds that contact with tolerant people will lead to more tolerance (Cote & Erickson, 2009). Even though teachers are not necessarily more tolerant, they are the ultimate

actors who fulfill the mission of the school to nurture the civic knowledge, democratic values, and tolerance of younger generations. Moreover, their potential is significant, given that they are among the few adults who may see a given child or adolescent every day.

According to the literature, the teachers' role in setting the standards of positive and prosocial student-teacher relationships is key for other factors such as student outcomes (Jennings & Greenberg, 2009), democratic norms (Angell, 1991), and their effectiveness in culturally diverse classrooms (McAllister & Irvine, 2002). Teachers not only have the potential to teach and influence students' attitudes and interactions, but are also role models and promote positive interactions among students with different backgrounds.

Empirical studies show that a positive student-teacher relationship is associated with better interpersonal relations in terms of individuals' being able to take the perspectives of others (O'Connor, Dearing, & Collins, 2011, p. 30), a decrease in students' antagonism toward peers (Meehan, Hughes, & Cavell, 2003), and an increased sense of caring about peers (Wentzel, 1998). Thus, there are theoretical and empirical reasons to expect that a positive relationship between students and teachers correlates with increased student tolerance.

In sum, various factors have been identified as being crucial for shaping tolerance. Of course, those factors are not exhaustive, and contextual factors such as the effect of the minority population and the economic and political climate have not been discussed. The present study considers three theoretical explanations (i.e., personality traits, social networks, and the school) to gain a more comprehensive understanding of factors that influence student tolerance of minority groups. In so doing, it makes important contributions to educational research by empirically testing various theoretical explanations in the Swedish context.

Methods

Data collection and procedure

This study analyzed the role of various explanations for tolerance using hierarchical analyses of a dataset of 6,854 adolescents between 14 and 20 years old. The dataset contains information related to students' personality traits, social networks, and experiences with school, as well as a range of background variables. Based on those data, the predictive power of various explanations derived from the literature were assessed in terms of what the independent variables add to the predictive power of the dependent variable (Tabachnick & Fidell, 2007).

In 2013, a questionnaire of 54 questions was distributed to 10,303 students in their final year of compulsory schooling and upper secondary school. The sample comprised students from 1,345 compulsory schools with 343,601 students and 1,795 secondary schools with 95,638 students. A stratified random sample was used to select 230 schools for the sample. At least one class per upper-level compulsory school and no less than three classes in upper secondary schools (i.e., one class per level) were selected to answer the questionnaire. In total, 6,854 students from 473 classes answered the survey, for a response rate of 72%. Missing data analysis showed that students who did not respond to the survey were scattered around the country and in various classes.

Respondents completed the questionnaires in their classrooms during regular school hours. To limit the potential influence of teachers, no teachers were allowed in the classrooms during data collection. The students were informed that participation in the study was voluntary, and the respondents were assured confidentiality of their responses. No student was paid for participating in the study.

In order to analyze the effect of missing values of the dependent variable, we ran logistic regression with all independent variables. We found significant differences for variable neuroticism only. Students who scored high on neuroticism were more likely not to answer, although the effect was quite small ($R^2 = .014$, $p = .001$).

Measures

Tolerance. The dependent variable was constructed as an index measuring personal attitudes toward various groups: immigrants, the LGBTQ community, Muslims, Roma, and Jewish people. One statement for each group was crafted: “It would be completely okay to live next door to a person who is [group identity] / in the [group name].” Cronbach’s alpha reliability for the scale was .83 at baseline. Factor analyses showed that the scores represented a single construct, which supported construct validity. The response options ranged from 1 (*strongly disagree*) to 5 (*strongly agree*). The measure was similar to that used in the World Value Survey and previous international studies on tolerance (Kirchner et al., 2011). The index was constructed from an additive five-point scale (1 = *less tolerant*, 5 = *tolerant*).ⁱⁱ

It is important to note that measuring social phenomena linked to tolerance is neither unproblematic nor methodologically straightforward. Attitudes can be both implicit and explicit, and questions can only measure part of the complex attitudes that people have. Moreover, inherent in studies using self-reported measures is so-called social desirability bias, in which respondents answer questions in a way that they believe is expected of them. Another problem is self-delusion, meaning that respondents want to portray themselves in the best possible light. However, the study shared those challenges with all research that has sought to understand tolerance and related constructs such as xenophobia, anti-immigrant attitudes, and racism.

Personality trait. Personality traits were measured with 10 items corresponding to the Big Five measures. The questionnaire measured respondents' self-reported assessments and read as follows: "Below are some traits that may describe you better than others. Enter the extent to which each trait describes you." The trait pairs for extraversion were outgoing and enthusiastic, as well as reserved and quiet; the traits for agreeableness were sympathetic and warm, as well as critical and contentious; the trait pairs for conscientiousness were reliable and self-disciplined, as well as unsystematic and careless; the trait pairs for neuroticism were anxious and indignant, as well as self-possessed and balanced; and the trait pairs for openness to experience were open to new experiences, as well as mainstream and non-creative. Participants responded to the traits on a 7-point scale (1 = *do not agree at all*, 7 = *completely agree*). Items 2, 4, 6, 8, and 10 were reversed.

Social networks. At the group level, the role of social networks was measured by two questions: The first concerned students' interaction with friends with immigrant background. Thus, immigrant background was used as a proxy for students' relationships to different groups in society. "Do you have friends who are immigrants?" Participants responded to the traits on a five-point scale *No* (1); *Yes, one* (2); *Yes, a few* (3); *Yes, several* (4); and *I do not know* (5). The last option was coded as a missing variable and excluded from the analysis. The second concerned the role of voluntary association activity. "Are you member of any kind of association or voluntary organization?" The response scale was coded as 0 (*No*) and 1 (*Yes*).

School measures. The study focused on two dimensions of students' experiences with the school setting. The first concerned students' perception of school climate and was measured by the (sense of) wellbeing in school. The second concerned students' perceptions of the quality of their student-teacher relationships. These items were measured by students' level of agreement or disagreement with the statements "I usually like my school" and "I feel good

about most of my teachers.” The response scales for the two dimensions of the school setting ranged from 1 (*do not agree at all*) to 5 (*completely agree*). It is important to note that experiencing a positive view of teachers says nothing about the extent to which the teacher has nourished tolerance among student. However, it does capture the quality of students’ relations with teachers, which previous research hypothesizes translates to positive effects in a range of interrelations.

Sociodemographic characteristics. In order to consider the effects of some other potentially important factors, the study also included a number of conventionally used control variables, namely: age, gender, immigrant background, and subjective socioeconomic status (SES). Gender was coded as 0 (*boy*) and 1 (*girl*), and immigrant background was measured as a dichotomous variable: 0 (Swedish – the adolescent or at least one of the parents was born in Sweden) and 1 (immigrant – the adolescent or both of the parents was born outside Sweden). Based on previous studies, it can be expected that women and people with immigrant backgrounds express higher levels of tolerance (Sullivan & Transue, 1999).

Subjective SES was measured using two questions. The first item measured household economy: “Does your family have more or less money than other families where you live?” The response scale ranged from 0 (*Very little money*) to 4 (*Plenty of money*). The second item measured the choice of school program. Education is a principle vehicle for transmitting social, political and cultural values and thus a key variable for socioeconomic status. As noted in previous studies from, for example, Denmark, the United States, Germany and England, students’ choices of education often reflect the educational backgrounds of their parents. Students of highly educated parents are more likely to choose education that has a more academic content. (Schnabel et al., 2002; Harris & Ranson, 2005; Jæger, 2007, p. 473). Thus, students’ educational choice was used as a proxy for social background. The variable was

coded as 0 (Vocational education and training program) and 1 (preparatory program). Although the measure can be criticized in the Swedish case, since Nordic countries are traditionally characterized by a relatively high degree of social mobility compared to, for example, the United States, there is consensus in the literature that educational achievement positively correlates with parent's education or with other indicators of parent's socioeconomic status, regardless of context (Björklund and Salvanes, 2011, p. 201). Thus, assuming a correlation between students' educational choices and social background is not unreasonable and has been used in other studies on students' social and political attitudes (Sohl & Arensmeier, 2015). Appendix 1 includes a summary of the descriptive statistics.

Results

As a first step toward answering the research question addressed in this study, this section presents the intercorrelations between the variables. Thereafter, the predictive power of the three explanations for tolerance is outlined, following the logic of a hierarchical multiple regression. Hierarchical regression is used to evaluate the relationship between a set of independent variables and the dependent variable, controlling for or considering the impact of a different set of independent variables on the dependent variable. The first model assesses the impact of control variables or background variables in the previous section; the second model introduces the predictive power of personal traits; the third model adds the role of social networks; and finally, the fourth model complements the analysis by introducing the significance of the school.

Turning to the correlations between the study variables, the results are presented in Table 1. Those values can range from -1.00 to 1.00 and indicate the strength of the relationship between the variables. A correlation of 0 indicates no relationship at all, a correlation of 1.0

indicates a perfect positive correlation, and a value of -1.0 indicates a perfect negative correlation. Results show a positive, significant association between tolerance and both gender (.267**) and education (.319**). Accordingly, women and students who chose a preparatory program scored higher on tolerance. With respect to dimensions of personality, the results show a positive significant association with openness and agreeableness (.113** and .091**).

Regarding social network variables, both participation in voluntary associations and having immigrant friends showed a positive significant correlation (.034** and .168** respectively). However, the effect of voluntary association was weak. Thus, students scoring high on tolerance scored high with respect to the number of immigrant friends. Finally, the school context showed significant positive correlations (.159**). In other words, students reporting high scores on tolerance scored high on wellbeing in school and satisfaction with their teachers. Overall, these findings provide a first indication of the potential correlation of tolerance with personal traits, social networks, and school factors.

Table 1. Inter-correlations between the study variables (N=590).

		1	2	3	4	5	6	7	8	9	10	11	12	13
1	Tolerance	1	.267**	-0.016	0.015	.319**	.113**	0.019	0.028	.091**	0.016	.034**	.168**	.159**
2	Gender		1	0.017	-.029*	.083**	.081**	.093**	0.018	.108**	.129**	-.056**	-.032**	-.012
3	Immigrant background			1	-.122**	-.060**	-.053**	.067**	-.073**	-.046**	0.022	-.106**	.298**	0.000
4	Family income				1	.198**	.064**	.091**	.074**	0.030	-.095**	.137**	-.054**	.108**
5	Education					1	.059**	.053**	0.003	0.025	-0.023	.117**	-.073**	.053**
6	Openness						1	.190**	.208**	.197**	-.135**	.083**	-0.019	.085**
7	Conscientiousness							1	.063**	.197**	-.194**	.052**	-0.007	.158**
8	Extraversion								1	.046*	-.098**	.114**	-.068**	.068**
9	Agreeableness									1	-.217**	.035*	-0.002	.158**
10	Neuroticism										1	-.035*	-0.018	-.145**
11	Voluntary association											1	.030*	.068**
12	Immigrant friends												1	-0.001
13	School climate													1

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

In order to evaluate the relative impact of each set of independent variables, the results from the hierarchical multiple regression are presented in what follows. The analyses reveal how well each set of variables can predict tolerance and which set of variables is the best predictor when the effects of other variables are controlled for. Model 1 introduces the

background variables, which can reveal how much of the variance in tolerance is explained by the background variables of gender, immigrant background, and family income. The results demonstrate that gender, immigrant background, and educational choice account for about 21% of the variation in the dependent variable ($F = 39.40^{**}$, $R^2 = .21^{**}$). Gender seems to have the strongest impact ($\beta = .33^{**}$), followed by education ($\beta = .284^{**}$).ⁱⁱⁱ

Personal level indicators were included in *Model 2*. This will tell us how much of the variance in tolerance is explained by the five indicators of personality. The results do not point in the direction of what was theoretically expected. No variable predicts tolerance. However, this model increases the role of gender while slightly moderating the role of education. Thus, it contributes significantly to explaining the variation in the dependent variable ($\Delta F = 1.24^{**}$, $\Delta R^2 = .008^{**}$).

In addition to the predictors on the personal level, *Model 3* adds factors pertaining to social networks. This will tell us how much of the variance in tolerance is explained by variables of immigrant friends and participation in voluntary associations. The results show that having immigrant friends is statistically significant ($\beta = .192^{**}$), while being a member of voluntary organizations displays no statistically significant influence. As shown in Table 2, having immigrant friends contributes an additional 3.4% of the variation in the dependent variable ($\Delta F = 13.04^{**}$, $\Delta R^2 = .24^{**}$). At the same time, adding group-level indicators appears to increase the role of having an immigrant background ($\beta = .122^{**}$).

Finally, we turn to *Model 4*, which introduces the school variables and their explanatory power, which can show how much of the variance in tolerance is explained by variables of school context. The results demonstrate that school context provides a statistically significant contribution ($\beta = .158^{**}$). As shown in Table 2, school climate adds an additional 2.4% to the

variation in the dependent variable ($\Delta F = 18.96^{**}$, $\Delta R^2 = .24^{**}$) increasing the total variation in the dependent variable to 26%.

Table 2. Hierarchical models predicting levels of tolerance among youths (N=590)

	Model 1			Model 2			Model 3			Model 4		
	B	SE(b)	β									
Control variables												
Gender	.60	.066	.33**	.609	.070	.341**	.609	.069	.340**	.609	.068	.339**
Immigrant Background	-.15	.086	-.066	-.142	.087	-.062	-.280	.090	-.122**	-.289	.089	-.126**
Family income	-.058	.045	-.049	-.066	.046	-.055	-.069	.045	-.058	-.082	.044	-.068
Education	.51	.067	.284**	.496	.067	.279**	.472	.066	.266**	.472	.065	.265**
Personal traits												
Extraversion				-.001	.037	-.001	-.020	.035	-.022	-.021	.035	-.022
Agreeableness				.050	.043	.047	.036	.042	.034	.038	.042	.035
Conscientiousness				-.042	.033	-.050	-.031	.033	-.037	-.051	.033	-.061
Neuroticism				-.061	.043	-.056	-.058	.042	-.053	-.039	.042	-.036
Openness				.041	.044	.037	.032	.043	.029	.034	.042	.031
Social networks												
Immigrant friends							.178	.036	.192**	.183	.035	.198**
Voluntary association							.046	.065	.026	.031	.064	.018
School variable												
School climate										.196	.45	.158**
F	39.40**			18.19**			17.87**			18.47**		
ΔF				1.24**			13.04**			18.96**		
Adj. R^2	.21**			.22**			.24**			.26**		
ΔR^2				.008**			.034**			.024**		

** . Correlation is significant at the 0.01 level (2-tailed).

* . Correlation is significant at the 0.05 level (2-tailed).

In accordance with the theoretical expectations, the results show that various factors are relevant to explaining variation in students' tolerance. In line with previous research, gender, immigrant background, and socioeconomic factors are all important factors explaining variation in tolerance (Kirchner et al., 2011, p. 216; Weldon, 2006).

An explanation concerning the difference between women and men seems to be that women tend—to a greater extent than men—to emphasize the importance of interpersonal relationships (Gilligan, 1982), and that thereby they, by their nature, will be more tolerant. Another interpretation is that the gender difference is linked to how young people perceive their social roles in society, and that women are traditionally expected to be more nurturing and caring than men (Eagly & Wood, 2013). Thus, perception of one's own social identity would explain why women are more supportive of people from different marginalized groups than men.

The finding that preparatory programs predict students' tolerance more than vocational and training programs can be interpreted differently. As previously argued, this effect calls attention to students' socioeconomic background, specifically noting that students of highly educated parents are more tolerant and more likely to choose education with more academic content than students of less educated parents, presumably with lower levels of tolerance, who choose training programs. At the same time, it cannot be ignored that this may be an effect of the increased education provided in preparatory programs.

Furthermore, the result confirms previous findings that having immigrant friends is associated with tolerance (Freitag & Rapp, 2013; Miklikowska, 2016). In addition, the results cannot confirm the role of voluntary association activity, which is in line with previous results (van der Meer, 2016; Lundberg & Abdelzadeh, 2017b). Thus, these results require further testing. It is possible that a certain type of voluntary association does, indeed, have an impact on tolerance.

Finally, and in accordance with the expected results, experienced from school explain some variation in students' level of tolerance. This tallies well with the literature on education stressing schools as environments that socialize and prepare young people in all aspects of democratic life such as shaping students' social and political attitudes (Ehman, 1980; Berman, 1997; Özdemir & Bayram Özdemir 2017).

Conclusion

This study set out to expand our knowledge on the factors that explain students' tolerance toward different groups in society, namely: immigrants, the LGBTQ community, Muslims, Roma, and Jewish people. In contrast to previous work, this study has empirically explored two factors of the school context, simultaneously taking into account two rival approaches:

personality traits and the role of social networks. It focused in particular on two aspects of the school context: the relevance of a positive school experience and the student-teacher relationship. Drawing evidence from an extensive dataset of students from Sweden, the analysis shows that personal attributes, socioeconomic factors, social networks, and the school climate all contribute to explaining differences in students' level of tolerance, which is in line with the expected results. More precisely, tolerance is higher for women and students with an immigrant background, who are enrolled in a preparatory program, who have plenty of immigrant friends, and who experience a positive school climate.

Results indicate that a positive school climate plays a role in students' tolerance toward different groups in society and that a positive student-teacher relationship and positive experiences at school are important factors in this respect. This supports claims in the literature on education stressing schools as environments that socialize and prepare young people in all aspects of democratic life, such as shaping students' social and political attitudes (Ehman, 1980; Berman, 1997; Özdemir & Bayram Özdemir 2017). However, the results also show that even though a positive school climate is important, other factors like gender, socioeconomic status, and social networks seem to play a more prominent role in explaining variation in students' tolerance (cf. Miklikowska, 2016). Therefore, when considering the potential perils of education for tolerance, we need to consider that tolerance may be influenced by multiple factors on individual, group, and institutional levels.

The strong role of factors associated with social networks and social background draws attention to the role of the school as a "community" and a "social melting pot" (Arnesen & Lundahl, 2006), where young people from different backgrounds meet and work together, thus reducing social barriers and promoting democratic values (Stier, 2003; Telhaug, Medias & Aasen, 2004). However, during the past few decades, increased opportunities for school choice,

in addition to housing segregation, have posed challenges to the social inclusiveness that characterizes Nordic countries in general and Sweden in particular (Arnesen & Lundahl 2006; Trumberg, 2011). Adding to this complicated picture, increased immigration has made society more socially diverse, which further underscores the importance of social cohesion. Thus, efforts that encourage schools as inclusive communities of students from different ethnic and social backgrounds may be a step in the right direction to promote tolerance.

Finally, although the choice of school program is treated as a proxy for social background, the role of educational choices can be interpreted in different ways. Another possible explanation is that it is linked to the school's socializing function; i.e., to its task of conveying the fundamental norms and values that apply in society (Hello, Scheepers & Gijssberts, 2002, p. 9), where tolerance is particularly emphasized. Thus, the extent to which—and possibly the way in which—young people are exposed to the educational system can affect their tolerance. Young people studying in vocational programs, as well as having a different curriculum, are also rooted in occupational life, making them less directly exposed to the educational system and the norms and values mediated in school.

Yet another explanation for the differences between educational programs relates to competition for resources between different groups in society (Esses, Dovidio, Jackson & Armstrong, 2001). Individuals of higher status (e.g., those with more education and higher incomes) would, in this view, perceive people from minority groups as less of a threat than individuals with a lower status in society who are less educated and have lower incomes, which, in turn, has consequences for tolerance.

This study has several limitations that warrant attention. First, several of the causes of tolerance measured here are analyzed using only one or a couple of items. Ideally, numerous items would be used to increase reliability. For example, each social network trait was only

measured by one item and factor at the school level; these are far from complete. Future studies need to expand on the number and variety of factors, such as the nature of the student-teacher relationship and the relative impact of the curriculum. Ideally, one would also like to control for contextual factors such as effect of minority populations and the economic and political climate. Second, the background of the participants was not comprehensively considered. For example, Muslims may be more tolerant of Muslims and Jewish people more tolerant of Jewish people. At the same time, this can be considered a minor problem, as the aim of study was to explain variation and not levels of tolerance toward different groups. Third, it is necessary to broaden the scope of the dependent variable considering other measures of tolerance. Although the measure used here is similar to other international studies (Kirchner et al., 2011), a study like this should ideally use a two-step measurement procedure to first establish that an individual has an objection toward a particular group, and second to measure the extent to which the individual supports or opposes that group.

Despite these limitations, the current study has several strengths that add to our knowledge of tolerance. The current study explored the role of the school while also considering other relevant explanations, thereby going beyond prior studies in the literature. In addition, previous studies often focused on tolerance among adults; in contrast, this study considered tolerance among adolescents, which is important as this represents a formative period for social and political attitudes (Lundberg & Abdelzadeh 2017a; Abdelzadeh & Lundberg, 2017). Finally, by controlling for various competing explanations and several background variables, the current study noted the importance of multiple factors besides the school that may influence tolerance.

To conclude, the vision of a multicultural society, where people of different ethnic, cultural, and religious backgrounds are expected to live side-by-side, requires mutual respect

for and tolerance of ethnic dissimilarities and the presence of dissidents. The findings from this study indicate that the promotion of tolerance requires action at various levels and on different fronts. In addition, this study calls attention to the role of schools as inclusive communities for people from different ethnic and social backgrounds.

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Appendix 1

Descriptive statistics

	N	Min	Max	Mean	Std.D.
Tolerance	7041	1,00	5,00	4,31	0,80
Gender	7367	0,00	1,00	0,49	0,50
Immigrant background	7358	0,00	1,00	0,23	0,42
Family income	7214	0,00	4,00	2,81	0,82
Education	4583	0,00	1,00	0,65	0,48
Openness	3750	1,00	7,00	4,61	0,88
Conscientiousness	6962	1,00	7,00	4,92	1,19
Extraversion	4389	1,00	7,00	4,24	1,03
Agreeableness	3787	1,00	7,00	4,52	0,85
Neuroticism	3748	1,00	7,00	3,64	0,84
Voluntary association	7299	0,00	1,00	0,54	0,50
Immigrant friends	6762	0,00	3,00	2,16	0,95
School climate	7208	0,00	4,00	3,01	0,78

Notes

ⁱ See, for example, the Swedish and Norwegian school curricula; LPO 2011 and LK 06 and, implicitly, in the Danish Folkeskolens formål Chapter 1; 1§

ⁱⁱ Skewness for this variable was -1.07 and kurtosis 1.08. According to George & Mallery (2010), values for asymmetry and kurtosis between -2 and +2 are considered acceptable in order to prove normal univariate distribution.

ⁱⁱⁱ Students' choices of education taps students in upper secondary schools. Separate analyses were made only with these students and no major differences in the results were detected.