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RESEARCH ARTICLE

WILEY

The impact of school bullying on adolescent migration expectations in Iceland

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Abstract

Adolescent migration expectations are shaped by various background characteristics, social relations, and lifestyle considerations. However, the impact of negative social experiences in adolescent society on migration expectations received limited attention. Research on the social consequences of school bullying has nevertheless demonstrated that bullying often leads to social withdrawal and place avoidance. In this study, we examine the potential effects of being bullied in school on adolescent migration expectations in rural, exurban, and urban communities in Iceland. We find adolescents who are regularly bullied to be about twice as likely to expect to move within the country or abroad. Interestingly, there are no significant differences across the rural–urban continuum in this respect. The results are discussed in the context of prior research on migration intentions and the social consequences of bullying.

KEYWORDS

adolescents, Iceland, migration expectations, peer relations, school bullying

1 | INTRODUCTION

The literature on adolescent migration expectations has predominantly focused on rural youth and the tug of war between the excitement and opportunities of city life on one hand and attachment to the home community on the other. Migration expectations may to some extent predict actual migration on the individual level (Dommermuth & Kluesener, 2019; Hooijen, Meng, & Reinold, 2020; Kley, 2017) and the aggregate level of migration expectations among adolescents has been shown to predict long-term community-level population growth or decline (Bjarnason, 2014). More generally, however, migration expectations reflect adolescent attitudes towards their home community and the outside world, irrespective of actual migration later in life (Bjarnason & Thorlindsson, 2006). Although some scholars have examined the dark side of social control in close-knit communities and its effects on rural youth migration expectations, the effects of noxious peer relations remain surprisingly unexplored.

Educational and occupational considerations are the major predictors of adolescents wanting to move from rural to urban areas (Dako-Gyeke, 2016; He, Zhai, Asami, & Tsuchida, 2016; Rosvall, Ronnlund, &

Johansson, 2018; Stockdale, Theunissen, & Haartsen, 2018). Furthermore, adolescents in rural areas are often drawn by the prospect of an urban lifestyle, diverse recreational opportunities, and freedom to explore social, cultural, and sexual identities in the city (Bæck, 2004; Bjarnason, 2014; Gabriel, 2002; Lowe, 2015; Thorsteinsson, Bjarnason, Loi, & Arnarsson, 2020). At the same time, factors such as a strong local identity, a sense of belonging and close relations to family and friends in the home community are associated with less migration expectations and greater expectations of returning in the future (Bjarnason & Thorlindsson, 2006; Cui, Geertman, & Hooimeijer, 2016; Gunko & Medvedev, 2018; Haartsen & Thissen, 2014; Lowe, 2015; Williams, Jephcote, Janta, & Li, 2018).

Although close-knit rural communities have frequently been characterised as warm, supportive, and caring, tight networks of social support and social control also limit individual freedom to explore social and individual identities (Gabriel, 2002; Matthews, Taylor, Sherwood, Tucker, & Limb, 2000). As a result, young people in particular may experience close-knit communities as “oppressive, repressive, suppressive and obsessive” (Stockdale, 2002). A macho culture and gendered restrictions of social life in many small communities

have specifically been found to make young women more likely to leave and less likely to return to more provincial areas in the global north (Bjarnason & Thorlindsson, 2006; Dahlström, 1996; Lowe, 2015; Rauhut & Littke, 2016).

Interestingly, however, the potential effects of negative peer relations in the community on migration expectations have not been explored in prior research. In this paper, we focus on bullying as a potential predictor of adolescent migration expectations. We present an overview of research on the social consequences of bullying and examine the association of bullying with migration expectations among Icelandic adolescents. Our analysis distinguishes between rural, urban, and exurban adolescents in Iceland and focuses on the association of bullying and other factors with their future expectations of moving permanently to another location on the island or abroad.

2 | BULLYING AND PLACE AVOIDANCE

For the past four decades, there has been a growing interest in the phenomena of bullying among scholars, school authorities, and the general public (Hawker & Boulton, 2000). According to Olweus (2006), bullying in schools can be defined as a repeated negative behaviour towards a student by one or more of his or her peers, characterised by an imbalance of power. This behaviour is voluntary and causes the victim physical or mental harm. It can be either direct, in the form of threats, verbal insults, or physical violence, or indirect by making faces, spreading false rumours, or social exclusion. Predictors of being bullied include socioeconomic factors such as low parental education or family poverty, minority race, ethnicity or religion, and various behavioural, attitudinal, and interpersonal characteristics (Cook, Williams, Guerra, Kim, & Sadek, 2010; Dill, Vernberg, Fonagy, Twemlow, & Gamm, 2004; Marshall & Allison, 2019; Peguero & Williams, 2013; Shea & Wiener, 2003; Strohmeier, Karna, & Salmivalli, 2011; Sulkowski, Bauman, Wright, Nixon, & Davis, 2014; von Marees & Petermann, 2010).

Bullying has various negative effects on the psychological and social well-being of victims. Bullied children show worse social adjustment than other children (Goldbaum, Craig, Pepler, & Connolly, 2003), have lower self-esteem (Juvonen, Nishina, & Graham, 2000), and are more likely to be lonely and withdrawn and to internalise their problems (Goldbaum, Craig, Pepler, & Connolly, 2003). They are also more prone to various psychological and physical health problems (Garmy, Hansson, Vilhjálmsdóttir, & Kristjánsdóttir, 2019a; Hansson, Garmy, Vilhjálmsdóttir, & Kristjánsdóttir, 2020; Wright, 2015) as well as being at an increased risk of suicide attempts (Arnarsson, Malmquist, & Bjarnason, 2017). These symptoms are seen in victims of both sexes, all ages and irrespective of whether the bullying is direct or indirect, and such negative consequences of bullying are both reported by both the victims and their peers (Hawker & Boulton, 2000).

Victims of bullying in particular experience a variety of problems in school-related situations (Storch & Esposito, 2003), and their school performance is on average worse than their peers (Juvonen, Nishina,

& Graham, 2000; Schwartz, Gorman, Nakamoto, Robin, & Toblin, 2005). Bullying victims often have poor school functioning, including school absenteeism (Juvonen, Nishina, & Graham, 2000; Payne & Hutzell, 2017), and are more likely to drop out of school than their peers (Tan, Heath, Das, & Choi, 2019; Townsend, Fisher, Chikobvu, Lombard, & King, 2008). Being victimised by bullying has also been linked with social avoidance more generally (Hutzell & Payne, 2012; Johannsdóttir & Olafsson, 2004). This includes avoidance of situations associated with the bullying, places where bullying occurred and people who either did the bullying or were related to them in some way (Storch & Esposito, 2003). A qualitative study by Carlisle and Rofes (2007) showed that posttraumatic effects of being bullied continue into adulthood. This may take various forms, including high levels of fear, anxiety and irritability, daytime thoughts of revenge, and intrusive nighttime dreams of being back at school. One adult participant recollecting his childhood experience said that years after he left school he was unable to go anywhere where he thought he might meet his former peers from school.

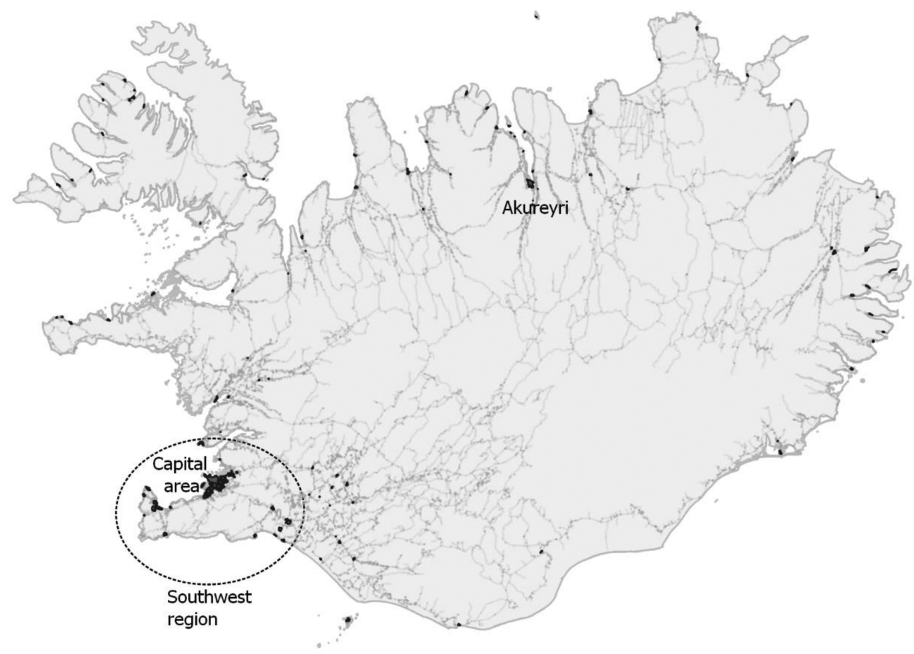
Avoiding places of victimisation may thus be a rational short-term strategy with long-term emotional consequences for place attachment and migration expectations. Place attachment is an important component of residential satisfaction and people with strong place attachment are frequently reluctant to leave the home community (Anton & Lawrence, 2014; Auh & Cook, 2009; Florida, Mellander, & Stolarick, 2011; Lewicka, 2011; Trentelman, 2009). Conversely, people with strong negative feelings towards a place of traumatic prior experiences could be expected to be more willing to leave, vowing never to come back. In particular, adolescents who are bullied in the home community should be expected to be more likely to see their future elsewhere. This might in particular be true of adolescents in smaller communities where there are fewer opportunities for avoiding people and places where bullying took place.

3 | ICELAND AS A SETTING OF STUDY

Iceland has a population of about 364,000 inhabitants on an island of about 103,000 km². About two thirds of the population live in the Reykjavík capital area shown in Figure 1, and about half the remaining population lives in either the Southwest exurban region within commuting distance from Reykjavík or the Akureyri regional centre on the north coast of the island. Less than one in five Icelanders lives in smaller towns, villages, and farming communities around the roughly 5,000-km coastline. Although shipping by sea is very important for the import and export of goods, the transportation of people is almost exclusively via several hours of air travel to Europe and North America.

About 1% of the Icelandic population moves in and out of the country each year, and 3% move between regions within Iceland (Garðarsdóttir, Bjarnason, Jónsson, & Shuttleworth, 2020; Statistics Iceland, 2019). Many leave the country to pursue higher education or employment, as Icelanders have enjoyed full employment rights in the other Nordic countries since the 1950s and in all member states of

FIGURE 1 The Reykjavík capital area, the southwest exurban region, the northern regional centre of Akureyri, and other regions of Iceland



the European Union since the 1990s. Although some people settle permanently abroad, about 70–80% of Icelandic emigrants ultimately return to Iceland (Garðarsdóttir, 2012). Although the immigration of foreign nationals was historically quite low, the proportion of immigrants in Iceland grew from 3% in 2000 to 8% in 2010 and 13% in 2018 (Statistics Iceland, 2019c).

Compulsory schools (*grunnskólar*) enrol students at the age of 5–6 years old (turning six before the end of year one) to 15–16 years old (turning 16 by the end of year 10). Each cohort of students in the country has just over 4,000 students, distributed across more than 170 compulsory schools (Statistics Iceland, 2019a, 2019b). Most of the compulsory schools are owned and operated by the municipalities, although 12 private compulsory schools are funded with a mixture of public and private funding. After graduating from compulsory school, students have the option of vocational training (*verknám*) or an academic track (*bóknám*) leading to university or other higher education.

As in many other northern countries, the majority of rural adolescents expect to live somewhere else in the future (Bjarnason, 2014). Perceptions of occupational opportunities are by far the strongest predictor of migration expectations while interpersonal ties and interest in working in the primary industries are most strongly associated with wanting to stay in such communities (Bjarnason & Thorlindsson, 2006). Although the development of energy-intensive industries has created employment and revitalised certain Icelandic rural areas, such projects have not significantly diminished adolescent migration expectations (Seyfrit, Bjarnason, & Olafsson, 2010). Regardless of employment opportunities, rural youth increasingly want to move to urban areas or abroad. If they had to leave Iceland, girls are more likely to choose the Nordic countries, in particular Denmark, while boys are more likely to choose the United States or the United Kingdom (Bjarnason, 2009).

The prevalence of bullying is quite low in Iceland compared to most other European countries. According the World Health Organization (WHO)-sponsored *Health Behaviour in School-Aged Children (HBSC)* survey conducted in 44 industrialised countries in 2015–2016, the prevalence of regular bullying among 15-year-old students was about 2% in Iceland, compared to an average prevalence of 8% in all the participating countries (Inchley et al., 2016). However, a low prevalence of bullying does not imply that victimisation is any less of a problem for the victims. On the contrary, an analysis of the international HBSC data revealed that bullying actually has a stronger negative effect on life satisfaction of individuals in schools and countries where bullying is less frequent (Arnarsson & Bjarnason, 2018). In Iceland, victims of bullying report poorer relations with their parents and are less likely to report having a best friend (Arnarsson & Bjarnason, 2009), report more physical and psychological symptoms (Garmy, Hansson, Vilhjálmsón, & Kristjánsdóttir, 2019a; Hansson, Garmy, Vilhjálmsón, & Kristjánsdóttir, 2020), use more pain medication controlling for self-reported pain (Garmy, Hansson, Vilhjálmsón, & Kristjánsdóttir, 2019b), and are more likely to have attempted suicide (Arnarsson, Malmquist, & Bjarnason, 2017).

The following analysis focuses on the more long-term consequences of bullying for Icelandic adolescents in terms of domestic and international migration expectations.

4 | DATA AND METHODS

This study is based on data collected for the Icelandic part of the HBSC study in 2010 (Currie et al., 2012). All students in the tenth grade of compulsory schools in Iceland were targeted, of which 3,858 participated (89% of all registered students in this grade). The data were collected anonymously, but the data collection was in

accordance with Icelandic legislation reported to the Icelandic Data Protection Authority. A letter of introduction and a copy of the questionnaire were sent to all principals of compulsory schools in Iceland and all, but one school principal gave their permission for the survey to be distributed to all tenth graders in their school. An information letter was then sent to all parents or custodians. It introduced the variables of the study and gave the recipients an opportunity to consent or refuse participation of the child. Additionally, the front page of the questionnaire informed all participants of their right to refuse participation regardless of whether the schools and parents had given consent. The students filled out the questionnaire on paper in the classroom and returned their answers in unmarked envelopes that were collected by their teachers. The questionnaires were administered in Icelandic, but English translations are presented below.

4.1 | Migration expectation as an outcome variable

The dependent variable was constructed from two stem questions: *How likely is it that you will in the future move away from the place where you live now?* and *How likely is it that you will in the future move abroad?* Each of the two stem questions included the two sub-items *For one year or more* and *Forever*. The response categories for each sub-item were “Very unlikely,” “Rather unlikely,” “Neither nor,” “Rather likely,” and “Very likely”.

In order to construct an outcome measure of permanent *migration expectations*, respondents were assigned the value 0 (*None*) if they were neither rather nor very likely to move permanently away from their home community in the future. Those who were rather or very likely to move away but not abroad were assigned the value 1 (*Domestic migration expectations*) and those who were rather or very likely to move abroad in the future were assigned the value 2 (*International migration expectations*).

It should be noted that this coding scheme focuses on permanent migration expectations. It does not take into account temporary migration expectations and does not distinguish between those who find permanent migration rather or very unlikely and those who are unsure about their future migration expectations. Although it would be possible to create a multidimensional measure of strength of expectations, direction of expectations, expected permanence of expectations, and expected domestic or international destinations, we have thus opted for a more concise but limited measure of permanent domestic or international migration expectations.

As shown in Table 1, 29% of the boys and 32% of the girls participating in the survey expected to migrate permanently from their home community in the future. The expected leavers were divided equally between those expecting domestic and international destinations.

4.2 | Bullying

Bullying was measured by the summary item used in the international HBSC study (Currie et al., 2012). Following a definition of physical or

verbal bullying, respondents were asked *How often have you been bullied at school in the past couple of months?* with the response categories (a) “I have not been bullied in the past couple of months,” (b) “It has only happened once or twice,” (c) “Two or three times a month,” (d) “About once a week,” and (e) “Several times a week.” These response categories do not form an equal interval scale, and it is not clear if the potential effect of being bullied on migration expectations should be expected to be linear or non-linear. Consequently, this variable was recoded as a series of four binary (0–1) variables: *Only once or twice*, *Two to three times a month*, *Once a week*, and *Several times a week*. For these four binary variables, *Not been bullied* served as the omitted reference category.

Table 1 shows that 87% of the boys and 88% of the girls had not been bullied in the past few months, with 8% having been bullied once or twice and the remaining 4–5% evenly distributed across the more frequent categories.

4.3 | Control variables

The primary focus of the current study is on the effects of bullying on migration expectations, but such effects may be confounded by other predictors of migration expectations. Although the full range of potential predictors would be beyond the scope of the current study, we thus control for indicators of gender, ethnic minority status, region of residence, school performance, and relations with parents and friends.

In the HBSC survey, gender was measured by the question *Are you a boy or a girl?* without any options for non-binary respondents. For the purposes of this study, *Gender* was recoded as girls = 1 and boys = 0. Table 1 shows that the gender ratio was almost exactly equal with 49% girls and 51% boys.

Ethnic background was indicated by responses to the question *Which language do you most often speak at home?* The responses were recoded into the variable *Language at home* with the values 0 (*Icelandic*) and 1 (*Other languages*). Table 1 shows that 8% of the respondents indicated that they spoke other languages than Icelandic at home. By comparison, in the year of the survey, about 7% of 15-year-old residents of Iceland had at least one parent born abroad (Statistics Iceland, 2019c).

The *region of residence* was coded according to the location of each school into four geographical groups shown in Table 1. About 58% of the respondents lived in the Reykjavik capital area and 15% in the southwest exurban region, compared to 60% and 15% of the 15-year-old population (Statistics Iceland, 2019a). About 6% of the respondents and the national population of 15-year-olds lived in the regional centre of Akureyri. About 21% of survey respondents lived in the more rural regions, compared to 19% of the national population.

In order to estimate academic achievement, the students were asked what number most accurately described their average grade in school according to the 10-point grade scale used in Icelandic compulsory schools. The possible responses were ranged from (5) an average grade of 5 or below to (10) an average grade of 10. The resulting *average grade* had a mean of 7.48 for boys and 7.58 for girls.

TABLE 1 Descriptive statistics for migration expectations and covariates among 15- to 16-year-old Icelandic students

	Range	All	Boys	Girls
Dependent variable				
Migration expectations				
None (contrast)	0–1	0.69	0.71	0.68
Domestic	0–1	0.15	0.14	0.16
International	0–1	0.16	0.15	0.16
Victimisation by bullying				
Being bullied				
Never bullied (contrast)	0–1	0.87	0.87	0.88
Bullied once or twice	0–1	0.08	0.08	0.08
Bullied 2–3 times a month	0–1	0.02	0.02	0.01
Bullied about once a week	0–1	0.01	0.01	0.01
Bullied several times a week	0–1	0.02	0.02	0.02
Control variables				
Gender				
Boys (contrast)	0–1	0.51	–	–
Girls	0–1	0.49	–	–
Language at home				
Icelandic (contrast)	0–1	0.92	0.92	0.93
Other language	0–1	0.08	0.08	0.07
Region of Iceland				
Reykjavík capital area (contrast)	0–1	0.58	0.58	0.59
Southwest exurban region	0–1	0.15	0.15	0.14
Akureyri regional centre	0–1	0.06	0.05	0.06
Other more rural regions	0–1	0.21	0.22	0.21
School performance				
Average grade	5–10	7.53	7.48	7.58
Relations with parent				
Other (contrast)	0–1	0.14	0.14	0.14
Easy to talk to at least one	0–1	0.38	0.37	0.39
Very easy to talk to at least one	0–1	0.48	0.49	0.47
Relations with friends				
Other (contrast)	0–1	0.13	0.19	0.06
Easy to talk to at least one	0–1	0.32	0.38	0.26
Very easy to talk to at least one	0–1	0.55	0.43	0.68
N: 3,858				

Good relations with a parent were indicated by the stem question *How easy is it for you to talk to the following individuals about things that trouble you?* using the four items “mother,” “stepmother,” “father,” and “stepfather.” The response categories were “Very easy,” “Easy,” “Difficult,” “Very difficult,” and “No such person.” Two binary (1–0) variables of parental relations were constructed from these measures: *Very easy to talk to at least one parent* and *Easy to talk to at least one parent*. Those who indicated that they could not easily confide in any parental figure or did not have such a parental figure were the omitted reference group. It should be noted that only 0.5% of the

respondents did not have such a parental figure. As shown in Table 1, the majority of male and female respondents (86%) found it easy or very easy to talk to a parent.

Good relations with a friend were similarly indicated by the same stem question using the three items “best friend,” “friend of the same sex,” and “friend of the opposite sex.” Two binary (1–0) variables of peer relations were constructed from these measures: *Very easy to talk to at least one friend* and *Easy to talk to at least one friend*. Those who indicated that they could not easily confide in any friends or did not have any friends were the omitted reference group. Again, it

should be noted that only 0.9% of the respondents did not any friends. As shown in Table 1, the majority of respondents (87%) found it easy or very easy to talk to a friend. This figure was however considerably lower for boys (81%) than girls (94%).

4.4 | Statistical analysis

Multinomial logistic regression (Pampel, 2000) analysis was conducted in SPSS (v. 25), distinguishing between the outcomes of (1) *Domestic migration expectations* and (2) *International migration expectations* against the reference of (0) *Neither domestic nor international migration expectations*. The primary emphasis is on the effects of bullying on migration expectations, but the effects of control variables are also reported. Several potential interaction effects between bullying and control variables were tested, but none were found to be statistically significant. Results are shown as odd ratios with 95% confidence intervals.

It should be noted that as 89% of the entire population of tenth grade students in Iceland participated in the survey, tests of statistical significance should not be interpreted as probabilities of sample statistics being caused by random fluctuations from zero population parameters. The actual empirical population of Icelandic adolescents could nevertheless be viewed as a “random realization of an infinite number of hypothetical adolescents” who could have been born in a particular year. In that sense, the results of statistical significance testing indicate the probability of finding a given effect in “another population of Icelandic students.”

Even though students are nested within classes and schools, there is negligible intracluster correlation in the dataset with a variance inflation factor (VIF) ranging between 1.03 and 1.07 for each item used in this analysis. Furthermore, it should be noted that all schools and tenth grade classes in Iceland were invited to participate and almost all of the accepted the offer. The data collection does thus not involve cluster sampling of schools or classes.

5 | RESULTS

5.1 | Migration expectations by frequency of bullying

Figure 2 gives an overview of the migration expectations of Icelandic adolescents by the reported extent of bullying. As noted in the previous section, the coding of migration expectations gives precedence to international destinations; that is, the shaded columns show domestic expectations only, while the white columns show international expectations as well reports of both international and domestic destinations.

About 30% of the respondents who had not been bullied in the past few months expected to migrate permanently from their home communities. The proportion increases gradually to 52% among those who had been bullied several times a week. The proportion that expected domestic migration only is rather similar among those who were bullied several times a week and those who were sometimes or never bullied. The proportion that expected international migration is however twice as high among those who were bullied several times a week, compared to those who were never bullied.

Table 2 shows the results of formally modelling the effects of frequency of bullying on domestic and international migration expectations, controlling for potentially confounding covariates based on prior studies on predictors of bullying and migration expectations.

Similar to the bivariate patterns shown in Figure 2, the multivariate analysis shows an association between bullying and migration expectations. Although obscured in the bivariate figure, the statistical analysis shows that controlling for other factors; adolescents who were bullied at least weekly are about twice as likely to expect to migrate domestically. Less frequent bullying does not appear to be associated with domestic migration expectations.

Adolescents who were bullied once a week or less frequently are about 1.5 times as likely to expect to migrate internationally. The estimates are close to identical for the three lower levels of bullying but

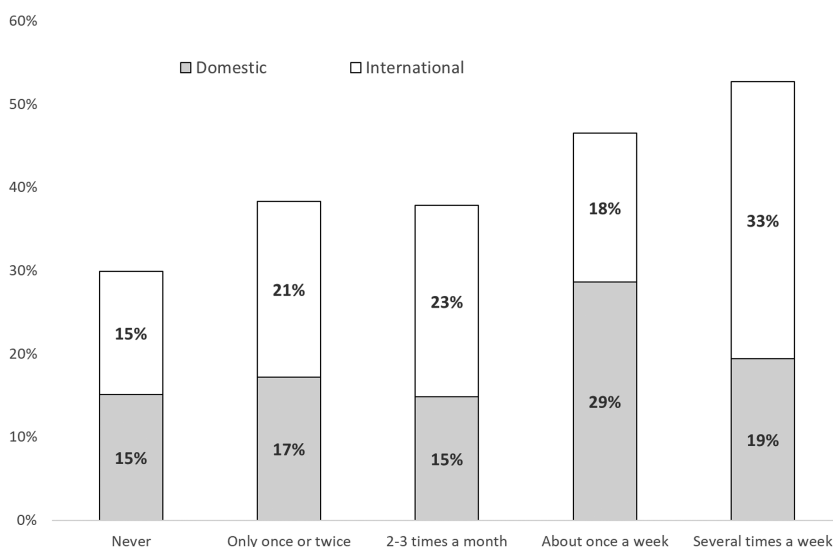


FIGURE 2 Proportion of 15- to 16-year-old students in Iceland who expect to migrate from their home community by frequency of being bullied

TABLE 2 Multinomial logistic regression model of migration expectations among 15- to 16-year-old students in Iceland (odds ratios)

	No firm Migration Intentions	Domestic Migration Intentions	International Migration Intentions
Victimisation by bullying			
Victims of bullying			
Bullied once or twice	1.00	1.28 (0.93–1.76)	1.56 (1.15–1.98)
Bullied two to three times a month	1.00	1.11 (0.53–2.32)	1.51 (0.80–2.85)
Bullied about once a week	1.00	2.40 (1.03–5.73)	1.53 (0.54–4.29)
Bullied several times a week	1.00	1.93 (1.01–3.70)	2.36 (1.35–4.16)
Never	1.00	1.00 contrast	1.00 contrast
Control variables			
Gender			
Girls	1.00	1.16 (0.96–1.40)	1.06 (0.88–1.28)
Boys	1.00	1.00 contrast	1.00 contrast
Language at home			
Other language	1.00	0.90 (0.60–1.33)	2.80 (2.11–3.71)
Icelandic	1.00	1.00 contrast	1.00 contrast
Region of Iceland			
Southwest exurban regions		1.39 (1.08–1.79)	0.86 (0.66–1.13)
Akureyri regional centre	1.00	0.81 (0.53–1.25)	0.90 (0.61–1.32)
More rural regions	1.00	1.49 (1.20–1.85)	0.74 (0.58–0.94)
Reykjavík capital area	1.00	1.00 contrast	1.00 contrast
School performance			
Average grades	1.00	0.94 (0.87–1.01)	1.04 (0.96–1.12)
Relations with parent			
Easy to talk to at least one	1.00	0.96 (0.72–1.29)	0.71 (0.53–0.93)
Very easy to talk to at least one	1.00	0.81 (0.61–1.09)	0.67 (0.51–0.88)
Other	1.00	1.00 contrast	1.00 contrast
Relations with friend			
Easy to talk to at least one	1.00	1.23 (0.89–1.70)	1.50 (1.09–2.07)
Very easy to talk to at least one	1.00	1.33 (0.97–1.82)	1.44 (1.05–1.98)
Other	1.00	1.00 contrast	1.00 contrast
N: 3,858			
Chi-square (df): 142.4(28), $p < .001$			

Coefficients that are statistically significant at $p < .05$ or better are shown in bold.

not statistically significant for groups with lower numbers of students. Adolescents who were bullied several times a week are more than twice as likely to expect to migrate internationally.

5.2 | Other predictors of migration expectations

In the multivariate model, there is no gender difference in either domestic or international migration expectations. Adolescents who speak other languages at home are equally likely to expect to migrate domestically as those who speak Icelandic at home. However, those who do not speak Icelandic at home are almost 3 times as likely to expect to leave the country. This is consistent with the greater

international mobility of immigrants than ethnic Icelanders according to Statistics Iceland (2019).

Geographically, adolescents living in the southwest exurban regions and in the more rural regions are significantly more likely than adolescents living in the Reykjavík capital area to expect to migrate domestically. Although it is not possible to determine expected destinations in this dataset, it is likely that these non-metropolitan adolescents expected to move to the Reykjavík capital area. Interestingly, adolescents in the northern regional centre of Akureyri were not more likely to expect to migrate domestically than their counterparts in the city. Only adolescents in the more rural regions had significantly less international migration expectations than adolescents in the Reykjavík capital area.

Somewhat surprisingly, self-reported grades do not appear to be associated with either domestic or international migration expectations, net of other predictors in the multivariate model.

Finally, neither close relations with parents or stepparents nor with friends predict domestic migration expectations. However, parental relations and peer relations appear to have opposite effects of international migration expectations. Adolescents who found it easy or very easy to talk to a parent or stepparent are about 0.7 times less likely to expect to leave the country permanently, while those who found it easy or very easy to talk to at least one friend are 1.4–1.5 times more likely to expect permanent international migration.

6 | DISCUSSION

This study draws together two sets of literature that have rarely if ever intersected before. On one hand, the literature on the social effects of bullying has demonstrated that victims tend to avoid the places where they were bullied in childhood. On the other hand, the literature on adolescent migration intentions has shown that negative perceptions of the home community may be an important push factor for rural adolescents in particular. Our findings thus contribute to the understanding of both the social effects of bullying and the effects of noxious social relations on migration expectations. In addition, we have added cross-cultural evidence to the literature on the effects of gender, ethnic minority status, level of urbanisation, school performance, and relations with parents and peers on adolescent migration expectations.

Our results show that after controlling for other factors, adolescents who are regularly bullied are about twice as likely as never bullied adolescents to expect to migrate permanently from their home community. This holds true for both expectations of migration within Iceland and migration to other countries.

Prior research on bullying and social avoidance has shown that bullied children show worse social adjustment and increased social avoidance (Goldbaum, Craig, Pepler, & Connolly, 2003; Hutzell & Payne, 2012; Johannsdottir & Olafsson, 2004). This includes avoidance of people and places associated with bullying experiences (Randa & Wilcox, 2010; Storch & Esposito, 2003) and may last well into adulthood (Carlisle & Rofes, 2007). Our results show that place avoidance by victims of bullying can also take the form of higher domestic and international migration expectations among adolescents. Although the relationship between migration expectations and actual migration is complex (see, e.g., Carling, 2019), future research should examine the extent to which bullying subsequently leads to higher levels of geographical mobility.

Prior research on adolescent migration expectations has emphasised the pull factors drawing young people towards larger cities (e.g., Bæck, 2004; Bjarnason, 2014; Dako-Gyeke, 2016; Gabriel, 2002; He, Zhai, Asami, & Tsuchida, 2016; Lowe, 2015; Rosvall, Ronnlund, & Johansson, 2018; Stockdale, Theunissen, & Haartsen, 2018). Studies of the factors pushing adolescents out of

their home communities have largely viewed negative social experiences in terms of claustrophobic experiences of social support and social control in rural communities (Gabriel, 2002; Lowe, 2015; Matthews, Taylor, Sherwood, Tucker, & Limb, 2000; Stockdale, 2002). Our findings suggest that noxious interpersonal interactions such as bullying may also be an active push factor in urban and rural settings alike.

Future studies should explore further the extent to which outmigration is fuelled by poor social adjustment and a desire to avoid noxious relations with people and places. In particular, the extent to which findings obtained in the context of Icelandic adolescents can be replicated in other social and cultural contexts should be explored. Such studies should also consider different types of bullying (e.g., exclusion, verbal abuse, and physical violence) in the context of more general discrimination based on, for example, gender, sexual orientation, ethnic background or social class.

It should also be noted that our measures of migration expectations do not distinguish between different types of destinations. Our measure of domestic migration is rather indirect and does not distinguish between different urban, exurban and rural destinations within Iceland. Similarly, our measurement of international migration expectations does not take into account different destination countries or different types of destinations abroad. Furthermore, our measures of migration expectations do not distinguish between those expecting to return to a place where they lived before and those who expect to move to a place where nobody knows them and they can build new social relationships from the scratch. It is thus not clear to what extent bullied individuals envision returning to an earlier life in the anonymity of larger cities, finding close-knit subcultures of like-minded people elsewhere or simply escaping from their current social situations.

Beyond demonstrating an association between bullying and migration expectations, the effects of our control variables have important implications for the literature. In particular, the contrary effects of close relations with parents and close relations with peers suggest a potential area of future studies. Strong ties with family and friends and strong integration into a close-knit community have generally been found to be associated with lower migration expectations (Bjarnason & Thorlindsson, 2006; Lowe, 2015; Rauhut & Littke, 2016; Williams, Jephcote, Janta, & Li, 2018). Such effects can however be complicated by strong relations with people who live elsewhere (Drozdowski, 2008; Rosvall, Ronnlund, & Johansson, 2018) and perceived parental and peer pressures to either stay or to leave (Cui, Geertman, & Hooimeijer, 2016; Nugin, 2014; Tucker, Sharp, Stracuzzi, Van Gundy, & Cesar Rebellon, 2013). We do not find any differences in domestic migration expectations by close relations with either a parent or friend. However, adolescents who report close relations with at least one friend are found to have higher international migration expectations while those who report close relations with a parent have lower international migration expectations. This might indicate that adolescents develop their international migration expectations within strong peer groups while strong bonds with parents likely to remain in Iceland predict less migration expectations. Further

research is however needed to confirm this pattern in cross-cultural settings and tease out the potential underlying mechanism.

Research in Europe (e.g., Rauhut & Littke, 2016; Stockdale, Theunissen, & Haartsen, 2018; van Mol, 2016), North America (e.g., Byun, Meece, Irvin, & Hutchins, 2012; Corbett, 2013; Lowe, 2015), and Australia (e.g., Drozdowski, 2008; Gabriel, 2002; Pretty, Bramston, Patrick, & Pannach, 2006) has shown young people to be likely to expect to leave rural areas in the future. Our results also suggest that adolescents in less densely populated areas are more likely to consider internal migration than those in the Reykjavík capital area or the urban Akureyri regional centre. This is in line with prior research on actual migration patterns in Iceland demonstrating a long-term albeit declining net flow of internal migration from rural to urban areas in Iceland (Garðarsdóttir et al., 2020). In the case of adolescents in the more rural regions, higher domestic migration expectations are however offset by lower international migration expectations.

Our non-findings may also have important implications for various aspects of migration expectations among adolescents. The academic publication process has a well-known and long-standing bias against the publication of statistically non-significant results (see, e.g., Hill, Bolton, & White, 2020; Rosenthal, 1979). In addition to the obvious risk of “false positives” dominating the literature, this publication bias may hide theoretically important cross-cultural variations where statistically significant effects are found in certain countries or types of regions but not in other settings. Our non-findings based on responses from 89% of all tenth grade students in Iceland provide quite robust comparison with findings obtained in other countries.

Our failure to find any gender differences in migration expectations for instance runs counter to the bulk of previous studies on this subject. In Europe, emigration expectations have generally been found to be greater among young men than among young women (van Mol, 2016; Williams, Jephcote, Janta, & Li, 2018). In rural areas of the global north, however, young women have rather consistently been found to be more likely than young men to expect to move to more urban areas and less likely to expect to return home (Bednarikova, Bavorova, & Ponkina, 2016; Lowe, 2015; Rauhut & Littke, 2016; Stockdale, 2002). A school survey conducted in Iceland in 1992 found higher migration expectations among girls than boys in rural areas but no gender differences in the Reykjavík capital area (Seyfrit, Bjarnason, & Olafsson, 2010). Fifteen years later, a comparable survey in 2007 found that such gender differences had disappeared in rural Iceland but migration expectations were higher among girls than boys in the Reykjavík capital area. In this study, we did not find significant interaction effects between gender and type of residence on migration expectations. The disappearance of gender differences in migration expectations might in some way be associated with the relatively high level of gender equality in Iceland which 10 years in a row has been internationally ranked by The World Economic Forum (2019) as the country with the least gender gap on various dimensions. The possible relation between gender equality and gendered migration expectations should be explored further in a cross-cultural context.

We also fail to find an effect of self-reported grades on migration expectations among Icelandic adolescents. Educational

achievement and educational aspirations have nevertheless been found to be major predictors of migration expectations among youth, in particular in rural areas characterised by limited educational and occupational opportunities (Corbett, 2013; Drozdowski, 2008; Rosvall, Ronnlund, & Johansson, 2018; Stockdale, Theunissen, & Haartsen, 2018). Our finding that may be indicative of a relatively non-competitive and inclusive school system where enrolment in higher education is generally open to those who have completed earlier school levels and not dependent on prior educational achievement. Coupled with the effects of bullying in school, these findings also highlight the need to consider the effects of school climate more generally and the potential of multi-level modelling of school-level, class-level, and individual-level effects on migration expectations. Prior research has, for instance, shown that bullying has a stronger negative effect on life satisfaction in schools and countries where bullying is less frequent (Arnarsson & Bjarnason, 2018). Similarly, it is possible that school and class levels of bullying and other aspects of social context may moderate the effects of individual-level bullying on migration expectations.

In conclusion, the results of our study show that negative experiences in adolescent society may encourage young people to seek a better future elsewhere and bullying in school may affect urban and rural adolescents alike. Prevention programs aimed at reducing bullying and supporting the victims may thus not only lead to better psychological and social adjustment. Such programs may also have positive long-term effects on rates of retention and return migration among local youth.

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