

CARINA MOOD *Stockholm University and Institute for Futures Studies*

JAN O. JONSSON *Stockholm University, Institute for Futures Studies,*
and Nuffield College***

SARA BROLIN LÅFTMAN *Stockholm University****

The Mental Health Advantage of Immigrant-Background Youth: The Role of Family Factors

Children of immigrant background, despite problems with acculturation, poverty, and discrimination, have better mental health than children of native parents. We asked whether this is a result of immigrant families' characteristics such as family structure and relations. Using a new comparative study

on the integration of immigrant-background youth conducted in England, Germany, the Netherlands, and Sweden (N = 18,716), particularly strong associations with mental health (internalizing and externalizing problems) were found for family structure, family cohesion, and parental warmth. Overall, half of the advantage in internalizing and externalizing problems among immigrant-background youth could be accounted for by our measures of family structure and family relations, with family cohesion being particularly important.

Swedish Institute for Social Research, Stockholm University, 106 91 Stockholm, Sweden
(carina.mood@sofi.su.se).

*Institute for Futures Studies, Box 591, 101 31 Stockholm, Sweden.

**Nuffield College, Oxford University, New Road, Oxford, OX1 1NF, United Kingdom.

***Centre for Health Equity Studies, Stockholm University/Karolinska Institutet, 106 91 Stockholm, Sweden.

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Children and adolescents in immigrant families face several challenges. Not only do they experience acculturation (Berry, 1997; Schwartz, Unger, Zamboanga, & Szapocznik, 2010a), but they may also face discrimination, socioeconomic deprivation, and contradictory expectations from parents and peers with regard to norms and behavior. Yet they have been found to have no worse, and in several studies better, mental health in terms of both internalizing and externalizing problems (e.g., Goodman, Patel, & Leon, 2008; Harker, 2001; Montazer & Wheaton, 2011; Mood, Jonsson, & Låftman, in press; Salas-Wright, Vaughn, Schwartz, & Córdova, 2016). This paradoxical

finding raises the question of what it is that could possibly instill such resilience in these children.

Could the family context be part of the explanation? At least in the United States, several immigrant groups appear to distinguish themselves from the native population by having a stronger sense of familism, emphasizing social support and obligations between family members (Almeida, Molnar, Kawachi, & Subramanian, 2009; Ghazarian, Supple, & Plunkett, 2008). This is something ascribed primarily to a more collectivistic orientation in origin country cultures (Fuligni, Tseng, & Lam, 1999; Schwartz, Weisskirch, et al., 2010). Part of the explanation, however, may also lie in immigrant selectivity because parents who migrate may possess unobserved characteristics, for example, better health and a stronger relationship, which may positively affect family relations and stability (e.g., Jasso, Massey, Rosenzweig, & Smith, 2004). Moreover, family relations may be adaptive responses to adversities and stresses faced by immigrant families (e.g., Patterson [2002] on family resilience). Against a backdrop of socioeconomic disadvantage and threats to their traditional culture, families may seek to shelter their offspring, encapsulating them in a tightly knit community revolving around the nuclear family and expressed through close family relations and active parental monitoring. This type of relation-based preservation of immigrants' original culture, combined with high socioeconomic aspirations, has been singled out as an advantageous mode of integration (Portes & Zhou, 1993).

Parental strategies of this kind carry some risks: They may appear discordant to children as a result of the potential clash in norms and attitudes between the host society and the family (e.g., Portes & Rumbaut, 2001). They may also slow down integration into the host society and could potentially cause family conflicts and stress that negatively affect mental health (e.g., Foner & Dreby, 2011). Strong family relations may however also provide children with psychological resources to cope with acculturation and stress and may ensure their well-being even in the face of adverse material living conditions and low socioeconomic status. Such experiences might well motivate families to "close ranks cohesively and productively" (Rumbaut, 1997, p. 9).

The hypothesis we set out to test is precisely that family structure and family relations account for the mental health advantage of youth of immigrant origin. Thus, we follow Crosnoe and Cavanagh's (2010) call for more research in the intersection between immigrant and family issues and apply it to an important indicator of immigrant integration. Family relations are operationalized as family cohesion, parental warmth, parental school engagement, and parental monitoring. We define *mental health* as a low frequency of internalizing (e.g., psychosomatic complaints, worries) or externalizing problems (e.g., aggression, disobedience), which are commonly seen as two different expressions of psychological maladjustment among adolescents (e.g., Forns, Abad, & Kirchner, 2011). Whereas internalizing problems are inwardly directed, externalizing problems are outwardly directed and tend to induce conflict with other people (Forns et al., 2011). Because poor mental health more often manifests itself in the form of internalizing problems in girls and externalizing problems in boys (Leadbeater, Kuperminc, Blatt, & Hertzog, 1999), it is essential to analyze both dimensions to capture mental health problems for both sexes.

Our analyses are based on the Children of Immigrants Longitudinal Survey in Four European Countries (CILS4EU; www.cils4.eu), a recently collected large-scale and nationally representative data set (total $n = 18,716$) from the following four European countries with substantial recent immigration: England, Germany, the Netherlands, and Sweden. The respondents represent many different sending countries, which gives us unique leverage in the search for generalizable mechanisms. The richness of the data in terms of information about the family context as well as the countries of origin and destination allows us to extend the study of how family factors relate to resilience in children of immigrant origin far beyond previous research.

Our empirical analysis proceeded in three steps. We began by asking how family structure and family relations matter in relation to mental health, we then studied how immigrant families differed from the majority (nonimmigrant) families in terms of these factors, and finally we brought these two analyses together to estimate how large part of the immigrant health advantage could be accounted for by these family characteristics.

THE FAMILY SITUATION OF ADOLESCENTS OF IMMIGRANT BACKGROUND

Family Structure

Whereas divorce or dissolution of nonmarital unions is common in many Western countries, with a large fraction of children experiencing parental separation before reaching adolescence, many immigrants come from countries where norms against divorce are stronger (cf. Inglehart, 2006). There are exceptions, however, and some immigrant groups, such as Caribbeans and Latin Americans, have relatively high divorce rates (e.g., United Nations Children's Fund, 2009). To the extent that adolescents of immigrant background more often live in nuclear families (i.e., with two original parents), this could partly explain their better mental health because we know that children with divorced parents tend to have worse mental health; a pattern that holds for virtually all Western countries and for both externalizing and internalizing problems and that appears at least in part to be causal (Amato & James, 2010).

Family Relations

There is ample evidence that parenting styles and family climate matter for adolescents' mental health. In studies of parenting styles, it is common to distinguish between measures of parental warmth and support on one hand and measures of monitoring and supervision on the other. Parental warmth, or related constructs such as acceptance, emotional support, and involvement, has proven to be beneficial for adolescents' mental health (e.g., Gray & Steinberg, 1999; Låftman & Östberg, 2006). Parent-child relations that are instead cold, unsupportive, and neglectful are linked to poor adolescent mental health and well-being (Repetti, Taylor, & Seeman, 2002).

Parental monitoring of children was traditionally seen as having a beneficial effect on adolescents' internalizing and externalizing outcomes (Dishion & McMahon, 1998), but this appears to be dependent on the children disclosing information to their parents of their own free will (Stattin & Kerr, 2000). Monitoring that is not implemented by force but through reasoning and explanation may be described as *authoritative*, whereas *authoritarian* control is instead based on force, threat, or physical punishment (Gecas & Seff, 1990). This distinction between different

types of monitoring is in line with the commonly held view that authoritative parenting, which combines responsiveness (being supportive and encouraging) and demandingness (monitoring, discipline, supervision) is optimal for child outcomes (e.g., Lamborn, Mounts, Steinberg, & Dornbusch, 1991), something that appears to hold for children across a range of cultural and other circumstances, including ethnic background (Steinberg, 2001).

Another commonly distinguished aspect of parenting is parental school engagement, which has primarily been studied in relation to children's school achievement, with results generally showing a positive association between the two (e.g., Kao, 2004). Parental school engagement may potentially also affect mental health, both indirectly through school achievement, and directly by signaling parental interest in the child's life.

Closely related to parenting styles is the family climate. Family cohesion, or "the degree of togetherness or closeness or emotional bonding that family members have toward one another" (Vandeleur, Jeanpretre, Perrez, & Schoebi, 2009, p. 1205), and the related construct parent-child connectedness, are associated with better adolescent mental health (Manzi, Vignoles, Regalia, & Scabini, 2006; Resnick et al., 1997; Vandeleur et al., 2009), as is ease of communication between parents and adolescents (Låftman & Östberg, 2006).

The quality of family relations will naturally vary widely within the majority group as well as within specific immigrant groups, and the question is whether we can expect any meaningful differences in the average quality of such relations between adolescents in immigrant and non-immigrant families. Immigrants tend to share two features that distinguish them from the majority and that can affect the family situation. First, they share the experience of migration itself. Migration is a disruptive event, and close family relations and the familial transmission of origin-country culture may constitute ways of coping with the loss of friends and networks as well as with acculturation stress. Second, most immigrants in Western societies come from countries that are poorer or less developed than the host country, and such origin countries also tend to be less individualistic in orientation and more attuned to the interests of social groups such as the family or kinship network (Hofstede, 2001). This more collectivistic

orientation has been suggested as a driver behind the stronger familism observed among immigrants in the United States (Schwartz, Weiskirch, 2010), where Latinos constitute the most frequently studied group (e.g., Almeida et al., 2009), but where similar family values have also been found among other groups of immigrants (Fuligni et al., 1999; Ghazarian et al., 2008). Although the concept of familism *per se* primarily refers to norms and obligations within the family, familism tends to go together with a more general family orientation that includes stronger familial cohesion and closeness and more frequent within-family interactions (Fuligni et al., 1999).

Studies of U.S. data suggest that immigrant parents exercise more authority, supervision, and control over their children (Chao, 2001; Driscoll, Russell, & Crockett, 2008; Kao, 2004), and Wissink, Dekovic and Meijer (2006) found such differences between Dutch and minority adolescents in the Netherlands. Driscoll et al. (2008) reported more authoritative or authoritarian parenting styles among Latino immigrant mothers than among nonimmigrant mothers, but the difference declined with immigrant generations, suggesting an assimilation into more American parenting styles. The results on family cohesion and parental warmth or closeness are more mixed: Kao (2004) reported more family closeness among Asian and Latino groups in the United States than among nonimmigrants, but Chao (2001) found no significant differences for Chinese immigrants, and Bankston and Zhou (2002) found less closeness in immigrant families. Salas-Wright et al. (2016) showed that recently arrived immigrant adolescents reported more parental support and less parent-child conflict than those born in the United States.

THE CURRENT STUDY

Our review of the literature suggests that characteristics of immigrant families may constitute part of the mechanism underlying the mental health advantage of youth of immigrant background, and our overall hypothesis is that the advantage in mental health observed for children of immigrant background is reduced when these potential mediating factors are accounted for. We build on our previous work (Mood et al., *in press*) using the same data, where we were able to establish that immigrant-background youth have a mental health advantage in the

European countries that we study. This holds for youth with origins in Africa, Latin America, Southern Europe, and the Middle East and to some extent among other Asian origin youths, but not for immigrants from Western countries or from Eastern Europe. Although this pattern is in line with the familism hypothesis, the non-Western/non-European groups may differ from other youth in terms of, for example, cultural values and socioeconomic characteristics. Thus what is needed and what we aim to provide is an analysis that directly tests the mediating role of family factors.

If immigrants integrate into the destination country, we would expect to find a convergence toward the majority's health level across immigrant generations or across time spent in the destination country. Although some earlier studies suggested such a pattern (e.g., Harker, 2001; Montazer & Wheaton, 2011; Salas-Wright et al., 2016), our previous analyses (Mood et al., *in press*) revealed no or very little convergence in the countries we examined. We have therefore included both the first (born abroad) and second (born in the host country to immigrant parents) generation in our immigrant origin groups, but we controlled for generation in our analyses (which did not alter the results).

Most of the research on health differences between the majority and people of immigrant background is based on single-country studies, and conclusions may thus reflect a given country's specific mix of origin countries or other idiosyncratic features. With data from four destination countries and a large number of origin countries, we stand a much better chance of uncovering general mechanisms than is normally the case. For reasons of space we cannot develop and test detailed hypotheses for individual origin countries and/or destinations—the use of data from multiple destinations and origins primarily constitutes a means of identifying systematic patterns and of assessing the robustness of our results.

IMMIGRANT GROUPS IN THE FOUR DESTINATION COUNTRIES

The immigrant composition varies across our four destination countries (e.g., Organization for Economic Cooperation and Development, 2015). England has the most favorably selected immigrant body, with higher average education levels than the majority population and with a

relatively large proportion having migrated for the purposes of work or higher education. In Germany, the Netherlands, and Sweden, immigrants have lower average levels of education, and refugee and humanitarian migration (mostly in the form of asylum rather than quota refugees) is more common, particularly in Sweden. England and the Netherlands have many immigrants from former colonies, groups that are often closer to the majority in terms of language or culture than other groups. In the cohorts of relevance to our study, Asian (India, Pakistan) and African (e.g., Kenya, Somalia, Nigeria, Ghana) immigrants dominate in England, and immigrants from the Caribbean (Antilles, Suriname), Turkey, and Morocco are most frequent in the Netherlands. Germany's immigrant population is dominated by Turks and Southern and Eastern Europeans. Sweden has the most diverse immigrant population, having had a generous asylum policy for a long time. The largest groups in our study's cohorts come from the Middle East (Turkey, Iraq, Iran, Syria), the former Yugoslavia, and Somalia.

DATA

The data were drawn from the first wave (2010–2011) of the cross-national, longitudinal survey CILS4EU, which focuses on 14- and 15-year-old children in England, Germany, the Netherlands, and Sweden (Kalter et al., 2013). The national surveys were designed to be generalizable to the population of youth in the relevant school grade. The sample was drawn from four strata on the basis of the proportion of immigrants in school, with oversampling of immigrant-dense schools to ensure sufficient power in analyses of immigrant groups. The respondents were sampled by means of a two-step cluster design in which schools were first randomly selected within strata, with two classes then being randomly selected from each school, and finally all pupils in these classes included. The school participation rate ranged between 66% (England) and 99% (Germany); the student participation rate was between 81% (England) and 92% (the Netherlands). The total responding sample consisted of 18,716 students in 952 classes from 480 schools.

The data were obtained using cross-nationally harmonized questionnaires. The students completed the first-wave questionnaires in late 2010 or early 2011 during an 80-minute period at

school. Parents also filled out a questionnaire, and in Sweden additional information was collected from registers. In this article, we primarily used youth-reported data, but also drew on information from parents and from registers on household characteristics, for example, parents' education. Both students and parents were informed that participation was voluntary and that their responses were anonymous. The survey data are available at www.gesis.org (ZA5353).

Internal nonresponse on the independent variables was handled by multiple imputation (see the Method section), and observations that were missing on the dependent variables were used in the imputation model but excluded from the regression (cf. von Hippel, 2007). For internalizing problems, 319 observations had missing values, but for the externalizing problems, 2,832 observations were missing because questions on law-breaking behavior were not allowed in one German federal state. Tests conducted using an alternative variable that excluded these items produced similar results. After applying the exclusion criteria and dropping an additional 28 cases with unrealistic response patterns, a total of 18,370 (internalizing) and 15,859 (externalizing) respondents remained in the analyses (98% and 85% of the total sample).

VARIABLES

Descriptions of all variables are presented in Table 1.

Internalizing problems. Internalizing problems is an index constructed from information about how often the respondent feels worried, depressed, and anxious or has headaches, stomachaches, and difficulties falling asleep (see Mood et al., in press). These are commonly used indicators of mental health in youth, with good reliability and validity (cf. Haugland & Wold, 2001). A factor analysis showed that the six items load on a single dimension with an eigenvalue of 1.94 (immigrants 1.97, majority 1.90) and a Cronbach's alpha of 0.74 (immigrants 0.73, majority 0.75). The index was expressed as a mean score ranging from 0 to 3 (i.e., the average of an individual's responses to the included items).

Externalizing problems. Externalizing problems is also an index constructed from responses to 12 questions (see Mood et al., in press)

Table 1. *Descriptive Statistics for Children of Immigrants Longitudinal Survey in Four European Countries Wave 1 Data: Unweighted Frequencies and Percentages*

	England	Germany	The Netherlands	Sweden	Total
Total <i>n</i>	4,310	5,013	4,363	5,002	18,688
Migration background (<i>n</i>)					
Majority	3,250	3,287	3,444	3,379	13,360
Generation					
1st generation	489	474	243	588	1,794
2nd generation	513	1,240	671	1,035	3,459
Missing	58	12	5	0	75
Origin region					
West European, U.S./Canada, Australia/New Zealand	34	14	16	76	140
Southern Europe	36	304	31	318	689
Eastern Europe	79	411	21	124	635
Latin America	78	17	142	64	301
Asia (other)	475	60	59	139	733
Middle East	43	824	295	669	1,831
Africa	282	94	302	233	911
Missing	33	2	53	0	88
Girls, %	49	49	51	51	50
Age, mean	15.1	15.3	15.1	14.7	15.0
<i>SD</i>	0.4	0.7	0.6	0.4	0.6
Parental education, %					
1a No education	0	3	1	3	2
1b/2b low/interm secondary	30	11	5	5	12
1c/2a low/interm secondary	0	49	18	26	24
2c general upper secondary	33	3	40	19	23
2c vocational upper secondary	0	14	21	19	14
3a/3b tertiary education	32	16	13	28	22
Missing	5	4	3	0	3
Parents' ISEI, mean	46.6	39.6	46.8	47.1	44.9
<i>SD</i>	27.2	23.7	24.0	25.3	25.2
Parental non-employment, %					
All (1 or 2) parents non-employed	12.4	11.1	8.4	8.9	10.2
Missing	2.6	3.3	0.9	1.5	2.1
Family type, %					
Two biological/adoptive parents	62	62	73	65	65
Separated parents	37	30	27	33	32
Missing	1	8	0	1	3
Stratum, %					
0% to 10%	716	715	744	767	2,942
10% to 30%	1,333	1,643	1,463	1,654	6,093
30% to 60%	986	1,189	1,341	1,378	4,894
60% to 100%	918	1,466	815	1,203	4,402
Independent schools	357	0	0	0	357
Family cohesion (0 – 3), mean	2.1	2.0	2.2	2.3	2.1
<i>SD</i>	0.6	0.6	0.5	0.5	0.6
Parental warmth (0 – 3), mean	1.9	1.9	2.0	2.2	2.0
<i>SD</i>	0.6	0.6	0.6	0.6	0.6
Parental school engagement (0 – 3), mean	2.5	2.3	2.3	2.5	2.4
<i>SD</i>	0.6	0.6	0.6	0.6	0.6

Table 1. *Continued*

	England	Germany	The Netherlands	Sweden	Total
Parental monitoring (0 – 3), mean	1.3	1.3	1.1	1.1	1.2
<i>SD</i>	0.8	0.8	0.7	0.8	0.8
Internalizing problems, mean	6.30	6.03	5.57	4.61	5.61
<i>SD</i>	3.60	3.30	3.30	3.50	3.47
Internalizing mean score, mean	1.08	1.01	0.93	0.79	0.95
<i>SD</i>	0.59	0.54	0.55	0.57	0.57
Externalizing problems, mean	7.52	5.80	5.74	5.16	6.01
<i>SD</i>	5.37	4.35	4.58	4.30	4.72
Externalizing mean score, mean	0.66	0.53	0.48	0.45	0.53
<i>SD</i>	0.46	0.39	0.38	0.37	0.41

about aggressiveness, disorderly behavior, and self-reported delinquency (cf. Achenbach, 1991), which also loaded on a single dimension (eigenvalue = 2.58 [immigrants 2.53, majority 2.62]; Cronbach's $\alpha = 0.74$, [immigrants 0.73, majority 0.75]). The index was expressed as a mean score ranging from 0 to 3. The correlation between the indices of internalizing and externalizing problems was 0.32, suggesting that they capture largely different dimensions of mental health.

Origin region. Origin region is an eight-category variable that subdivides those with immigrant background (who have no native parent) by their regional origin. Although this is a conventional way of classifying ethnic minorities, we should note that our intention was not to measure ethnicity but, rather, to identify immigrant origins that are, on average, culturally closer or more distant to the host country. We distinguished the following categories: majority, Western Europe, and other Western countries (United States, Canada, Australia, New Zealand); Southern Europe; Eastern Europe; Latin America; Middle East; other Asia; Africa. This represented an approximate ranking of distance, and we viewed the four latter non-Western, non-European groups as most distant.

Immigrant background. This trichotomous variable was based on the origin-region variable and on our results in Mood et al. (in press). Majority was the reference category and origin regions were classified into two groups: one consisting of immigrant regions where we had observed a mental health advantage (Southern Europe, Latin America, Middle East, other Asia,

and Africa) and one where we found no advantage (Western or Eastern European background, including a small group of youth with missing information about origin).

Family structure. Family structure indicated whether the child lived with two biological (or adoptive) parents. Using a more detailed measure had no impact on the effects of interest.

Family relations. Family relations were child reported and were measured by a set of indices expressed in terms of mean scores constructed from response categories coded 0 to 3 (e.g., varying between *strongly agree* to *strongly disagree*). All were centered around their mean values. We used the following indices with Cronbach's alphas given in parentheses (overall/majority/immigrant background):

Family cohesion. Items: "We like to spend free time with each other"; "We feel very close to each other"; "It becomes tense when everyone is at home"; "When we are together, the atmosphere is uneasy"; "We fight about small things" (α : .74/.76/.67).

Parental warmth. Items: "When I feel sad, my parents try to comfort me"; "My parents try to help me when I have a problem"; "My parents show me that they love me"; "My parents try to understand what I think and feel"; "My parents often tell me to be quiet"; "My parents are very strict with me, even over small things"; "My parents often criticize me" (α : .80/.80/.81).

Parental monitoring. Items: "My parents say that I must tell them everything that I do"; "My parents want to know the parents of the people I hang out with"; "I always need to tell my parents exactly where I am and what I am doing when I am not at home" (α : .65/.63/.66). We interacted

this variable with parental warmth in our models because our literature review suggested that the effect of monitoring might differ depending on how warm and supportive are the parents.

Parental school engagement. Items: "My parents show a lot of interest in my grades and in my achievement in school"; "My parents tell me that they are proud of me when I do well in school"; "My parents encourage me to work hard for school" (alpha: .73/.74/.72).

Sex and age. Sex and age (and their interaction) were used as control variables throughout to avoid the estimated health differences across groups being influenced by possible effects of sex or age composition. Age was measured in days (= date of interview – date of birth), and effects were expressed in years.

Immigrant generation. Immigrant generation divided those with immigrant background into first-generation immigrants (who immigrated themselves) and second generation (born in the host country with both parents [or a single parent] born in another country).

Parents' education. Parents' education was coded into the six-category (for England a three-category) version of the CASMIN educational schema (Müller & Shavit, 1998). To maximize reliability, we used information primarily from parents (in the case of Sweden also register information), and when no such information was available, from the student's questionnaire.

Parents' occupational status. Parents' occupational status was based on survey reports from parents and children coded in accordance with the 2008 International Standard Classification of Occupations and converted into the interval-scale international socio-economic index of occupational status (ISEI-08) (Ganzeboom, 2010). Values ranged from 11 to 89, with higher values representing higher status. The higher of the ISEI scores for parents formed the measure of family occupational status. If both parents (or the single parent) were non-employed, a value of 0 was assigned (rather than a missing code).

Parents' non-employment. Parents' non-employment was a dichotomy indicating

whether both parents (or the single parent) were not in employment at the time of the interview.

Stratum. Stratum was a four-category variable (coded as dummy variables) that adjusted for the stratified sampling design on the basis of the percentage of pupils in the school with non-Western backgrounds.

METHOD

Linear (ordinary least squares) regression was used in all multivariate analyses, and an inspection of residuals suggested that this was appropriate. Because pupils are nested within school classes, robust standard errors were estimated (clustering by school class), and we compensated for the oversampling of schools with a high density of immigrants by including stratum in all analyses. To reduce the risk of cumulative item nonresponse biasing our estimates, we used multiple imputation (STATA's multiple imputation (MI) module with chained imputations, 20 datasets) including respondents with missing information on any of the independent variables. In addition to the variables in our own models, the imputation model also included results on tests for language skills and cognitive ability because these were correlated with the risk of item nonresponse. The imputation model converged without problems, and the results were similar when using the nonimputed data, full information maximum likelihood, or alternative imputation models.

The extent to which the gap in mental health (MH) was mediated by our family variables was assessed by means of two regression models, one without the mediators and one with them. We exemplify the approach using a single variable (imm) for immigrant background (1 = yes; 0 = no):

$$MH_i = \alpha_1 + \text{imm}_i\beta_1 + X_i\beta_z + \varepsilon_{i1} \quad (1)$$

$$MH_i = \alpha_2 + \text{imm}_i\beta_2 + \text{se}_i\beta_3 + \text{co}_i\beta_4 + \text{wa}_i\beta_5 + \text{en}_i\beta_6 + \text{mo}_i\beta_7 + X_i\beta_z + \varepsilon_{i2} \quad (2)$$

In Equation 1, i indexes individuals, β_1 is the gap in mental health (to be estimated) between those of immigrant origins and others, X_i is a

shorthand for all control variables, and β_z for their respective estimated parameters. Equation 2 adds the mediators (separation [se], cohesion [co], warmth [wa], engagement [en], and monitoring [mo]), and estimates their effects β_3 to β_7 . Because Equation 2 contains variables assumed to mediate β_1 , we expected that $\beta_2 < \beta_1$, and the difference between β_2 and β_1 is the part of β_1 that is accounted for by the family variables.

To distinguish the contribution of each of the five family mediators to β_1 , we entered all mediators simultaneously in Equation 2 as a stepwise inclusion would have allowed some variables to pick up part of the effect of others when they were correlated, and we did not want to make assumptions about the internal causal order of the mediators. We then decomposed β_1 using the same logic as in path analysis (e.g., Duncan, 1966). The role of each family variable in relation to β_1 depends on two components: (a) the average difference in the value of the variable between children of immigrants and others and (b) the estimated effect of that variable on mental health. The second component was represented by the coefficient from Equation 2 (i.e., β_3 to β_7), and to obtain the first component we used estimates from a series of regressions in which we let immigrant status predict each of the mediating variables, of the following type:

$$co_i = \alpha_3 + imm_i \beta_{ico} + X_i \beta_v + \varepsilon_{i3} \quad (3)$$

They are exemplified here with the equation predicting family cohesion (co), with β_{ico} representing the estimated gap in family cohesion between immigrant families and others, X_i representing the same set of control variables as in Equations 1 and 2, and β_v their respective effects. We estimated such a regression for each mediator, producing the coefficients β_{ise} (the immigrant-majority gap in the proportion with separated parents), β_{ico} (gap in cohesion), β_{iwa} (gap in warmth), β_{ien} (gap in engagement), and β_{imo} (gap in monitoring). This gave all the components required to decompose β_1 :

$$\begin{aligned} \beta_1 = & \beta_2 + \beta_{ise}\beta_3 + \beta_{ico}\beta_4 + \beta_{iwa}\beta_5 \\ & + \beta_{ien}\beta_6 + \beta_{imo}\beta_7 \end{aligned} \quad (4)$$

With Equation 4, the gross gap β_1 was split into six parts: five mediating pathways (one for each family variable) and one remaining, non-mediated path (β_2). The statistical significance

of each mediated path was assessed using a Sobel test, here exemplified for the family cohesion path:

$$\beta_{ico}\beta_4 / \sqrt{((\beta_{ico}^2 * var(\beta_4)) + (\beta_4^2 * var(\beta_{ico})))} \quad (5)$$

setting the significance level at $p < .05$. This decomposition did not give priority to any one mediator in cases where they are internally correlated. For example, we did not interpret the correlation between family structure and family relations as a causal effect because both may be the outcome of a third variable. Although a model assessing the causal pathways between the mediators would provide a better understanding, our data did not allow such a model. Moreover, the decomposition should be in line with the way children themselves experience their situation because the family variables are contemporaneous from the perspective of the child.

RESULTS

In Table 2, we present the gaps between youth of majority (the omitted reference category) and immigrant background in internalizing and externalizing problems: Models 1a and 1b control for all variables except the family mediators, Models 2a and 2b add the mediators, and Models 3a and 3b add an interaction between parental warmth and monitoring. Recall that we specified the immigrant variable to contrast those with a health advantage with the majority, and Models 1a and 1b showed the average size of this gap across all non-Western and non-Eastern European groups, namely, 0.078 (internalizing) and 0.091 (externalizing) mean score units. These gaps are not dramatic but also not trivial, corresponding to 14% (internalizing) and 22% (externalizing) of a standard deviation. The gap for the Western and Eastern European group was small.

Moving to Models 2a/2b, the reduction of the gap for both outcomes suggested that family variables accounted for around half of the overall advantage observed for youth of non-Western and non-Eastern European background. Positive outcomes were strongly associated with family cohesion and moderately associated with parental warmth and with living with two original parents, but they were (practically) unrelated to parental school engagement. Youth whose parents monitored them more in fact tended to have more problems (although

Table 2. *Multivariate Ordinary Least Squares Regression Estimates and Robust Standard Errors for Internalizing and Externalizing Problems (Mean Score Units) in 14- and 15-Year-Olds According to Origin Region, Host Country, Immigrant Generation, and Family Variables*

	Internalizing problems			Externalizing problems		
	Model 1a	Model 2a	Model 3a	Model 1b	Model 2b	Model 3b
Origin region (ref. majority)						
Non-Western/non-Eastern Europe	-0.078*** (0.012)	-0.038*** (0.011)	-0.038*** (0.011)	-0.091*** (0.010)	-0.044*** (0.009)	-0.044*** (0.009)
Western, Eastern Europe	-0.021 (0.022)	-0.030 (0.021)	-0.029 (0.021)	0.016 (0.018)	0.014 (0.017)	0.014 (0.017)
Host country (ref. England)						
Germany	-0.068*** (0.015)	-0.076*** (0.015)	-0.078*** (0.015)	-0.158*** (0.015)	-0.167*** (0.013)	-0.167*** (0.013)
Netherlands	-0.145*** (0.015)	-0.090*** (0.014)	-0.091*** (0.014)	-0.181*** (0.014)	-0.145*** (0.012)	-0.145*** (0.012)
Sweden	-0.268*** (0.016)	-0.179*** (0.015)	-0.180*** (0.015)	-0.167*** (0.014)	-0.110*** (0.013)	-0.111*** (0.013)
First generation (ref. second)						
	0.018 (0.017)	0.013 (0.016)	0.012 (0.016)	-0.001 (0.014)	-0.008 (0.013)	-0.009 (0.013)
Family cohesion						
		-0.279*** (0.009)	-0.277*** (0.009)		-0.210*** (0.008)	-0.209*** (0.008)
Parental school engagement						
		0.013* (0.008)	0.012 (0.008)		-0.001 (0.006)	-0.002 (0.006)
Parental warmth						
		-0.107*** (0.009)	-0.105*** (0.009)		-0.072*** (0.007)	-0.072*** (0.007)
Parental monitoring						
		0.051*** (0.005)	0.051*** (0.005)		0.011*** (0.004)	0.011*** (0.004)
Warmth × Monitoring						
			-0.021** (0.008)			-0.006 (0.007)
Separated parents						
		0.064*** (0.009)	0.064*** (0.009)		0.079*** (0.007)	0.079*** (0.007)

Note. *n* = 18,370 (internalizing); *n* = 15,859 (externalizing). All models control for sex, age, sex × age, stratum, parental education, parents' ISEI, and parents' non-employment. ref = reference. Family relations variables are mean-centered.
p* < .10. *p* < .05. ****p* < .01.

the estimated effect on externalizing problems was very small). For internalizing problems, the negative association with monitoring was somewhat muted when it was combined with warmth (Model 3a), lending some support to the view that authoritative parenting is better than authoritarian for children. The fact that the family variables had similar associations with internalizing and externalizing problems supports the interpretation that both outcomes captured an underlying dimension of mental health. As for host-country differences, Table 2 shows that they were substantial, with English youth (the omitted reference category) reporting the highest level of internalizing problems and Swedish youth the lowest. English youth

also reported more externalizing problems than youth in the other countries.
In Table 3, the immigrant-background group was subdivided into seven origin-region categories. The coefficients for the family variables are not shown because they were almost identical to those presented in Table 2. Youth of African origin, and for externalizing problems also those of Asian origin, were the most advantaged. The largest gaps of 0.13 to 0.15 correspond to between one fourth and one third of a standard deviation and are about twice the size of the gaps found between youth in nuclear and separated families (Model 2a). Youth of Western and Eastern European origins did not have fewer internalizing problems and had more

Table 3. Ordinary Least Squares Regression Estimates and Robust Standard Errors for Internalizing and Externalizing Problems (Mean Score) in 14- and 15-Year-Olds by Origin Region and Immigrant Generation

	Internalizing problems			Externalizing problems		
	Model 1a	Model 2a	Model 3a	Model 1b	Model 2b	Model 3b
Origin region (ref. majority)						
Western	-0.025 (0.050)	-0.043 (0.045)	-0.043 (0.045)	0.059 (0.040)	0.047 (0.038)	0.048 (0.038)
Southern Europe	-0.077*** (0.023)	-0.018 (0.020)	-0.018 (0.020)	-0.074*** (0.019)	-0.013 (0.017)	-0.013 (0.017)
Eastern Europe	0.001 (0.025)	-0.011 (0.024)	-0.010 (0.024)	0.017 (0.022)	0.014 (0.021)	0.014 (0.021)
Latin America	-0.062* (0.032)	-0.087*** (0.031)	-0.087*** (0.031)	-0.016 (0.026)	-0.031 (0.025)	-0.031 (0.025)
Asia (other)	-0.045* (0.025)	-0.014 (0.024)	-0.014 (0.024)	-0.133*** (0.019)	-0.098*** (0.017)	-0.098*** (0.017)
Middle East	-0.062*** (0.016)	-0.010 (0.015)	-0.010 (0.015)	-0.083*** (0.014)	-0.024* (0.013)	-0.024* (0.013)
Africa	-0.150*** (0.021)	-0.113*** (0.019)	-0.113*** (0.019)	-0.112*** (0.016)	-0.062*** (0.014)	-0.062*** (0.014)
First generation (ref. second)	0.016 (0.017)	0.014 (0.016)	0.013 (0.016)	-0.001 (0.014)	-0.006 (0.013)	-0.006 (0.013)

Note. $n = 18,370$ (internalizing); $n = 15,859$ (externalizing). All models control for destination country, sex, age, sex \times age, stratum, parental education, parents' ISEI, and parents' non-employment. Model 2 adds family type and family relations (cohesion, warmth, school engagement, monitoring), and Model 3 adds warmth \times monitoring. ref = reference.

* $p < .10$. ** $p < .05$. *** $p < .01$.

externalizing problems when compared with the majority youth (although this difference was not statistically significant). Those of Latin American origin had an advantage only in terms of internalizing problems, but the other groups (Southern Europe, Asia, Middle East, Africa) were advantaged in relation to both outcomes. Overall, the advantage lay primarily with youth from more culturally and socioeconomically distant origins. Family factors largely accounted for the advantage of Southern European and Middle Eastern youth, but only partially for the advantage of youth from Asia and Africa (Table 3, Models 2a, 2b and 3a, 3b). The results for Latin American youth deviated from the others: The estimated advantage in relation to internalizing problems increased when controlling for family factors, meaning that the gap was partly suppressed when they were not accounted for.

It is beyond the scope of this article to develop and test theories about destination and origin-interaction effects, but we present host-country specific regressions in the appendix. These should be interpreted with caution because many cells have small ns (see Table 1), leading to high statistical uncertainty.

Generally, origin groups with an overall health advantage tended to have advantages in all countries, but of varying sizes. There were two exceptions to this. In England, advantages for immigrant-background youth were small or nonexistent, and for Latin American youth, the results were inconsistent across destinations. In a model with Destination \times Origin interaction terms, only one was statistically significant (the larger gap between Southern Europeans and majority in Sweden vs. Germany). Supplementary host-country specific analyses (not shown) revealed clearly smaller differences in family relations and family structure between majority and immigrant-background youth in England than in the other countries. The main effects of family variables on mental health were however similar across countries and excluding England had very little impact on the overall role of family factors.

We proceed toward a more exact understanding of the mechanisms underlying the mental health gap by establishing how family characteristics differed between immigrant and majority families. Table 4 shows regressions of family structure and family relations on

Table 4. Ordinary Least Squares Regression Estimates and Robust Standard Errors (From Several Regressions) for Family Type and Family Relations (Mean Score Units) in 14- and 15-Year-Olds According to Origin Region (n = 18,370)

Origin region (ref. majority)	Separated parents	Family cohesion	School engagement	Parental warmth	Parental monitoring
Non-Western/Non-Eastern Europe	−0.205*** (0.010)	0.140*** (0.013)	0.209*** (0.014)	0.038** (0.015)	0.266*** (0.019)
West + East Europe	−0.030 (0.019)	−0.005 (0.023)	0.040 (0.027)	−0.073*** (0.026)	0.047 (0.033)
Western	−0.047 (0.040)	−0.055 (0.053)	0.090* (0.050)	0.001 (0.051)	0.094 (0.068)
Southern Europe	−0.227*** (0.018)	0.171*** (0.024)	0.183*** (0.025)	0.086*** (0.028)	0.239*** (0.036)
East Europe	−0.050** (0.022)	−0.014 (0.027)	0.001 (0.032)	−0.106*** (0.031)	0.024 (0.038)
Latin America	0.161*** (0.029)	0.040 (0.037)	0.142*** (0.037)	−0.127*** (0.041)	0.208*** (0.052)
Asia	−0.222*** (0.019)	0.110*** (0.026)	0.051* (0.029)	−0.064** (0.029)	0.163*** (0.037)
Middle East	−0.305*** (0.012)	0.156*** (0.017)	0.262*** (0.017)	0.087*** (0.020)	0.339*** (0.024)
Africa	−0.090*** (0.019)	0.149*** (0.023)	0.284*** (0.023)	0.043* (0.025)	0.249*** (0.032)

Note. All models control for destination country, sex, age, sex × age, stratum, immigrant generation, parental education, parents' ISEL, and parental non-employment. ref = reference.
p* < .10. *p* < .05. ****p* < .01.

immigrant background and origin region, controlling for the same background variables as noted previously.

Parental separation was, as expected, less common in the groups that we found to be advantaged in terms of mental health, with the exception of Latin Americans. Youth in these groups also benefited from higher levels of family cohesion (again with the exception of Latin America), parental school engagement, and parental monitoring. Those of Southern European and Middle Eastern origin also experienced more parental warmth. In line with our expectations, the two origin groups in which no mental health advantage was observed—Western and Eastern Europe—had higher separation rates and weaker family relations than the other immigrant groups.

Decomposing the Gap Between Majority and Immigrant-Background Youth

We learned from Tables 2 and 3 that family mediators contributed to the mental health gap between majority and immigrant-background youth, and Table 4 demonstrates that family structure and relations differ between these

groups. Using this combined information, Table 5 decomposes the gaps into their constituent parts, focusing on the groups with a health advantage. The five first columns in Table 5 show, for each origin group, the absolute impact on the health gap in mean score units, which means that these five figures sum to the mediated part of the health gap for each group. For example, for youth in Southern European families, the lower rates of parental separation gave them a mean score on internalizing problems that was on average 0.016 lower than the mean score for the majority, and their higher rates of family cohesion gave them an additional advantage of 0.048, and so on, with all mediating paths summing to a total gap of 0.058, which was 76% of the total gap (0.077) observed in Table 3.

The patterns were similar for internalizing and externalizing problems. The primary mediating mechanism was the stronger cohesion of immigrant families, and their higher rates of nuclear families also contributed, whereas the fact that immigrant parents monitored their youth more contributed to more internalizing problems. Latin American youth differed from the other groups: Their high parental separation rates, low levels of family cohesion and parental

Table 5. *Decomposition of the Mental Health Advantage of Immigrants Versus Majority Into Components Mediated by Family Type and Family Relations*

	Separated parents	Family cohesion	Parental school engagement	Parental warmth	Parental monitoring	Total gap (mediated and nonmediated)	Mediated gap	Proportion mediated gap of total
Internalizing								
Immigrant background (non-Western, non-Eastern Europe)	−0.013 (0.002)	−0.039 (0.004)	0.003 (0.002)	−0.004 (0.002)	0.014 (0.002)	−0.078	−0.040	0.51
Southern Europe	−0.016 (0.002)	−0.048 (0.007)	0.003 (0.001)	−0.009 (0.003)	0.012 (0.002)	−0.077	−0.058	0.76
Latin America	0.011 (0.002)	−0.011 (0.010)	0.002 (0.001)	0.014 (0.005)	0.011 (0.003)	−0.062	0.026	−0.42
Asia	−0.015 (0.002)	−0.031 (0.007)	0.001 (0.001)	0.007 (0.003)	0.008 (0.002)	−0.045	−0.031	0.69
Middle East	−0.021 (0.003)	−0.043 (0.005)	0.004 (0.002)	−0.009 (0.002)	0.017 (0.002)	−0.062	−0.052	0.83
Africa	−0.006 (0.002)	−0.042 (0.007)	0.004 (0.002)	−0.005 (0.003)	0.012 (0.002)	−0.150	−0.038	0.25
Externalizing								
Immigrant background (non-Western, non-Eastern Europe)	−0.016 (0.002)	−0.030 (0.003)	0.000 (0.001)	−0.003 (0.001)	0.003 (0.001)	−0.091	−0.047	0.52
Southern Europe	−0.016 (0.002)	−0.038 (0.006)	0.000 (0.001)	−0.008 (0.002)	0.003 (0.001)	−0.074	−0.061	0.83
Latin America	0.012 (0.003)	−0.008 (0.008)	0.000 (0.001)	0.010 (0.003)	0.002 (0.001)	−0.016	0.015	−0.92
Asia	−0.018 (0.002)	−0.022 (0.006)	0.000 (0.000)	0.004 (0.002)	0.002 (0.001)	−0.133	−0.034	0.26
Middle East	−0.024 (0.002)	−0.033 (0.004)	0.000 (0.002)	−0.007 (0.002)	0.004 (0.001)	−0.083	−0.059	0.71
Africa	−0.009 (0.002)	−0.037 (0.005)	−0.001 (0.002)	−0.004 (0.002)	0.002 (0.001)	−0.112	−0.049	0.44

Note. Standard errors are in parentheses. Bold estimates are statistically significant ($p < .05$).

warmth, and high levels of parental monitoring meant that their expected mental health was much worse than their actual mental health. For this group, some counterbalancing factor must have compensated for their disadvantages in the family sphere, resulting in an observed health advantage.

So, how important were family mediators for the mental health advantage of youth of immigrant background? The rightmost column shows that they accounted for slightly more than 50% of the overall gap to the majority in both internalizing and externalizing problems. They were

most successful in explaining the gap for Southern European and Middle Eastern youth, but they did not account for any of (but rather suppressed) the advantage of Latin American youth. In all, family structure and relations were behind much of the health advantage we found for youth of immigrant background, but there were certainly other factors involved as well.

Robustness Analyses

We carried out a number of robustness checks, of which two deserve mentioning. First, we tested

whether the effects of family variables were heterogeneous across origin groups using a Bonferroni correction for multiple comparisons. These analyses showed no systematic tendencies, and none of the interaction effects were statistically significant. Second, we excluded all alcohol- and drug-related items from the externalizing index, which resulted in smaller advantages for youth of Asian, Middle Eastern, and African origin, meaning that their advantage was stronger in relation to the use of alcohol and drugs than to other externalizing indicators (e.g., rowdy behavior). Nevertheless, these groups continued to have clearly fewer externalizing problems than others even on this modified index, and the patterns across models were similar. Other tests also verified that the reported results were robust to alternative definitions and codings.

LIMITATIONS

Although we believe that our analyses represent a major step forward in linking family structure and relations with mental health gaps between adolescents of immigrant and majority backgrounds, our study is not without limitations. First, there is a risk of reverse causality in some of our estimates. It is possible that adolescents are not only affected by but also affect parental behavior, and previous research suggests this to be the case for externalizing problems (e.g., Goldberg & Carlson, 2014; Kerr, Stattin, & Özdemir, 2012). If children are aggressive or rowdy, this can take a toll on family cohesion and may even increase the risk for parental separation. Thus, it cannot be ruled out that the poorer mental health of majority children (irrespective of the reasons behind it) affect their family relations negatively, and that such reverse causality potentially overestimates the role of family relations in explaining the mental health advantage of immigrant children.

Second, there is a risk that the association between family relations and child outcomes to some extent reflects omitted variables, such as the respondent's degree of optimism or positive outlook. For example, someone who is pessimistic may rate both mental health and family relationships more negatively, and someone who is depressed may assess relationships in a more gloomy light; thus "optimism" could act as a confounding variable for the association between family characteristics and child mental health. If the distribution of such an omitted

variable (confounder) - and there could be several others - differs between majority children and children of immigrants, or if the effect of that variable differs between these groups, this could account for some of the group differences we report.

Furthermore, differences in mental health may to some extent reflect systematic reporting differences between youth of majority and immigrant backgrounds or across host countries (Johnson, Kulesa, Cho, & Shavitt, 2005). Our mental health measures, however, have similar scale properties for immigrant-background and majority youth and in the four host countries. Moreover, measurement invariance of internalizing and externalizing problem scales has been reported in cross-ethnic samples, thus indicating that the constructs work similarly across groups (Guttmanova, Szanyi, & Cali, 2008; Verhulp, Stevens, Van de Schoot, & Vollebergh, 2014). The validity of self-rated health has also been shown to be similar for youth from different ethnic groups (Allen, McNeely, & Orme, 2016), and a review by Paalman, Terwee, Jansma, and Jansen (2013) found high cross-cultural validity for youth self-reports (but not parent or teacher reports) of externalizing problems. Also, our indices of family relations have similar psychometric properties for youth of immigrant and majority backgrounds in all four countries, indicating that they captured the same constructs across countries and groups. We cannot, however, rule out the risk of differences across groups in how family relations were assessed or reported, as this would require validation against external (i.e., not reported by parents or youth themselves) measures of family relations—something that is probably unattainable, at least on a large scale.

CONCLUSIONS AND DISCUSSION

Although many children of immigrants face multiple problems with acculturation, poverty, and discrimination, their mental health has in several previous studies paradoxically been shown to be better than that of majority youth (e.g., Harker, 2001). We corroborated this result using new large-scale data (CILS4EU) from England, Germany, the Netherlands, and Sweden and showed that youth with non-Western origins have the largest mental health advantage (cf. Montazer & Wheaton, 2011). Our main contribution was to test the hypothesis that this

advantage could be accounted for by immigrant families possessing stress-buffering characteristics such as tight family bonds, low divorce rates, and strong parental support. Immigrant familism has primarily been studied in the United States (Almeida et al., 2009; Ghazarian et al., 2008), but our findings suggest that it also exists in Europe. We found that youth of non-Western background overall were more likely to live in nuclear families, tended to experience stronger family cohesion, and had parents who were more engaged in their schoolwork and who monitor them more closely.

Because living in a nuclear family and having strong parental relations (with the exception of monitoring) are positively associated with mental health, these family factors also, as hypothesized, mediated part of the mental health advantage of immigrant-background youth. For youth of Southern European and non-Western background taken together, half of the overall advantage in internalizing and externalizing problems could be accounted for by our measures of family structure and family relations, with family cohesion being particularly important. When youth were subdivided by origin region, however, we got a mixed picture. On one hand, family factors accounted for almost all of the health advantage among Middle Eastern and Southern European youth, and they contributed to—but did not fully explain—the larger gross advantage found among Asian and African youth. On the other hand, Latin American families went against the familism expectation by having high separation rates and relatively weak family relations. Thus, their observed health advantage must be explained by some other factors important enough to compensate for their less favorable family situation.

How can we explain the remaining mental health advantage for youth of immigrant origin once we have accounted for family structure and relations? First, a positive selection of immigrant parents (e.g., on health, ambition, or skills) may matter for their children's mental health (cf. Jasso et al., 2004). It is possible that such unobserved characteristics contributed to the reason for migration, on which we (like almost all others) unfortunately do not have data. Our analysis in Mood et al. (in press), however, showed that an immigrant mental health advantage existed both for groups that typically comprise refugees and groups that normally are dominated by labor migrants. Because parental

characteristics could affect both family relationships and children's mental health, selection may also lie behind part of the gap accounted for by our family characteristics. In line with the selection explanation, we found that both mental health gaps and immigrant-majority differences on family variables were small and unsystematic in England. The fact that immigrants to England are more positively selected on human capital than in our other countries suggests that they may be more similar to the majority population.

Second, another fruitful line of investigation would be to ask what types of social comparisons immigrant-background youth make; if they relate their current situation to their pre-migration situation or to friends and relatives in the origin country (something not covered by our data), their comparatively favorable situation may improve their mental health. Other promising avenues might be to study school characteristics or social networks, looking for supportive mechanisms typical of immigrant-dense environments, such as a sense of cultural belonging (e.g., Portes & Rumbaut, 2001). The fact that the immigrant health advantage that we observed persists across immigrant generations and time spent in the host country (Mood et al., in press) constitutes a conundrum in this regard because the effects of these alternative mechanisms are likely to wear off as immigrants and their children become integrated into host societies.

Finally, it is worth considering our results in relation to the overarching issue of the living conditions and opportunities of children of immigrants, who constitute a rapidly growing group in many Western societies. Our findings leave us with a rather optimistic picture of a group that is able to rely on strong family support and, probably in part as a result of this, has better overall mental health than the majority population. Differences in neither mental health nor family relations should be overstated, but the fact that resilience appears to be strongest among the probably most vulnerable immigrant groups (from culturally and socioeconomically distant countries) serves to counterbalance the most pessimistic accounts of immigrant adversity. Whether this will benefit youth of immigrant background later in life—in school or in the labor market, for example—is a highly relevant question for the future study of immigrant integration.

NOTE

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APPENDIX

Table A1. Multivariate Ordinary Least Squares Regression Estimates and Robust Standard Errors for Internalizing and Externalizing Problems (Mean Score Units) in 14- and 15-Year-Olds According to Origin Region by Host Country (England, Germany, the Netherlands, Sweden)

	Internalizing problems				Externalizing problems			
	England	Germany	Netherlands	Sweden	England	Germany	Netherlands	Sweden
Origin region (ref. majority)								
Western	0.011 (0.120)			−0.070 (0.060)	0.023 (0.082)			0.062 (0.054)
Southern Europe	−0.070 (0.081)	−0.024 (0.033)	−0.106 (0.093)	−0.144*** (0.033)	−0.145 (0.090)	−0.095*** (0.029)	−0.090 (0.064)	−0.054* (0.028)
Eastern Europe	0.052 (0.075)	−0.007 (0.033)		0.012 (0.054)	−0.013 (0.077)	0.013 (0.029)		−0.014 (0.046)
Latin America	−0.006 (0.078)		−0.104** (0.041)	−0.029 (0.081)	−0.021 (0.060)		−0.024 (0.033)	0.107 (0.071)
Asia (other)	0.013 (0.037)	−0.077 (0.062)	−0.178*** (0.068)	−0.056 (0.048)	−0.139*** (0.031)	−0.118** (0.052)	−0.122*** (0.043)	−0.123*** (0.032)
Middle East	0.029 (0.101)	−0.065*** (0.023)	−0.105*** (0.040)	−0.089*** (0.028)	−0.047 (0.084)	−0.083*** (0.023)	−0.104*** (0.027)	−0.075*** (0.025)
Africa	−0.059 (0.041)	−0.073 (0.055)	−0.211*** (0.036)	−0.214*** (0.044)	−0.104*** (0.033)	−0.099* (0.052)	−0.117*** (0.027)	−0.085** (0.033)
N	4,197	4,972	4,337	4,864	3,709	3,678	4,247	4,225

Note. Blank cells have $n < 30$. All models control for destination country, sex, age, sex \times age, stratum, parental education, parents’ ISEL, parental non-employment, and immigrant generation.

* $p < .10$. ** $p < .05$. *** $p < .01$.