

## Book of the Short Papers

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UNIVERSITÀ Politecnica Delle Marche

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## Comparing migrant and "native" Italian adolescents in risky behaviours

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#### Abstract

Background: Risky behaviours are detrimental to health, and their onset in adolescence is a key marker of risky behaviours in adulthood. Research on the relationship between migrant background and the use of substances has underlined the importance of the cultural environment in which teenagers grow.

Aim: This study aims to assess the correlation between adolescents' cultural background and adolescent substance use in Italy, taking into account the eventual migrant background. Methods: Data from the HBSC 2018 surveillance were used to analyse the risk behaviours. We used logistic regressions to evaluate the effect of cultural background on risky behaviours. Conclusions: This analysis highlights that migrant status plays a protective role in all three risky behaviours. The results of the maternal birthplace emphasize the cultural background differences.

Keywords: Risky behaviours, Adolescence, Migration

## 1. Introduction

At the beginning of 2021, about 5.2 million migrants regularly lived in Italy (ISTAT, 2021) and the percentage of people with a migrant background arrived at about 10% of the 60 million inhabitants (Cesareo, 2019), when considering those who were naturalized Italians and the children of mixed couples.

Due to differences in occupations and employment conditions, the wages of immigrant male and female workers are consistently lower than "native" Italian workers (Frattini & Vigezzi, 2018). Some international studies have associated lower socio-economic status with risky behaviours (Mathur et al., 2013) and with engagement in multiple risky behaviours (Kipping et al., 2015).

Risky behaviour is a term taken from psychology and it is related to the concept of risk taken, which indicates a pattern of engaging in behaviours that can harm an individual (Trimpop, 1994). Usually, these behaviours are associated with drug abuse, gambling, and high-risk sexual behaviours. Risky behaviours are detrimental to health, and their onset in adolescence is a crucial marker of risky behaviours in adulthood (D'Amico & McCarthy, 2006). People who assume one risky behaviour are more prone to develop more risky behaviours over time (DuRant et al., 1999).

In literature, the most known theory that connects risky behaviours and the migrant's background is called the immigrant paradox. First-generation immigrants are considered the least assimilated, the poorest, and the least educated. Nonetheless, according to this paradox, they have better health, conduct, and academic attainments than native-born people in the country (García Coll et al., 2013). Since adolescence is a difficult period of life, the paradox is frequently studied during this time. In this case, the idea is that newcomer children and adolescents have better health than coetaneous natives and those born in the country to

immigrant parents (Marks et al., 2014). To measure the immigrant paradox and health status, research often uses measures of health risk behaviours such as substance use or risky sexual behaviours (Bui, 2013; García Coll et al., 2013; Laghi et al., 2021).

In the U.S.A., several studies support the immigrant paradox theory (Bui, 2013; Marks et al., 2014). Other studies in Europe have found that the migrant background is a protective factor for these behaviours (Monshouwer et al., 2007), and that second generations are more at risk than the first generations (Abebe et al., 2015). No common pattern was found in a study in several European countries, that was analysing risky behaviours and migrant adolescents (Molcho et al., 2010).

Regarding substance consumption in Italy, the Global Youth Tobacco Survey has found that more than one student out of five, aged between 13 to 15 years old, is a daily smoker, and the share of girls who smoke is higher than the one of boys (EpiCentro, 2019). Considering alcohol, the last years have evidence of a shift. The traditional daily consumption of alcohol has decreased in the last years, but the occasional outside meal drinking has increased (Scafato et al., 2021). In Italy, very few studies have addressed the topic of risky behaviours and migrant adolescents. To our best knowledge, one study found that migrants were less likely to consume some substances such as pharmaceutical drugs and cannabis, but it was only for a little sample and only in North Italy (Cristini et al., 2015). In 2021, a study conducted by Laghi et al. (2021) found that alcohol consumption was lower among second-generation immigrants than native adolescents.

Based on previous studies, we develop two hypotheses: (1) First- and second-generation migrant students, particularly those from lower-income countries, are more protected from risky behaviours than other adolescents, because migrants with lower socioeconomic status were less likely to engage in risky behaviours; (2) As stated by the immigrant paradox theory, adolescents with a migrant background but born in Italy are more vulnerable to risky behaviours than those born in another country. This study aims to investigate the associations between migrant background and risky health behaviours among adolescents in Italy. We are interested in studying if the mother's cultural background affects how likely adolescents are to engage in risky behaviours, such as alcohol consumption and cigarette smoking during the last month, binge drinking in the last year.

## 2. Materials And Methods

## 2.1 Data: Description Of The Survey

For this research, we used data from the Health Behaviours in School-Age Children (HBSC) survey in Italy in 2018. The HBSC is a World Health Organization study that investigates various aspects of health in adolescence. The self-administered questionnaire is compiled by students of the first and third classes of middle school and the first class of high school (11, 13 and 15 years old).

In Italy, the survey is part of the adolescent monitory health system, the sample is constructed in order to be representative of the Italian adolescent enrolled in the school system at the time, but it is not representative of the migrant adolescent population in Italy. In the HBSC Italian survey 2018, 58,976 Italian adolescents answered the questionnaire. 404 students failed to provide clear information about their or the birthplace of their parents. Thus, 58,572 observations were analysed.

#### 2.2 Measures

The sample included 29,595 boys and 28,977 girls.

Birthplace of the mother We determined the birthplace of the mother from the question "Where is your mother born?". We chose to use the birthplace of the mother because the breadwinner model is still significantly the more common one in Italian society and mothers are responsible for raising the children (Bosoni, 2014). After, we grouped the observations into seven categories based on the country indicated or the area: Italy, Africa, Americas and Oceania, Asia, Eastern Europe, Northern-Western Europe, and Southern Europe. From this variable, we also created the variable the main religion of the maternal birthplace. We obtained it using data from the World Population Review site that combines several sources (*Religion by Country 2022*, 2022). We created three main categories: "Christians", "Muslims", and "Others". The migrant status variable was constructed using the questions: "Where were you born?" and "Where was your mother/father born?". We divided the answer into three categories: "At least one parent born in Italy" as "native" Italian, "First-generation migrant" when both the parents and the child were born outside of Italy,

and "Second-generation migrant" when both the parents were born abroad but the child was born in Italy. In the sample, 48,178 observations had both parents Italian, 3,293 the parents and the child were born abroad, and 1,890 students had both parents born outside of Italy, but the child was born in Italy.

For the risky behaviours, We used three variables: one for smoking cigarettes in the previous month, one for drinking alcohol daily in the last month and one for binge drinking in the last year. For smoking cigarettes, we used the question: "How many days have you smoked at least one cigarette in the last month?". For alcohol consumption in the last month, we considered the question: "How many days have you drank alcohol in the last month?". For binge drinking, we used the variable: "Think about the last 12 months: have ever occurred to you to consume 5 or more on one occasion?". We dichotomized these variables due to the low frequencies of some of those categories. The answers considered in this study were: "No, I did not" and "Yes, I did at least one time". We included in the analysis also some control variables such as socio-economic status, perceived family support and the dialogue with the parents. The socio-economic status is assessed through the Family Affluence Scale (FAS III) indicator since children are not reliable about the information on their parents' education level. For risky behaviours, it is also important to consider the family environment that adolescents live in. We considered the Perceived Social Support measured with the Multidimensional Scale of Perceived Social Support (MSPSS) indicator for the family. We also included the variables that measured the dialogue with the parents.

## 2.3 Methods

For the analysis, we constructed logistic regressions with the three risk behaviours as dependent variables using Stata 17.

For the statistical models, we utilised a bottom-up strategy, employing just the basic demographic data in the first model (sex and age), and adding all the variables that reflect the background of the immigrant between the second and fourth models (migrant status, mother's place of origin, and dominant religion). In the last three models, we add one at a time the socio-economic indicator, the perceived family support and the dialogue with the parents. Due to lack of space, we present in Table 2 only the final models.

## 3. Results

		Smoking	Alcohol	
		cigarettes	consumption	Binge drinking
		(n. 55033)	(n.54757)	(n. 55105)
Gender (Ref. Male)	Female	1.2*** [1.1,1.2]	0.6*** [0.6,0.6]	0.6*** [0.6,0.7]
Age	11 years old	0.1*** [0.1,0.2]	0.3*** [0.3,0.3]	0.4*** [0.4,0.5]
(Ref. 13 years old)	15 years old	4.6*** [4.4,4.9]	3.8*** [3.6,3.9]	3.5*** [3.3,3.7]
Migration status (Ref. Native Italian)	1 generation migrant	0.8* [0.6,0.9]	0.8** [0.6,0.9]	0.9 [0.7,1.0]
	2 generation migrant	0.8* [0.6,1.0]	0.7*** [0.6,0.9]	0.8* [0.7,1.0]
	Africa	0.8 [0.6,1.2]	0.3*** [0.2,0.4]	0.7** [0.5,0.9]
	Americas and Oceania	1.3** [1.1,1.6]	0.8* [0.7,1.0]	1.2 [1.0,1.4]
Birthplace of the	Asia	0.7 [0.5,1.1]	0.4*** [0.3,0.6]	0.8 [0.6,1.1]
mother (Ref. Italy)	Eastern Europe	1.2 [1.0,1.4]	1.0 [0.8,1.1]	1.2* [1.0,1.4]
(Ref. huly)	Northern-Western			
	Europe	1.1 [0.9,1.3]	1.1 [0.9,1.2]	1.1 [0.9,1.2]
	Southern Europe	1.3 [0.9,1.7]	1.0 [0.8,1.3]	1.4** [1.1,1.8]
The main religion in the birthplace of the mother	Muslims	0.8 [0.6,1.1]	0.9 [0.7,1.2]	0.8* [0.6,1.0]
(Ref. Christians)	Others	0.5* [0.3,0.9]	1.2 [0.8,1.8]	1.0 [0.7,1.5]
FAS3 (Ref. Low)	Medium High	1.0 [0.9,1.1] 1.2*** [1.1,1.3]	1.2*** [1.1,1.2] 1.4*** [1.3,1.5]	1.0 [1.0,1.1] 1.3*** [1.2,1.4]

Table 2. Odds Ratio for logistic regressions (smoking cigarettes in the last month, alcohol consumption in the last month, and binge drinking in the last year)

Perceived Social	Medium	0.6*** [0.5,0.7]	0.8*** [0.7,0.8]	
Support (Ref. Low)	High	0.3*** [0.3,0.4]	0.5*** [0.5,0.6]	
Dialogue with the parents (Ref. Low)	Medium Low	0.9* [0.8,1.0]	1.1 [0.9,1.2]	1.0 [0.9,1.1]
	Medium High	0.7*** [0.7,0.8]	0.9* [0.8,1.0]	0.8** [0.8,0.9]
	High	0.7*** [0.6,0.8]	0.7*** [0.7,0.8]	0.8** [0.8,0.9]
*050/				

\*95% confidence intervals in brackets; \* p<0.05; \*\* p<0.01; \*\*\* p<0.001

The main results indicate that the levels of the first and the second generation are always less likely to practice those behaviours with respect to those with at least one Italian parent. (The only exceptions are the models for binge drinking where the first generation is not significant after the introduction of the main religion in the birthplace of the mother). Looking at the Birthplace of the mother: the area Africa is a protective factor for both alcohol-related risky behaviours than those with a mother born in Italy. For the alcohol consumption model also, Asia is less at risk. Instead, Sothern and Eastern Europe are more at risk of binge drinking.

The main religion in the country of the mother underlines less risk for Muslims to binge drinking, and Other beliefs to smoking cigarettes than the base level Christians.

Overall, the three models show that some variables consistently influenced the different risky behaviours in the same way. The age of the adolescents indicates always less risk for the 11 years old category and always an increased risk for the 15 years old. Medium and high levels of family perceived support and the possibility to talk with your parents are always protective factors for low levels.

Another interesting finding is that females have a higher risk of smoking cigarettes than males, but a lower risk for the two behaviours related to drinking alcohol.

For FAS III, the indicator of socio-economic status, a high level represents a risk factor for smoking cigarettes and binge drinking, while the medium and high levels in the models for drinking alcohol in the last month are protective factors.

## 4. Discussion And Conclusions

This study concentrates on adolescence and investigates the correlation between risky behaviours and cultural background. Specifically, we focused on the migrant status, the origin country of one of the parents, and the dominant religion in the birthplace of the mother. The central finding of this research is the protective role of the migrant status in all three risky behaviours with respect to "native" Italians. However, this protective role becomes not significant for first-generation migrants in binge drinking when some other variables are inserted: the maternal birthplace and the main religion in it.

The results of our study are partially coherent with the immigrant paradox theory. As the paradox states, the first-generation migrants are less at risk than "native" Italians, but contrary to the hypothesis, the first generation does not show fewer risk behaviours than the second. This was also observed in the article of Laghi and colleagues in 2021, who found that the second generation is less at risk of alcohol consumption than "native" Italians.

To our knowledge, the only studies about risky behaviours in adolescents in Italy are the study by Laghi (2021), which focuses on alcohol abuse, and earlier research on cannabis and drug consumption from Cristini (2015). This is the first study that underlines migrant background as a protective factor for both smoking cigarettes and drinking alcohol in the previous month. Also, both those studies did not take into consideration the cultural aspect of the country of origin of the adolescent.

The models presented here include a variable about religion, in specific, the main religion of the birthplace of the mother. Considering Christians as the base level, the level Other Believes is significant for the model of smoking. Instead, the Muslim category is a protective factor for the model of binge drinking in the last year and this could be explained by the fact that, due to a religious precept, Muslims are not allowed to consume alcohol. However, the dominant religion in the maternal country was not significant for the model of alcohol consumption in the previous month.

Another interesting outcome is not only finding which maternal birthplaces indicated protective factors, but also which areas were more at risk with respect to those with the mother born in Italy. This is particularly evident in the binge drinking outcome, where Southern and Eastern Europe were more at risk.

The presence in the models of both the migrant status and the maternal birthplace creates some

mismatches. Those who had a mother born in Italy, but not the father, were considered Italian in both the variables, while who had a father born in Italy, but a mother born abroad, were considered for the migrant status "Italian" and for the birthplace of the mother, of the area where the mother was born. It was not possible to include both the birthplace of parents in the analysis because of the high correlation, and also introducing another indicator for the birthplace of the father would have created high collinearity. At the same time, to delete the observations with an Italian-born mother and a foreign father would have meant dropping some information.

This study has some limitations related to the data availability and study design. Data were not representative of a sample of migrant adolescents in Italy, but of all the adolescents that were enrolled in the Italian school system at the time of the survey. Regarding the information, the survey does not provide information on the religion of the adolescent or their parents. Instead, we used the main religion of the mother's country of birth as a proxy. However, this was not the only option available. For instance, the data from the World Value Survey also take into account, not only the religion in the country but also the values of a nation and how important the population finds them.

Considering the analytical decisions we made, we only used the response variables in their binary distribution. In this way, we lost the daily frequency that the survey provides. Additionally, we utilised the logistic regression approach, which does not allow for the simultaneous analysis of all response variables.

In the future development of this study, we plan to research a more complete statistical method that can include the independent variables but also addresses the correlation between the dependent variables. Also, we could explore more appropriate data for values transmitted by the origin culture.

In conclusion, the results of this study indicate that the first and the second generation of immigrant adolescents are more protected from risky behaviours with respect to "native" Italians. Moreover, some origin places influence the propensity to alcohol consumption and smoking cigarettes. This highlights the importance of the cultural background of the family.

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