

## REGISTERED REPORT

# Efficacy of a cultural adaptation of the *Identity Project* intervention among adolescents attending multiethnic classrooms in Italy: A randomized controlled trial

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## Abstract

This registered report evaluated the efficacy of an Italian adaptation of the *Identity Project*, a school-based intervention promoting adolescents' cultural identity. Migration background and environmental sensitivity were explored as moderators. After adapting and piloting the intervention, a randomized controlled trial was conducted between October 2021 and January 2022 on 747 ethnically diverse adolescents ( $M_{\text{age}} = 15$  years, 53% girls, 31% with migration background) attending 45 classrooms randomly assigned to the intervention or control condition. Bayesian analyses confirmed the efficacy of the Italian IP in enhancing exploration processes (Cohen's  $d = .18$ ), whereas no cascading effect on resolution emerged. Youth with higher (vs. lower) levels of environmental sensitivity benefited more in terms of exploration. Implications for developmental theory and practice are discussed.

The successful adaptation and integration of immigrant and ethnic minority youth is a key challenge that has become increasingly relevant not only in societies with a long history of migration and multiculturalism (e.g., US or Canada), but also in the European context due to globalization and other major sociopolitical events, including the so-called “refugee crisis” (Silove et al., 2017). This is particularly true in recent receiving countries like Italy, where immigration is still perceived as a new and potentially threatening phenomenon by the local population. Politicians and the media often amplify these negative sentiments, contributing to the perpetuation of stereotypes and prejudice through the use of a narrative emphasizing fear and societal insecurity (Rubaltelli

et al., 2020). In addition, the COVID-19 outbreak has further intensified socioeconomic disparities and discriminatory acts against members of ethnic minorities and immigrants (Cheah et al., 2020).

Given the growing social polarization and persistent interethnic tensions, understanding one's own cultural identity (a term often used in the European literature, reflecting different histories and experiences regarding immigrant and ethnic minority populations; see Juang et al., 2020) and learning how to approach cultural diversity have become even more pressing tasks that both ethnic majority and minority youth need to face on their way to adulthood (Schwarzenthal et al., 2017). Achieving a stable ethnic identity and intercultural competence are

**Abbreviations:** AES, Aesthetic Sensitivity; CFA, Confirmatory Factor Analysis; CFI, comparative fit index; EIS, Ethnic Identity Scale; EOE, Ease of Excitation; ERI, ethnic-racial identity; FAS, Family Affluence Scale; HSCS, Highly Sensitive Child Scale; IP, *Identity Project*; LST, Low Sensory Threshold; RMSEA, root mean square error of approximation; SES, socioeconomic status; SRMR, standardized root mean square residual; TLI, Tucker Lewis index.

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two interrelated processes that are pivotal for adolescents' well-being (see Rivas-Drake et al., 2014) and represent a step toward building more inclusive multiethnic societies. Yet, despite international calls to promote tolerance and respect for diversity among youth and the recognized importance of ethnocultural identity formation in the scientific field, evidence-based interventions that provide effective tools and protected spaces for adolescents to address such topics are still scarce, especially in the European context.

The *Identity Project* (IP) is a school-based intervention in which, through the stimulation of identity exploration processes, all students are involved in a series of activities that aim to foster sense of belonging, acceptance of cultural diversity, and quality of interethnic relationships (Umaña-Taylor & Douglass, 2017). The intervention was designed and successfully tested in the US (Sladek, Umaña-Taylor, Wantchekon, et al., 2021; Umaña-Taylor, Douglass, et al., 2018; Umaña-Taylor, Kornienko, et al., 2018), and a first study in the European context has been recently carried out in Germany (Juang et al., 2020), yielding promising results. However, as stated by the authors, the small sample size decreased the power to detect effects (see Juang et al., 2020). Thus, more research is needed to test the efficacy of the IP in other countries outside the US with different histories and patterns of immigration. For example, compared to the US and Germany, Italian society differs greatly in terms of multicultural policies, ethnic composition, and intergroup dynamics between ethnic majority and minority members (Musso et al., 2018). In addition, the identification of specific subgroups of adolescents for whom the intervention might be most (or least) effective merits further investigation.

This registered report aimed to test the efficacy of a culturally adapted version of the IP in Italy, a country that is one of the main entries into Europe for immigrants and refugees. Replication of efficacy studies in new sociocultural contexts is essential to ensure external validity and generalizability of evidence-based interventions, while adaptation responds to a professed lack of cultural sensitivity when implementing programs with different target groups (Beilmann et al., 2018). Furthermore, given that the efficacy of interventions might be underestimated when it is hidden in individual-by-environment interactions (Bakermans-Kranenburg & Van IJzendoorn, 2015), we explored whether migration background and sensitivity to environmental influences (defined as the ability to register, process, and respond to stimuli; Pluess, 2015) moderated adolescents' response to the intervention.

## The IP intervention: in pursuit of ethnic-racial identity

The pursuit of identity is a core developmental task: even though identity continues to evolve throughout the lifespan, its formation is emphasized in adolescence by the

advances in cognitive maturity (e.g., abstract thinking, introspection) and the possibility of exploring new options and different potential “selves” (Erikson, 1968). During adolescence, individuals gain more independence from parents and autonomy in decision making, are allowed to engage more freely with external environments, and are increasingly oriented toward interactions with peers. Erikson referred to this phase as the “identity versus role confusion” stage, noting that a failure in resolving one's identity could lead to negative consequences, such as limiting the ability to develop close relationships with others, or difficulties in defining one's values, goals, and future plans.

An important component of identity is ethnic-racial identity (ERI), which refers to a sense of belonging to, and identification with, one's ethnic group (Phinney, 1989). Similar to global identity, the process of ERI formation is critical in the teen years for ethnic minority and immigrant youth as well as for majority youth (Musso et al., 2018; Rivas-Drake et al., 2014). In particular, among ethnic minority adolescents, exploration of one's own ERI is associated with fewer depressive symptoms and greater self-esteem, and both exploration and resolution are related to higher levels of academic engagement and achievement (Rivas-Drake et al., 2014). Furthermore, increased exploration was found to be linked to greater intercultural competence among the German majority youth (Schwarzental et al., 2017). Finally, in both minority and majority youth, ERI resolution was linked to an increase in global identity cohesion, academic grades and self-esteem, and a decrease in depressive symptoms (Umaña-Taylor, Kornienko, et al., 2018).

The IP program was specifically designed to help adolescents achieve the developmental competence of ERI formation and promote a classroom climate of tolerance and respect for diversity (Umaña-Taylor & Douglass, 2017). The conceptual model of the IP intervention draws on developmental theory postulating that a clear sense of one's own identity (i.e., resolution) results from an extensive process of search, observation, and consideration of that identity (i.e., exploration). This process ultimately allows individuals to experience a “whole” and “complete” inner identity in which they integrate a sense of who they were, who they are, and who they can become (Erikson, 1968; Marcia, 1980). Furthermore, the intervention is based on the idea that ERI is an essential competence for youth from any cultural background and that the strategies used by adolescents to explore their heritage identity are common across cultural groups, even if the content of the exploration itself may differ (Umaña-Taylor, Kornienko, et al., 2018). Thus, individual identity formation can also be promoted in a collective, multicultural context such as school, which holds a central role in immigrant youths' acculturation process (Schachner et al., 2016).

The IP intervention comprises 8 weekly sessions involving developmentally appropriate activities that take

place in the classroom setting. The sessions are designed to stimulate ERI exploration and resolution processes and are conceived to be relevant and accessible to all students, regardless of their family constellations and ethnic composition of the classroom. For example, when the family topic is addressed, participants are encouraged to adopt a broad and comprehensive perspective to make them reflect on how many meaningful individuals can influence their own cultural identity and to avoid creating discomfort among youth whose family constellations include people who are not their biological relatives. Moreover, because classrooms often have a multifaceted ethnic composition, activities refer to as many cultures of origin as possible and always show examples that students without a migration background can also relate to.

Throughout the different sessions, students are provided opportunities to examine their cultural heritage and traditions (e.g., by taking and sharing photos of meaningful cultural symbols and interviewing members of their ethnic community), learn about others' background during moments of collective discussions, and gain awareness about the country's history of migration by discovering stories of past and present discrimination based on real-life events. By engaging in active reflections and debates with facilitators and classmates, students are guided to overcome stereotypes and misconceptions about ERI and to understand that each of them is allowed to find their unique way of experiencing this part of their identity (Umaña-Taylor, Douglass, et al., 2018).

In terms of efficacy, a small-scale randomized control trial conducted in the US evidenced that the IP intervention started a ripple effect, leading adolescents to explore and thus gain a clearer sense of their ethnic identity which, in turn, was linked to a greater global identity cohesion as well as to psychological and academic benefits (see Umaña-Taylor, Kornienko, et al., 2018). A recent study testing the German adaptation of the IP showed that students in the intervention group reported more unequal treatment in school due to ethnic differences, but they were also more resilient in the face of societal inequalities than their peers in the control group (Juang et al., 2020). Albeit promising, these results warrant further scrutiny to determine the efficacy of the IP in other sociocultural contexts (Beelmann et al., 2018). Here, we propose to replicate a culturally adapted version of the IP intervention in a sample of adolescents attending multiethnic classrooms in Italy. In doing so, we followed recommended guidelines concerning study preregistration and open science (see Nosek et al., 2018; Syed & Donnellan, 2020) to increase transparency, avoid questionable research practices (e.g., insufficient statistical power, *p*-hacking, hypothesizing after results are known), and ultimately increase reproducibility.

A relevant issue in intervention research concerns the extent to which efficacy may vary as a function of specific individual or contextual characteristics. Based

on separate lines of research highlighting the impact of migration background and trait-like environmental sensitivity on intervention efficacy in the realm of other school-based prevention/intervention programs for adolescents (see Nocentini et al., 2018; Pluess & Boniwell, 2015; Sladek, Umaña-Taylor, Wantchekon, et al., 2021), in this study we explored the role of these variables as candidate moderators, as discussed next.

### Migration background and environmental sensitivity as moderators

In the original IP, the authors considered ethnic group membership as a relevant variable possibly influencing intervention efficacy in light of their multiethnic sample. Indeed, Sladek, Umaña-Taylor, Wantchekon, et al. (2021) found that ethnic minority youth reported greater levels of identity resolution from pre- to posttest, whereas their majority counterparts showed higher increases in this variable over a 1-year follow-up period. This result is attributable to the higher salience of ERI-related issues for ethnic minority adolescents due to their involvement in acculturation processes and the need to accommodate between heritage and mainstream culture values (Rivas-Drake et al., 2014; Schachner et al., 2018). However, several differences exist between the majority/minority distinction within the US context and what is considered to be an “immigrant” or a person with a migration background in Europe. For example, in the former case, ethnic minorities are grouped into a few major racial categories (e.g., Hispanic or Latinxs, African Americans, Asian Americans) that represent a sizable part of the social fabric, whereas immigration in Europe is a rather heterogeneous and relatively recent phenomenon in many countries due to its rapid increase only in the past 50 years. In addition, whilst immigrants in the US tend to become part of the majority group or extant minority groups over the course of two or three generations, in European countries individuals of immigrant descent keep being referred to as “immigrants” long after having settled into host societies, also due to differences in citizenship attribution (Motti-Stefanidi & Masten, 2013). Thus, in the European context, migration background might play a different role in relation to identity processes compared to ethnic majority or minority status in the US.

Beyond group-based characteristics, theoretical and empirical evidence also suggests that temperamentally-based traits can influence individuals' responses to treatment (Bakermans-Kranenburg & Van IJzendoorn, 2015; de Villiers et al., 2018). Among these, environmental sensitivity has gained particular attention in recent years due to its importance for adaptation and mental health (Lionetti, Pastore, et al., 2019). Environmental sensitivity is defined as the fundamental “ability to register, process, and respond to external factors” (Pluess, 2015,

p. 138). Although such ability is critical for all human beings to adapt successfully to their social and physical environment, people substantially differ in their levels of sensitivity, with some being more affected by contextual conditions than others (Aron et al., 2012). Building on previous theoretical models concerning person-environment interactions and their role in adjustment quality (Aron et al., 2012; Belsky & Pluess, 2009; Boyce & Ellis, 2005), Pluess (2015) proposed a meta-framework to capture theories of individual-environment interaction under the same umbrella and defined environmental sensitivity as an inherited trait responsible for individual differences in response to stimuli. This trait has been shown to increase vulnerability when people are faced with negative events (in line with the diathesis-stress model), but it also renders individuals highly susceptible to positive environments, as postulated by the “vantage sensitivity” proposition.

In line with this meta-framework, a number of studies confirmed the moderating role of environmental sensitivity in a variety of contexts. For instance, Lionetti, Aron, et al. (2019) found that children with high levels of behaviorally observed sensitivity were more affected by the influence of a negative parenting style in relation to emotional-behavioral problems, but they also showed greater social competence in the presence of good parenting quality than low sensitive children. Similarly, Scrimin et al. (2018) reported that highly sensitive children were more vulnerable to the negative effects of a stressful environment, but they also benefited more from a supportive family environment than their low-sensitive counterparts. Of importance, intervention studies where the environmental variable was manipulated revealed that highly sensitive adolescents had greater advantage from being exposed to positive environmental conditions compared to less sensitive ones (Nocentini et al., 2018; Pluess & Boniwell, 2015). Given that the IP aims to create a safe context where students receive positive feedback and support in their identity formation process, and consistent with the vantage sensitivity proposition, it is possible that the intervention might be more effective for high (vs. low) sensitive participants.

## Italian sociocultural background

In comparison to both Germany and the US, Italy can be considered a recently receiving society that rapidly changed from a country of emigration into one of immigration starting from the 1990s. Although Italy is becoming increasingly multicultural, immigration policies still reflect an “emergency” approach rather than a structured, long-term, integration-oriented view. This is also mirrored in the scarce resources allocated by the national government to enhance teachers' preparedness in the management of multicultural issues. However, the Italian school system distinguishes itself from other countries, including Germany, as it adopts a universalist

and inclusive approach involving the absence of early school tracking, the integration of migrant children into mainstream classes from the beginning of their schooling, and the possibility to attend Italian language classes during school hours or after-school programs (European Commission/EACEA/Eurydice, 2019).

Another important difference concerns the ethnic composition of the population of immigrant descent in the country, which counts approximately 5 million legally residing citizens (9% of the total population) and includes over 200 different nationalities, with the main countries of origin being Romania (23%), Albania (8%), Morocco (8%), China (6%), and Ukraine (4%; ISTAT, 2020). Overall, the main reason for immigration is related to better employment opportunities. People from former Communist (e.g., Albania, Romania, Ukraine) and North African countries (e.g., Morocco, Egypt, Tunisia) tend to choose Italy as their destination due to geographical and/or cultural proximity, whereas individuals from farther nations are attracted by the possibility of being employed in seasonal jobs (e.g., Bangladesh, Pakistan) or launching new business activities (e.g., China). Therefore, immigrant communities in Italy cannot be compared to long-standing ethnic minorities such as the Turkish community in Germany or minoritized groups in the US (e.g., Latinxs, African Americans).

At the societal level, Italy exhibits moderately supportive policies toward multiculturalism as indexed by the Migrant Integration Policy Index (Solano & Huddleston, 2020) and the Multiculturalism Policy Index (Queen's University, 2022). However, according to the Eurobarometer (European Commission, 2018), almost half of the Italian respondents (46%) consider immigrants as having a negative impact on society, and only 21% have a totally positive perception, whereas in Germany 27% of respondents report a negative perception and 44% a completely positive perception. These differences reflect an overall ambivalent attitude toward immigrants in Italy, with the media often perpetuating negative stereotypes and spreading narratives of migration associated with illegality and crime (Rubaltelli et al., 2020).

## The present study

Considering the scarcity of empirically-based interventions designed to promote ERI development and psychosocial adjustment among youths from diverse ethnocultural backgrounds in the European context, the purpose of the present study was to evaluate the efficacy of a culturally adapted version of the IP intervention in a sample of multiethnic adolescents in Italy. Specifically, we aimed to replicate Umaña-Taylor, Douglass, et al.'s (2018) process model postulating that the intervention would result in an increase in cultural identity exploration which, in turn, would be linked to higher levels of resolution at follow-up. In intervention research, replication is particularly important to evaluate whether the intervention

meets the challenges associated with cultural adaptation and implementation in a different context, including the use of materials in another educational setting, participant engagement, or the adjustment of organizational structures (Huising et al., 2020). In addition, we explored the possible role of migration background and environmental sensitivity in moderating intervention efficacy.

Building on previous research related to the IP intervention, the following preregistered hypotheses (<https://osf.io/kd2gb>) were tested:

(H1) Adolescents in the intervention group will show an increase in cultural identity exploration from pretest (T0) to posttest (T1) as compared to their peers in the control group.

(H2) In the intervention (vs. control) group, increases in cultural identity exploration from pre- (T0) to posttest (T1) will be linked to increases in resolution at follow-up (T2).

These hypotheses were formalized in terms of plausible effect sizes that are further described in Appendix A1 (see also Figure 1).

In addition to these hypotheses, and in light of emerging evidence suggesting that personal characteristics might play a role in how adolescents respond to school-based interventions, our study also explored whether participants with a migration background and those with higher levels of trait-like sensitivity benefited more (or less) from the intervention than their nonmigrant, low-sensitive counterparts.

## METHOD

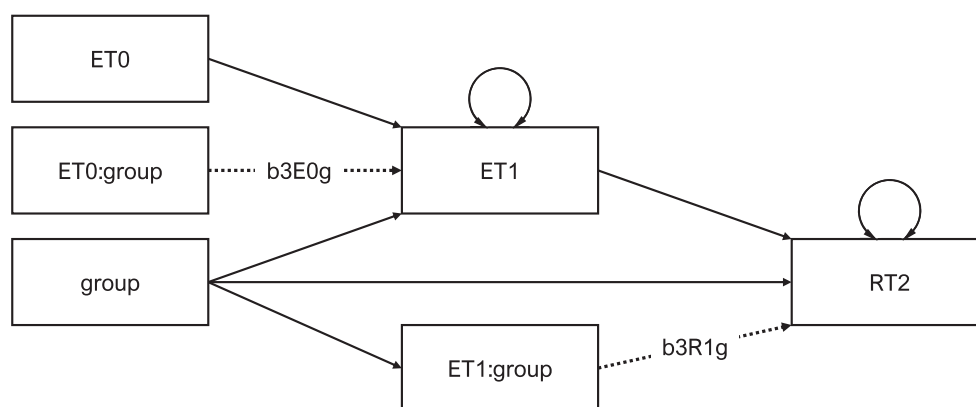
### Cultural adaptation of the IP intervention to the Italian context

The IP contents and activities were adapted to the Italian sociocultural context based on international guidelines concerning the adaptation of evidence-based

interventions (Barrera et al., 2013). Specifically, we followed five steps: (1) information gathering, (2) preliminary adaptation design, (3) preliminary adaptation test, (4) adaptation refinement, and (5) cultural adaptation trial. Due to space limitations, Steps 1–4 are described in Appendix A2, whereas Step 5 (main study) is the focus of the current paper. Here, we will briefly describe the main outcomes of the preliminary adaptation design and subsequent refinement which informed the large-scale implementation of the Italian IP.

In relation to the intervention protocol, the major changes concerned a conceptual and terminological shift from “race”, “ethnicity”, and “ERI” to the terms “culture” and “cultural identity.” Following the German adaptation (Juang et al., 2020), this modification was deemed necessary to address the taboo surrounding the concept of race that is still present in European countries due to the racially motivated atrocities committed during World War II. Moreover, we adapted the IP contents to be more accessible for an Italian audience by including facts from the country's history and personal episodes experienced by individuals with an Italian background.

As regards feasibility and acceptability, qualitative feedback gathered from teachers and students through focus groups confirmed the cultural salience of activities, students' appreciation of the interactive approach adopted by facilitators, and a good participation rate, whereas some concerns were raised in relation to the length of survey assessments and insufficient time for reflections (see Cecon et al., 2023). Our target measures reported good psychometric properties, with the exception of one subscale of the questionnaire measuring cultural identity (see Measures section). Based on these findings, we further refined our adaptation of the IP (i.e., emphasis on participatory and practical tasks; creation of additional activity about language and multilingualism; shortening of assessment protocol; more time for group discussions; use of long instead of a short version of cultural identity measure).



**FIGURE 1** Target model. ET0=exploration at T0; ET1=exploration at T1; RT2=resolution at T2; b=standardized beta. Group coded as 1=intervention, 0=waitlist control. Intercepts are omitted for clarity. Dotted arrows represent parameters considered in power analysis.

## Main study

### Design

We used Bayesian power analysis to determine our sample size, selecting relevant parameters and evaluating a multivariate multilevel linear model to test our main hypotheses (see Figure 1). A detailed explanation of the sampling plan is provided in Appendix A1.

The study was designed as a randomized controlled trial at the classroom level. Participants from classrooms in the intervention group received the 8-week IP intervention, whereas their peers from classrooms in the control group were put on a waitlist prior to receiving the intervention. The variables of interest were measured 1 week prior to the intervention (T0, pretest), 9 weeks after baseline (T1, posttest), and 13 weeks after baseline (T2, follow-up). Adolescents in the waitlist control group received the intervention beginning 2 weeks after the T2 follow-up data collection, i.e., 15 weeks after baseline. This means that classrooms in the control group started the intervention 7 weeks after the classrooms in the experimental condition had completed the intervention. This design was in line with international recommendations to include at least one follow-up at an appropriate time interval beyond the end of the intervention, especially for outcomes that may weaken or decline over time (Flay et al., 2005). The efficacy of the IP intervention was compared relative to the waiting list control condition. Classrooms were randomly distributed between the IP intervention and the control sample 1 week before pretest due to organizational constraints, but neither students nor teachers were informed about the group their classroom had been assigned to at the time of baseline assessment to prevent contamination effects. The randomization procedure was implemented using computer-generated randomization sequences.

### Participants and procedure

Participants were recruited in public upper secondary schools in northeastern Italy, specifically in the Veneto region, a geographical area that hosts a large proportion of legally residing citizens of immigrant descent in the country (ISTAT, 2020). According to regional statistics, in most high schools (65%) the percentage of students from immigrant families ranges from 0% to 15%; in 25% of the schools between 15% and 30%; in 5% between 30% and 40%; in the remaining 5%, students with a migration background account for over 40% of the total student population (MIUR, 2020). Over 200 different nationalities are represented, although more than half of these students originate from Eastern Europe (e.g., Romania, Albania), North Africa (e.g., Morocco), and Asia (e.g., China, India).

The Italian school system is structured into primary education, lower secondary education, and upper secondary education (14–18 years of age, corresponding to 9th–13th grade). Upper secondary schools can be private or public and are divided into academic schools, fine arts schools, technical, and vocational schools, with no specific requirements in terms of academic achievement that need to be met to attend a specific type of school. However, youth from immigrant families tend to be overrepresented in public technical and vocational schools due to several contextual factors (e.g., preference for work-oriented schools to contribute to family income). Therefore, we approached these types of schools to ensure that at least 20%–25% of our sample was composed of adolescents of immigrant descent. Following the original study, we focused on middle adolescence as this particular age is considered to be most receptive and sensitive to identity-related issues (Umaña-Taylor, Douglass, et al., 2018).

All procedures were approved by the Ethic Committee of the School of Psychology at the University of Padova (protocol n. 3871). After establishing informal contacts with schools, we proceeded to obtain approval from relevant authorities (i.e., school principals, teachers) and written informed consent from parents. To achieve our planned sample size (i.e.,  $N=600$ ), and based on national regulations indicating that classroom composition in upper secondary school entails between 20 and 30 students per classroom (MIUR, 2020), we asked 1037 students from 45 classrooms in 6 different public upper secondary schools located in urban areas to volunteer for the study. One teacher served as a contact person for each school, organizing the intervention schedule to fit in with preexisting activities. Participants were eligible if they (1) attended 10th grade during the period of data collection; (2) had sufficient knowledge of the Italian language; (3) had no certified intellectual disability or neurodevelopmental disorder. To avoid generating feelings of social exclusion, students who did not meet the second ( $n=6$ ) or third ( $n=6$ ) criterion were excluded from survey assessments, but they were invited to participate in the IP sessions and were further assisted by a facilitator/support teacher and, for non-Italian speakers, they were provided materials translated in their respective mother tongues. Of the eligible participants, 68 did not return parental consent, resulting in a participation rate of 92%.

Thus, the final sample comprised 957 10th graders ( $M_{\text{age}}=15.12$ ,  $SD=0.68$ ; 52% self-identifying as girls). One percent of parents had received no education, 2% had completed primary school, 22% had completed lower secondary school, 47% had completed upper secondary school, 25% attended university, and 3% were missing or preferred not to answer/did not know. With regard to socioeconomic status (SES), the average score

on the Family Affluence Scale (FAS; see Measures section) was 6.35 (SD=1.76, range=0–9). Overall, 32% of the participants had a migration background (born abroad or in Italy from at least one parent born abroad); among these, 72% were born in Italy. Students reported 55 different countries of origin, the main ones being Romania, Morocco, Moldova, Albania, and Tunisia.

The IP intervention involved 8 weekly sessions of 55 min each that were delivered between October and December 2021 by the first author together with a team of extensively trained and thoroughly supervised psychology graduate students. The facilitators worked in pairs, taking turns in conducting the activities. In particular, the second facilitator ensured that all planned key goals, activities, and topics were covered, addressed any potentially missing contents, and completed an ad-hoc fidelity checklist to assess adherence, i.e., “the extent to which the essential components of an intervention are being delivered/implemented as designed” (Lee & Chue, 2013, p. 2510). In our study, the average fidelity of implementation was 94% (range=48%–100%); moreover, 50% of the sessions reported a 100% fidelity. For those sessions ( $n=4$ , 2%) whose fidelity was lower than 60%, facilitators made efforts to cover the missing contents in the subsequent session. While there were no COVID-19-related school closures, a few classrooms were occasionally quarantined and 6 meetings (3% of the total number) were held from remote, building on previous experience from the pilot study (see Ceccon et al., 2023). The week after the follow-up survey (January 2022), we invited students from the intervention classrooms and their teachers to take part in focus group discussions. A total of ten focus groups were carried out with students (5 students on average per group) and six focus groups were conducted with teachers (4 teachers on average per group).

## Measures

### *Sociodemographics*

Students were asked about their age, gender, birthplace, parents' birthplace, length of residence in Italy (for foreign-born youth), first and second language spoken, family composition, parental occupation, and educational level. Consistent with previous research (e.g., Schachner et al., 2016), migration background was coded as 0 (born in Italy from Italian-born parents) or 1 (born abroad or in Italy from at least one parent born abroad).

### *Socioeconomic status*

This variable was assessed via the FAS (Currie et al., 2008), a widely used 4-item scale measuring family wealth (e.g., “Do you have a room all by yourself?”). Scores assigned to each item are summed to yield a total score ranging from 0 (lowest affluence) to 9 (highest affluence). This scale is particularly suitable for adolescent samples and has shown good criterion and construct

validity in a large cross-cultural validation study involving 35 countries, including Italy (Boyce et al., 2006).

### *Cultural identity exploration and resolution*

The two dimensions of cultural identity exploration and resolution were assessed via the 17-item Ethnic Identity Scale (EIS; Umaña-Taylor et al., 2004), using items from the exploration (7 items; e.g., “I have attended events that have helped me learn more about my ethnicity”) and the resolution subscale (4 items; e.g., “I know what my ethnicity means to me”). Prior to answering those items, students were asked to indicate their heritage culture (e.g., Italian, Moroccan, Romanian, Chinese) and think about that particular cultural group when answering subsequent questions. Items were rated on a 4-point Likert scale from 1 (does not describe me at all) to 4 (describes me very well), and total scores were calculated by averaging item responses of the respective subscales, with higher scores indicating higher levels of each variable. Students could then also list all other cultural groups with which they self-identified. The EIS has been used to examine ethnic identity among multiracial adolescents and adults in the US, showing good validity, internal consistency, and measurement invariance across ethnic minority and majority group members (Sladek, Umaña-Taylor, McDermott, et al., 2020; Umaña-Taylor et al., 2004), and it exhibited high internal consistency in the German IP study (Juang et al., 2020). We selected the EIS instead of the EIS-Brief (Douglass & Umaña-Taylor, 2015) used in the US study due to the low internal reliability of the exploration subscale found in our pilot study. Since the questionnaire had not been previously used in the Italian context, it was translated using standard translation-back translation procedures in collaboration with the instrument authors. In the current study, internal reliabilities measured via Cronbach's alpha and McDonald's Omega were  $\alpha = .78$ , 95% CI [.75–.80] and  $\omega = .79$ , 95% CI [.77–.81] for the exploration subscale, and  $\alpha = .84$ , 95% CI [.82–.86] and  $\omega = .85$ , 95% CI [.83–.86] for the resolution subscale.

A Confirmatory Factor Analysis (CFA) was conducted on the EIS to test the originally proposed 3-factor structure (i.e., exploration, resolution, and affirmation; Umaña-Taylor et al., 2004). We used the Diagonally Weighted Least Squares (DWLS) estimator to address the ordinal nature of the data. To assess model fit we computed various goodness-of-fit indices, including the comparative fit index (CFI), the Tucker Lewis index (TLI), the root mean square error of approximation (RMSEA), and the standardized root mean square residual (SRMR). Based on suggested cutoff values (e.g., Schermelleh-Engel et al., 2003), the 3-factor model had an overall acceptable fit (CFI = .98, TLI = .98, RMSEA = .09, SRMR = .06).

### *Environmental sensitivity*

Participants' sensitivity to environmental stimuli was assessed through the short version of the Highly Sensitive

Child Scale (HSCS; Pluess et al., 2018). The scale comprises 12 items (e.g., “I notice when small things have changed in my environment”) pertaining to three subscales: Ease of Excitation (EOE; 5 items), Low Sensory Threshold (LST; 3 items), and Aesthetic Sensitivity (AES; 4 items). Items are rated on a 5-point scale ranging from 1 (not at all) to 5 (extremely). In this study, we used the mean score, which is obtained by averaging all item responses, with higher scores indicating higher sensitivity. The scale has shown good psychometric properties in terms of validity and reliability in adolescent samples across different countries (Weyn et al., 2021). In the original development and validation studies, the HSCS showed adequate internal consistency, test-retest reliability, and construct validity in relation to measures of temperament and personality traits (Pluess et al., 2018). Consistent with previous studies concerning the psychometric properties of the Italian version of the HSCS as applied in intervention research with children (Nocentini et al., 2018), in the current sample the HSCS had good internal reliability (Cronbach's  $\alpha = .75$ , 95% CI [.73–.77] and McDonald's  $\omega = .74$ , 95% CI [.71–.77]). As prior research showed that the HSCS fits a bifactor structure, i.e. a general sensitivity factor with items loading onto three separate factors represented by the three subscales (EOE, LST, and AES; Pluess et al., 2018), we tested this type of model using CFA. Results supported a bifactor solution showing a good fit (CFI = .99, TLI = .99, RMSEA = .03, SRMR = .04).

### Focus groups

Students were asked open-ended questions regarding which activities they enjoyed the most/least; if they had noticed any changes in the way they perceived or felt about their own cultural identity and attitudes toward others' cultural backgrounds; and whether they would add, remove, or modify any activities. Teachers were asked about their general impressions of the curriculum; whether any IP-related topics had been discussed during standard lessons; possible issues encountered during implementation; suggestions for improving the intervention. Focus group discussions lasted approximately 1 h. All sessions with teachers were conducted online by the corresponding author together with the first author, whereas sessions with students were conducted in presence or from remote (4 and 6 out of 10, respectively) by the facilitators who had carried out the intervention with those students.

### Data analysis

Statistical analyses were performed using R software (R Core Team, 2018) including *blavaan* (Merkle & Rosseel, 2018) and *brms* (Bürkner, 2017) packages, and using STAN to implement MCMC sampling (Stan Development Team, 2018). In preliminary analyses, we

screened for missing data (see Appendix A3) and explored data distribution. If a participant had more than 10% of missing values on one of the questionnaires, we explored the presence of recurrent patterns (if any) of such values and critically discussed these findings as appropriate (i.e., possibility of excluding these participants from the analyses if missing data showed recurrent patterns). We also ascertained whether adolescents from classrooms randomly assigned to the intervention and control group were comparable, with potential differences being taken into account in our statistical model.

Next, we computed descriptive statistics and bivariate correlations among our study variables (see Table 1). We subsequently evaluated our hypothesized model (Figure 1) using a full Bayesian approach; possible variations between students of different schools and classrooms were considered as random effects by analyzing the posterior distributions of their associated variance. Specifically, we compared a series of multivariate multilevel linear models (including school and classroom as random intercepts): model 0, i.e. a model assuming that there were no associations among the study variables; model 1, representing the interaction between exploration at T0 and group on exploration at T1, and the interaction of exploration at T1 and group on resolution at T2; model 2, a model including the main effects of exploration at T0 and group on exploration at T1, and of exploration at T1 and group on resolution at T2; model 3, representing the interaction of exploration at T0 and group on exploration at T1, and the main effects of exploration at T1 and group on resolution at T2; and model 4, considering the main effects of exploration at T0 and group on exploration at T1, and the interaction between exploration at T1 and group on resolution at T2.

We fitted an observed (vs. latent) variable model as we were interested in replicating the original authors' approach, and because the target questionnaires had been previously validated in different countries and ethnic groups (see Douglass & Umaña-Taylor, 2015; Weyn et al., 2021). Moreover, the inclusion of additional parameters related to latent variables would have required at least twice as many participants (approximately 1200) as those determined by our power analysis, therefore compromising study feasibility. We used the following informative priors: for main effects (exploration at T0 on resolution at T1; exploration at T1 on resolution at T2) Student's  $t(3, 0.5, 0.5)$ , for group effect Student's  $t(3, 1, 0.5)$  and interaction effects Student's  $t(3, 0.2, 1)$ ; for random effects and residual standard deviations we used truncated Student's  $t(3, 0, 2.5)$ ; for residuals' correlations a Lewandowski-Kurowicka-Joe distribution. For all models, estimates were based on 4000 samples extracted from the posteriors with 4 chains, using the package *brms* (Bürkner, 2017) which interfaces with STAN (Stan Development Team, 2018). Models were compared using the following criteria: Bayesian  $R^2$ ; Leave-one-out Cross Validation information criterion, with low values





**TABLE 1** Correlations and descriptive statistics for study variables by group (intervention  $n=382$ , control  $n=365$ ).

	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.
1. T0 exploration		.57	.54	.53	.38	.41	.12	.20	.04	.01	-.07
2. T1 exploration	.62		.69	.31	.51	.44	.11	.18	.10	.02	-.05
3. T2 exploration	.63	.72		.36	.39	.60	.13	.24	.04	.01	-.12
4. T0 resolution	.44	.36	.37		.49	.50	.04	.20	-.13	.10	-.03
5. T1 resolution	.38	.49	.46	.62		.58	.06	.13	-.05	.04	-.05
6. T2 resolution	.40	.46	.55	.61	.78		.06	.18	-.04	.06	-.03
7. Environmental sensitivity	.04	-.03	-.03	.02	.00	-.01		.18	.36	.09	-.12
8. Migration background	.16	.13	.08	.23	.23	.17	.05	.13		.21	-.30
9. Gender	.01	.02	.01	-.09	-.13	-.11	.33	-.04		-.02	-.08
10. Age	.06	.04	-.01	.09	.11	.04	-.06	.19	-.23		-.19
11. Socioeconomic status	.02	-.01	-.02	-.09	-.03	-.06	.05	-.31	.06	-.20	
Intervention											
<i>M</i> (SD)	2.63 (0.55)	2.70 (0.55)	2.64 (0.57)	2.81 (0.65)	2.95 (0.62)	2.88 (0.64)	4.56 (0.85)	0.30 (0.46)	1.55 (0.55)	15.10 (0.67)	6.38 (1.74)
Control											
<i>M</i> (SD)	2.63 (0.61)	2.61 (0.57)	2.62 (0.57)	2.86 (0.68)	2.83 (0.64)	2.83 (0.63)	4.73 (0.87)	0.32 (0.47)	1.64 (0.54)	15.03 (0.62)	6.39 (1.74)

*Note:* Correlations are presented for the intervention group (above the diagonal) and the control group (below the diagonal). Migration background was coded as 0=without migration background (i.e., born in Italy from Italian-born parents) and 1=with migration background (i.e., born in Italy or abroad from at least one parent born abroad). Gender was coded as 1=boys, 2=girls, and 3=other (e.g., non-binary, gender fluid). T0=pretest, T1=9-week posttest, T2=13-week posttest.

reflecting a higher predictive capability of the model; and model weights, with high values indicating a better model. We also verified the normalcy of model residuals.

Finally, we addressed our exploratory research questions by including participants' migration background and environmental sensitivity in our statistical model using weak-informative priors. Before proceeding with this step, as part of our quality check, we analyzed measurement invariance of the two questionnaires (EIS and HSCS) by exploring the degree of overlap of the posterior distribution of parameters separately in the two groups (i.e., students with and without a migration background). This technique allows to obtain information on the extent to which the two groups may differ in relation to the variables under investigation (Pastore & Calcagni, 2019). Results of this analysis are reported in Appendix A4.

The focus group data were subjected to thematic content analysis to describe recurrent themes across participants' responses following procedures from previous research (e.g., Cecon & Moscardino, 2022). The first author and another member of the research team independently reviewed students' and teachers' responses, generated and compared codes, and discussed emerging interpretations of salient aspects related to intervention implementation.

## RESULTS

### Preliminary analyses

Among the participants designated for assessment ( $N=957$ ), 908 completed the questionnaire at T0, 854 at T1, and 845 at T2 (see Consort map in Figure 2), with an attrition rate of 7%.

When conducting CFA for the two main measures (EIS and HSCS), we screened for missing data at baseline: only 8% of participants had missing values in the questionnaires. Specifically, 0.33% ( $n=3$ ) had more than 10% of missing values in the EIS measure at T0 and 0.23% ( $n=2$ ) at T1, while none of the participants had more than 10% of missing values in the EIS at T2 or in the HSCS measure at T0. No recurrent pattern emerged from missing values. Because both instruments had good psychometric properties (see Measures section), we proceeded by calculating mean scores for our variables of interest at the different time points. To assess whether participants who missed and did not miss survey administrations differed on sociodemographic and intervention-related characteristics, we used a logistic model which is further described in Appendix A3. Given that none of these characteristics showed any effect, we decided to use a listwise deletion approach and excluded all those students who were not present at all three assessments ( $n=210$ , 22% of the sample designated for assessment), resulting in a final analytic sample of 747 (intervention  $n=382$ , control  $n=365$ ). Based on observed

data distribution (see Appendix A5), no relevant differences were detected between the intervention and control groups on sociodemographic variables (gender, migration background, and SES) as well as on our variables of interest (cultural identity exploration and resolution, environmental sensitivity) at T0.

### Main hypotheses testing

Table 2 shows the results of the Bayesian model comparison. The best-performing model was model 2 (i.e., without interactions and with random intercepts for school and classroom), which highlighted a main effect of condition (intervention vs. control) on cultural identity exploration at T1. Residuals of both dependent variables of the model (exploration and resolution) were normally distributed.

In this model, students in the intervention group reported higher scores on cultural identity exploration compared to the control group (H1). The expected difference between intervention and control group was about 0.10 points, with a 90% CI [0.04; 0.15], corresponding to a Cohen's  $d$  posterior mean of 0.18, with a 90% CI [0.07; 0.28]. Standard deviation of intercepts (random effects) ranged from 0.04 to 0.1, indicating irrelevant differences between schools or classrooms. However, this model did not include the hypothesized interaction effect of exploration at T1 and group on resolution at T2, suggesting that increases in resolution at follow-up were not linked to increases in exploration in the intervention (vs. control) group; hence, H2 was not supported. Indeed, the latter interaction was included in model 1 and model 4, both of which had lower model weights than model 2. A closer inspection of these models indicated that our parameter of interest was equal respectively to  $-0.01$ , with a 90% CI  $[-0.13; 0.12]$  in M1 and to  $-0.01$ , with a 90% CI  $[-0.13; 0.11]$  in M4, and therefore could not be considered a relevant effect.

We reran this analysis with an imputed dataset applying a Bayesian estimation method to ensure that the findings were not influenced by missing data. Results obtained with the imputation were substantially the same as those obtained with non-imputed data (see Appendix A6).

### Exploratory analyses

To address our exploratory research questions, we included migration background and environmental sensitivity as possible moderators in our analyses. Given that the intervention and control groups were comparable in terms of cultural identity exploration at baseline, in all models we did not control for this variable. All tested models are presented in Table 3. Results of model comparison suggested that the first two models outperformed

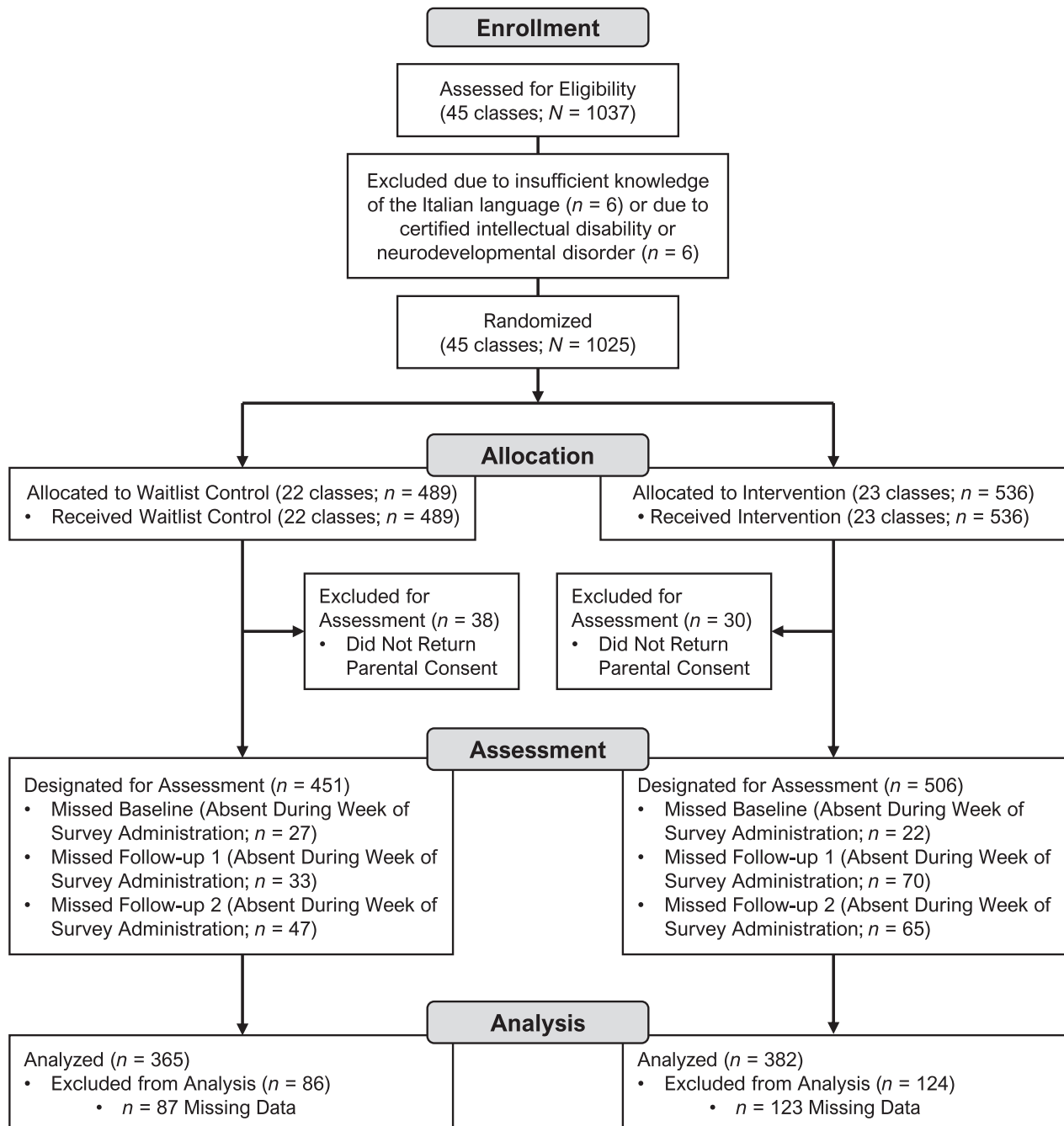


FIGURE 2 Consort map for trial enrollment and analysis.

the others to a comparable extent (in terms of weight and explained variance): model 14 (with the interaction between group and environmental sensitivity and the main effect of migration background on cultural identity exploration at T1, and the main effects of these variables on resolution at T2) and model 10 (with the triple interaction of group, migration background, and environmental sensitivity on cultural identity exploration at T1, and the main effects of these variables on resolution at T2). In model 14, there was a relevant effect of the interaction between group and environmental sensitivity (0.05,  $[-0.02; 0.12]$  90% CI) on exploration at T1, suggesting

that for students in the intervention (vs. control) group, those with higher levels of sensitivity reported greater exploration at T1 compared to their less sensitive peers (see Figure 3).

In model 10, there was a relevant effect of the three-way interaction among group, migration background, and sensitivity (0.19,  $[0.04; 0.35]$  90% CI) on cultural identity exploration at T1. In other words, for students in the intervention (vs. control) group, those with a migration background reporting higher levels of sensitivity showed greater exploration at T1 compared to their nonmigrant, less sensitive peers (see Figure 4).

**TABLE 2** Comparison of multivariate multilevel linear models for main hypotheses testing.

Model	R2ET1	R2RT2	LOO	SE	Weight
Model 2	0.38	0.36	2176.628	65.308	0.60
Model 4	0.38	0.36	2179.298	65.407	0.16
Model 3	0.38	0.36	2179.302	65.349	0.16
Model 1	0.38	0.36	2180.672	65.348	0.08
Model 0	0.02	0.03	2534.392	60.363	0.00

Note:  $N=747$ . R2ET1=Bayesian  $R^2$  for exploration at T1; R2RT2=Bayesian  $R^2$  for resolution at T2; weight=model weights. Model 0=exploration at T1~(1|school/classroom); RT2~(1|school/classroom). Model 1=exploration at T1~exploration at T0×group+(1|school/classroom); RT2~exploration at T1×group+(1|school/classroom). Model 2=exploration at T1~exploration at T0+group+(1|school/classroom); RT2~exploration at T1+group+(1|school/classroom). Model 3=exploration at T1~exploration at T0×group+(1|school/classroom); RT2~exploration at T1+group+(1|school/classroom). Model 4=exploration at T1~exploration at T0+group+(1|school/classroom); RT2~exploration at T1×group (1|school/classroom).

Abbreviations: LOO, leave-one-out cross-validation information criterion; SE, standard error.

**TABLE 3** Comparison of multivariate multilevel linear models for exploratory analyses.

Model	R2ET1	R2RT2	LOO	SE	Weight
Model 14	0.06	0.06	2516.60	61.07	0.22
Model 10	0.07	0.29	2516.84	60.72	0.19
Model 5	0.06	0.26	2517.09	60.88	0.17
Model 13	0.06	0.06	2518.32	61.01	0.09
Model 12	0.06	0.26	2518.50	60.80	0.08
Model 6	0.06	0.29	2518.76	60.91	0.07
Model 11	0.06	0.26	2519.52	60.92	0.05
Model 8	0.07	0.25	2519.62	60.93	0.05
Model 7	0.06	0.27	2520.05	60.88	0.04
Model 9	0.06	0.25	2520.05	61.08	0.04
Model 0	0.02	0.03	2534.39	60.36	0.00

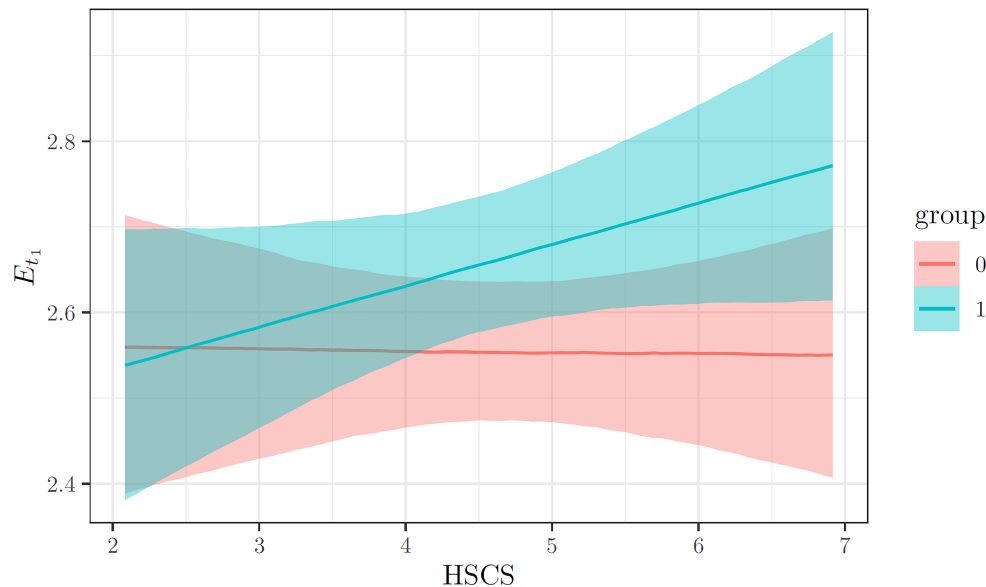
Note:  $N=747$ . R2ET1=Bayesian  $R^2$  for exploration at T1; R2RT2=Bayesian  $R^2$  for resolution at T2; LOO, leave-one-out cross-validation information criterion; SE, standard error; weight=model weights. Model 0=exploration at T1~(1|school/classroom); RT2~(1|school/classroom). Model 5=exploration at T1~group+migr. background+sensitivity+(1|school/classroom); resolution at T2~exploration at T1+group+migr. background+sensitivity (1|school/classroom). Model 6=exploration at T1~migr. background+group×sensitivity+(1|school/classroom); resolution at T2~exploration at T1+migr. background+group×sensitivity (1|school/classroom). Model 7=exploration at T1~sensitivity+group×migr. background+(1|school/classroom); resolution at T2~exploration at T1+sensitivity+group×migr. background+(1|school/classroom). Model 8=exploration at T1~group×migr. background×sensitivity+(1|school/classroom); resolution at T2~exploration at T1+group×migr. background×sensitivity (1|school/classroom). Model 9=exploration at T1~group+migr. background+sensitivity+(1|school/classroom); resolution at T2~exploration at T1+group×migr. background×sensitivity (1|school/classroom). Model 10=exploration at T1~group×migr. background×sensitivity+(1|school/classroom); RT2~exploration at T1+group+migr. background+sensitivity (1|school/classroom). Model 11=exploration at T1~group+migr. background+sensitivity+(1|school/classroom); resolution at T2~exploration at T1+migr. background+group×sensitivity+(1|school/classroom). Model 12=exploration at T1~group+migr. background+sensitivity+(1|school/classroom); resolution at T2~exploration at T1+sensitivity+group×migr. background+(1|school/classroom). Model 13=exploration at T1~sensitivity+group×migr. background+(1|school/classroom); resolution at T2~sensitivity+group+migr. background+(1|school/classroom). Model 14=exploration at T1~migr. background+group×sensitivity+(1|school/classroom); resolution at T2~sensitivity+group+migr. background+(1|school/classroom).

Effect sizes for moderation effects related to student subgroups for models 14 and 10 are reported in Appendix A7. We subsequently replicated the best-performing model in terms of weight (i.e., model 14) controlling for exploration at baseline, but the two-way interaction effect was not evident anymore (see Appendix A8), most likely due to the high correlation between levels of exploration at T0 and T1.

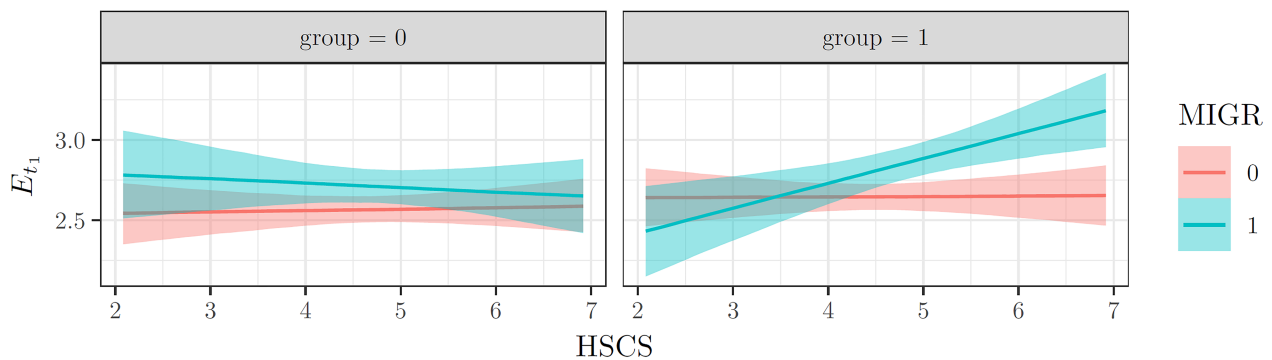
### Focus group analyses

A recurrent theme for students was their emphasis on the usefulness of the IP in addressing issues related to

their heritage culture(s) and those of their classmates, as these topics are seldom discussed in the school curriculum. The opportunity for exploration was particularly appreciated by students with a migration background, who described how they developed further curiosity and acceptance toward their heritage cultures (“*I realized that I was losing touch with my culture ... Now I feel more interested, I even started searching for in-depth material*”, “*The fact that my classmates started asking me about our traditions and symbols made me feel more accepted by them and closer to my origins*”) or became increasingly aware of how this dimension could be integrated into a multifaceted, multicultural identity (“*Before the project I felt only Chinese, now I think that the way I would define*



**FIGURE 3** Expected values of model 14 with the interaction between group and environmental sensitivity.  $E_{t1}$ =exploration at T1;  $R_{t2}$ =resolution at T2; group=experimental condition (0=waitlist control, 1=intervention); HSCS, environmental sensitivity. Expected values of the model on exploration at T1 as a function of environmental sensitivity (x-axis) and group (colors). The bands indicate 90% credibility intervals.



**FIGURE 4** Expected values of model 10 with the interaction among group, migration background, and environmental sensitivity.  $E_{t1}$ =exploration at T1;  $R_{t2}$ =resolution at T2; group=experimental condition (0=waitlist control, 1=intervention); HSCS, environmental sensitivity; MIGR, migration background (0=no, 1=yes). Expected values of the model on exploration at T1 as a function of environmental sensitivity (x-axis), migrant background (colors), and group (panels). The bands indicate 90% credibility intervals.

myself would include my Italian identity as well”). The IP was described as an eye-opening opportunity also by majority students, who often found themselves reflecting for the first time on their own cultural identity and on how culture may shape behaviors and ways of thinking (“This project made me think more about my culture and the aspects that characterize it: I thought about things that I normally do, and that in another culture would not be normal or obvious”). Participants particularly enjoyed the hands-on activities of sharing cultural symbols and creating their own family tree, as well as the possibility to strengthen relationships with their classmates. They also valued the opportunity to engage with external professional figures (i.e., linguistic-cultural mediators, psychologists) to discuss issues concerning social inclusion and intercultural communication from a different

perspective. In addition, they pointed out that the IP rendered them more sensitive to issues such as discrimination and prejudice and stimulated them to adopt a more critical look at others' experiences. For instance, some students reported how having participated in the IP had prompted them to defend fellow classmates who had been discriminated against (“After our sessions, I started noticing that one of our classmates was treated in a discriminatory way ... I'm trying to include him more in our group, I don't want him to feel different”).

Among teachers, a recurrent theme concerning the effects of the IP was the increase in cohesion among classmates, mostly resulting from the sharing activities (“It was most useful for students to know each other better, and also to know themselves better”, “The sessions helped students to build a team, to create a group”). Teachers also

noticed a heightened sensitivity and awareness among adolescents on issues of cultural belonging (“*This year I noticed how much it mattered to them, this sense of belonging to their own culture: it's a topic that really touched them*”). This observation led some of them to incorporate specific contents of the IP curriculum into their lessons and carry out independent, content-related projects (“*During my history class, we examined the concept of identity in depth; it was no longer an abstract topic, a 'required reading', the students had made the topic their own*”).

## DISCUSSION

The purpose of this study was to assess the efficacy of a culturally adapted version of the IP intervention among adolescents attending multiethnic classrooms in Italy. In doing so, we aimed to replicate the original study carried out by Umaña-Taylor, Douglass, et al. (2018) in the US, hypothesizing that the intervention would lead to an increase in cultural identity exploration at posttest which, in turn, would result in higher levels of cultural identity resolution at follow-up. Moreover, we were interested in exploring the potential moderating role of migration background and environmental sensitivity on intervention effects. Overall, the Italian version of the IP proved to be efficacious in stimulating exploration processes among adolescents who participated in the intervention compared to those who were in the waitlist control group, but no differences were found in resolution at follow-up (T2) as a function of levels of exploration at posttest (T1). With regard to potential moderators, the results of our model comparison revealed that in the intervention (vs. control) group, students with greater environmental sensitivity reported higher levels of exploration at posttest than their less sensitive counterparts. In addition, youth of immigrant descent who reported higher (vs. lower) levels of sensitivity to environmental influences showed more exploration at posttest. No effects of these variables on resolution emerged at follow-up.

Consistent with our theoretical model and previous implementations of the IP (Juang et al., 2020; Umaña-Taylor, Douglass, et al., 2018; Umaña-Taylor, Kornienko, et al., 2018), we observed higher levels of exploration from pre- to posttest among adolescents in the intervention (vs. control) group, confirming our first hypothesis. In other words, despite originating from a different sociocultural milieu, the IP in its culturally adapted version to the Italian school context was effective in stimulating youths' reflections concerning their heritage culture(s) through a meaningful search, observation, and consideration of this salient identity dimension across the sessions (Umaña-Taylor et al., 2004). This heightened interest was also mirrored in students' responses during focus groups and supports the idea that, in middle adolescence, providing a protected space for

collective reflection on cultural diversity, inequalities, and their implications for one's identity is beneficial for an increased awareness and understanding of ethnically diverse others among both ethnically minoritized and majoritized groups (Juang et al., 2020).

In our study, no evidence was found to support the cascading effect of cultural identity exploration at posttest on resolution at follow-up in the intervention group. Hence, the participants did not report a greater sense of clarity concerning their own cultural identity one month after experiencing an increase in exploration processes linked to their attendance in the IP. This can be interpreted in light of the peculiar characteristics of identity development and socialization in Italy compared to the US and other European countries. Indeed, identity formation among Italian youth has been shown to be affected by the “delay syndrome” (Livi Bacci, 2008), which involves the extension of education, deferral of entry into the job market and in a committed relationship, living in the parental home until the late 20s or 30s, and a delayed transition to parenthood. This postponement of adult commitments, which is overall socially accepted, can enhance identity instability during adolescence (Crocetti, Rabaglietti, & Sica, 2012). Individuals may experience adolescence as a prolonged period of moratorium, during which they consider and reconsider multiple identity alternatives instead of solidifying a sense of identity, or even as a return to a diffused state. In support of this view, cross-country studies found that Italian youth had lower levels of commitment and were more represented in the moratorium status compared to their Dutch counterparts (Crocetti, Schwartz, et al., 2012). Furthermore, Crocetti et al. (2011) reported that adolescents from immigrant families in Italy had higher levels of reconsideration of commitment than their peers from mixed and non-immigrant families. Indeed, these youths may experience additional difficulties in finding a personal identity coherence, possibly because this process is closely intertwined with the negotiation between parents' expectations of carrying on their “cultural legacy” and the pressure from peers and other societal agents to conform to social norms of the majority group.

There is a dearth of studies concerning cultural socialization processes in relation to identity formation among both immigrant and non-immigrant youth in Italy. This may be due to the relatively late unification of the country, the coexistence of both regional and national identities, and the recency of the immigration phenomenon, which started to become numerically relevant from the 1990s (Juang et al., 2022). These factors, together with immigration policies emphasizing assimilation rather than integration, may render cultural socialization practices less salient than in contexts with a longer history of immigration such as the US. In the latter society, complex interethnic dynamics, as well as systemic and structural inequalities, likely have contributed to an increased relevance of ERI

for individual development (Umaña-Taylor, 2016). In Italy, structured learning opportunities occur less frequently within students' microsystems (family, school) due to the inherent difficulty of such topics and the lack of shared meanings concerning terminology and conceptualization to address them (Juang et al., 2020). Therefore, it is possible that messages about knowledge, beliefs, and practices concerning one's cultural heritage are much more pervasive in the US than in Italian society. The qualitative data collected during our post-intervention focus groups seem to support this interpretation, given that especially for students without a migration background, cultural identity was less central to their global identity than other social identities, such as gender identity and sexual orientation. Thus, the absence of a rippling effect on resolution may reflect an overall delayed salience of this identity in youth, connected with a lower emphasis on cultural socialization. It also must be considered that gaining awareness and clarity about one's own cultural identity is a process that requires time and prolonged reflection, as well as the opportunity to engage in multiple real-life experiences concerning one's own heritage culture(s). Future research needs to shed light on this issue, for example, by including more time points and/or long-term assessments to ascertain the presence of possible chain effects that could become evident after the conclusion of the intervention.

Regarding our exploratory research questions, Bayesian analyses revealed that the two models outperformed the others to a comparable extent. The first model indicated that, among adolescents in the intervention (vs. control) group, those with greater environmental sensitivity showed higher levels of exploration at posttest in comparison to their peers with lower levels of sensitivity. In the second model, participants in the intervention group with a migration background and who scored high on environmental sensitivity reported greater exploration at posttest than their less sensitive counterparts of immigrant descent. Thus, students characterized by a deeper processing and a greater reactivity to both favorable and adverse conditions particularly benefited from having the opportunity to engage in activities and discussions within the school setting focusing on one's heritage culture(s), symbols and traditions, and people who are relevant in shaping cultural identity, encouraging them to further reflect upon and explore their backgrounds and possible selves. Interestingly, the second model also indicated that this effect was more relevant for adolescents of immigrant descent. Although caution is needed when interpreting this result and more replication research is necessary, it suggests that potential vulnerability factors like environmental sensitivity and immigration-related challenges (e.g., discrimination, acculturative stress), in the context of positive environments and when considered in a combined fashion,

lend support to vantage sensitivity theory (de Villiers et al., 2018; Pluess, 2015). The latter posits that highly sensitive individuals benefit especially strongly from favorable features of environmental experience.

Our candidate moderators did not have any impact on the expected cascading effect of exploration at posttest on resolution at follow-up in the intervention group. As mentioned in relation to our second hypothesis, resolution is a process that requires time, repeated and prolonged experiences allowing for exploration, as well as cognitive-affective maturity (Sladek, Umaña-Taylor, Wantchekon, et al., 2021). The time interval in which we assessed adolescents' possible changes in their sense of clarity regarding their own cultural identity is probably insufficient to tackle these changes, at least in the Italian social context, for both ethnic minoritized and majoritized groups. Of note, a previous study conducted with US adolescents showed that ERI resolution increased across a 1-year follow-up period for ethnic-majoritized youth who participated in the IP (Sladek, Umaña-Taylor, Wantchekon, et al., 2021). Hence, future research involving long-term follow-up assessments is warranted to shed light on possible differential paths over time in terms of intervention efficacy based on adolescents' ethnocultural background. With regard to sensitivity, given that this construct refers to the processing of environmental (including interpersonal/social) stimuli, it might play a greater role in exploration rather than in resolution processes. Indeed, while exploration was prompted within the classroom by facilitators and classmates during collective discussions and reflections across the sessions, resolution is a more introspective, private process involving multiple individual characteristics which might be less influenced by external factors.

## Limitations and directions for future research

This replication study has a number of strengths, including the cultural adaptation of an evidence-based intervention that targets a pivotal developmental task in adolescence (i.e., cultural identity formation), the waitlisted pre- and posttest design with an additional follow-up assessment, the large sample size, the a priori power analysis and preregistration of planned hypotheses, research design, and analyses, the consideration of potential moderators of intervention efficacy, and quantitative and qualitative data collection. However, there are several limitations that need to be acknowledged.

First, the proportion of students with a migration background in our sample was relatively small (around 30%) in comparison to other countries with longer histories of migration such as the US, and there was high diversity in terms of cultures of origin (i.e., more than 50 nationalities), reflecting the dynamics of immigration in Italy. Overall, this pattern may have influenced

intervention efficacy, since the IP has been shown to be particularly effective in schools with a higher percentage of ethnic minority students (approx. 50%; see Umaña-Taylor, Douglass, et al., 2018). Moreover, it was not possible to ascertain differential effects based on national origin or generational status due to the heterogeneous sample composition of youth of immigrant descent. Future studies are warranted to determine whether the IP is more efficacious for particular ethnocultural groups, or first versus second-generation adolescents (Sladek, Umaña-Taylor, McDermott, et al., 2020). Second, as previously mentioned, several changes were made to the original intervention protocol to accommodate both logistic/organizational needs and cultural-contextual characteristics. Although facilitators used fidelity checklists to ensure implementation quality, and feedback during focus groups highlighted that specific adapted activities were deemed effective by participants, such modifications might have impacted on intervention effects. More replication studies are needed—especially within the European context—to evaluate the IP intervention and identify culturally specific components that may influence its efficacy (Beelmann et al., 2018). Third, the effect sizes within our statistical models were relatively small, resembling those found in previous implementations of the IP (Juang et al., 2020; Umaña-Taylor, Douglass, et al., 2018). Yet, it should be noted that large effect sizes are rarely found in the context of psychological research with large samples or in replication studies. Moreover, a recent meta-analysis reported that the median average effect of universal intervention programs targeting youth tends to fall within the range of 0.07–0.16 standard deviations (Tanner-Smith et al., 2018), indicating that the value found in our study as regards exploration (Cohen's  $d = .18$ ) is in the upper boundary of this range. As highlighted by Funder and Ozer (2019), when estimates are reliable, small effects can still translate to a considerable increase in individual outcomes if they are aggregated across all the students in a class, a school, or a school district. They may also trigger long-term psychological change within an individual not only in relation to cultural identity resolution, but also to exploration (see Rivas-Drake et al., 2014). Beyond quantitative estimates, qualitative insights gained from focus group data are equally important to consider given the value of hearing adolescents' perspectives. Fourth, even though a waitlist control design was chosen to ensure that all students eventually received the intervention, we cannot exclude that adolescents and/or teachers in the intervention group possibly revealed information about the project that might have reduced potential differences between the two groups. Last, our study was conducted in a northern Italian region (i.e., Veneto) characterized by economic wealth, high population density, and one of the highest shares of immigrants

coming to Italy (ISTAT, 2020). Thus, examination of program efficacy in other geographical areas with differing sociodemographic characteristics and immigration patterns is necessary to ascertain generalizability.

Despite these limitations, our study provides novel evidence concerning the efficacy of a universal, school-based intervention stimulating adolescents' cultural identity exploration within multiethnic classrooms. While the intervention was developed in the US, the current study shows that it can also be effective in a European country that considers itself an immigrant-receiving society only since the past few decades. Furthermore, it highlights the importance of youths' migration background and sensitivity to environmental influences as conditions to better understand for whom the IP is more beneficial, although more research is needed to uncover the mechanisms underpinning individuals' heightened responsivity to interventions. From an applied perspective, the current study emphasizes the importance of tailoring psychological interventions to the social context in which they are implemented, especially when working with minoritized groups. The Italian version of the IP has proven to be feasible, acceptable, and efficacious in engaging students with their heritage culture(s), resulting in more exploration of their sense of self. Further work is necessary to boost resolution processes, involve teachers, and identify factors that can enhance long-term efficacy using rigorous statistical procedures and an open science approach to generate reliable estimates, facilitate replication, and share good practices.

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#### DATA AVAILABILITY STATEMENT

The analyses presented here were preregistered, and the data and code necessary to reproduce the analyses are publicly accessible. Data, code, and preregistration of the analyses are available at the following project in the Open Science Framework (OSF): <https://osf.io/zry23/>.



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## REFERENCES

- Aron, E. N., Aron, A., & Jagiellowicz, J. (2012). Sensory processing sensitivity: A review in the light of the evolution of biological responsiveness. *Personality and Social Psychology Review, 16*, 262–282. <https://doi.org/10.1177/1088868311434213>
- Bakermans-Kranenburg, M. J., & Van IJzendoorn, M. H. (2015). The hidden efficacy of interventions: Gene × environment experiments from a differential susceptibility perspective. *Annual Review of Psychology, 66*, 381–409. <https://doi.org/10.1146/annurev-psych-010814-015407>
- Barrera, M., Jr., Castro, F. G., Strycker, L. A., & Toobert, D. J. (2013). Cultural adaptations of behavioral health interventions: A progress report. *Journal of Consulting and Clinical Psychology, 81*, 196–205. <https://doi.org/10.1037/a0027085>
- Beelmann, A., Malti, T., Noam, G. G., & Sommer, S. (2018). Innovation and integrity: Desiderata and future directions for prevention and intervention science. *Prevention Science, 19*, 358–365. <https://doi.org/10.1007/s11121-018-0869-6>
- Belsky, J., & Pluess, M. (2009). Beyond diathesis stress: Differential susceptibility to environmental influences. *Psychological Bulletin, 135*, 885–908. <https://doi.org/10.1037/a0017376>
- Boyce, W., Torsheim, T., Currie, C., & Zambon, A. (2006). The Family Affluence Scale as a measure of national wealth: Validation of an adolescent self-report measure. *Social Indicators Research, 78*, 473–487. <https://doi.org/10.1007/s1120-5-005-1607-6>
- Boyce, W. T., & Ellis, B. J. (2005). Biological sensitivity to context: I. An evolutionary–developmental theory of the origins and functions of stress reactivity. *Development and Psychopathology, 17*, 271–301. <https://doi.org/10.1017/S0954579405050145>
- Bürkner, P. C. (2017). brms: An R package for Bayesian multilevel models using Stan. *Journal of Statistical Software, 80*, 1–28. <https://doi.org/10.18637/jss.v080.i01>
- Cecon, C., & Moscardino, U. (2022). Impact of COVID-19 and lockdown on mental health and future orientation among young adult asylum seekers in Italy: A mixed-methods study. *Transcultural Psychiatry, 59*, 782–796. <https://doi.org/10.1177/13634615221098306>
- Cecon, C., Schachner, M.K., Umaña-Taylor, A.J., & Moscardino, U. (2023). Promoting Adolescents' Cultural Identity Development: A Pilot Study of the Identity Project Intervention in Italy. Manuscript submitted for publication.
- Cheah, C. S., Wang, C., Ren, H., Zong, X., Cho, H. S., & Xue, X. (2020). COVID-19 racism and mental health in Chinese American families. *Pediatrics, 146*, 1–10. <https://doi.org/10.1542/peds.2020-021816>
- Crocetti, E., Fermani, A., Pojaghi, B., & Meeus, W. (2011). Identity formation in adolescents from Italian, mixed, and migrant families. *Child & Youth Care Forum, 40*, 7–23. <https://doi.org/10.1007/s10566-010-9112-8>
- Crocetti, E., Rabaglietti, E., & Sica, L. S. (2012). Personal identity in Italy. In S. J. Schwartz (Ed.), *Identity around the world: New directions for child and adolescent development* (Vol. 2012, pp. 87–102). Wiley.
- Crocetti, E., Schwartz, S. J., Fermani, A., Klimstra, T., & Meeus, W. (2012). A cross-national study of identity status in Dutch and Italian adolescents. *European Psychologist, 17*, 171–181. <https://doi.org/10.1027/1016-9040/a000076>
- Currie, C., Molcho, M., Boyce, W., Holstein, B., Torsheim, T., & Richter, M. (2008). Researching health inequalities in adolescents: The development of the Health Behaviour in School-Aged Children (HBSC) Family Affluence Scale. *Social Science & Medicine, 66*, 1429–1436. <https://doi.org/10.1016/j.socscimed.2007.11.024>
- de Villiers, B., Lionetti, F., & Pluess, M. (2018). Vantage sensitivity: A framework for individual differences in response to psychological intervention. *Social Psychiatry and Psychiatric Epidemiology, 53*, 545–554. <https://doi.org/10.1007/s00127-017-1471-0>
- Douglass, S., & Umaña-Taylor, A. J. (2015). A brief form of the Ethnic Identity Scale: Development and empirical validation. *Identity, 15*, 48–65. <https://doi.org/10.1080/15283488.2014.989442>
- Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.
- European Commission. (2018). *Report. Integration of immigrants in the European Union*.
- European Commission/EACEA/Eurydice. (2019). *Integrating students from migrant backgrounds into schools in Europe: National policies and measures*.
- Flay, B. R., Biglan, A., Boruch, R. F., Castro, F. G., Gottfredson, D., Kellam, S., Mościcki, E. K., Schinke, S., Valentine, J. C., & Ji, P. (2005). Standards of evidence: Criteria for efficacy, effectiveness and dissemination. *Prevention Science, 6*, 151–175. <https://doi.org/10.1007/s11121-005-5553-y>
- Funder, D. C., & Ozer, D. J. (2019). Evaluating effect size in psychological research: Sense and nonsense. *Advances in Methods and Practices in Psychological Science, 2*, 156–168. <https://doi.org/10.1177/2515245919847202>
- Huitsing, G., Lodder, G. M., Browne, W. J., Oldenburg, B., Van der Ploeg, R., & Veenstra, R. (2020). A large-scale replication of the effectiveness of the KiVa antibullying program: A randomized controlled trial in The Netherlands. *Prevention Science, 21*, 627–638. <https://doi.org/10.1007/s11121-020-01116-4>
- ISTAT. (2020). *Bilancio demografico nazionale anno 2019. Comunicato stampa* [National demographic records year 2019. Press release]. Istituto Nazionale di Statistica.
- Juang, L. P., Schachner, M. K., Pevec, S., & Moffitt, U. (2020). The identity project intervention in Germany: Creating a climate for reflection, connection, and adolescent identity development. *New Directions for Child and Adolescent Development, 2020*, 65–82. <https://doi.org/10.1002/cad.20379>
- Juang, L. P., Umaña-Taylor, A. J., Schachner, M. K., Frisén, A., Hwang, C. P., Moscardino, U., Motti-Stefanidi, M., Oppedal, B., Pavlopoulos, V., Abdullahi, A. K., Barahona, R., Berne, S., Cecon, C., Gharaei, N., Moffitt, U., Ntalachanis, A., Pevec, S., Sandberg, D. J., Zacharia, A., & Syed, M. (2022). Ethnic-racial identity in Europe: Adapting the Identity Project intervention in five countries. *European Journal of Developmental Psychology, 1–29*. <https://doi.org/10.1080/17405629.2022.2131520>
- Lee, Y.-J., & Chue, S. (2013). The value of fidelity of implementation criteria to evaluate school-based science curriculum innovations. *International Journal of Science Education, 35*, 2508–2537. <https://doi.org/10.1080/09500693.2011.609189>
- Lionetti, F., Aron, E. N., Aron, A., Klein, D. N., & Pluess, M. (2019). Observer-rated environmental sensitivity moderates children's response to parenting quality in early childhood. *Developmental Psychology, 55*, 2389–2402. <https://doi.org/10.1037/dev0000795>
- Lionetti, F., Pastore, M., Moscardino, U., Nocentini, A., Pluess, K., & Pluess, M. (2019). Sensory processing sensitivity and its association with personality traits and affect: A meta-analysis. *Journal of Research in Personality, 81*, 138–152. <https://doi.org/10.1016/j.jrp.2019.05.013>
- Livi Bacci, M. (2008). *Avanti giovani, alla riscossa* [Go ahead young people, to the rescue!]. Il Mulino.
- Marcia, J. E. (1980). Identity in adolescence. In J. Adelson (Ed.), *Handbook of adolescent psychology* (pp. 159–187). Wiley.

- Merkle, E., & Rosseel, Y. (2018). Blavaan: Bayesian structural equation models via parameter expansion. *Journal of Statistical Software*, 85, 1–30.
- MIUR. (2020). *Gli alunni con cittadinanza non italiana a.s. 2018/2019* [Students with non-Italian citizenship s.y. 2018/2019]. Ministero dell'Istruzione.
- Motti-Stefanidi, F., & Masten, A. S. (2013). School success and school engagement of immigrant children and adolescents. *European Psychologist*, 18, 126–135. <https://doi.org/10.1027/1016-9040/a000139>
- Musso, P., Moscardino, U., & Inguglia, C. (2018). The Multigroup Ethnic Identity Measure–Revised (MEIM-R): Psychometric evaluation with adolescents from diverse ethnocultural groups in Italy. *European Journal of Developmental Psychology*, 15, 395–410. <https://doi.org/10.1177/0272431616659557>
- Nocentini, A., Menesini, E., & Pluess, M. (2018). The personality trait of environmental sensitivity predicts children's positive response to school-based antibullying intervention. *Clinical Psychological Science*, 6, 848–859. <https://doi.org/10.1177/2167702618782194>
- Nosek, B. A., Ebersole, C. R., DeHaven, A. C., & Mellor, D. T. (2018). The preregistration revolution. *Proceedings of the National Academy of Sciences of the United States of America*, 115, 2600–2606. <https://doi.org/10.1073/pnas.1708274114>
- Pastore, M., & Calcagni, A. (2019). Measuring distribution similarities between samples: A distribution-free overlapping index. *Frontiers in Psychology*, 10, 1089. <https://doi.org/10.3389/fpsyg.2019.01089>
- Phinney, J. S. (1989). Stages of ethnic identity development in minority group adolescents. *The Journal of Early Adolescence*, 9, 34–49.
- Pluess, M. (2015). Individual differences in environmental sensitivity. *Child Development Perspectives*, 9, 138–143. <https://doi.org/10.1111/cdep.12120>
- Pluess, M., Assary, E., Lionetti, F., Lester, K. J., Krapohl, E., Aron, E. N., & Aron, A. (2018). Environmental sensitivity in children: Development of the Highly Sensitive Child Scale and identification of sensitivity groups. *Developmental Psychology*, 54, 51–70. <https://doi.org/10.1037/dev0000406>
- Pluess, M., & Boniwell, I. (2015). Sensory-processing sensitivity predicts treatment response to a school-based depression prevention program: Evidence of vantage sensitivity. *Personality and Individual Differences*, 82, 40–45. <https://doi.org/10.1016/j.paid.2015.03.011>
- Queen's University. (2022). *Multiculturalism Policy Index*. <http://www.queensu.ca/mcp/>
- R Core Team. (2018). *R: A language and environment for statistical computing*. R Foundation for Statistical Computing. <https://www.R-project.org>
- Rivas-Drake, D., Seaton, E. K., Markstrom, C., Quintana, S., Syed, M., Lee, R. M., Schwartz, S. J., Umaña-Taylor, A. J., French, S., Yip, T., & Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity in adolescence: Implications for psychosocial, academic, and health outcomes. *Child Development*, 85, 40–57. <https://doi.org/10.1111/cdev.12200>
- Rubaltelli, E., Priolo, G., Scrimin, S., & Moscardino, U. (2020). Media exposure to terrorism and perception of immigrants as a threat: The role of emotional intelligence and psychophysiological self-regulation. *Risk Analysis*, 40, 1666–1676. <https://doi.org/10.1111/risa.13498>
- Schachner, M. K., Juang, L., Moffitt, U., & van de Vijver, F. J. (2018). Schools as acculturative and developmental contexts for youth of immigrant and refugee background. *European Psychologist*, 23, 44–56. <https://doi.org/10.1027/1016-9040/a000312>
- Schachner, M. K., Noack, P., Van de Vijver, F. J., & Eckstein, K. (2016). Cultural diversity climate and psychological adjustment at school—Equality and inclusion versus cultural pluralism. *Child Development*, 87, 1175–1191. <https://doi.org/10.1111/cdev.12536>
- Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8, 23–74. <http://www.mpr-online.de>
- Schwarzenthal, M., Juang, L. P., Schachner, M. K., van de Vijver, F. J., & Handrick, A. (2017). From tolerance to understanding: Exploring the development of intercultural competence in multiethnic contexts from early to late adolescence. *Journal of Community & Applied Social Psychology*, 27, 388–399. <https://doi.org/10.1002/casp.2317>
- Scrimin, S., Osler, G., Pozzoli, T., & Moscardino, U. (2018). Early adversities, family support, and child well-being: The moderating role of environmental sensitivity. *Child: Care, Health and Development*, 44, 885–891.
- Silove, D., Ventevogel, P., & Rees, S. (2017). The contemporary refugee crisis: An overview of mental health challenges. *World Psychiatry*, 16, 130–139. <https://doi.org/10.1002/wps.20438>
- Sladek, M. R., Umaña-Taylor, A. J., McDermott, E. R., Rivas-Drake, D., & Martinez-Fuentes, S. (2020). Testing invariance of ethnic-racial discrimination and identity measures for adolescents across ethnic-racial groups and contexts. *Psychological Assessment*, 32, 509–526. <https://doi.org/10.1037/pas0000805>
- Sladek, M. R., Umaña-Taylor, A. J., Wantchekon, K. A., McDermott, E. R., & Updegraff, K. A. (2021). Contextual moderators of a school-based ethnic-racial identity intervention: The roles of family ethnic socialization and ethnic-racial background. *Prevention Science*, 22, 378–385. <https://doi.org/10.1007/s1121-020-01166-8>
- Solano, G., & Huddleston, T. (2020). *Migrant Integration Policy Index 2020*. <https://www.mipex.eu/>
- Stan Development Team. (2018). *Stan modeling language user's guide and reference manual, version 2.18.0*. <http://mc-stan.org>
- Syed, M., & Donnellan, M. B. (2020). Registered reports with developmental and secondary data: Some brief observations and introduction to the special issue. *Emerging Adulthood*, 8, 255–258. <https://doi.org/10.1177/2167696820938529>
- Tanner-Smith, E. E., Durlak, J. A., & Marx, R. A. (2018). Empirically based mean effect size distributions for universal prevention programs targeting school-aged youth: A review of meta-analyses. *Prevention Science*, 19, 1091–1101. <https://doi.org/10.1007/s1121-018-0942-1>
- Umaña-Taylor, A. J. (2016). Ethnic-racial identity: Conceptualization, development, and associations with youth adjustment. In L. Balter & C. S. Tamis-LeMonda (Eds.), *Child psychology: A handbook of contemporary issues* (3rd ed., pp. 305–327). Taylor & Francis.
- Umaña-Taylor, A. J., & Douglass, S. (2017). Developing an ethnic-racial identity intervention from a developmental perspective: Process, content, and implementation. In N. J. Cabrera & B. Leyendecker (Eds.), *Handbook of positive development of minority children and youth* (pp. 437–453). Springer.
- Umaña-Taylor, A. J., Douglass, S., Updegraff, K. A., & Marsiglia, F. F. (2018). A small-scale randomized efficacy trial of the Identity Project: Promoting adolescents' ethnic-racial identity exploration and resolution. *Child Development*, 89, 862–870. <https://doi.org/10.1111/cdev.12755>
- Umaña-Taylor, A. J., Kornienko, O., Bayless, S. D., & Updegraff, K. A. (2018). A universal intervention program increases ethnic-racial identity exploration and resolution to predict adolescent psychosocial functioning one year later. *Journal of Youth and Adolescence*, 47, 1–15. <https://doi.org/10.1007/s10964-017-0766-5>
- Umaña-Taylor, A. J., Yazedjian, A., & Bámaca-Gómez, M. (2004). Developing the ethnic identity scale using Eriksonian and social identity perspectives. *Identity: An International Journal of Theory and Research*, 4, 9–38. [https://doi.org/10.1207/S1532706XID0401\\_2](https://doi.org/10.1207/S1532706XID0401_2)
- Weyn, S., Van Leeuwen, K., Pluess, M., Lionetti, F., Greven, C. U., Goossens, L., Colpin, H., Van Den Noortgate, W., Verschueren,



K., Bastin, M., Van Hoof, E., De Fruyt, F., & Bijttebier, P. (2021). Psychometric properties of the Highly Sensitive Child scale across developmental stage, gender, and country. *Current Psychology*, *40*, 3309–3325. <https://doi.org/10.1007/s12144-019-00254-5>

## SUPPORTING INFORMATION

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