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Version: Post-print

Publisher's version: Maehler, D.B., Daikeler, J., Ramos, H., Husson, C. & Nguyen, T.A. (2020). The cultural identity of first-generation immigrant children and youth: Insights from a meta-analysis. Self & Identity. doi.org/10.1080/15298868.2020.1765857

Title

The Cultural Identity of First-Generation Immigrant Children and Youth: Insights from a Meta-Analysis

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The Cultural Identity of First-Generation Immigrant Children and Youth: Insights from a Meta-Analysis

Abstract

In a globalized world with high rates of migration, identification with one's culture of origin and one's new cultural environment is a key and sometimes conflicted issue. Focusing on the growing population of first-generation immigrant children and youth, this study reviewed previous literature, using meta-analysis to investigate core factors affecting identity development. A search of databases yielded 3,636 English-language articles published between 1987 and 2017, of which only 24 met all eligibility criteria and were analyzed in depth. Random-effects analysis revealed that young first-generation immigrants identified moderately with their culture of origin, and that their identification with the residence country was, by comparison, weaker. Identity was found to be moderated by core demographic and migration-related factors. The implications of the findings and methodological challenges in the field are discussed.

Keywords: identity; acculturation; first-generation immigrant children and youth; refugees; identification with culture of origin and residence country

The Cultural Identity of First-Generation Immigrant Children and Youth: Insights from a Meta-Analysis

Migration flows and the number of people seeking asylum have increased worldwide in recent years (e.g., UNHCR, 2017). However, data and evidence gaps exist, particularly in relation to *young* people affected by migration or forced displacement (UNICEF, IOM, UNHCR, Eurostat, & OECD, 2018). With a view to addressing these gaps and thereby facilitating the development of suitable measures to support the integration of immigrant children and youth into receiving countries, the present work examines findings on the *cultural identity* of young first-generation immigrants (including refugees). Immigrant children and youth often struggle with the tension between identifying with their country/culture of origin (hereafter referred to collectively as "culture of origin") and their new country of residence (e.g., Hou, Schellenberg, & Berry, 2017). Psychological development models (Erikson, 1988; Phinney, 1992) postulate that the identity formation process occurs particularly during adolescence, when young people examine their ethnicity and its significance for their lives. In this period, they seek to reconcile different, and possibly conflicting, cultural patterns in order to establish a secure cultural identity. Confident identification with a community or the environment contributes significantly to positive psychosocial functioning and development among young immigrants in host societies (Umaña-Taylor, 2011). Particularly for those who were socialized outside the residence country, the new cultural context triggers a new identity development process. However, little attention has been paid to *first-generation* immigrant children and youth's identification with their culture of origin and their residence country, and even less research has focused on the identity of *refugee* children and youth.

In contrast to children of immigrants (i.e., *second-generation immigrants*), first-generation immigrants have been (partially) socialized in a culture different from that of the

residence country, have migration experience of their own, and have to adapt to a *new* social environment. Second-generation immigrants, on the other hand, were born in the residence country, do not have to adapt to a new society, and, in most cases, are citizens of the residence country. Therefore, when investigating emotional adaptation or identification in the post-migration context, it is essential to distinguish between these two groups (see also Giuliani, Tagliabue, & Regalia, 2018; Umaña-Taylor, 2011; Wiley, Deaux, & Hagelskamp, 2012).

The goal of the present study is to summarize, by means of meta-analysis, previous research on the identity of first-generation immigrant children and youth in order to understand how committed they feel to their *old* and *new* cultural environments, and to identify core factors that are related to the identity development process.

Identity Approach in an Acculturation Setting

After arriving in a new country or cultural setting different from the one in which they were initially socialized, young immigrants undergo a process of psychological and sociocultural adaptation that is referred to in psychology as *acculturation* (e.g., Berry, 1997; Chirkov, 2009). Immigrant acculturation has been measured using a variety of domains, such as cognitive competencies as measured, for example, by linguistic skills (e.g., Jasinskaja-Lahti & Liebkind, 2007); social contact (e.g., Berry, 1997); behavioral repertoire, such as food practices or leisure behavior (e.g., Ryder, Lynn, & Paulhus, 2000); structural placement in the education system or on the labor market (e.g., Esser, 2006); and/or identity (e.g., Phinney, Berry, Vedder, & Liebkind, 2006). These domains can be applied singly or in combination to capture large-scale acculturation processes (e.g., Berry & Sabatier, 2011). Whereas acculturation domains such as language acquisition or behavioral adaptation are more short-term processes and can largely be controlled by individuals themselves, identification with, or a sense of belonging to, a receiving country is based on deeper psychological processes that unfold over time (e.g., Berry &

Sabatier, 2011). Thus, depending on the domains used, and on their operationalization, divergent acculturation patterns may emerge on the individual level.

As noted above, the present study focuses on the identity domain in order to capture acculturation and its correlates among young first-generation immigrants in their new residence country. The most extensively used model in the literature on identity among children and adolescents with migration backgrounds (Schwartz, Luyckx, & Vignoles, 2011) is the *ethnic identity development* approach proposed by Jean Phinney (e.g., 1992). Phinney (2003, p. 63) defined ethnic identity as "a dynamic, multidimensional construct that refers to one's identity of self as a member of an ethnic group." Her approach considers individuals' perceptions of their ethnicity and the role that they assign to it in their lives, regardless of their actual individual ethnic involvement. The model focuses on two components of ethnic identity: exploration and commitment. *Exploration* is defined as "seeking information and experience relevant to one's ethnicity," and is measured, for example, "by reading and talking to people, learning cultural practices, and participating in ethnic events" (Phinney & Ong, 2007, p. 272). An exemplary item used to measure this component is "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs" (Phinney & Ong, 2007, p. 276). *Commitment* refers to positive affirmation of one's ethnic group and a strong sense of belonging (Roberts et al., 1999). This component is captured usually with items such as "I have a strong sense of belonging to my own ethnic group" or "I feel a strong attachment towards my own ethnic group" (Phinney & Ong, 2007, p. 276). Although the two components of ethnic identity – exploration and commitment – are distinct processes, the variables have been found to be closely correlated (Phinney & Ong, 2007).

Phinney's identity approach focuses on the development of ethnic identity – or rather, on identification with the culture of origin. In this stream of research, ethnic identity has generally been studied with reference to survey respondents' identification with their heritage groups or ethnic groups (e.g., parents' culture of origin in the case of second-generation

immigrants, or the culture of origin of many generations ago in the case of minorities such as the African American or Latino population in the United States). In these surveys, respondents with a migration background (but not necessarily with migration experience of their own) can, as a rule, self-identify *either* as members of their heritage culture *or* of the residence country. However, the acculturation stream of research has illustrated that immigrant youth may simultaneously identify with their culture of origin *and* the culture of the new residence country (e.g., Arends-Tóth & van de Vijver, 2007; Berry, 1997). The cultural identity of immigrant children and youth can thus be operationalized as the degree of identification with, or commitment to, their culture of origin *and* their country of residence. This can be captured with a two-dimensional model that assesses *ethnic identity* (i.e., identification with the culture of origin) and *national identity* (i.e., identification with the country of residence). For example, from the perspective of this model, Syrian refugee children who immigrated to Germany may identify with Syrian cultural values and traditions and thus have a Syrian ethnic identity. In the case of native German children (born and socialized in Germany), *ethnic identity* would mean that they identify with German cultural values and traditions. Syrian immigrant children may also identify with Germany, and thus have a (German) national identity but a Syrian ethnic identity. In the case of native German children, by contrast, ethnic and national identity coincide (e.g., Phinney & Baldelomar, 2011). To date, empirical evidence regarding the interrelations between ethnic and national identities has been inconsistent (see also Maehler, Zabal & Hanke, 2019; Martiny, Froehlich, Soltanpanah, & Haugen, 2019).

Although there is a vast body of research on identity, several factors preclude uniform or clear conclusions. These factors include the varied conceptualizations of identity (Schwartz et al., 2011; Ward, 2013), the failure to control for key acculturation background factors (e.g., Arends-Tóth & van de Vijver, 2006; Hou, Schellenberg, & Berry, 2017), and the use of heterogeneous cultural samples based on a very broad definition and conceptualization of "immigrant." Heterogeneous samples that mix different immigrant generations will, for

instance, confound the results. For first-generation immigrants, identification with the culture of origin is initially expected by default to have developed before their emigration process started; after immigration, they may also develop identification with the new residence country. By contrast, second-generation immigrants, having been born and raised in the residence country, are more likely to identify with that country. Identification with their immigrant parents' culture of origin is possible but not inevitable. Research has shown that immigrants' identity development will be different if they are born and socialized outside the residence country (e.g., Gong, 2007). In addition, empirical findings show that divergent mechanisms (e.g., perceived discrimination or context) can influence the strength of both the ethnic and national identity development of first- and second generation immigrants (e.g., Giuliani, Tagliabue, & Regalia, 2018; Fleischmann & Phalet, 2016; Kim & Chao, 2009; Wiley et al., 2012). Related to mixed-sample issues, the voluntary status of immigrants may also moderate identity development. In contrast to voluntary immigrants, refugees are forced to leave their homeland, and this may affect their psychological adaptation in the new residence country (e.g., Echterhoff, Hellmann, Back, Esses, & Wagner, 2019). However, a recent Canadian study based on a large sample ($N = 7{,}003$) did not find evidence of significantly different identity patterns for voluntary and involuntary immigrants (Hou et al., 2017).

The identity concept used in the present study is based on the *content* (i.e., scales or items) of Phinney's ethnic identity development approach (see description above). *Structurally*, however, the study analyzes two possible dimensions of identity among young people socialized outside their residence country: identification with the culture of origin and identification with the *new* residence country.

Factors Moderating Identification with Culture of Origin and Residence Country

Research and theoretical frameworks on integration focusing on young immigrants have identified diverse individual and contextual factors that influence psychological adaptation to a

new environment (Arends-Tóth & van de Vijver, 2006; Suárez-Orozco, Motti-Stefanidi, Marks, & Katsiaficas, 2018). Of these factors, demographic traits are most consistently used, and are among the least subjective measures used. *Gender* and *age* are primary factors explored by researchers at the individual level. Despite the widespread use of these two factors in relevant studies, empirical results regarding their impact on identity have been contradictory (Phinney, Vedder, van de Vijver, & Liebkind, 2006). Some studies (e.g., Berry et al., 2006; Crul, 2016; Phinney, Berry, Vedder, & Liebkind, 2006) found no effects of gender and age on identification with the culture of origin or country of residence, whereas others did find that they had an impact. For example, gender has been shown to affect how people experience culture and their country of origin, and in turn to affect gender-specific socialization experiences of children (Suárez-Orozco & Qin, 2006; Umaña-Taylor, Wong, Gonzales, & Dumka, 2012). In many cultures hegemonic patriarchal values prevail, and girls are subject to stricter parental control and socialization to uphold parental values. Girls tend to be "socialized more toward staying close to the home and family environment," whereas boys tend to be socialized more "toward extrafamilial environments and experiences" (Umaña-Taylor, Wong, Gonzales, & Dumka, 2012). Hence, boys and men from such cultures of origin will have more opportunities to interact with the society of the residence country, which may support the development of identification with that country. In this regard, a longitudinal analysis (over a period of five years) showed that male students were less likely than females to retain their ethnic identity (Qin-Hilliard, 2003). Furthermore, a number of studies (e.g., Benet-Martínez & Haritatos, 2005; Hou et al., 2017) found that *age of arrival* affects the development of a cultural identity. Younger age of arrival means less socialization in the country of origin and more exposure to the residence country; this is associated with stronger identification with the residence country (e.g., Hou et al., 2017).

Several studies (e.g., Hou et al., 2017; Kuo & Roysircar, 2004) have shown that *duration of residence* is also positively related to identification with the residence country. However,

empirical results regarding the impact of this variable are contradictory. Phinney et al. (2006), for example, found an effect of duration of residence on identification with the residence country, but no effect for identification with the culture of origin.

Moreover, research has shown that *culture of origin* may have an effect on identification with both the culture of origin and the residence country (e.g., Berry, 2006; Chirkov, Lynch & Niwa 2005). Most research in this regard has focused on the cultural distance between the culture of origin and the receiving country, and the related difficulties to adapt. Berry (1997), for instance, summarized that cultural difference was negatively related to adaptation. The effect of the social *context* in the receiving country (e.g., immigration policies or degree of tolerance toward immigrants) on immigrants' adaptation is also worth considering in theoretical frameworks (e.g., Arends-Tóth & van de Vijver, 2006). The sociopolitical context of immigrants' host countries can crucially influence the maintenance of identification with the culture of origin and the development of a sense of belonging to the residence country (e.g., Christ, Asbrock, Dhont, Pettigrew, & Wagner, 2013; Martiny et al., 2019). For example, a study conducted by Fleischmann and Phalet (2016) indicated that a negative climate of public opinion about immigrants (or immigrant groups) in the host country was not conducive to the (simultaneous) development and maintenance of both identities among immigrants.

Besides these basic factors that may moderate identity development, further factors, such as language proficiency, contact, or perceived discrimination, have been identified in the literature as correlates of (ethnic and national) identity (e.g., Kim & Chao, 2009; Martiny et al, 2019; Maehler et al., 2019; Potochnick, Perreira, & Fuligni, 2012). Recent scoping reviews of the literature on immigrant (and refugee) integration have revealed that research conducted in the last few years has not consistently considered individual and contextual factors, and that reviewed publications failed to report comprehensive information on sample composition (Maehler et al., 2020). The present study will therefore focus on the aforementioned *basic* factors that may moderate cultural identity – namely, gender, age, age of arrival, duration of

residence, culture of origin, and country of residence – as they can be expected to be surveyed and reported. Moreover, the quality of the raw data is expected to be adequate for use in a meta-analysis. In contrast to subjective information (e.g., perceived discrimination, language proficiency), this more objective information on age, age of arrival, gender, etc. as moderators of identity is expected to be more often reported, more reliable, and comparable across diverse studies.

Questions Regarding the Cultural Identity of First-Generation Immigrant Children and Youth

Through a meta-analysis of scholarship, the following questions (see Figure 1 for an overview) will be investigated and previous research on cultural identity and related factors among immigrant children and youth summarized:

1) How strongly do young first-generation immigrants identify with their culture of origin?
2) How strongly do young first-generation immigrants identify with the residence country?
3) To what degree does young first-generation immigrants' identification with their culture of origin differ from their identification with the residence country?
4) How, and to what extent, is identification with the culture of origin and the residence country moderated by the following basic demographic characteristics and migration-related factors: (a) gender, (b) age, (c) age of arrival, (d) duration of residence, (e) culture of origin, and (f) country of residence?

INSERT FIGURE 1 HERE.

5) Furthermore, it will be investigated whether the immigration entry status (voluntary or involuntary) and the operationalization of identity used may have an impact on the observed cultural identity of young first-generation immigrants.

Method

Eligibility Criteria

The present meta-analysis was based on peer-reviewed journal articles published during a 30-year period (1987–2017). It concentrated on peer-reviewed articles to ensure comparability and availability of the literature. The search for articles was conducted between August 20 and 28, 2018 in English-language databases, including the Education Resources Information Center (ERIC) database, PubPsych, PsycINFO, Web of Science, ScienceDirect, PubMed, and EconLit. The target group of the meta-analysis was first-generation immigrants (including refugees) aged 19 years and younger.

In the search for articles on *immigrants*, a number of search terms were used in combination. These terms were assigned to three different levels. The search terms at Level 1 served to define the target group (*migrant, immigrant*); the search terms at Level 2 delimited the desired age range (*child, youth, teen, minor, adolescent*); the terms at Level 3 comprised keywords relevant to content *(identity, belonging, identification*). Only documents containing at least one keyword from each of the three levels were retained. The searches yielded a working sample of 3,636 articles (see Figure A1 in the Appendix), which constituted the broad basis for further selection and coding.

Coding Procedure

The selection and coding procedure followed the Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) model (Moher, Liberat, Tetzlaff, Altman, & The PRISMA Group, 2009). PRISMA is an evidence-based minimum set of items for reporting

systematic reviews and meta-analyses. In the first screening, duplicates were excluded. In further steps, articles were examined for eligibility, and further entries were removed. Exclusions included, for example, empirical research with divergent target groups (not first-generation immigrants [$n = 434$] or not within the specified age range [$n = 525$]), qualitative studies ($n = 1{,}160$), divergent literature sources (e.g., not English-language publications, or a book chapter, $n = 18$), or more than one of these reasons ($n = 218$). In a second step, studies were excluded that did not measure ($n = 315$) or did not cover a similar identity concept to that outlined above (e.g., studies that focused on linguistic adaptation) ($n = 79$). Also excluded were studies that displayed insufficient data quality ($n = 43$), for example by failing to report arithmetic means for the measurement of identity.

Coding was performed by two independent coders. The second coder was instructed by the first; a coding scheme and coding samples were provided. The second coder coded a random sample of 75% of the studies (from a total of 24 studies); intercoder reliability showed a Krippendorff's alpha (Krippendorff, 2004) of 1 for the effect sizes and .77 for the moderators, and a combined value of .80, indicating almost 80% agreement between the two coders (as recommended in the literature). Coding disagreements were resolved by discussion.

This yielded a final sample for the meta-analysis comprising 24 publications that examined first-generation immigrant child and youth participants (see Figure A1 in the Appendix).

The journals that yielded the most articles matching the eligibility criteria were *Cultural Diversity and Ethnic Minority Psychology*, the *Journal of Cross-Cultural Psychology*, and the *Journal of Youth and Adolescence* (see references). In addition to bibliographic information, articles were coded for sample characteristics, the concept of identity used, and methodological factors.[1]

[1] The data coded and the coding scheme used will be made available for further analysis in the data archive PsychData.

Statistical Method: Effect Sizes and Analysis Procedure

To answer the research questions, effect sizes were calculated. Three effect sizes were extracted for the analyses: strength of identification with the culture of origin (see Question 1), strength of identification with the residence country (see Question 2), and the difference between the two identity dimensions (see Question 3). For the first two effect sizes, the standardized raw means were used. For the difference between the two dimensions, the standardized mean differences were used as effect sizes (Borenstein, Hedges, Higgins, & Rothstein, 2009). A positive effect size means that subjects had a stronger identification with their culture of origin than with the residence country.

The statistical analysis comprised the following steps (Lipsey & Wilson, 2001). First, the weighted means and mean difference across all studies were computed by weighting each effect size by the inverse of its variance. This variance component consisted of the study-level sampling error variance and an estimate of the between-study variance (Borenstein et al., 2009). Random-effects analysis was used because inference should be made for a population of studies larger than the set of observed studies (Hedges & Vevea, 1998). In the next step, the confidence interval (CI) for the mean effect size was calculated in order to determine the degree of precision of the estimate and whether the mean effect size was statistically significant. In the third step, homogeneity analysis was performed to assess whether the effect sizes came from the same population (random-effects assumption). In the fourth step, a mixed-effect model analysis was conducted for each moderator separately to determine which moderators had a significant influence on the mean identification with the culture of origin and the residence country and on the difference between the two identity dimensions. In the fifth analysis step, a publication bias analysis was performed: As only *published* studies were covered by the meta-analysis, funnel plots were used to examine whether the results were biased (Light & Pillemer, 1984). Related to this, the meta-analysis was also controlled for outlier effects. In the final analysis step, several robustness checks were performed. As only a small number of studies covered the continuous

variables age, age of arrival, and duration of residence, a robustness check was performed by categorizing these three moderators. Further robustness checks were conducted to account for the multilevel structure of the data (effect sizes are nested in studies[2]): First, to verify the *main effects*, multilevel models were conducted; second, to verify the *moderator effects,* one effect size per study was extracted and synthesized (taking the effect size with the largest sample size; e.g., Borenstein et al., 2009; Moeyaert et al., 2017). Note that due to the small sample sizes, multilevel models to check the robustness of the moderators were not feasible. The R package metafor (Version 1.9-9) was used for the analyses (Viechtbauer, 2010).

Results

Sample and Study Description

Sample characteristics. From the 24 included publications, 35 effect sizes (samples) could be extracted for the meta-analysis. In addition to the full study sample, some publications provided measurements for the dependent variable (identity) differentiated by subgroups/samples such as gender (e.g., Phuntsog, 2012), culture of origin (e.g., Kim & Chao, 2009), or the region of residence in the host country (e.g., Kiang & Fuligni, 2009). In the following description, the sample characteristics will be referred to throughout (Table 1).

As can be seen from Table 1, the period of publication of the articles was from 1998 to 2015. This information can be used as a proxy indicator of the density of research on identity among first-generation immigrant children and youth (the period in which the empirical fieldwork took place was reported by only 11 of the 24 included publications). Most of the included studies used medium sample sizes (up to 149 participants; $n = 27$); eight studies were

[2] Seven of the included studies contained multiple effect sizes: Birman, Trickett, & Buchanan, 2005; Costigan et al. 2010; Kim & Chao, 2009; Kiang & Fuligni, 2009; Phuntsog, 2012; Sonderegger & Barrett, 2004; Walsh et al. 2015.

based on large sample sizes (> 150 participants). All reported samples focused on first-generation immigrants; in eight samples, the focus was also on the refugee subgroup. Overall, the publications used data collected in nine countries. The fieldwork for the samples was conducted mainly in Anglo-Saxon countries ($n = 26$) such as the United States, Australia, Canada, and New Zealand. Some of the European countries ($n = 6$), such as Italy, Greece, and Spain, that host large numbers of immigrants were also covered.

Regarding the individual characteristics of the participants, gender was about equally distributed (45% female to 55% male) in most samples ($n = 13$ of 27 samples that provided this information). Most sample participants were adolescents (12–19 years; $n = 22$). Four samples comprised participants in middle and late childhood (aged between 6 and 11 years). Nine samples did not, or did not adequately, report age ranges. The overall mean age of the participants was 14.89 years ($n = 27$), with a mean range of 11.95–19.4 years. The samples were composed of young participants who had arrived between the ages of 5 and 15 years (average age of arrival: 9.57 years; $n = 22$). The duration of residence in the host country ranged between under one year and 16 years ($n = 14$); the average duration of residence was 6.22 years ($n = 18$). Twenty-two studies reported measuring the socioeconomic status (SES) of sample participants, but only 16 studies actually reported SES values. SES was measured using diverse single or combined indicators based on parental education in school grades ($n = 12$), parental education in years ($n = 5$), parental occupation ($n = 6$), or reduced-fee or free meals at school ($n = 1$). Besides the different indicators used, the samples varied in the way they reported these indicators. It is also important to note that, in most cases, these data were based on information that the interviewed children and adolescents provided about their parents' SES. The authors are aware of the importance of this variable, particularly in the acculturation context. However, because of the variance in how it was measured and defined, it was not possible to categorize it meaningfully or to extract reliable results from the meta-analysis.

The samples studied consisted of first-generation immigrant (and refugee) children and adolescents from several different countries or cultural regions. The included studies covered, in particular, participants from East Asian countries ($n = 13$), Southern Asian countries ($n = 8$), or countries of the former Soviet Union ($n = 8$). Furthermore, some samples included participants from Central or South America ($n = 8$), from African countries ($n = 5$), or from former Yugoslavian countries ($n = 4$).

INSERT TABLE 1 HERE.

Instruments used to measure identity. To operationalize identity, the studies included in the sample used the approach proposed by Phinney (e.g., 1992), or very similar concepts (see Table A1/A2 in the Appendix for a short description). Fourteen of these studies covered both identity dimensions – that is, identification with the culture of origin and with the country of residence. Five of the 14 studies used the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) or the Multigroup Ethnic Identity Measure–Revised (MEIM-R; Phinney & Ong, 2007) for this purpose (see Table A1/A2 in the Appendix for a short description). A further five studies used the Identity subscale of the Language, Identity and Behavioral Acculturation Scale (LIB; Birman & Trickett, 2001) or the American Identity Questionnaire (AIQ; Phinney and Devich-Navarro, 1997), both of which are based on the MEIM approach. Four studies used similar concepts and very similar items to measure the two identity dimensions in immigrants (see Table A1/A2 in the Appendix). A total of 10 studies measured only identification with *the culture of origin*, and one study measured only identification with *the residence country*. Most of the studies captured identity using items that reflect the contents of the commitment subscale of the MEIM/MEIM-R. Furthermore, based on the samples of first-generation immigrants, the findings of the studies that measured both identity dimensions *and* reported scale interrelations

show that ethnic and national identity were unrelated (n = 4; e.g., Tartakovsky, 2009; Stuart & Ward, 2011), or negatively related (n = 5; e.g., Birman, 2006; Cristini et al., 2011).

Predictor and outcome measures. Identity measures were used as predictor variables in 14 of the studies (identification with country of origin: n = 7; identification with residence country: n = 1; both dimensions: n = 6); 10 studies used identity measures as outcome variables (identification with country of origin: n = 3; both dimensions: n = 7). Identity was used as a predictor variable to investigate, for example, issues of psychological well-being (n = 7), school adjustment (n = 6), and drug-use attitudes or delinquent behaviors (n = 2). It was used as an outcome variable to assess the impact of family-related factors (n = 5), demographic characteristics and migration related factors (n = 4), perceived support (n = 4), and other acculturation domains (n = 3).

Identification with the Culture of Origin and the Residence Country: Mean Effect Sizes

In the following, the first three research questions are addressed by presenting the mean effect sizes under the random-effects assumption.

Identification with the culture of origin. The sampling error weighted mean effect size estimate for the young first-generation immigrants' identification with their culture of origin, computed across all 34 effect sizes under a random-effects assumption, was 3.04 (95% CI = 2.83/3.26; see first line and column of Table 2). The forest plot in Figure 2 summarizes the study-level differences in the means of identification with culture of origin. The metric in the forest plot ranges from 0 to 5, where 0 means weak identification with the culture of origin and 5 means very strong identification. Each row displays the effect size for each study. The diamond at the base of the graph shows the error weighted mean effect size estimate under the random-effects assumption. The effect size distribution in the forest plot suggests that the mean values cluster around a moderate identification factor of 3.

Identification with the residence country. The second effect size was the mean of young immigrants' identification with the residence country. A medium effect size of 2.41 under the random-effects distribution (95% CI = 1.97/2.84; see first line and second column of Table 2) was observed. This indicates a rather weak identification with the residence country. However, the effect size distribution was somewhat more heterogeneous (ranging from 1 to 4) than for identification with the culture of origin. This can be observed in the second forest plot (Figure 3).

INSERT TABLE 2 HERE.

Comparison of identification with the culture of origin and the residence country. The third research question focused on the difference between identification with the culture of origin and the residence country. The results show a difference of 0.39 (95% CI = −0.73/−0.06) to the disadvantage of national identity (see first line and third column of Table 2). This means that identification with the residence country was on average 0.4 scale points lower than identification with the culture of origin. The third forest plot (Figure 4) shows that the effect sizes are quite heterogeneously distributed, which means that some studies found a stronger identification with the residence country (effect sizes on the right-hand side of the zero line), and that most of the effect sizes were significantly different from zero, as the confidence intervals do not cross the zero line.

INSERT FIGURE 2 HERE.

INSERT FIGURE 3 HERE.

INSERT FIGURE 4 HERE.

Identification Mean Moderated by Demographic Characteristics: Heterogeneity and Moderator Analyses

In the heterogeneity analysis for all three effect sizes, significant heterogeneity was found (see significance levels in the first line of Table 2), which indicates the heterogeneity of the effect size distribution under the random-effects assumption. These findings supported a moderator analysis to investigate whether moderators influenced identification with the culture of origin and the country of residence, and the difference between the two identity dimensions. Together with the results on the role of moderators of young immigrants' identification, issues regarding the validity and robustness of the findings will be addressed in the following.

To determine whether publication bias existed, the funnel plots were examined as suggested by Light and Pillemer (1984). The funnel plots in Figure 5 show the individual observed effect sizes on the *x* axis and the corresponding standard errors on the *y* axis. It is important that the point cloud on both sides of the line be approximately equal in number and distribution, indicating that both published and unpublished findings had comparable effect sizes and significance levels. As can be seen from Figure 5, this holds true for the present analysis. This result is underscored by Egger et al.'s regression test for funnel plot asymmetry (Egger, Smith, Schneider, & Minder, 1997), the result of which was non-significant, which means that the funnel plot is not asymmetric and that there is no evidence of the existence of publication bias. In addition, plotting the quantiles of the effect size distribution against the quantiles of the normal distribution in a normal quantile plot as proposed by Wang and Bushman (1998) did not suggest the presence of publication bias (see Figure A2 in the Appendix): The cases did not deviate substantially from linearity, nor were there any suspicious gaps.

INSERT FIGURE 5 HERE.

Furthermore, it was examined whether outliers could have disproportionately affected the meta-analysis. If an effect size is more than three standard deviations away from the mean, it is classified as an outlier (see Lipsey & Wilson, 2001). That was not the case for the present sample (see model diagnostics in Figure A3 in the Appendix). Neither the studentized residual[3] (first panel in Figure A3 in the Appendix), which takes values between 1 and −2, nor Cook's distance[4] (third panel in Figure A3 in the Appendix) indicated the existence of outliers.

In the next step, a moderator analysis was conducted (results displayed in Table 2) to examine the impact of demographic and migration-related characteristics on the three effect sizes.

Gender. Due to missing variation for one of the three effect sizes – namely, identification with the residence country – the impact of gender could be investigated only on identification with the culture of origin. Overall, this variable showed no significant effect (see Table 2, third line). However, the three categories were significantly different from the intercept (Table 2, lines 4–6). At this point, it could be observed that females showed the greatest identification with the culture of origin. Next, it was examined whether the results depended on the percentage of females in the samples; no effect was found.

Age. No significant effect of age on any of the three effect sizes was found. This means that the age of young immigrants in the studies had no impact on their identification with the culture of origin or the residence country, or on the difference between the two identity dimensions. Due to the small number of effect sizes, the age variable was categorized into three age groups in the robustness check (see Table 3). This revealed a significant effect of age on the difference between the two identity dimensions: Whereas the younger respondents (age groups "13 years and younger" and "13 to 16 years") reported stronger identification with the

[3] The studentized residual is a measure of the size of the residual, standardized by the estimated standard deviation of residuals based on all the data but the *i*th effect size.
[4] Cook's distance is a measure of the influence of the *i*th effect size. Influence is the amount that the *i*th effect size is affecting the regression line, measured by how much the regression line would change if the *i*th effect size were not included in the analysis.

residence country, older respondents (aged > 16 years) reported stronger identification with the culture of origin.

Age of arrival. Although it had been assumed that age of arrival would have an impact on the identification with both the culture of origin and the residence country, the results showed no significant effect of this variable. However, due the small number of studies in this group (n = 11), this result should be interpreted with caution. Furthermore, both robustness checks (see Table 3) – although not significant (p = .5; p = .3) – suggest that the earlier the children immigrated, the stronger the identification with both cultures was.

Duration of residence. The moderator analysis revealed a significant effect of duration of residence in the host country on young immigrants' identification with that country: The longer they stayed in the residence country, the stronger was their identification with it. However, this did not necessarily imply significantly weaker identification with the culture of origin or a difference between the two dimensions.

Culture of origin. A significant effect of culture of origin on the difference between identification with the culture of origin and the residence country was found. For example, young first-generation immigrants from countries in Africa and Central and South America tended to show a stronger identification with their country of residence than with their culture of origin. By contrast, young immigrants from the former Soviet Union and from Asian countries tended to report a stronger identification with their culture of origin. Particularly immigrants from African countries tended to identify, on average, one scale point higher with the residence country than with their culture of origin, whereas the identification of immigrants from East Asian countries with the culture of origin was, on average, one scale point higher than with the residence country.

Country of residence. The analysis revealed that the strength of identification with the culture of origin depended on the current residence country of the respondent. In Italy and Finland, for example, young first-generation immigrants reported the strongest identification

with their culture of origin. In Greece and New Zealand, by contrast, the young immigrants reported the weakest identification with their culture of origin.

INSERT TABLE 3 HERE.

Controlling for Immigration Entry Status and Operationalization of Identity

It was also investigated whether the observed identification with the culture of origin or the residence country, and the difference between the two, were affected by the immigration entry status of participants (voluntary immigrants or refugees) and the operationalization of identity. As Table 4 shows, neither of these factors had a significant impact.

INSERT TABLE 4 HERE.

Controlling for the Multilevel Structure of the Data

The multilevel models for the *main effects* (Table A3 in the Appendix) confirm the robustness of the findings. The coefficients of the random-effects models testing identification with the country of origin and the country of residence (Table 2) are only slightly lower than those of the multilevel models (Table A3). Also, the difference between identification with the culture of origin and the residence country increased only slightly – from 39% in the random-effects model (Table 2) to 44% in the multilevel model (Table A3).

The findings of the reduced sample approach (Table A4 in the Appendix) to test *moderator* effects confirm the results above, and the comparison of Table 2 with Table A4 shows that the direction of the effects and the significance level vary hardly at all. The already weak effect of culture of origin on the difference between identification with the culture of

origin and the residence country (Table 2) is no longer significant in the robustness check model (Table A4). This might be due to the smaller number of studies in the robustness check model (n = 13 vs. n = 15). Furthermore, the robustness of the findings for the *control variables* immigration entry status and operationalization of identity could also be confirmed, and, as the comparison of Table 4 with Table A5 shows, the results did not differ in terms of significance or direction.

Discussion

The aim of the present contribution was to summarize findings regarding the identification of first-generation immigrant children and youth (incl. refugees) with their culture of origin and their residence country. Overall, the present meta-analysis revealed that young immigrants (mean age about 15 years) socialized outside the residence country (mean age of arrival about 10 years) identified moderately with their culture of origin, and that their identification with their residence country was, by comparison, weaker. Considering the multiple environments to which young immigrants have been exposed, and the discrimination they may face in new residence countries, the development of a coherent cultural identity may be a challenging task. Maintaining a sense of belonging to the culture of origin, and thus continuity, might be a central psychological resource for coping with immigration-related challenges, and might provide a sense of control and meaningfulness (see Çelebi, Verkuyten, & Bagci, 2017). In terms of Berry's (1997) classification of acculturation strategies, the results of the present meta-analysis correspond to an acculturation profile situated between "integration" (characterized by a positive orientation toward both the culture of origin and the residence country) and "separation" (characterized by a positive orientation toward the culture of origin and a negative orientation toward the residence country). However, this finding should be interpreted with caution because, following the identity development approach (e.g., Phinney, 1992), the process

of identity formation was ongoing in these age cohorts. Furthermore, recent studies focusing on second-generation immigrants suggest that in today's super-diverse Western cities and their heterogeneous school environments, national identity is increasingly broken down to the level of local identity and a sense of belonging to a city (Crul, 2016). This will also be the case for first-generation immigrant children and youth in Western societies.

Moreover, similar to general findings in the literature on samples of second-generation immigrants and ethnic minorities, the interrelations between ethnic and national identity scales among first-generation immigrants were not consistent across studies. Some studies reported negative correlations between the scales, others reported that the scales were unrelated. Positive correlations were not found in the reviewed studies. These divergent findings regarding the correlations between the scales might be related to diverse factors, such as different sociopolitical host country contexts (e.g., Martiny et al., 2019), the sample composition, or different measurements used (e.g., Maehler et al., 2020). Moreover, as some of the included studies did not report corresponding correlations, the extent to which the results are representative is unclear.

Furthermore, moderator analysis showed that cultural identity was related to core sociodemographic characteristics: Girls and older adolescents reported a stronger identification with the culture of origin than did boys and younger adolescents and children. The latter age groups reported a stronger identification with the residence country. As discussed above, stronger identification with the culture of origin among girls might be related to gender-specific socialization experiences and to the resulting lack of opportunities to integrate into and develop a sense of belonging to the new environment. However, the higher expectations for girls to endorse traditional values and gender-role ideologies reported in the literature (for an overview see Suárez-Orozco & Qin, 2006) may also result in high levels of intergenerational conflict and may generate resistance to and rejection of traditional values among young women (e.g., Dion & Dion, 2001).

Although the present results suggest that age of arrival does not have a moderating effect on the strength of identification, the duration of residence in the host country was positively related to identification with that country. Neither variable impacted on identification with the culture of origin. This suggests that the migration-related factors *age of arrival* and *duration of residence in the host country* have different implications for young immigrants and are not equivalent proxies to predict cultural identity. The results show further that the effect of duration of residence in the host country was independent of variations in the strength of identification with the culture of origin. As expected, they also reveal that the strength of the identification varied according to the residence country of the young immigrants (context effect). There is no doubt that host countries differ in their history as settler societies, their immigration policies, and, last but not least, the attitudes of the autochthonous majority toward immigrants in general, or toward specific immigrant groups. All these factors may affect the development of identification with the residence country and the maintenance or development of heritage identification among young immigrants (Suárez-Orozco et al., 2018). Additionally, the meta-analysis suggests that cultural identity may be related to the cultural distance between immigrants' culture of origin and the residence country, which can hamper the acculturation process. Relatedly, characteristics of the local community in which the young immigrants are living – for example, a community with a high or low ethnic density – may affect the development of a sense of belonging to the two cultures (Birman, Trickett, & Buchanan, 2005).

Challenges in Migration Research and Future Directions

As already acknowledged by researchers and policymakers, more research is needed on first-generation immigrant children and youth, and particularly on young people with refugee experience. Because previous research has been based on mixed immigrant-generation groups, it is difficult to derive insights for the integration of new immigrant groups, especially in European host countries (Maehler et al., 2019). Another obstacle is the operationalization of

immigrant, which varies greatly in the literature. The definition of the term depends on the research question and on the information available in the datasets used for secondary analyses. Several indicators, such as citizenship, place of birth, and first language, have been used individually or jointly to operationalize *immigrant*. To investigate cultural identity and cultural identity formation, place of birth is a crucial variable. Attention should also be paid to whether migrants are first or second generation, as the latter are likely to have already been socialized in the host country culture.

Poor data reporting poses a further methodological challenge. Many of the studies reviewed for the present analysis failed to report core demographic information on the samples, such as gender, immigrant generation, age of arrival, duration of residence, religion, and socioeconomic status (SES). Theoretical frameworks on acculturation have identified these factors as relevant, and have emphasized the importance of taking them into account in studies on child and adolescent immigrants (Suárez-Orozco et al., 2018). In addition to poor reporting practices, inconsistency in the measurement of variables (e.g., SES) also hampered the evaluation of some studies.

The same problem arose when age ranges were not reported, or a definition of *immigrant* was not provided. This was compounded by the fact that about one third of the articles identified in the literature search employed qualitative approaches, which cannot be used in a meta-analysis. However, the exploratory and participatory designs used in qualitative research enable comprehensive consideration of individual and context factors. Moreover, they may be more appropriate for assessing – and may facilitate a deeper understanding of – cultural identity, or sense of belonging, in children and youth (e.g., Barrett, 2007). This could be an advantage, particularly for the study of younger children, or of children and youth with low literacy skills or low proficiency in the language of the new host society. However, compared with quantitative designs, the possibility of making generalizations beyond the studied individual or group is limited. Moreover, studies focusing on young first-generation immigrants

rarely addressed the identification with both cultures (i.e., country of origin and residence country) together with relevant predictors, such as proficiency in the native and host country language, perceived discrimination, or social networks. Only about one quarter of the eligible studies reviewed reported such values, and, even then, the variables were rarely measured in a comparable way. Finally, although the number of publications on the topic of *cultural identity* and *migration* has increased steadily in recent years, the present meta-analysis did not identify any eligible works published in the last five years (i.e., after 2015). This is reflective of the overall lack of data on first-generation immigrant children and youth addressed in the introduction to this article (see UNICEF et. al., 2018) and of the failure of many studies on this target group to appropriately report information on their samples and methodology.

Overall, the present study – which the authors believe is the first to offer a meta-analysis and review of the literature on the cultural identity of first-generation child and adolescent immigrants – offers important insights into the field. There is a need for the development of common definitions of key measures and common development of methodological practices in order to better meet the needs of this growing population of children and youth. Failure to do so will mean missed opportunities to successfully support them in taking advantage of all of the opportunities in their new host countries, and to develop fully integrated and diverse communities.

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TABLES

Table 1. Overview of 35 samples from the 24 studies included in the meta-analysis.

Publication	*N*	Study year	Country of residence	Country of origin	Gender (% female)	Age (*M*)	Age at arrival (*M*)	Duration of residence in host country (*M*)	Duration of residence in host country (Range)
Jasinskaja-Lahti & Liebkind, 1998	142	1996-1997	Finland	Particularly Russia and Estonia, as well as other countries	-	15.00	1.60	2.60	0.5 to 9 years
Birman & Trickett, 2001	144	1997-1998	USA	Particularly Russia, Ukraine, and Belarus, as well as other countries	46.0	16.00	10.67	5.40	1.3 to 9.7 years
Liebkind, Jasinskaja-Lahti, & Solheim, 2004	175*	2000	Finland	Vietnam	52.0	15.40	7.89[1]	7.51	-
Sonderegger & Barrett, 2004	135	-	Australia	China, Bosnia and Herzegovina, Croatia, and Serbia	49.5	12.33[1]	-	-	-
Sonderegger & Barrett, 2004	138	-	Australia	China, Bosnia and Herzegovina, Croatia, and Serbia	50.5	12.33[1]	-	-	-
Sonderegger & Barrett, 2004	125	-	Australia	Bosnia and Herzegovina, Croatia, and Serbia	50.5	12.33[1]	-	-	-
Sonderegger & Barrett, 2004	148	-	Australia	China	50.5	12.33[1]	-	-	-
Birman, Trickett, & Buchanan, 2005	149	1998	USA	Particularly Russia, Ukraine, and Belarus, as well as other countries	45.0	16.15	10.50	5.76	1.3 to 16 years
Birman, Trickett, & Buchanan, 2005	122	1998	USA	Particularly Russia, Ukraine, and Belarus, as well as other countries	47.0	16.18	10.50	5.12	1.3 to 16 years
Trickett & Birman, 2005	110	1997-1998	USA	Particularly Russia, Ukraine, and Belarus, as well as other countries	42.0	16.00	10.001	6.00	.
Birman, 2006	115	-	USA	Russia	43.0	15.00	9.00[1]	6.00	0.5 to 11 years
Marsiglia, Kulis, Luengo, Nieri, & Villar, 2008	249	2005	Spain	Particularly Argentina, Colombia, and Venezuela, as well as other countries	-	14.76	-	-	-
Kiang & Fuligni, 2009	279*	2006	USA	Particularly China and Mexico, as well as other countries	52.0	14.87	-	-	-
Kiang & Fuligni, 2009	258*	2006	USA	Particularly China and Mexico, as well as other countries	47.0	14.87	-	-	-
Kim & Chao, 2009	97	-	USA	China	-	19.43[1]	8.00	11.43	-
Kim & Chao, 2009	69	-	USA	Mexico	-	17.18[1]	5.00	12.18	-
Su & Costigan, 2009	95	-	Canada	China, Taiwan, Hong Kong	56.8	11.95	7.02[1]	4.93	1 to 13.5 years
Tartakovsky, 2009	151	1999	Israel	Russia, Ukraine	-	-	15.00	1,00	-
Telzer & Vasquez-Garcia, 2009	26	-	USA	Particularly Cuba, Dominican Republic, Mexico, and Puerto Rico, as well as other countries	100.0	-	8.80	-	-
Costigan, Koryzma, Hua, & Chance, 2010	95*	-	Canada	China, Taiwan, Hong Kong	56.8	11.95	7.02[1]	4.93	1 to 13.5 years
Costigan, Koryzma, Hua, & Chance, 2010	41*	-	Canada	China, Taiwan, Hong Kong	43.2	11.95	7.02[1]	4.93	1 to 13.5 years
Costigan, Koryzma, Hua, & Chance, 2010	54*	-	Canada	China, Taiwan, Hong Kong	56.8	11.95	7.02[1]	4.93	1 to 13.5 years
Cristini, Scacchi, Perkins, Santinello, & Vieno, 2011	214	-	Italy	Particularly Romania, Moldavia, Albania, and Morocco, as well as other countries	33.2	17.56	-	-	-
Stuart & Ward, 2011	262	-	New Zealand	India, Pakistan, Sri Lanka	53.4	19.40	13.12[1]	6.28	Less than 1 to 21 years
Potochnick, Perreira,, & Fuligni, 2012	114*	2006-2007	USA	Particularly Mexico; and other countries in Central and South America	55.0	15.25	-	-	-
Phuntsog, 2012	41	2002	USA	India, Nepal	39.0	-	12.37	-	2 to 7 years
Phuntsog, 2012	25	2002	USA	India, Nepal	39.0	-	12.37	-	2 to 7 years
Phuntsog, 2012	16	2002	USA	India, Nepal	39.0	-	12.37	-	2 to 7 years
Walsh, Edelstein, & Vota, 2012	73	2010	Israel	Ethiopia	-	-	-	-	-
Morela, Hatzigeorgiadis, Kouli, Elbe, & Sanchez, 2013	83	-	Greece	-	20.5	15.60	5.09[1]	10.51	-
Tummala-Narra, & Claudius, 2013	49	-	USA	-	42.8	15.38	9.04	6.34[1]	-
Coutinho & Koinis-Mitchell, 2014	46	-	USA	Cape Verde	16.5	16.20	10.14	6.18	3 to 16 years
Tummala-Narra, 2015	141	-	USA	Particularly China, Vietnam, Brazil, Haiti, as well as other countries	48.0	14.81	-	-	-
Walsh, Fogel-Grinvald, & Shneider, 2015	63	-	Israel	Russia	-	-	-	-	-
Walsh, Fogel-Grinvald, & Shneider, 2015	17	-	Israel	Ethiopia	-	-	-	-	-

Notes. Studies are sorted by year of publication. In cases where information about, for example, age or gender was not reported for the respective samples/subgroups, the average value for the total study sample was used. *Share of first-generation immigrants 75–100%; [1]Mean not reported but rather estimated on the basis of other information available (e.g., year and month of arrival and age used to estimate duration of residence); - = data not available.

Table 2. Random- and mixed-effects models.

	Identification with culture of origin			**Identification with residence country**			**Difference between identification with culture of origin and residence county**		
	n	*M*	Sig.	*n*	*M*	Sig.	*n*	*M*	Sig.
Random-effects model without moderators	34	3.04	***	16	2.41	***	15	−0.39	**
Moderators									
Gender	30		*ns*		no variation			no variation	
Female		3.24	***		-	-		-	-
Male		3.06	***		-	-		-	-
Both		3.05	***		-	-		-	-
Female (%)	26	0.00	*ns*	10	−0.01	*ns*	10	0.01	*ns*
Age	26	−0.01	*ns*	12	0.15	*ns*	13	−0.03	*ns*
Age of arrival	21	−0.04	*ns*	11	−0.14	*ns*	10	−0.07	*ns*
Duration of residence	16	0.09	*ns*	11	0.18	*	10	0.06	*ns*
Culture of origin in:	30		*ns*	16		*ns*	15		*
Africa		3.45	***		2.73	**		1.01	
Central America		3.04	***		2.71	**		0.55	
East Asia		3.23	***		2.27	***		−1.17	*
Former Yugoslavia		3.41	***		.			-	-
Former Soviet Union		3.01	***		2.60	***		−0.38	
South America		3.07	***		3.22	***		0.15	
Southern Asia		1.94	***		1.55	**		−0.26	
America and Asia		3.19	***		-	-		-	-
East Asia and Former Yugoslavia		3.07	***		2.51	**		−0.15	
Context (country of residence)	34		***	16		*ns*	15		*ns*
Australia		3.02	***		-	-		-	-
Canada		3.17	***		-	-		-	-
Finland		3.61	***		2.31	**		−1.30	
Greece		2.16	***		2.71	**		0.55	
Israel		3.02	***		2.98	***		−0.05	
Italy		3.67	***		2.37	**		−1.30	*
New Zealand		2.66	***		2.51	**		−0.15	
Spain		2.78	***		1.37	*		−1.40	*
United States		3.25	***		2.54	***		−0.54	*

Notes. Sig. = Significance level; *ns* = not statistically significant; - = data not available; ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 3. Robustness check – categorized moderator variables.

	Identification with culture of origin			**Identification with residence country**			**Difference between identification with culture of origin and residence country**		
	n	*M*	Sig.	*n*	*M*	Sig.	*n*	*M*	Sig.
Age, grouped	26		*ns*	12		*ns*	13		**
13 years and younger		3.10	***		3.23	***		0.05	
13–16 years		2.66	***		2.06	***		0.11	
16 years and older		3.06	***		2.32	***		−0.68	***
Age of arrival, grouped	21		*ns*	11		*ns*	10		*ns*
under 8 years		3.02	***		2.61	***		0.55	
over 8 years		2.98	***		2.21	***		−0.43	*
Duration of residence, grouped	16		*ns*	11		*	10		*ns*
up to 2 years		2.56	***		1.07			−0.26	
2–5 years		3.02	***		2.53	***		−0.48	*
over 8 years		2.92	***		2.71	***		0.55	

Notes. As we were able to extract only a limited number of studies, we categorized three continuous moderator variables – age, age of arrival, and duration of residence – as a robustness check. Sig. = Significance; *ns* = not statistically significant; ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table 4. The role of immigration entry status and operationalization of identity for identity mean effects.

	Identification with culture of origin			**Identification with residence country**			**Difference between identification with culture of origin and residence country**		
	n	*M*	*Sig.*	*n*	*M*	Sig.	*n*	*M*	Sig.
Immigration entry status	34		*ns*	16		*ns*	15		*ns*
Immigrant (voluntary)		3.06	***		2.36	***		−0.36	*ns*
Immigrant with refugee status		3.04	***		-			-	*ns*
Both		2.98	***		2.50	***		−0.46	*ns*
Operationalization of identity	32		*ns*	14		*ns*	15		*ns*
Used one identity component[1]		3.13	***		0.64	***		−0.17	
Used both identity components[2]		3.24	***		0.59			−0.41	*

Notes. Sig. = Significance; *ns* = not statistically significant; - = data not available; ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$; [1]commitment; [2]exploration and commitment.

Figures

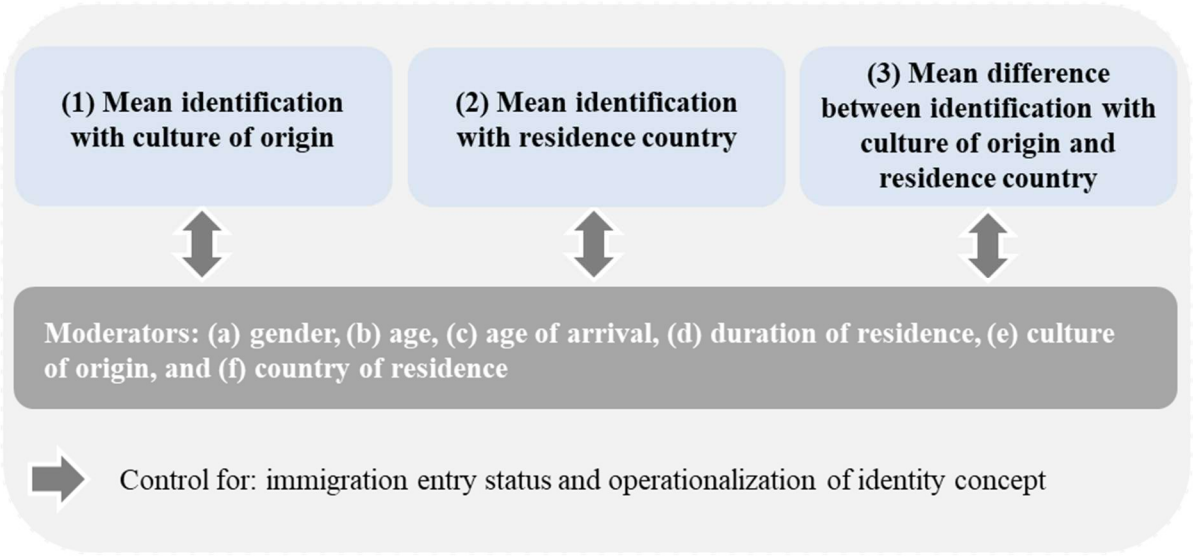


Figure 1. Design of meta-analysis on the identity of first-generation immigrant children and youth.

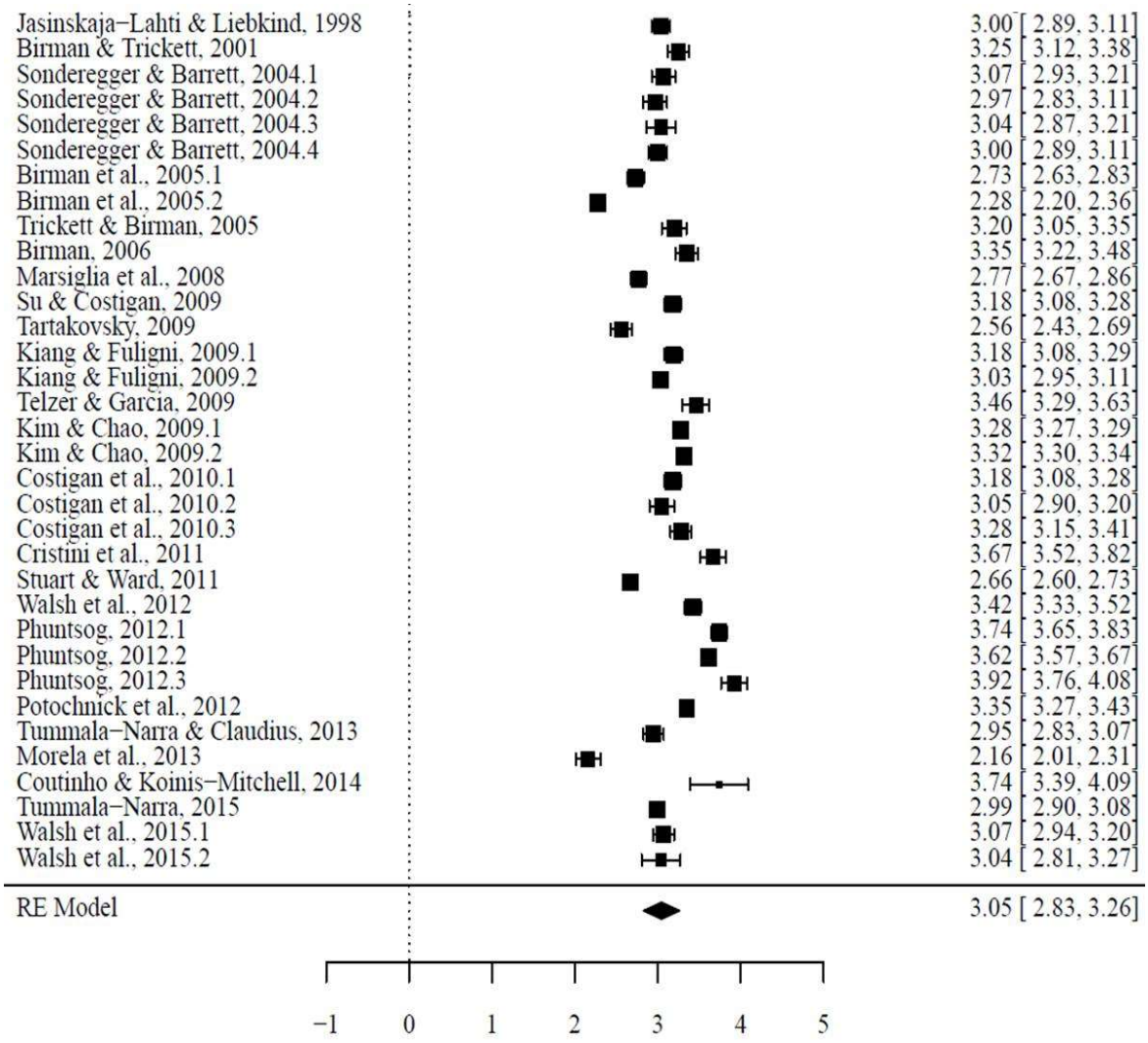


Figure 2. Forest plot effect size summary: Mean identification with culture of origin.

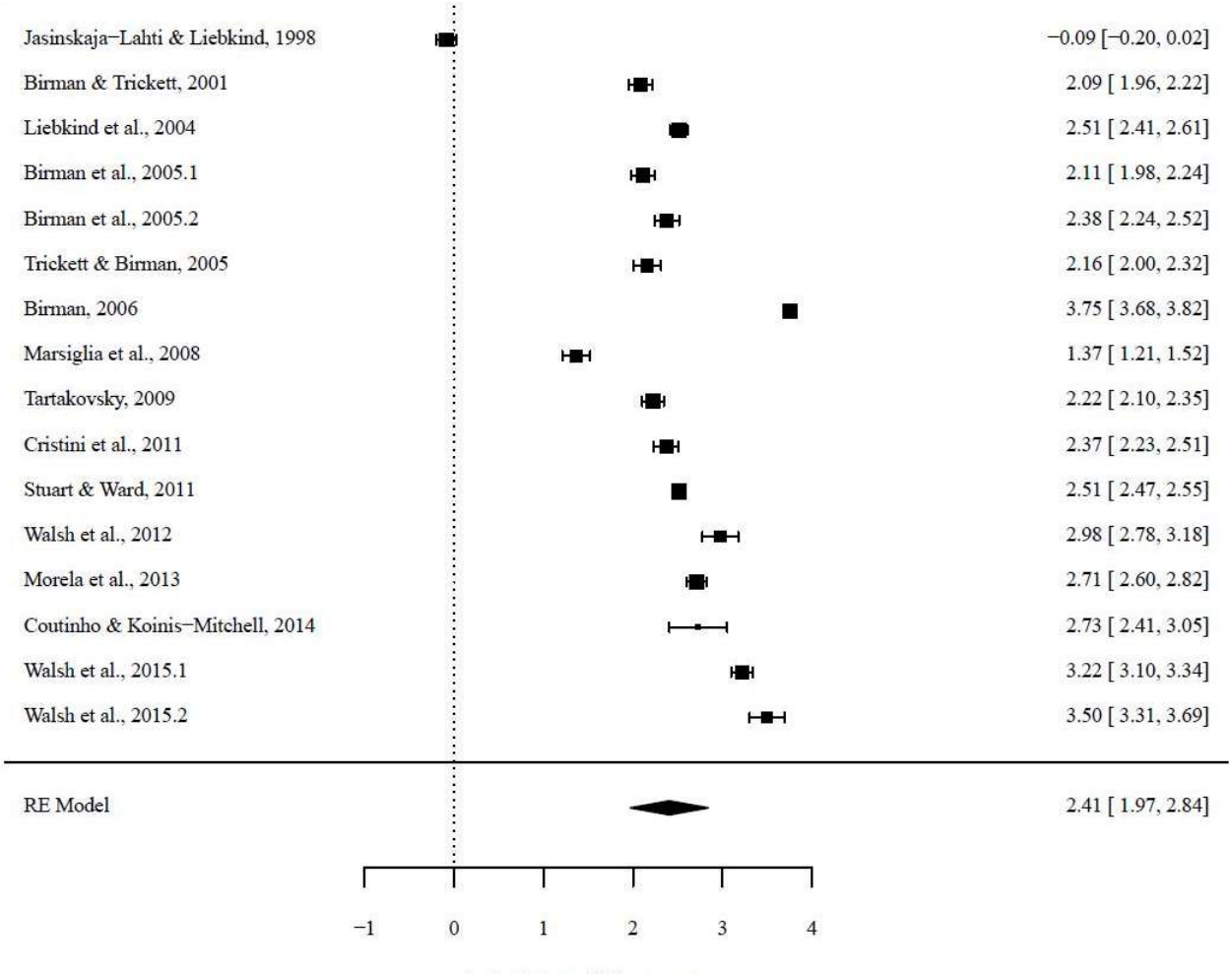


Figure 3. Forest plot effect size summary: Mean identification with country of residence.

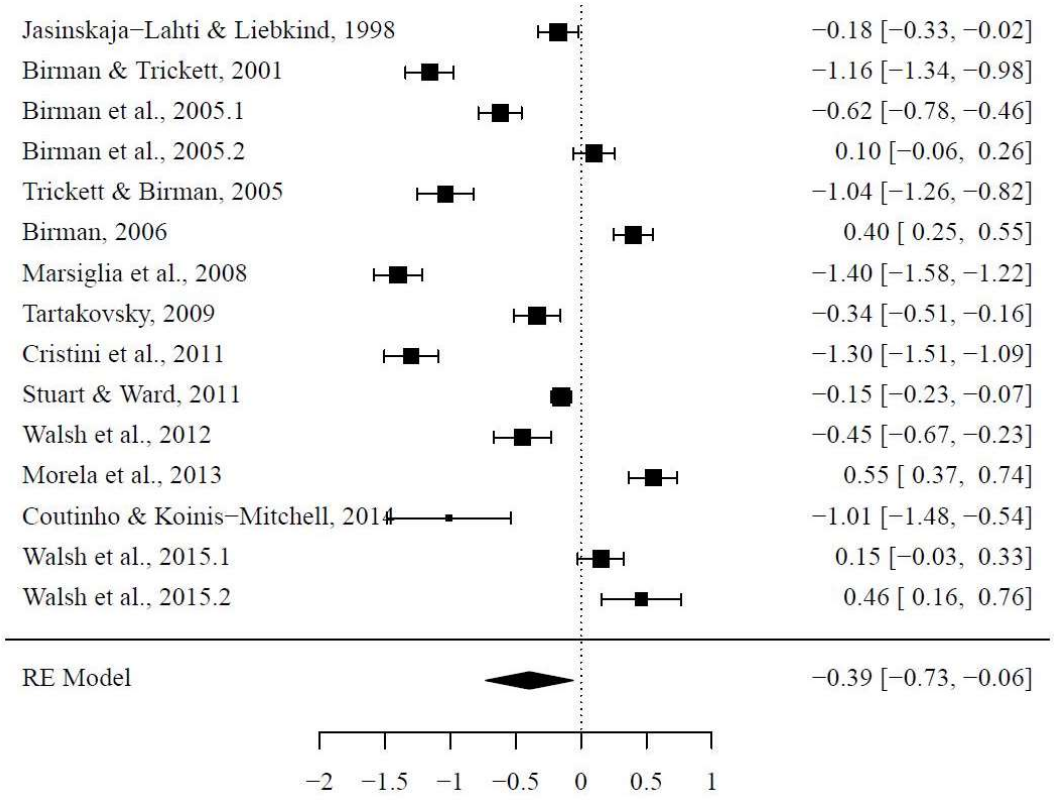
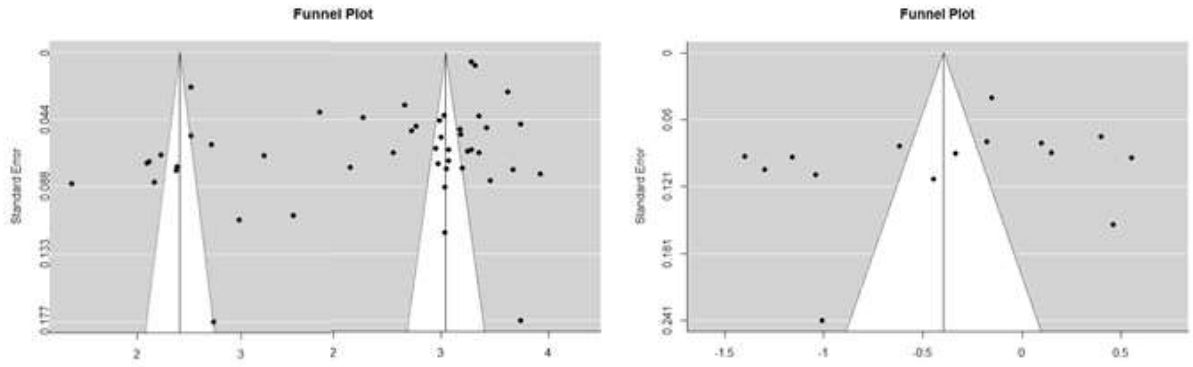


Figure 4. Forest plot effect size summary: Mean difference culture of origin–country of residence.



Identification with residence country

Identification with culture of origin

Difference culture of origin – residence country

Figure 5. Funnel plots for publication bias check.

Appendix

Tables

Table A1. Concepts used in research on identity in young immigrants: Measurement of identification with country/culture of origin.

Region of origin of study participants	Former Soviet Union countries	Former Soviet Union countries	East Asia	East Asia	Former Soviet Union countries	Former Soviet Union countries	Former Soviet Union countries	South America	East Asia; Central America	Central America	East Asia	Former Soviet Union countries	Central America	East Asia	Former Yugoslavia countries; Africa	Southern Asian	Central America	Southern Asia	Africa	-	Central and South America; East and Africa	Central and South America; East and Africa	Central and South America; East and Africa	
Scale: The Multigroup Ethnic Identity Measure (MEIM) developed by Phinney, 1992; particularly the Affirmation and Belonging subscale; or the Multigroup Ethnic Identity Measure–Revised (MEIM-R) by Phinney & Ong, 2007; particularly the Commitment subscale. Item description or example: The MEIM comprises two factors: ethnic identity search (e.g., "I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.") and affirmation, belonging, and commitment (e.g., "I have a strong sense of belonging to my own ethnic group." and " I have a lot of pride in my ethnic group.")	X			X				X*	X	X	X		X	X	X		X*	X			X*	X*	X*	
Scale: Identity subscale of the Language, Identity and Behavioral Acculturation Scale (LIB) by Birman & Trickett, (2001). Identity subscale based on Phinney and Devich-Navarro (1994) OR the American Identity Questionnaire (AIQ), also based on Phinney and Devich-Navarro (1994) Item description or example: Degree of identification with culture, e.g.: "I consider myself Russian.", and the extent to which respondents regard this identification positively, e.g., : "I am proud to be Russian."		X			X	X	X																	X
Scale: The Belonging subscale of the Factor Model Social Identity scale from Cameron, 2004. Item description or example: e.g. "I have a lot in common with other South Asians"																X								
Scale: Ethnic/Cultural Identity Salience Questionnaire (Kouli & Papaioannou, 2009) Item description or example: The instrument assesses two dimensions: ethnic belonging, e.g. "The cultural traditions of my ethnic group represent who I am."; and feelings of fringe, e.g. "Sometimes I feel bad that I belong to the ethnic group I do."																				X				
Scale: Sense of Belonging scale adapted from Roccas (1997) Item description or example: e.g.: "Being Israeli is an important part of my self-definition." or "It is important for me to think about myself as an Israeli."												X												
Scale: Items extracted from Acculturation Scale (Shalom & Horenczyk, 2004) Item description or example: e.g.: "I feel connected to Amharic culture.", "I am pleased I come from Ethiopian heritage.", or "I feel close to Ethiopians."																			X					
Alpha	.90	.93		-	.91	.93	.89	-	58 - .78	.83	.81	.79	.71	.81	.92	.86	.86	-	.76	.90	.89	.89	.91	.87

Note. *Reports only values for the Multigroup Ethnic Identity Measure (MEIM) scale as a whole.

Table A2. Concepts used in research on identity in young immigrants: Measurement of identification with country of residence.

Publication	Jasinskaja-Lahti & Liebkind, 1998	Birman & Trickett, 2001	Liebkind, Jasinskaja-Lahti & Solheim, 2004	Sonderegger & Barrett, 2004	Birman, Trickett & Buchanan 2005	Trickett & Birman, 2005	Birman, 2006	Marsiglia, Kulis, Luengo, Nieri, & Villar, 2008	Kiang & Fuligni, 2009	Kim & Chao, 2009	Su & Costigan, 2009	Tartakovsky, 2009	Telzer & Vasquez-Garcia, 2009	Costigan, Koryzma, Hua & Chance, 2010	Cristini, Scacchi, Perkins, Santinello, & Vieno, 2011	Stuart & Ward, 2011	Potochnick, Perreira, & Fuligni, 2012	Phuntsog, 2012	Walsh, Edelstein, & Vota, 2012	Morela, Hatzigeorgiadis, Kouli, Elbe, & Sanchez, 2013	Tummala-Narra & Claudius, 2013	Coutinho & Koinis-Mitchell, 2014	Tummala-Narra, 2015	Walsh, Fogel-Grinvald, & Shneider, 2015
Country of residence of study participants	Finland	US	Finland	Australia	United States	United States	United States	Spain	United States	United States	Canada	Israel	United States	Canada	Italy	New Zealand	United States	United States	Israel	Greece	United States	United States	United States	Israel
Scale: Identification with country of origin measure based on adaptations of the MEIM items to the host country (e.g., "I feel that I am a part of the Finnish culture") or the similar Identity scale from Phinney and Devich-Navarro (1994). Item description or example: e.g.: "I feel good about being Italian.", "I feel that I am part of mainstream Italian culture.", or "I am proud of being American.", or "I feel that I am a part of the Finnish culture."	X		X					X							X							X		
Scale: Identity subscale of the Language, Identity and Behavioral Acculturation Scale (LIB) developed by Birman & Trickett (2001). Identity subscale based on Phinney and Devich-Navarro (1994) OR the American Identity Questionnaire (AIQ), also based on Phinney and Devich-Navarro (1994). Item description or example: Degree of identification with culture, e.g.: "I consider myself American." ; and the extent to which respondents regard this identification positively, e.g.: "I am proud to be American."		X			X	X	X																		X
Scale: The Belonging subscale of the Factor Model Social Identity scale (Cameron, 2004). Item description or example: e.g.: "I don't feel strong ties to New Zealanders."																X									
Scale: Ethnic/Cultural Identity Salience Questionnaire (Kouli & Papaioannou, 2009) Item description or example: Assesses two dimensions: assimilation, e.g. "It is important for me to identify more closely with the general Greek/Spanish culture.", and lack of desire to interact with members of other ethnic groups, e.g. "I avoid friendships with people from other ethnic groups."																				X					
Scale: Sense of Belonging scale adapted from Roccas (1997) Item description or example: e.g.: "Being Israeli is an important part of my self-definition.", or "It is important for me to think about myself as an Israeli."												X													
Scale: Items extracted from the Acculturation Scale developed by Shalom & Horenczyk (2004). Item description or example: e.g.: "I am pleased to be Israeli.", "I feel I am part of Israeli culture", or "I feel close to Israelis."																					X				
Alpha	.71	.92	.78		.91	.92	.94	-				.75			.93	.70			.82	.87		.87		.88

Note. *Reports only values for the Multigroup Ethnic Identity Measure (MEIM) scale as a whole.

Table A3. Multilevel model as robustness check.

	Identification with culture of origin			**Identification with residence country**			**Difference between identification with culture of origin and residence country**		
	n	*M*	Sig.	*n*	*M*	Sig.	*n*	*M*	Sig.
Random-effects model without moderators	34/ 22	2.98	***	16/ 14	2.35	***	15/ 13	−0.44	**
Variance at study level accounted for		97%			96%			65%	

Notes. Sig. = Significance level; *ns* = not statistically significant; ***$p \leq 0.001$; **$p \leq 0.01$; *$p \leq 0.05$.

Table A4. Random- and mixed-effects models: Robustness check.

	Identification with culture of origin			**Identification with residence country**			**Difference between identification with culture of origin and residence country**		
	n	*M*	Sig.	*n*	*M*	Sig.	*n*	*M*	Sig.
Random-effects model without moderators	23	3.00	***	13	2.33	***	13	−0.49	**
Moderators									
Gender	20		*ns*		no variation			no variation	
Female		3.16	***		-	-		-	-
Male		3.46	***		-	-		-	-
Both		3.01	***		-	-		-	-
Female (%)	17	0.00	*ns*	9	−0.00	*ns*	8	0.00	*ns*
Age	18	0.02	*ns*	11	0.15	*ns*	10	−0.03	*ns*
Age of arrival	12	−0.08	*ns*	10	−0.14	*ns*	8	−0.07	*ns*
Duration of residence	16	0.11	*ns*	10	0.18	*	9	0.07	*ns*
Culture of origin in:	23		*ns*	14		*ns*	13		*ns*
Africa		3.45	***		2.73	**		−1.01	
Central America		2.16	***		2.71	**		0.55	
East Asia		3.26	***		2.65	***		−1.17	**
Former Yugoslavia		3.60	***		.			-	-
Former Soviet Union		3.10	***		2.46	***		−0.64	
South America		3.07	***		3.22	***		0.15	
Southern Asia		1.94	***		1.55	**		−0.26	
America and Asia		3.97	***		-	-		-	-
East Asia and Former Yugoslavia		3.01	***		2.51	**		−0.15	
Context (country of residence)	23		***	14		*ns*	13		*ns*
Australia		3.00	***		-	-		-	-
Canada		3.18	***		-	-		-	-
Finland		3.61	***		1.21	**		−1.30	
Greece		2.16	***		2.71	**		0.55	
Israel		3.02	***		2.81	***		−0.21	
Italy		3.67	***		2.37	**		−1.30	*
New Zealand		2.66	***		2.51	**		−0.15	
Spain		2.76	***		1.37	*		−1.40	*
United States		3.26	***		2.57	***		−0.67	*

Notes. 97.22 % of the variance in the model testing identification with culture of origin, 96.14 % of the variance in the model testing identification with the residence country, and 65.61 % of the variance in the model testing the difference between identification with the culture of origin and the residence country can be explained with the multilevel structure; Sig. = Significance level; *ns* = not statistically significant; - = data not available; ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$.

Table A5. The role of immigration entry status and operationalization of identity for identity mean effects: Robustness check.

	Identification with culture of origin			**Identification with residence country**			**Difference between identification with culture of origin and residence country**		
	n	*M*	*Sig.*	*n*	*M*	Sig.	*n*	*M*	Sig.
Immigration entry status	23		*ns*	14		*ns*	13		*ns*
Immigrant (voluntary)		2.96	***		2.25	***		−0.45	*ns*
Immigrant with refugee status		3.04	***		-			-	*ns*
Both		3.13	***		2.52	***		−0.60	*ns*
Operationalization of identity	21		*ns*	14		*ns*	13		*ns*
Used one identity component[1]		3.12	***		2.60	***		−0.18	
Used both identity components[2]		3.24	***		2.73			−0.53	**

Notes. Sig. = Significance; *ns* = not statistically significant; - = data not available; ***$p \leq .001$; **$p \leq .01$; *$p \leq .05$; [1]commitment; [2]exploration and commitment.

Figures

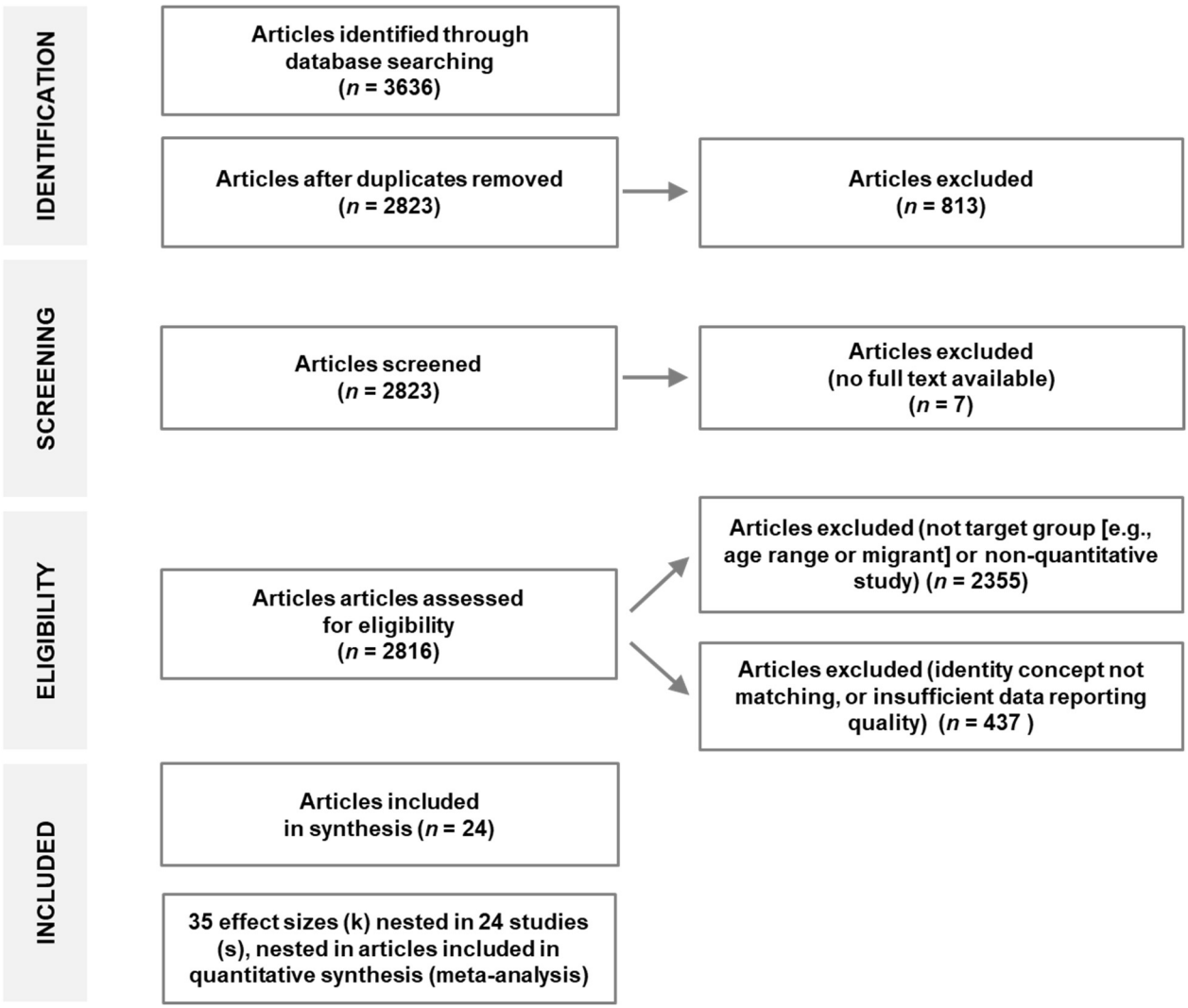
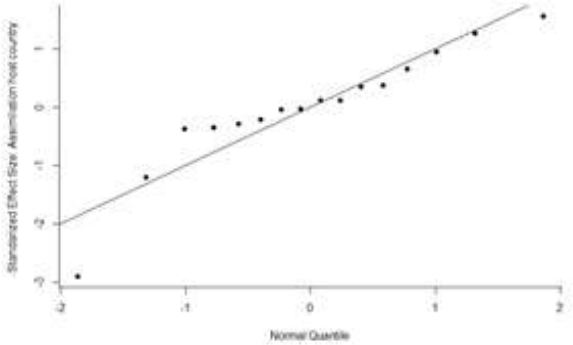


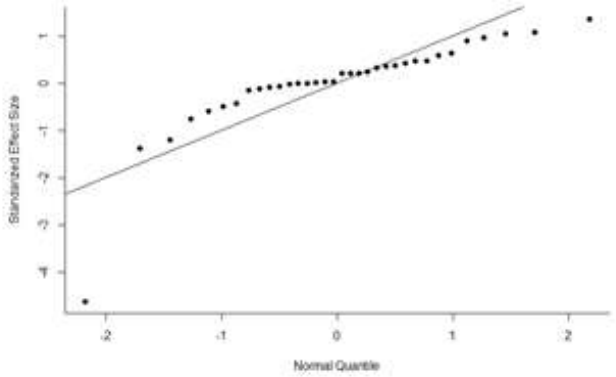
Figure A1. PRISMA flow chart: Publications on identity in young immigrants.

Source: Adapted from Figure 1 in Moher, Liberati, Tetzlaff, Altman, & The PRISMA Group. (2009). Preferred Reporting Items for Systematic Reviews and Meta-Analyses: The PRISMA Statement. *PLoS Med 6*(7), e1000097. doi:10.1371/journal.pmed.1000097

Identification with culture of origin



Identification with residence country



Difference culture of origin– residence country

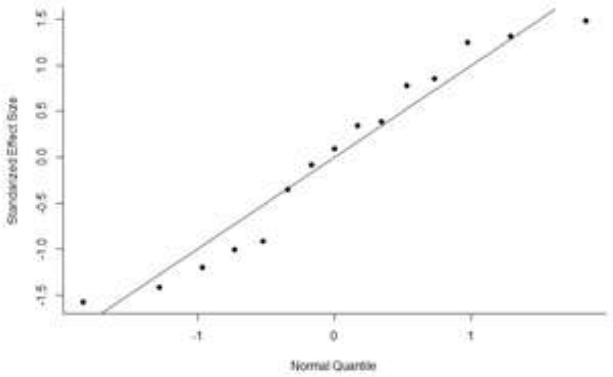


Figure A2. Normal quantile plot for publication bias check.

Note. The figure shows the plotting of quantiles of the effect size distribution against the quantiles of the normal distribution in a normal quantile plot (Wang & Bushman,1998). The figure does not suggest the presence of publication bias, the cases do not deviate substantially from linearity, nor are there any suspicious gaps.

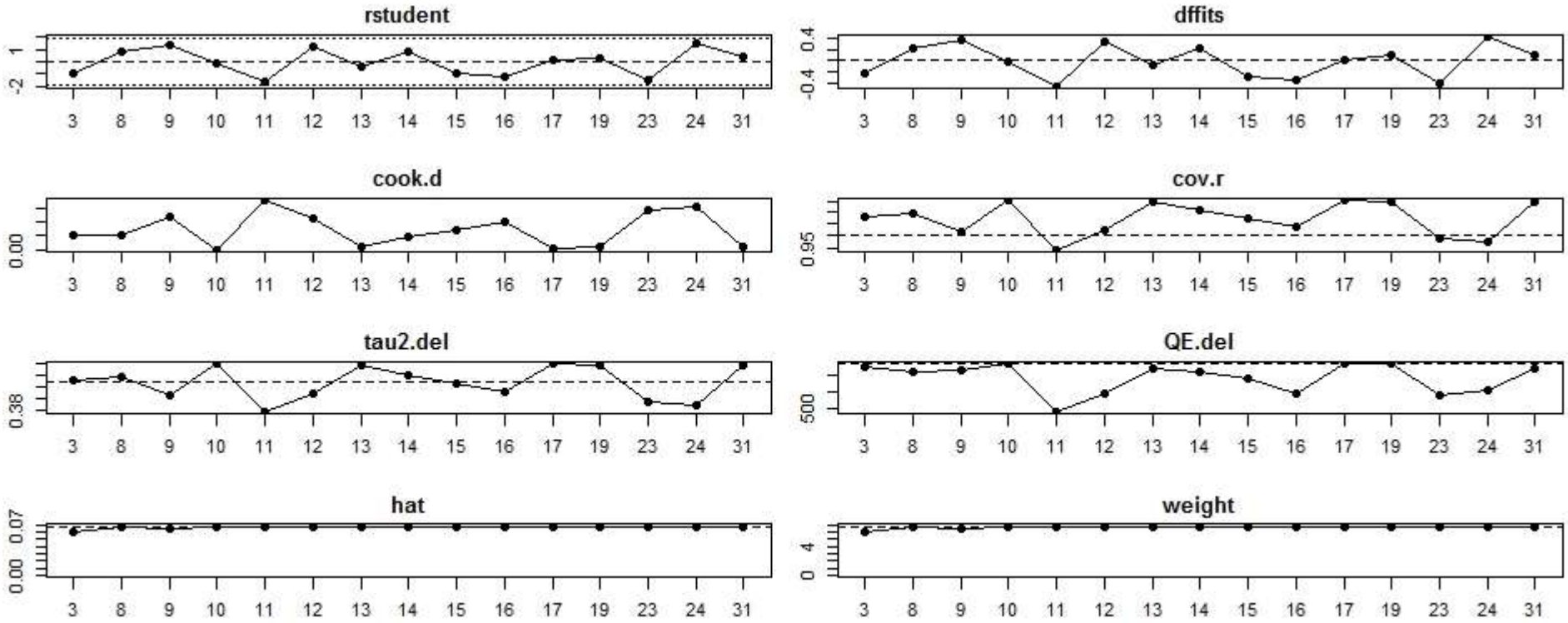


Figure A3. Model diagnostics to test for the presence of outliers.