**Article:**
Laketa, A., Chrysochoou, E., Studenica, A. et al. (2023) Linguistic, affective, parental, and educational contributions to the bicultural identity development of Balkan minority adolescents. Journal of Research on Adolescence, 33 (3). pp. 899-912. ISSN: 1050-8392

https://doi.org/10.1111/jora.12846

Received: 23 June 2022 | Accepted: 22 February 2023

DOI: 10.1111/jora.12846

JOURNAL OF Research on Adolescence Society for Research on Adolescence www.s-r-a.org

EMPIRICAL ARTICLE

# Linguistic, affective, parental, and educational contributions to the bicultural identity development of Balkan minority adolescents

**Aleksandra Laketa**[1,2,3] | **Elisavet Chrysochoou**[1,4] | **Arvesa Studenica**[1,2] | **Ana B. Vivas**[1,5]

[1]South East European Research Center (SEERC), Thessaloniki, Greece

[2]Department of Psychology, University of Sheffield, Sheffield, UK

[3]Department of Psychology, University of Zurich, Zürich, Switzerland

[4]School of Psychology, Aristotle University of Thessaloniki, Thessaloniki, Greece

[5]Department of Psychology, CITY College, University of York Europe Campus, Thessaloniki, Greece

**Correspondence**
Aleksandra Laketa, Department of Psychology. University of Zurich, Zurich, Switzerland.
Email: laketa.aleksandra@gmail.com

**Abstract**

This study investigated linguistic, affective, parental, and educational contributions to bicultural identity, in two samples of younger (13- to 14-year-old; $N = 95$) and older (16- to 17-year-old; $N = 67$) bilingual adolescents, who were immigrants or belonged to ethnic minority communities in the Balkans. While bicultural identity level was not differentiated as a function of age group, there was an age-related shift in its predictors. Bicultural identity level was significantly predicted by perceived educators' attitudes toward linguistic/cultural diversity in the younger adolescent group, but by personal affective states (motivation and attitudes) toward the mainstream language in the older adolescent group. Implications of the findings are discussed regarding educational and family practices that would facilitate biculturalism in minority adolescents.

**KEYWORDS**

adolescents, bicultural identity, minorities

## INTRODUCTION

Bilingual individuals, in addition to speaking and managing two languages, often need to manage two cultural identities as well. Research has shown that particularly those bilinguals who are immigrants or belong to ethnic minority communities may find it difficult to adapt to the challenges of *acculturation* (e.g., Sam, 2000), referring to the process of change, and adaptation, that occurs as a result of contact between two cultures. Being integrated in a host society involves maintaining identification with the heritage culture while internalizing the norms and values of the host culture as well; thereby, it involves developing a *bicultural identity* (Benet-Martínez & Haritatos, 2005). Integration has been associated with a range of positive outcomes, including better social adjustment (e.g., Phinney, Horenczyk, et al., 2001; Phinney, Romero, et al., 2001), higher psychological adaptation and well-being (Nguyen & Benet-Martínez, 2013), greater academic involvement, and even enhanced cognitive functioning (e.g., Spiegler & Leyendecker, 2017; Studenica et al., 2022). In contrast, not being well-integrated in a host society, such as in the case of separation and/or marginalization, could have negative consequences, including higher levels of acculturative stress (McCoy & Major, 2003), poorer mental health and psychological well-being (e.g., Gonzales et al., 2002), poorer cognitive performance (Laketa et al., 2021), or even cognitive impairment (e.g., Simpao et al., 2005).

While numerous studies have investigated the outcomes of biculturalism, research on bicultural identity development—and in particular, its antecedents—remains scarce (for a review, see Safa & Umaña-Taylor, 2021). However, this line of research could inform policy making that aims to enhance mental health and well-being of an ever-increasing population of bilingual immigrants, or ethnic minority group members. Adolescence is an ideal period for such an investigation, given the associated advances in self-reflection and the resulting enhancement of self-awareness, along with the developmental prioritization of identity formation, including the dimension of cultural identity (Cross & Cross, 2008; Erikson, 1968; Umaña-Taylor et al., 2014). With this in mind, the overarching aim of this study is to examine individual- and context-level predictors of bicultural identity development, involving bilingual adolescents who are members of ethnic and immigrant minorities in the wider Balkan region.

Within Berry's (2003) *bi-dimensional acculturation model*, one of the most prominent in the literature (e.g., Flannery et al., 2001), biculturalism would be related to the adoption of an *integration* acculturation strategy, with individuals identifying with and internalizing both heritage and host society cultures (e.g., Benet-Martínez & Haritatos, 2005). On the other hand, both *assimilation* (completely adopting the host society culture, while losing identification with the heritage culture) and *separation* (fully maintaining the heritage culture, while failing or rejecting to adopt the culture of the host society) strategies are *monocultural* in essence. The fourth acculturation strategy described in the model, *marginalization*, involves a lack of identification with either culture, and therefore, absence of any particular cultural orientation (Berry et al., 2006), although research has shown that this is a rare case (e.g., Laketa et al., 2021; Schwartz & Zamboanga, 2008).

Developing a cultural identity—namely, a sense of membership and belonging to a particular cultural group (or groups), through the adoption or rejection of their norms, values, and behavioral practices—is a complex process (Schwartz et al., 2006). Its formation begins in childhood, with a somewhat basic identification and "categorization" of oneself, in relation to others, based on racial and/or ethnic background. More complex cultural identity exploration processes characterize adolescence, given ongoing socioemotional and cognitive development (Cross & Cross, 2008; Umaña-Taylor et al., 2014). Adolescents actively search for, acquire, and interpret culture-specific information and knowledge (e.g., learning about the history and traditions of cultural groups; Syed et al., 2013), with younger adolescents more likely to change and shift their cultural beliefs and values (i.e., dissonant acculturation), relative to older adolescents, or adults. It is through these dynamic changes, and the exploration of options, that internalizations of specific cultural norms and values are made in late adolescence. Yet, despite the importance of this cultural *exploration and commitment* process that shapes one's cultural identity (Phinney, 1990), the development of a bicultural identity in the case of immigrant or ethnic minority adolescents has so far received little attention in the literature (for a review, see Safa & Umaña-Taylor, 2021).

Based on the available evidence, it is the dynamic interaction of individual- and context-level factors that guides people toward some acculturative outcomes (e.g., biculturalism) and away from others (Schwartz & Unger, 2010). For example, women on average seem to have poorer acculturative outcomes relative to men (Ataca & Berry, 2002); possibly resulting from differences in socialization patterns, and having fewer opportunities to adjust to a new society due to traditional gender role differentiation. Empirical evidence also suggests that female adolescents are expected to remain close to the family, whereas male adolescents are given more freedom to explore other social contexts (e.g., Raffaelli & Ontai, 2004). That is, women might be viewed as carriers of the heritage culture, and expected to preserve and pass on cultural traditions to future generations, which might, in turn, promote a separatist approach to acculturation, and a monocultural identity development (Phinney, 1990; Zlobina et al., 2006).

Socioeconomic status (SES; as determined by educational level and occupational/professional variables) may also influence bicultural identity and acculturation preferences. Individuals with higher SES are more likely to acculturate successfully relative to low-SES individuals; possibly because they have more contact with members of the host society, who, in return, approach them with more positive attitudes and greater acceptance (Farver et al., 2002). In contrast, disadvantages in SES can result in lower levels of identification with the mainstream culture, and a separatist approach to acculturation (De Vroome et al., 2014). With regard to younger individuals, studies have found parental SES to be associated with important aspects of bicultural identity, such as the adolescents' feelings of belonging and attachment to the heritage culture (Kiang & Fuligni, 2009), and their heritage language proficiency (Phinney, Horenczyk, et al., 2001).

Language learning and use is possibly the most widely studied determinant of cultural identity formation and acculturation (Masgoret & Ward, 2006). Language use reflects cultural membership, and acquisition of the mainstream language, in particular, seems to be one of the most important predictors of the integration of immigrants, and their children, in a host society. Studies have also shown that mainstream language proficiency plays a key role in the development of *national identity* (e.g., Phinney, Romero, et al., 2001)—referring to one's feelings of belonging and commitment to the host society—and results in greater identification with the mainstream culture (e.g., Henning-Lindblom & Liebkind, 2007). On the other hand, proficiency in the heritage language seems to be an essential component of *ethnic identity*; that is, one's sense of attachment and belonging to the relevant heritage culture. For example, Imbens-Bailey (1996) found that bilingual Armenian-American adolescent immigrants expressed a closer affinity with the Armenian society, as compared to those adolescent immigrants who were monolingual and proficient in the English (mainstream) language only. In line, Phinney, Romero, et al. (2001) found that heritage language proficiency predicted ethnic identity across three samples of immigrant adolescents in the United States.

While the above evidence points to a close relationship between language proficiency and cultural identity processes in adolescence, most studies seem to have examined the links between host or heritage language proficiency, and either national or ethnic identity, respectively. To our knowledge, this study is the first to investigate the relationship between heritage and host language proficiency, among other variables, and *bicultural* identity development in particular. There is some evidence to suggest that heritage and especially host/mainstream language proficiency might be positively associated with biculturalism, as the latter is reflected by the adoption of an integration acculturation strategy (e.g., Xing et al., 2020). However, existing studies have focused predominantly on international students living abroad (i.e.,

sojourners), who are thus only temporary residents of a given host country. Yet, these populations are very different from ethnic minority or immigrant adolescents, as those involved in this study, who have been exposed to both languages and cultures early in life. For example, student sojourners are pursuing better possibilities for personal development, and as such, are highly motivated to immigrate in the first place. This is not necessarily the case for ethnic minority or immigrant youth, especially if the latter were born in the country of residence, or have moved to this country early in life. In addition, international students tend to have higher-than-average academic skills, and possibly fewer psychological problems, relative to the (much) more diverse populations of ethnic or immigrant minority members (e.g., Slonim-Nevo & Shraga, 2000). Finally, international students are likely to receive greater financial, social, and psychological support in adapting to a host society, relative to ethnic minority or immigrant youth (Tartakovsky, 2012).

The role of affective variables in bicultural identity development has received less attention in the literature. Affective variables, such as attitudes toward heritage and/or host groups, are known to be important components of cultural identity (e.g., Félix-Ortiz et al., 1994; Phinney & Ong, 2007). For example, based on social identity theory (Tajfel & Turner, 2004), the construct of cultural identity is expected to include cultural attitudes. In support of this, a study in Russian and Ukrainian adolescent immigrants living in Israel found that, throughout the process of migration (from pre-migration to 3 years post-migration), the adolescents' attitudes toward a given culture (heritage or host) were positively correlated with their sense of belonging to that culture (Tartakovsky, 2009). In this study, we were particularly interested in adolescents' *affective states* (motivation and attitudes) toward learning and using both heritage and host languages. It is important to examine affective states related to language learning and use, in addition to language proficiency, because the latter is more greatly dependent on contextual effects (e.g., academic or professional requirements). In contrast, affective states, such as one's motivation to continue developing and using a given language, and one's attitudes toward a given language (which inadvertently includes attitudes toward the target culture/community as well), are more personal, and might therefore more closely reflect one's subjective experience of identifying with a given group or culture; namely, his or her (bi)cultural identity (Félix-Ortiz et al., 1994). Importantly, affective states also present an important locus for intervention. That is, in addition to teaching (heritage and host) language skills, schools and educators could also target relevant motivation and attitudes, so as to facilitate bicultural identity development.

Based on Gardner's prominent *socio-educational model* (2001), a major part of one's overall motivation to learn a (second) language involves *integrative motivation*. Integrative motivation is, in turn, comprised of *attitudes toward the learning situation* (e.g., in a formal educational setting, attitudes toward the course, the teacher, the material) and *integrativeness*, which refers to one's attitudes toward the cultural group that speaks the target language, their willingness to adopt the norms and values of this group, and to interact with members of this group. Therefore, in line with Gardner's (2001) model, motivation to learn a second language is expected to be deeply rooted in the wider social context, and closely related to cultural identity concerns (e.g., attitudes and willingness to embrace a given culture). For instance, a study with Iranian secondary high school students found that higher identification with their ethnic culture was associated with lower motivation and less positive attitudes toward learning English as a second language (Habibzadeh & Payandedari, 2022; see also Chinen & Tucker, 2005; Goldberg & Noels, 2006, for similar results with other populations in the US and Canada, respectively).

Although there is evidence to suggest a relationship between language-related affective states (motivation and attitudes) and cultural identity processes in adolescents, we are not aware of any studies that have examined whether such affective states might predict bicultural identity formation in this developmental period. Moreover, in this case as well, previous studies have largely recruited sojourners or second language learners, with no investigations, to our knowledge, focusing on bilingual, ethnic or immigrant, minority adolescents.

With regard to context-level factors, as the family is a key socialization context, parental attitudes are likely to contribute to cultural identity development (Phinney, Horenczyk, et al., 2001), possibly also affecting bicultural identity formation in minority youth. Gardner (1985) was one of the first to argue that—to the extent that parents are involved in the attitude development of their children—they will also affect children's (second) language learning and use outcomes, and their beliefs and perceptions about the target language and community. Subsequently, parental attitudes and encouragement have been widely studied in relation to second language learning (e.g., Atay & Kurt, 2010), and to some extent, in relation to cultural identity as well.

While there do not seem to be any studies investigating the effects of parental encouragement on bicultural identity development per se, there is evidence to support that the family environment could exert significant influences on various processes related to cultural identity (Lorenzo-Blanco et al., 2012). For instance, Schwartz and Zamboanga (2008) found that familial ethnic socialization—referring to the extent to which parents expose their children to the heritage language and culture—was the largest differentiating factor between adopting an integration strategy (i.e., biculturalism), relative to other acculturation strategies, among Hispanic college students. Moreover, Sari et al. (2018) found that parental cultural maintenance, which is similar to familial ethnic socialization, was positively related to both ethnic and national identity formation in a large sample of adolescents from four ethnic groups in Indonesia. Interestingly, across Armenian, Vietnamese, and Mexican immigrant adolescent groups in the United States, Phinney, Romero, et al. (2001) found that parental cultural maintenance was only indirectly related to ethnic identity, through ethnic language

proficiency. Given the above evidence, we also aimed at investigating the role of parental encouragement, as pertaining to (heritage and mainstream) language learning and use, in adolescents' bicultural identity development.

Outside of the family, the *educational setting* may also offer an important and influential context for the development of bicultural identity (Ward & Geeraert, 2016). Berry et al. (2011) argued that schools act like small societies of settlement, which characterize and introduce immigrant children to a new culture. The educational setting provides the opportunity for valuable (and meaningful) inter-cultural contact to occur, and as such, is a key context of ongoing acculturation, cultural learning, and overall identity development (Makarova & Herzog, 2013; Verhoeven et al., 2019). Educators in particular are considered key figures for immigrant and minority students during their process of cultural adaptation and adjustment to the host country's academic system, expectations, and social norms (Park-Taylor et al., 2007). For example, studies have found perceived social support from educators to reduce the preference for a separation acculturation strategy, and promote positive attitudes toward the mainstream culture in immigrant students; this might, in turn, facilitate the adoption of an integration strategy (i.e., biculturalism; Tartakovsky, 2012). Actually, Bender-Szymanski et al. (2000) found that educators who themselves had integrative attitudes regarding acculturation were more likely to approach culture-related conflicts proactively, and to adapt the learning materials and objectives to the needs of a culturally diverse classroom. This has been suggested to promote a culture of acceptance and integration within the school, and create a safe environment for cultural learning and exploration to occur. On the other hand, strong assimilationist attitudes toward acculturation among educators, as perceived by immigrant and minority adolescents, have been suggested to possibly promote forced assimilation or separation (e.g., Niens et al., 2013).

In terms of identity development specifically, studies have found that (perceived) educators' expectations could affect personal and social identity development, even when they are implicitly communicated to the students (e.g., a teacher not expecting a student to make progress in a given class; e.g., Heyd-Metzuyanim, 2013). What is particularly interesting is that ethnic/racial biases seem to be present—or at the very least, are perceived to be present—in teacher expectations across different student groups (for a review, see Verhoeven et al., 2019). Such biases could certainly affect students' own attitudes toward heritage and host cultures, and as such, their (bi)cultural identity development. Studies have also found that the cultural sensitivity of educators (e.g., Gay, 2018) and appropriate representation (or lack thereof) in the school curriculum (e.g., Ladson-Billings, 2000) could have an impact on students' racial identity, referring to one's sense of belonging to a particular racial group (or groups).

Issues related to ethnic identity exploration and development are also known to emerge within the educational context. For example, a qualitative study with Latino educators in the United States, who identified themselves as bicultural, found that educators were aware of how certain schooling practices might "force" Latino students to suppress their heritage language and identity. They also recognized the need to convey value for the Spanish language within the educational setting, as a way of affirming Latino students' ethnic identities (Weisman, 2001). Another study found that Mexican-American adolescents felt a renewed commitment to their heritage culture (i.e., an increase in ethnic identity) when they participated in school events that they perceived as being culturally inclusive, and when they engaged in school activities in which their bilingual competence was seen as an asset (Gonzalez, 2009).

In sum, educators' beliefs and attitudes seem to play an important role in their approaches to teaching, and their subsequent behavior in the classroom; particularly with regard to cultural and linguistic diversity support and/or encouragement. As such, educators—as well as the educational context more broadly—might affect immigrant and minority students' own attitudes toward heritage and mainstream cultures, and consequently, their bicultural identity development.

The above evidence suggests that whether ethnic minority or immigrant bilingual adolescents form a bicultural identity or not may depend on a combination of individual- and context-level variables. However, a recent, extensive review of the literature on biculturalism (Safa & Umaña-Taylor, 2021) suggests that existing studies have focused predominantly on investigating biculturalism *outcomes*, as related to adjustment (e.g., physical health, psychosocial outcomes), whereas studies looking into relevant *predictors* of biculturalism were scarce, and mostly involved adult populations. Furthermore, only eight studies (5%) conceptualized biculturalism in terms of (bi)cultural identity, and out of those, none focused on examining the predictors of biculturalism; rather, only its outcomes. Finally, very few studies have been conducted in contexts outside of the United States. The Balkan region, from which the populations of this study are drawn, is known for its multiculturalism and multilingualism. Therefore, studying the predictors of bicultural identity development could have important implications for the promotion of overall health and wellbeing of minority youth in this culturally diverse region.

As mentioned earlier, adolescence is a sensitive period for the study of (bi)cultural identity development, with its earlier phase characterized by intense exploration of different cultural norms, and later adolescence considered a period of commitment and internalization of these norms. It is important to note that cultural identity is closely related to other aspects of adolescents' development as well (Schwartz & Pantin, 2006). Namely, cognition (including language) and affect refine during this period, and so does adolescents' ability to process social information and acquired knowledge, and self-reflect, to unravel the complexity of their cultural group membership (Cross & Cross, 2008; Umaña-Taylor et al., 2014). Therefore, it is

JOURNAL OF Research on Adolescence Society for Research on Adolescence www.s-r-a.org

possible that individual-level forces, such as one's own beliefs, motivations, and attitudes, become more significant predictors of (bi)cultural identity in older adolescents, who are more self-aware and autonomous. In contrast, younger adolescents who have fewer personal experiences with the two languages and cultures, and whose (bi)cultural identity is less coherent, might be more susceptible to contextual influences, with factors such as attitudes and beliefs of significant others (e.g., parents, educators) possibly gaining power in predicting (bi)cultural identity during this period (e.g., Phinney, 2008; Spear & Kulbok, 2004). Thus, one might expect age-related differences in the relative contribution of linguistic, affective, family, and educational variables to the prediction of bicultural identity in younger versus older adolescents.

This study makes a first attempt, to our knowledge, to explore the relative contribution of language proficiency, affective states (motivation and attitudes), perceived parental encouragement, perceived support within the educational context, and perceived educators' attitudes (all measured for both heritage and mainstream languages/cultures) to the bicultural identity development of bilingual adolescents. Given the sensitivity of the adolescence period for identity development more generally, we addressed the above separately in younger (13- to 14-year-old) and older (16- to 17-year-old) minority (ethnic or migrant) bilingual adolescents from the wider Balkan region. Specifically, we involved Albanian–Serbian bilinguals living in Serbia, Turkish–-Albanian bilinguals living in Kosovo, and Bosnian–Albanian bilinguals living in Kosovo, who were all non-immigrant members of relevant ethnic minority groups, as well as an immigrant population of Albanian–Greek bilinguals living in Greece. Two research questions and related hypotheses were stated:

1. Does the level of bicultural identity differ as a function of age group? We hypothesized that bicultural identity level will be higher in older relative to younger adolescents.
2. Is there an age-related shift in the bicultural identity predictive patterns? We hypothesized that contextual factors would better predict bicultural identity level in younger adolescents, while individual factors would better predict bicultural identity level in older adolescents.

# METHODS

## Participants

A total of 162 bilingual adolescents (73 males 89 females) took part in the study. The younger adolescent group consisted of 13- to 14-year-olds ($N$ = 95), and the older adolescent group consisted of 16- to 17-year-olds ($N$ = 67). Participants were recruited from three countries in the Balkan region, and belonged to four bilingual populations (constituting 1.1–4.5% of the respective country's population); Albanian–Serbian bilinguals ($N$ = 43) living in Serbia (mainstream language: Serbian), Bosnian–Albanian ($N$ = 48), and Turkish–Albanian ($N$ = 36) bilinguals living in Kosovo (mainstream language: Albanian), who were all non-immigrant members of respective bilingual ethnic minorities, and Albanian–Greek bilinguals ($N$ = 35) living in Greece (mainstream language: Greek), who were first- and second-generation immigrants from Albania. Eighty-six percent of the adolescents in our sample ($N$ = 139) were born in the country of residence—in which they were assessed—while 14% ($N$ = 23) moved to that country early in life. The average age at immigration was 2.26 years.

Participants were recruited through middle and high schools, as well as community centers, in the cities of Prizren, Prishtina, and Peja (in Kosovo); the Preševo region (in Serbia); and Thessaloniki (in Greece). They were defined as bilingual based on the following criteria: (i) level of proficiency in heritage and mainstream languages (self-reporting satisfactory competence in understanding, speaking, reading and writing, as well as having satisfactory performance on measures of productive vocabulary in both languages; i.e., Wechsler Adult Intelligence Scale; WAIS-III; Wechsler, 1997); (ii) self-reported frequency of heritage and mainstream language use (reporting frequent and regular exposure to both languages); and (iii) years of active bilingualism (i.e., at least 10 years prior to assessment; calculated as the difference between participants' age and their age at second language acquisition, i.e., bilingualism onset). Demographic and language-related information is presented in Table 1.

As illustrated by the above, multiculturalism and bilingualism are characteristic features of the Balkans, thereby offering an ideal geographic context for research on bicultural identity development in minority (ethnic or migrant) bilingual adolescents.

## Materials and procedure

Data collection took place between March and October of 2019, as part of a larger project investigating the effects of bilingualism on cognitive performance in adolescence and adulthood. Assessment took place in a quiet environment, in the premises of participants' schools, or in community settings. Participants were asked to first complete the demographic and language background questionnaire, followed by the WAIS-III, the abbreviated version of the Attitude Motivation Test Battery (mini-AMTB) for both languages (heritage and mainstream), the parental encouragement subscale from the original AMTB for both languages, an educational support questionnaire for both languages, the revised Multigroup Ethnic Identity Measure (MEIM-R) for both cultures, and a questionnaire regarding educators' attitudes toward linguistic/cultural diversity. Written informed consent was obtained from at least one parent,

**TABLE 1** Descriptive statistics for younger and older bilingual adolescent groups

| | Younger bilingual adolescents ($N = 95$) | | Older bilingual adolescents ($N = 67$) | |
|---|---|---|---|---|
| | **Mean (SD)** | **Range** | **Mean (SD)** | **Range** |
| Gender | 40 Male<br>55 Female | – | 33 Male<br>34 Female | – |
| Age | 13.54 (.50) | 13–14 | 16.64 (.48) | 16–17 |
| Continuous SES score | 6.06 (2.55) | 1–13 | 6.34 (2.51) | 1–13 |
| Proficiency HL | 4.76 (.54) | 2.5–5 | 4.78 (.60) | 2–5 |
| Proficiency ML | 4.39 (.65) | 2–5 | 4.57 (.59) | 2.75–5 |
| WAIS vocabulary HL | 48.38 (6.77) | 33–62 | 51.56 (7.28) | 38–66 |
| WAIS vocabulary ML | 46.33 (6.37) | 34–61 | 49.55 (7.75) | 36–64 |
| Affective states HL | 53 (11.33) | 24–66 | 50.46 (13.13) | 19–66 |
| Affective states ML | 51.97 (8.05) | 35–66 | 52.74 (8.67) | 32–66 |
| Parental encouragement HL | 39.33 (7.89) | 12–48 | 38.37 (8.41) | 10–48 |
| Parental encouragement ML | 38.84 (6.98) | 22–48 | 35.89 (8.36) | 14–48 |
| Educational support HL | 22.76 (8.27) | 8–35 | 21.50 (7.32) | 8–35 |
| Educational support ML | 21.34 (6.72) | 7–35 | 22.04 (6.23) | 8–34 |
| Educators' attitudes | 40.96 (7.58) | 26–59 | 40.83 (8.46) | 23–59 |
| Bicultural identity | 38.74 (5.08) | 21–48 | 37.25 (6.22) | 22–48 |

Abbreviations: HL, heritage language; ML, mainstream language.

and written informed assent was additionally obtained by all adolescent participants. The study was approved by the Ethics Committee of City College—International Faculty of the University of Sheffield (016656).

## Demographics and language background

The first part of the questionnaire (e.g., Ladas et al., 2015; see also Vivas et al., 2017; Laketa et al., 2021; Studenica et al., 2022) collected information on key demographics (e.g., age, gender, place of birth, length of residence in the respective country) and SES (a composite measure assessing parental education level, occupation status/type, and occupation level). Values on these three SES-related questions were added up for each parent, and divided by two, to get an average parental SES score per participant. The second part of the questionnaire collected information on learning and use of both heritage and mainstream languages (e.g., age at second language acquisition, language proficiency, frequency of use). Productive vocabulary for heritage and mainstream languages were assessed using the vocabulary subtest of the WAIS-III (Wechsler, 1997), which requires participants to provide word definitions.

## Bicultural identity

An adapted version of the MEIM-R (Phinney & Ong, 2007) was administered separately for heritage and mainstream cultures, to assess bicultural identity level. The original (English) version of the MEIM-R consists of two subscales: one measuring exploration (3 items; e.g., "I have often talked to other people in order to learn more about the heritage/mainstream culture"), and the other measuring commitment (3 items; e.g., "I have a strong sense of belonging to the heritage/mainstream culture"). A total identity score for each culture (heritage and mainstream) was computed by adding up raw item values in the respective questionnaire (6 items in total, scored on a 1–4 Likert scale). Then, we computed a total (continuous) bicultural identity score by adding up the two cultural identity scores for heritage and mainstream cultures, with higher scores reflecting higher levels of bicultural identity. Internal consistency was found high for both the heritage ($\alpha = .91$) and mainstream ($\alpha = .89$) culture identity measures.

It is noted here that we originally aimed at additionally using the exploration and commitment sub-measures in the analysis. However, exploratory factor analyses conducted following the adaptation of the MEIM-R for use with the populations of this study showed a one-factor structure for both heritage (Bartlett's test, $x^2 = 613.94$, $df = 15$, $p < .001$; KMO = .89; factor loadings between .699 and .875; total variance explained 63.6%) and mainstream cultural identity (Bartlett's test, $x^2 = 498.52$, $df = 9$, $p = .003$; KMO = .88; factor loadings between .656 and .864; total variance explained 57.3%). In line, confirmatory factor analyses that followed showed that a two-factor model was not a good fit to the data for either heritage or mainstream cultural identity (e.g., RMSEA not falling below .80), while a two-factor model could not even be reliably identified for the mainstream cultural identity measure. Therefore, only an overall bicultural identity score was used in this study, based on the two total scores from the MEIM-R (i.e., one for each culture).

JOURNAL OF Research on Adolescence Society for Research on Adolescence www.s-r-a.org

## Affective states related to language learning and use

An adapted version of the abbreviated (mini) AMTB (Bernaus & Gardner, 2008) was used to assess participants' motivation and attitudes related to language learning and use, and it was administered separately for heritage and mainstream languages. The total score for each language was computed by adding up raw item values (11 items, scored on a 1–6 Likert scale; e.g., "I am motivated to learn the heritage/mainstream language in order to interact with members of the heritage/mainstream community"), with higher scores reflecting higher motivation and more positive attitudes toward learning and using the respective language. Internal consistency was found high for both the heritage ($\alpha$ = .84) and mainstream language ($\alpha$ = .79) measures.

## Parental encouragement

An adapted version of the parental encouragement subscale from the original AMTB (Gardner, 1985) was used to assess perceived parental encouragement related to language learning and use, and it was administered separately for heritage and mainstream languages. The total score for each language was computed by adding up raw item values (8 items, scored on a 1–6 Likert scale; e.g., "My parents feel that it is very important for me to learn the heritage/mainstream language"), with higher scores reflecting higher parental encouragement to learn and use the respective language. Internal consistency was found high for both the heritage ($\alpha$ = .87) and mainstream language ($\alpha$ = .88) measures.

## Educational support

An adapted version of the educational support questionnaire from Landry and Allard (1992) was used to assess the perceived level of support provided within the educational context for language maintenance and/or development (i.e., the degree to which the two languages were present across different aspects of the educational context), and it was administered separately for heritage and mainstream languages. The total score for each language was computed by adding up raw item values (7 items, scored on a 1–5 Likert scale; e.g., "How much of your school instruction is in the heritage/mainstream language?"), with higher scores reflecting more educational support provided for the respective language. Internal consistency was found high for both the heritage ($\alpha$ = .89) and mainstream language ($\alpha$ = .85) measures.

## Educators' attitudes

An adapted version of the teachers' attitudes toward linguistic/cultural diversity questionnaire from Goriot et al. (2016) was used to assess adolescents' perceptions of educator attitudes toward heritage and mainstream languages and cultures. The total score was computed by adding up raw item values (10 items, scored on a 1–6 Likert scale; e.g., "I have the feeling that it does not matter to my educators whether I speak in the heritage or mainstream language"), with higher scores reflecting more positive (perceived) educators' attitudes toward linguistic/cultural diversity. The questionnaire showed acceptable internal consistency ($\alpha$ = .63).

# RESULTS

## Bicultural identity level comparison between younger and older adolescents

To examine whether bicultural identity level was higher in older adolescents as compared to younger adolescents (1st hypothesis), an independent samples *t*-test was conducted. Results showed a non-significant difference between older ($M$ = 37.25, $SD$ = 6.22) and younger ($M$ = 38.74, $SD$ = 5.08) adolescent groups; $t(160) = 1.67$, $p$ = .096, $d$ = .267.

## Exploration of bicultural identity predictors in younger bilingual adolescents

Pearson's correlations were conducted to explore the relationships between bicultural identity and SES, language proficiency (self-report and WAIS-III vocabulary), affective states, (perceived) parental encouragement, (perceived) educational support, and (perceived) educators' attitudes toward linguistic/cultural diversity in younger bilingual adolescents ($N$ = 95). A *t*-test analysis was also conducted to test for gender differences in bicultural identity level. In terms of demographic variables, SES did not correlate significantly with bicultural identity level ($r$ = −.04, $p$ = .683), and the effect of gender on bicultural identity level was not significant; $t(93) = -.68$, $p$ = .493, $d$ = −.143. Results of correlation analyses showed that a greater level of bicultural identity was associated with higher motivation and more positive attitudes toward learning and using both heritage and mainstream languages, with higher levels of parental encouragement to learn and use both heritage and mainstream languages, and with more positive educators' attitudes toward linguistic and cultural diversity ($ps < .05$; see Table 2).

To examine which factors independently predicted bicultural identity in younger adolescents (in relation to the 2nd hypothesis of the study), a multiple regression analysis was conducted with these five variables as predictors, and bicultural identity level as the outcome variable. We employed bootstrapping procedures (1000 bootstrap samples, 95% CIs), in order to increase confidence in the obtained results (e.g., Field, 2013). Results showed that only perceived educators' attitudes toward linguistic/cultural diversity proved a significant predictor of bicultural identity in younger bilingual adolescents ($\beta$ = .26, $p$ = .043), accounting for 19.8% of the variance in the outcome variable (see Table 3).

**TABLE 2** Correlations between bicultural identity and the linguistic, affective, family, and educational variables in younger bilingual adolescents

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Proficiency HL | – | – | – | – | – | – | – | – | – | – | – |
| 2. Proficiency ML | **−.302**** | – | – | – | – | – | – | – | – | – | – |
| 3. Vocabulary HL | **.469**** | −.160 | – | – | – | – | – | – | – | – | – |
| 4. Vocabulary ML | −.011 | **.269**** | **.559**** | – | – | – | – | – | – | – | – |
| 5. Affective states HL | **.588**** | **−.213*** | **.484**** | .166 | – | – | – | – | – | – | – |
| 6. Affective states ML | .076 | .080 | .094 | .147 | **.261*** | – | – | – | – | – | – |
| 7. Parental encouragement HL | **.358**** | −.045 | **.306**** | .143 | **.626**** | .196 | – | – | – | – | – |
| 8. Parental encouragement ML | .161 | .011 | .108 | .093 | **.249*** | **.570**** | .179 | – | – | – | – |
| 9. Educational support HL | **.534**** | **−.383**** | **.577**** | .195 | **.569**** | .150 | **.278**** | .139 | – | – | – |
| 10. Educational support ML | **−.471**** | **.389**** | **−.483**** | −.197 | **−.465**** | −.037 | −.185 | −.013 | **−.853**** | – | – |
| 11. Educators' attitudes | **.257*** | −.012 | .101 | −.112 | **.275**** | **.270**** | .144 | **.211*** | .151 | −.173 | – |
| 12. Bicultural identity | .166 | .070 | .157 | .071 | **.243*** | **.327**** | **.209*** | **.247*** | .018 | .095 | **.348**** |

Abbreviations: HL, heritage language; ML, mainstream language.
*$p < .05$; **$p < .01$.

## Exploration of bicultural identity predictors in older bilingual adolescents

Pearson's correlations were conducted to explore the relationships between bicultural identity and SES, language proficiency (self-report and WAIS-III vocabulary), affective states, (perceived) parental encouragement, (perceived) educational support, and (perceived) educators' attitudes toward linguistic/cultural diversity in older bilingual adolescents ($N = 67$). A $t$-test analysis was conducted to test for gender differences in bicultural identity level. In terms of demographic variables, in this case as well, SES did not correlate significantly with bicultural identity ($r = .23$, $p = .064$), and the effect of gender on bicultural identity level was not significant; $t(65) = -1.52$, $p = .133$, $d = -.372$. Results of correlation analyses showed that a greater level of bicultural identity was associated with higher motivation and more positive attitudes toward learning and using both heritage and mainstream languages, and with higher levels of parental encouragement to learn and use both heritage and mainstream languages ($ps < .05$; see Table 4).

To examine which factors independently predicted bicultural identity in older adolescents (in relation to the 2nd hypothesis of the study), these four variables were entered into a multiple regression analysis, using bootstrapping procedures (1000 bootstrap samples, 95% CIs). The results showed that only affective states (motivation and attitudes) regarding the mainstream language proved a significant predictor of bicultural identity level in older bilingual adolescents ($\beta = .35$, $p = .033$), accounting for 34.1% of the variance in the outcome variable (see Table 5).

# DISCUSSION

This study is the first, to our knowledge, to examine differences in bicultural identity level between younger (13- to 14-year-olds) and older (16- to 17-year-olds) minority (ethnic or immigrant) bilingual adolescents, along with a possible age-related shift in its prediction by individual- (linguistic, affective) and context-level (family, educational) factors. While bicultural identity level was not differentiated as a function of age group, the level of bicultural identity was significantly predicted by perceived educators' attitudes toward linguistic/cultural diversity in younger adolescents, but by personal affective states (motivation and attitudes) toward the mainstream language in older adolescents.

Our results did not confirm the hypothesis that bicultural identity level would be higher in older bilingual adolescents as compared to younger bilingual adolescents. This finding does not align with some past research (e.g., Phinney & Devich-Navarro, 1997), and with the theory-driven assumption that older adolescents should have a stronger sense of bicultural identity, given the progressive cultural identity refinement over the adolescence period (Phinney, 2003). However, our finding is in agreement with the conclusions of Safa and Umaña-Taylor (2021), who reviewed the only three

JOURNAL OF Research on Adolescence Society for Research on Adolescence www.s-r-a.org



**TABLE 3** Examination (employing bootstrapping) of the predictors of bicultural identity in younger bilingual adolescents

| Predictors | *B* | SE *B* | 95% CI | *β* | *p* |
|---|---|---|---|---|---|
| Affective states HL | 0.022 | 0.057 | −0.072, 0.114 | 0.049 | .603 |
| Affective states ML | 0.124 | 0.075 | −0.049, 0.303 | 0.197 | .136 |
| Parental encouragement HL | 0.060 | 0.079 | −0.078, 0.215 | 0.094 | .470 |
| Parental encouragement ML | 0.037 | 0.085 | −0.144, 0.223 | 0.051 | .704 |
| Educators' attitudes | 0.173 | 0.068 | 0.009, 0.334 | **0.257*** | **.043*** |
| $R^2$ = .198, Adjusted $R^2$ = .153, $F$ (5, 89) = 4.40, $p$ = .001 | | | | | |

*Note*: Bootstrapped CIs estimated using Bias corrected accelerated (BCa).

Abbreviations: HL, heritage language; ML, mainstream language.

*$p < .05$.

studies that examined biculturalism longitudinally (in US Latinos), and suggested that the degree to which adolescents endorse and organize heritage and mainstream cultural identities might remain largely stable throughout the adolescence period. The authors argued that relevant changes might actually emerge later on, during adulthood, as a function of bigger academic and/or work transitions, that might trigger bicultural adaptation and identity adjustment. Future longitudinal research can examine this hypothesis also providing clearer insight into the development of bicultural identity as a function of exploration and commitment processes. In addition, it might be of interest for future research to examine the developmental trajectory of other aspects of biculturalism, that are also important for successful adaptation and adjustment, such as bicultural competence (i.e., one's perceived ability to respond to the specific cues and demands associated with both cultures, and successfully switch between two cultural frames of reference; Safa et al., 2020).

With regard to the correlation patterns in both age groups, demographic variables (gender and SES) and language proficiency were not significantly associated with bicultural identity level. The latter contradicts existing evidence on acculturation outcomes in sojourners (e.g., students in foreign countries). Yet, this study involved bilingual adolescents, living for several years in their respective country of residence, as ethnic minority group members or immigrants. Their proficiency levels in both heritage and mainstream languages were, therefore, already developed to a significant degree (see Table 1) for these variables to possibly retain sensitivity as correlates of ongoing bicultural identity development. On the other hand, in both age groups, adolescents who had higher motivation and more positive attitudes toward learning and using both heritage and mainstream languages, as well as adolescents who perceived greater encouragement from their parents to learn and use both languages, tended to have higher levels of bicultural identity as well.

On a broad level, our findings seem to support Gardner's (2001) socio-educational model of second language (L2) acquisition, which suggests a close relationship between L2 learning motivation and one's openness toward and willingness to embrace the L2 culture, as well as previous research that found affective variables to play an important role in cultural identity processes (e.g., Chinen & Tucker, 2005; Goldberg & Noels, 2006; Habibzadeh & Payandedari, 2022). Our findings also seem to be aligned with evidence suggesting positive associations between cultural identity development and acculturation outcomes in adolescence, and parental attitudes (as well as cultural maintenance behaviors; e.g., Phinney, Horenczyk, et al., 2001; Sari et al., 2018). Bicultural identity also correlated with perceived educators' support (in line with e.g., Bender-Szymanski et al., 2000, and Gonzalez, 2009), but only in younger adolescents. The regression analyses that followed, however, in relation to the second research question, helped clarify which of these aforementioned variables actually made an independent contribution to bicultural identity development in each age group.

For younger bilingual adolescents, perceived educators' attitudes toward linguistic/cultural diversity emerged as the only significant, independent predictor of bicultural identity. This finding is consistent with previous studies that reported significant relationships between educator attitudes and students' preferences with regard to acculturation, their attitudes toward heritage and host languages and cultures, their level of inter-cultural competence, and the frequency of inter-cultural contact (e.g., Bender-Szymanski et al., 2000; Tartakovsky, 2012). This finding is also aligned with studies reporting significant relationships between educators' attitudes and aspects of identity development in adolescents (e.g., Heyd-Metzuyanim, 2013; Verhoeven et al., 2019). However, to our knowledge, this is the first study to empirically demonstrate the pivotal contribution of educators' attitudes toward linguistic/cultural diversity to the development of bicultural identity more specifically, among minority (ethnic or immigrant) bilingual adolescents.

Indeed, young adolescents, who are in the exploration stage of cultural identity development, are expected to actively seek new information about heritage and mainstream cultures and groups (Phinney & Ong, 2007). During this time, it is not unusual for adolescents to need support in unraveling the complexity, and understanding possible implications of (cultural) group membership and affiliation. Given that issues related to cultural identity exploration frequently emerge within the educational context

**TABLE 4** Correlations between bicultural identity and the linguistic, affective, family, and educational variables in older bilingual adolescents

| | 1. | 2. | 3. | 4. | 5. | 6. | 7. | 8. | 9. | 10. | 11. |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Proficiency HL | – | – | – | – | – | – | – | – | – | – | – |
| 2. Proficiency ML | **−.252*** | – | – | – | – | – | – | – | – | – | – |
| 3. Vocabulary HL | **.452**** | −.235 | – | – | – | – | – | – | – | – | – |
| 4. Vocabulary ML | −.154 | .082 | **.405**** | – | – | – | – | – | – | – | – |
| 5. Affective states HL | **.413**** | −.065 | **.503**** | −.041 | – | – | – | – | – | – | – |
| 6. Affective states ML | .003 | **.249*** | .160 | .046 | **.522**** | – | – | – | – | – | – |
| 7. Parental encouragement HL | .228 | −.079 | **.285*** | −.067 | **.588**** | .217 | – | – | – | – | – |
| 8. Parental encouragement ML | −.082 | **.268*** | .003 | −.139 | **.326**** | **.666**** | .015 | – | – | – | – |
| 9. Educational support HL | .036 | **−.413**** | .101 | −.105 | .238 | −.125 | .239 | −.040 | – | – | – |
| 10. Educational support ML | .133 | **.242** | −.018 | .039 | −.088 | .229 | −.129 | .176 | **−.768**** | – | – |
| 11. Educators' attitudes | .159 | −.061 | .161 | −.018 | **.498**** | .179 | **.334**** | .076 | .047 | −.089 | – |
| 12. Biculturalism score | .077 | .231 | .055 | .102 | **.430**** | **.528**** | **.325**** | **.403**** | .026 | .083 | .085 |

Abbreviations: HL, heritage language; ML, mainstream language.
*$p < .05$; **$p < .01$.

(Gonzalez, 2009; Huang & Stormshak, 2011), the role of educators becomes imperative for young adolescents' cultural identity development. Our results suggest that educators, who are perceived to have more positive attitudes toward linguistic/cultural diversity, may stimulate the development of bicultural identity. This might occur through the creation of safe learning and socialization environments for young adolescents to explore different cultural norms, values, and behaviors, as well as through the provision of enriched contexts for the development of bilingualism (i.e., learning and using both languages), which would, in turn, be expected to further promote bicultural identity development. Future research could explore in more depth such contextual (educational) contributions to bicultural identity formation, and biculturalism more broadly.

On the other hand, in the group of older bilingual adolescents, it was affective states related to the mainstream language that emerged as the only significant, independent predictor of bicultural identity. This is in agreement with the theoretical arguments of affective variables playing a central role in cultural identity development (e.g., Tajfel & Turner, 2004), and with previous studies suggesting a strong relationship between language-related affective states and attitudes toward the target culture, identification with the target culture, and extent of contact with the target community (e.g., Chinen & Tucker, 2005; Goldberg & Noels, 2006; Habibzadeh & Payandedari, 2022). To our knowledge, though, this is the first study to demonstrate that motivation and attitudes toward learning and using the mainstream language can predict bicultural identity development in older minority (ethnic or immigrant) bilingual adolescents. Thus, our findings suggest that positive affective states toward the mainstream language (and culture) should be protected, enhanced, and maintained even in minority bilingual adolescents—who are already proficient in the mainstream language, and reside permanently in the mainstream society—to help promote the development of a bicultural identity.

Summing up, the results confirmed our second hypothesis for an age-related shift in the predictors of bicultural identity, from context-level factors in early adolescence to individual-level factors in late adolescence. It has been suggested that in childhood and early adolescence, adult members of one's main social circle (e.g., family members, educators) serve as the primary sources of identification in the process of identity development (Erikson, 1968). However, as adolescents grow older, they develop a greater sense of behavioral, emotional, and cognitive autonomy (Kroger, 2006). This involves a sense of self-reliance, independence, and a belief that one is able to make decisions without the need for social support and/or validation (Sessa & Steinberg, 1991). Adolescence is the time when autonomy is negotiated (Neel et al., 1985), and to reach autonomy one needs to go through the process of identity formation and eventual emancipation, referring to the realization that significant others' authority is not absolute and indisputable (Spear & Kulbok, 2004). With this in mind, it

JOURNAL OF Research on Adolescence Society for Research on Adolescence www.s-r-a.org

**TABLE 5** Examination (employing bootstrapping) of the predictors of bicultural identity in older bilingual adolescents

| Predictors | *B* | SE *B* | 95% CI | *β* | *p* |
|---|---|---|---|---|---|
| Affective states HL | 0.042 | 0.070 | −0.085, 0.163 | 0.088 | .436 |
| Affective states ML | 0.249 | 0.110 | 0.005, 0.448 | **0.347*** | **.033*** |
| Parental encouragement HL | 0.145 | 0.097 | −0.042, 0.364 | 0.196 | .093 |
| Parental encouragement ML | 0.104 | 0.105 | −0.109, 0.327 | 0.140 | .321 |
| $R^2 = .341$, Adjusted $R^2 = .299$, $F(4, 62) = 8.02$, $p < .001$ | | | | | |

*Note*: Bootstrapped CIs estimated using Bias corrected accelerated (BCa).

Abbreviations: HL, heritage language; ML, mainstream language.

*$p < .05$.

seems plausible for external, or contextual, influences on (bi)cultural identity development to become less important in older adolescence, while internal forces gain more significance. Indeed, it has been argued that in the early stages of cultural identity development, immigrant and minority youth tend to accept and adopt the views of others; it is only later in the process that they begin to self-reflect on issues related to their ethnic background, and ponder their own cultural identity (Phinney, 2008). That is, a shift from context-regulated acculturation and cultural identity development—guided primarily by the beliefs and motivations of significant others—to self-regulated acculturation and cultural identity development—guided primarily by one's own beliefs and motivations—might take place from early to late adolescence; as also evident in our findings.

An interesting null finding in both age groups was that neither heritage nor mainstream language educational support correlated with bicultural identity level. That is, in contrast to the significant role of (perceived) educators' attitudes—particularly in younger adolescents—other aspects of the educational context that were assessed as part of the *educational support* variable (e.g., the curriculum, teaching materials, language of instruction, ethnic composition of the school) did not seem to relate to the bicultural identity development of minority (ethnic or immigrant) adolescents in our sample. If confirmed in future studies, this finding could have implications for educational practice, as it indicates that schools do not necessarily need to implement significant changes to the educational program (e.g., adopt formal bilingual education practices) to facilitate the development of biculturalism in minority and migrant bilingual students. Yet, it would be important to raise awareness among educators about issues pertaining to cultural identity development, and foster positive attitudes toward cultural and linguistic diversity within the educational setting, in an attempt to encourage bicultural identity exploration and formation, especially among young adolescents. That being said, it should be noted that we did not include a broader, objective measure of educational support in this study. Instead, we focused on adolescents' perceptions of how much the educational context was supporting the development/maintenance of heritage and mainstream languages. Future research should more comprehensively assess factors related to the educational context, such as school ethnic composition, when investigating their potential role in (bi)cultural identity development.

Lastly, it should be pointed out that—while not all statistically significant—none of the individual- and context-level factors examined in this study showed a negative correlation trend with bicultural identity level. That is, while variables related to the mainstream language and culture were positively correlated with bicultural identity, which is to be expected, all variables related to the heritage language and culture (language proficiency, affective states, parental encouragement, and educational support) were also positively correlated with bicultural identity, irrespective of the adolescents' age. This finding disputes the common belief that promoting maintenance of the heritage language and culture might foster a "separatist," monocultural outlook on acculturation and cultural identity development, thereby hindering the successful integration of minority members in a mainstream society. It is actually often the case that parents and educators of immigrant and ethnic minority children gravitate toward emphasizing the importance of acquiring the mainstream language and internalizing the mainstream culture, relative to the heritage one, in a desire to promote integration. However, our study and others (e.g., Henning-Lindblom & Liebkind, 2007; Lee, 2002) suggest that maintaining proficiency in and having a positive affective predisposition toward the heritage language (and culture) does not hinder integration, and on the contrary, might be associated with the development of a bicultural identity in minority bilingual adolescents.

This study had certain limitations. First, we assessed bicultural identity by combining adolescents' scores on heritage and mainstream cultures, resulting in a single, continuous bicultural identity score. However, this assessment method does not provide information about the level of identification with each single culture. For example, this way of scoring makes it difficult to differentiate between individuals who identify moderately with both heritage and host cultures (i.e., a medium score on each scale), and those who identify very strongly with one culture, but very little with the other (i.e., a high score on one scale, but a low score on the other scale). Nonetheless, alternative approaches have their own limitations, and there does not seem to be a general agreement in the literature on the best way to measure biculturalism, or bicultural identity in particular (e.g.,

Nguyen & Benet-Martínez, 2007). Moreover, the focus of our study was on minority (ethnic or immigrant) bilingual adolescents, and the measures used had a language-specific focus. Although biculturalism and bilingualism are tightly intertwined, and conceptions of cultural identity are expected to interact significantly with language learning and use (e.g., Fielding & Harbon, 2013; Grosjean, 2015), if would be important for future studies to operationalize their predictors of bicultural identity more broadly, and investigate if the present findings can be generalized to other immigrant and/or minority populations, who are monolingual, but possibly still experience some level of biculturalism. Finally, although the variable that showed independent predictive capacity in each age group explained a significant amount of variance in the outcome measure (19.8% in younger adolescents, and 34.1% in older adolescents), there seem to be other determinants of bicultural identity development, that were not assessed in this study and have yet to be explored.

In conclusion, this study provides meaningful insight into bicultural identity development of minority (ethnic or immigrant) bilingual adolescents in the multicultural Balkan region. Our findings show that while bicultural identity level was not differentiated as a function of age group, there was an age-related shift in its predictors. Bicultural identity level was significantly predicted by perceived educators' attitudes toward linguistic/cultural diversity in the younger group, but by personal affective states (motivation and attitudes) toward the mainstream language in the older group. These results could have important implications, particularly for educational practice. That is, our findings point to the important role that educators might play in facilitating bicultural identity development, especially among young minority bilingual adolescents. Being appropriately trained and further raising relevant awareness, they can create inclusive and supportive educational environments for students to explore their cultural identities. This study also suggests that bicultural identity development might be promoted among older minority bilingual adolescents, through the enhancement of their motivation and positive attitudes toward the mainstream language (and culture). Once again, the educational context, along with the family, could play a major role in this regard, given their known influences on youth's affective states.

## ACKNOWLEDGEMENTS

We would like to thank the adolescents who participated in the study, for generously sharing their time and insights with us. We are also grateful to the parents, teachers, and school administrators, who supported and facilitated our data collection efforts. We would also like to thank the University of Sheffield, for enabling Open Access funding for this article.

## CONFLICT OF INTEREST STATEMENT

None declared.

## REFERENCES

Ataca, B., & Berry, J. W. (2002). Psychological, sociocultural, and marital adaptation of Turkish immigrant couples in Canada. *International Journal of Psychology*, *37*(1), 13–26.

Atay, D., & Kurt, G. (2010). The socio-educational model of second language acquisition: The Turkish context. *PRO*, *2*, 3088–3093.

Benet-Martínez, V., & Haritatos, J. (2005). Bicultural identity integration (BII): Components and psychosocial antecedents. *Journal of personality*, *73*(4), 1015–1050.

Bender-Szymanski, D., Hesse, H.-G., & Göbel, K. (2000). Acculturation in schools: Culture related conflicts and their impact on the thinking and acting of young teachers in multicultural classrooms. In I. Gogolin & B. Nauck (Eds.), *Migration, societal differentiation, and education* (pp. 213–244). Leske + Budrich.

Bernaus, M., & Gardner, R. C. (2008). Teacher motivation strategies, student perceptions, student motivation, and English achievement. *The Modern Language Journal*, *92*(3), 387–401.

Berry, J. W. (2003). Conceptual approaches to acculturation. In K. Chun, P. Balls Organista, & G. Marín (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 17–37). American Psychological Association.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant youth: Acculturation, identity, and adaptation. *Applied Psychology*, *55*(3), 303–332.

Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross cultural psychology: Research and applications*. Cambridge University Press.

Chinen, K., & Tucker, G. R. (2005). Heritage language development: Understanding the roles of ethnic identity and Saturday school participation. *Heritage Language Journal*, *3*(1), 27–59.

Cross, W., & Cross, T. (2008). Theory, research, and models. In S. Quintana & C. McKown (Eds.), *Handbook of race, racism and the developing child* (pp. 154–181). John Wiley and Sons.

De Vroome, T., Verkuyten, M., & Martinovic, B. (2014). Host national identification of immigrants in The Netherlands. *International Migration Review*, *48*(1), 1–27.

Erikson, E. H. (1968). *Identity: Youth and crisis*. Norton.

Farver, J. A. M., Bhadha, B. R., & Narang, S. K. (2002). Acculturation and psychological functioning in Asian Indian adolescents. *Social Development*, *11*(1), 11–29.

Félix-Ortiz, M., Newcomb, M. D., & Myers, H. (1994). A multidimensional measure of cultural identity for Latino and Latina adolescents. *Hispanic Journal of Behavioral Sciences*, *16*(2), 99–115.

Field, A. (2013). *Discovering statistics using IBM SPSS statistics*. Sage.

Fielding, R., & Harbon, L. (2013). Examining bilingual and bicultural identity in young students. *Foreign Language Annals*, *46*(4), 527–544.

Flannery, W. P., Reise, S. P., & Yu, J. (2001). An empirical comparison of acculturation models. *Personality and Social Psychology Bulletin*, *27*(8), 1035–1045.

Gardner, R. C. (1985). *Social psychology and second language learning: The role of attitudes and motivation*. Edward Arnold.

Gardner, R. C. (2001). Integrative motivation and second language acquisition. *Motivation and Second Language Acquisition*, *23*(1), 1–19.

Gay, G. (2018). *Culturally responsive teaching: Theory, research, and practice*. Teachers College Press.

Goldberg, E., & Noels, K. (2006). Motivation, ethnic identity, and post-secondary education language choices of graduates of intensive French language programs. *The Canadian Modern Language Review*, *62*(3), 423–447.

Gonzales, N. A., Knight, G. P., Morgan-Lopez, A. A., Saenz, D., & Sirolli, A. (2002). Acculturation and the mental health of Latino youths: An integration and critique of the literature.

Gonzalez, R. (2009). Beyond affirmation: How the school context facilitates racial/ethnic identity among Mexican American adolescents. *Hispanic Journal of Behavioral Sciences*, *31*(1), 5–31.

Goriot, C., Denessen, E., Bakker, J., & Droop, M. (2016). Benefits of being bilingual? The relationship between pupils' perceptions of teachers'

appreciation of their home language and executive functioning. *International Journal of Bilingualism*, *20*(6), 700–713.

Grosjean, F. (2015). Bicultural bilinguals. *International Journal of Bilingualism*, *19*(5), 572–586.

Habibzadeh, H., & Payandedari, Z. (2022). Examining the relationship between cultural identity and attitude of high school students of Tehran toward learning English. *Journal of Foreign Language Research*, *11*(2), 255–272.

Henning-Lindblom, A., & Liebkind, K. (2007). Objective ethnolinguistic vitality and identity among Swedish–speaking youth. *International Journal of the Sociology of Language*, *187-188*, 161–184.

Heyd-Metzuyanim, E. (2013). From identity to identifying: Tools for discourse analysis of identity construction in the mathematics classroom. *Proceedings of PME*, *37*(3), 57–64.

Huang, C. Y., & Stormshak, E. A. (2011). A longitudinal examination of early adolescence ethnic identity trajectories. *Cultural Diversity and Ethnic Minority Psychology*, *17*, 261–270.

Imbens-Bailey, A. L. (1996). Ancestral language acquisition: Implications for aspects of ethnic identity among Armenian American children and adolescents. *Journal of Language and Social Psychology*, *15*(4), 422–443.

Kiang, L., & Fuligni, A. J. (2009). Ethnic identity and family processes among adolescents from Latin American, Asian, and European backgrounds. *Journal of Youth and Adolescence*, *38*(2), 228–241.

Kroger, J. (2006). *Identity development: Adolescence through adulthood*. Sage.

Ladas, A. I., Carroll, D. J., & Vivas, A. B. (2015). Attentional processes in low- socioeconomic status bilingual children: Are they modulated by the amount of bilingual experience? *Child Development*, *86*(2), 557–578.

Ladson-Billings, G. (2000). Fighting for our lives: Preparing teachers to teach African American students. *Journal of Teacher Education*, *51*(3), 206–214.

Laketa, A., Studenica, A., Chrysochoou, E., Blakey, E., & Vivas, A. B. (2021). Biculturalism, linguistic distance, and bilingual profile effects on the bilingual influence on cognition: A comprehensive multi-population approach. *Journal of Experimental Psychology. General*, *150*, 2273–2292.

Landry, R., & Allard, R. (1992). Ethnolinguistic vitality and the bilingual development of minority and majority group students. *Maintenance and Loss of Minority Languages*, *1*, 223–251.

Lee, J. S. (2002). The Korean language in America: The role of cultural identity in heritage language learning. *Language, Culture and Curriculum*, *15*(2), 117–133.

Lorenzo-Blanco, E. I., Unger, J. B., Baezconde-Garbanati, L., Ritt-Olson, A., & Soto, D. (2012). Acculturation, enculturation, and symptoms of depression in Hispanic youth: The roles of gender, Hispanic cultural values, and family functioning. *Journal of Youth and Adolescence*, *41*(10), 1350–1365.

Makarova, E., & Herzog, W. (2013). Teachers' acculturation attitudes and their classroom management: An empirical study among fifth-grade primary school teachers in Switzerland. *European Educational Research Journal*, *12*(2), 256–269.

Masgoret, A. M., & Ward, C. (2006). The cultural learning approach to acculturation. In D. L. Sam & J .W. Berry (Eds.), *Cambridge Handbook of Acculturation Psychology* (pp. 58–77). Cambridge University Press.

McCoy, S. K., & Major, B. (2003). Group identification moderates emotional responses to perceived prejudice. *Personality and Social Psychology Bulletin*, *29*(8), 1005–1017.

Neel, E. U., Jay, S., & Litt, I. F. (1985). The relationship of self-concept and autonomy to oral contraceptive compliance among adolescent females. *Journal of Adolescent Health Care*, *6*(6), 445–447.

Nguyen, A. M. D., & Benet-Martínez, V. (2007). Biculturalism unpacked: Components, measurement, individual differences, and outcomes. *Social and Personality Psychology Compass*, *1*(1), 101–114.

Nguyen, A. M. D., & Benet-Martínez, V. (2013). Biculturalism and adjustment: A meta analysis. *Journal of Cross-Cultural Psychology*, *44*(1), 122–159.

Niens, U., Mawhinney, A., Richardson, N., & Chiba, Y. (2013). Acculturation and religion in schools: The views of young people from minority belief backgrounds. *British Educational Research Journal*, *39*(5), 907–924.

Park-Taylor, J., Walsh, M. E., & Ventura, A. B. (2007). Creating healthy acculturation pathways: Integrating theory and research to inform counselors' work with immigrant children. *Professional School Counseling*, *11*(1), 25–34.

Phinney, J. (2003). Ethnic identity and acculturation. In K. Chun, P. Organista, & G. Marin (Eds.), *Acculturation: Advances in theory, measurement, and applied research* (pp. 63–81). American Psychological Association.

Phinney, J., Horenczyk, G., Liebkind, K., & Vedder, P. H. (2001). Ethnic identity, immigration, and well-being: An interactional perspective. *Journal of Social Issues*, *57*(3), 493–510.

Phinney, J. S. (1990). Ethnic identity in adolescents and adults: Review of research. *Psychological Bulletin*, *108*(3), 499–514.

Phinney, J. S. (2008). Bridging identities and disciplines: Advances and challenges in understanding multiple identities. *New Directions for Child and Adolescent Development*, *2008*(120), 97–109.

Phinney, J. S., & Devich-Navarro, M. (1997). Variations in bicultural identification among African American and Mexican American adolescents. *Journal of Research on Adolescence*, *7*(1), 3–32.

Phinney, J. S., & Ong, A. D. (2007). Conceptualization and measurement of ethnic identity: Current status and future directions. *Journal of Counseling Psychology*, *54*(3), 271–281.

Phinney, J. S., Romero, I., Nava, M., & Huang, D. (2001). The role of language, parents, and peers in ethnic identity among adolescents in immigrant families. *Journal of Youth and Adolescence*, *30*(2), 135–153.

Raffaelli, M., & Ontai, L. L. (2004). Gender socialization in Latino/a families: Results from two retrospective studies. *Sex Roles*, *50*(5), 287–299.

Safa, M. D., & Umaña-Taylor, A. J. (2021). Biculturalism and adjustment among US Latinos: A review of four decades of empirical findings. *Advances in Child Development and Behavior*, *61*, 73–127.

Safa, M. D., White, R., & Knight, G. P. (2020). Family contextual influences on bicultural competence development among US Mexican-origin youths. *Developmental Psychology*, *56*(8), 1596–1609.

Sam, D. L. (2000). Psychological adaptation of adolescents with immigrant backgrounds. *The Journal of Social Psychology*, *140*(1), 5–25.

Sari, B. T., Chasiotis, A., van de Vijver, F. J., & Bender, M. (2018). Parental culture maintenance, bilingualism, identity, and well-being in Javanese, Batak, and Chinese adolescents in Indonesia. *Journal of Multilingual and Multicultural Development*, *39*(10), 853–867.

Schwartz, S. J., Montgomery, M. J., & Briones, E. (2006). The role of identity in acculturation among immigrant people: Theoretical propositions, empirical questions, and applied recommendations. *Human Development*, *49*(1), 1–30.

Schwartz, S. J., & Pantin, H. (2006). Identity development in adolescence and emerging adulthood: The interface of self, context, and culture. In A. Prescott (Ed.), *The concept of self in psychology* (pp. 45–85). Nova Science Publishers.

Schwartz, S. J., & Unger, J. B. (2010). Biculturalism and context: What is biculturalism, and when is it adaptive? Commentary on Mistry and Wu. *Human Development*, *53*(1), 26–32.

Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. *Cultural Diversity and Ethnic Minority Psychology*, *14*(4), 275–285.

Sessa, F. M., & Steinberg, L. (1991). Family structure and the development of autonomy during adolescence. *The Journal of Early Adolescence*, *11*(1), 38–55.

Simpao, M. P., Espino, D. V., Palmer, R. F., Lichtenstein, M. J., & Hazuda, H. P. (2005). Association between acculturation and structural assimilation and mini-mental state examination-assessed cognitive impairment in older Mexican Americans: Findings from the San Antonio longitudinal study of aging. *Journal of the American Geriatrics Society*, *53*(7), 1234–1239.

Slonim-Nevo, V., & Shraga, Y. (2000). Psychological and social adjustment of Russian-born and Israeli-born Jewish adolescents. *Child and Social Work Journal*, *17*, 455–475.

Spear, H. J., & Kulbok, P. (2004). Autonomy and adolescence: A concept analysis. *Public Health Nursing*, *21*(2), 144–152.

Spiegler, O., & Leyendecker, B. (2017). Balanced cultural identities promote cognitive flexibility among immigrant children. *Frontiers in Psychology*, *8*, 1579.

Studenica, A., Laketa, A., Chrysochoou, E., Blakey, E., & Vivas, A. B. (2022). The influence of bilingualism on adolescent cognition: The roles of biculturalism, the bilingual profile, and linguistic similarity. *Cognitive Development*, *63*, 101203.

Syed, M., Walker, L. H., Lee, R. M., Umaña-Taylor, A. J., Zamboanga, B. L., Schwartz, S. J., … Huynh, Q. L. (2013). A two-factor model of ethnic identity exploration: Implications for identity coherence and well-being. *Cultural Diversity and Ethnic Minority Psychology*, *19*(2), 143–154.

Tajfel, H., & Turner, J. C. (2004). The social identity theory of intergroup behavior. In *Political psychology* (pp. 276–293). Psychology Press.

Tartakovsky, E. (2009). The psychological well-being of unaccompanied minors: A longitudinal study of adolescents immigrating from Russia and Ukraine to Israel without parents. *Journal of Research on Adolescence*, *19*(2), 177–204.

Tartakovsky, E. (2012). Factors affecting immigrants' acculturation intentions: A theoretical model and its assessment among adolescent immigrants from Russia and Ukraine in Israel. *International Journal of Intercultural Relations*, *36*(1), 83–99.

Umaña-Taylor, A. J., Quintana, S. M., Lee, R. M., Cross, W. E., Jr., Rivas-Drake, D., Schwartz, S. J., … Ethnic and Racial Identity in the 21st Century Study Group. (2014). Ethnic and racial identity during adolescence and into young adulthood: An integrated conceptualization. *Child Development*, *85*(1), 21–39.

Verhoeven, M., Poorthuis, A. M., & Volman, M. (2019). The role of school in adolescents' identity development: A literature review. *Educational Psychology Review*, *31*, 35–63.

Vivas, A. B., Ladas, A. I., Salvari, V., & Chrysochoou, E. (2017). Revisiting the bilingual advantage in attention in low SES Greek-Albanians: Does the level of bilingual experience matter? *Language, Cognition and Neuroscience*, *32*(6), 743–756.

Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current Opinion in Psychology*, *8*, 98–104.

Wechsler, D. (1997). *WAIS III: Wechsler adult intelligence scale* (3rd ed.). Psychological Corporation.

Weisman, E. M. (2001). Bicultural identity and language attitudes: Perspectives of four Latina teachers. *Urban Education*, *36*(2), 203–225.

Xing, X., Popp, M., & Price, H. (2020). Acculturation strategies of Chinese university students in the United States. *Journal of Advances in Education Research*, *5*(1), 11–24.

Zlobina, A., Basabe, N., Paez, D., & Furnham, A. (2006). Sociocultural adjustment of immigrants: Universal and group-specific predictors. *International Journal of Intercultural Relations*, *30*(2), 195–211.

**How to cite this article:** Laketa, A., Chrysochoou, E., Studenica, A., & Vivas, A. B. (2023). Linguistic, affective, parental, and educational contributions to the bicultural identity development of Balkan minority adolescents. *Journal of Research on Adolescence*, *00*, 1–14. https://doi.org/10.1111/jora.12846