Variants of biculturalism in migrant and host adolescents living in Italy and Spain: Testing the importance of life domains through the Relative Acculturation Extended Model

Tiziana Mancini[1], Marisol Navas[2], Lucia López-Rodríguez[3], and Benedetta Bottura[4]

[1]Department of Humanities, Social Sciences and Cultural Industries, University of Parma, Parma, Italy
[2]Department of Psychology, University of Almeria, Centro de Estudio de las Migraciones y las relaciones Interculturales (CEMyRI), Almería, Spain
[3]Department of Psychology, University of Almería, Almería, Spain
[4]Department of Humanities, Social Sciences and Cultural Industries, University of Parma, Parma, Italy

*S*everal variants of biculturalism have recently been proposed (Schwartz, Birman, Benet-Martínez, & Unger, 2016). Nevertheless, few studies have identified different types of bicultural individuals, and no one has addressed the possibility that these types could depend on acculturation domains. By using the Relative Acculturation Extended Model (RAEM), this study aimed to explore if different variants of biculturalism could be individuated, and if some of these variants were sensitive to life domains. Four samples of migrant and host adolescents living in Italy ($n = 173$ and $n = 186$) and Spain ($n = 139$ and $n = 156$) answered a questionnaire about acculturation perceptions and preferences in central and peripheral life domains. Together with acculturation options consistent with Berry's (1997) model (full-assimilation, full-separation and full-marginalisation), some variants of biculturalism emerged from the latent class analysis: full-high and full-low integration, which were not sensitive to life domains; and "alternate" acculturation options that were sensitive to life domains, with participants switching from their original culture to the host culture according to the peripheral and central domains. Acculturation options varied across the four samples, with Italians switching more from one culture to another, and Spanish adolescents being more full-high or full-low integrated.

Keywords: Acculturation domains; Latent class analysis; Host adolescents; Migrant adolescents; RAEM.

Intercultural relationships occupy an increasingly prominent position in today's globalised world. Adolescents and emerging adults increasingly interact with people from different cultures, either directly via face-to-face contacts with migrants, or indirectly through various media, such as the internet or television (Jensen & Arnett, 2012). Studies have generally shown that most migrant adolescents actually "live" between two cultures (e.g., Berry, Phinney, Sam, & Vedder, 2006), and that a majority of host adolescents also shape different ideas on how migrants are and should be integrated into their society (e.g., Mancini & Bottura, 2014). However, the specific form that this biculturalism takes in migrant and host adolescents remains largely unexplored. This issue is somewhat complex, because different life domains—in which people discern how to negotiate multiple cultures—are involved. In this regard, the alternation model (LaFromboise, Coleman, & Gerton, 1993) assumes that people can alter their behaviour to fit a particular social context. Furthermore, Schwartz et al. (2016) stressed the importance of differentiating between the endorsement of the two (or more) cultural

streams, cultural frame switching and bicultural identity integration in order to distinguish different types of bicultural individuals. Nevertheless, no studies have yet verified the existence of different variants of biculturalism in migrant and host adolescents. The present study aims this objective, using a model able to detect acculturation processes in different domains: the Relative Acculturation Extended Model (RAEM; Navas et al., 2005). Applying RAEM to adolescent populations, previous studies (López-Rodríguez, Bottura, Navas, & Mancini, 2014; Mancini & Bottura, 2014) confirmed that acculturation perceptions and preferences of migrant and host adolescents cannot be considered as a uniform whole, since both vary according to the central (family relations, religion and values) or peripheral (school and consumer habits) domains considered. In these studies, maintenance of original culture and adoption of host culture were considered as separate measures, meaning that comparisons between migrant and host adolescents on acculturation options or strategies were not considered. Using the same data set in López-Rodríguez et al. (2014), this study conducted new analyses to explore whether detecting acculturation dimensions (maintenance and adoption) in central and peripheral domains could help to identify different variants of biculturalism, together with the classical options (i.e., separation, assimilation, integration and marginalisation) identified by Berry (1997). Qualitative intra-country (hosts vs. migrants) and cross-country (Italy vs. Spain) comparisons will be made on acculturation options.

The RAEM

The RAEM sought to integrate several elements from previous models, generating innovative contributions to the field of acculturation research. As the most renowned model of psychological acculturation (Berry, 1997), the RAEM (Navas, Rojas, García, & Pumares, 2007; Navas et al., 2005) considers two dimensions: maintenance of original culture and adoption of host culture. Similar to previous research (e.g., Bourhis, Moïse, Perreault, & Senécal, 1997), the RAEM assumes an *intergroup level of analysis* (Mancini & Bottura, 2014) where both the majority and minority perspectives should be considered for a better understanding of the acculturation processes. However, the RAEM also adopts an *interpersonal level of analysis*, establishing a distinction between the real and the ideal plane in the acculturation process, namely, between acculturation *perceptions* (strategies: options that migrants declare to practice in the host society, and those that hosts perceive migrants to practice) and acculturation *preferences* (attitudes: options both migrants and hosts would prefer if they could choose).

However, undoubtedly, one of the main contributions of the model is considering specific acculturation domains as a way to capture the inherent *complexity* of the acculturation process (e.g., Schwartz, Unger, Zamboanga, & Szapocznik, 2010). Some psychological research has emphasised the importance of differentiating the life domains where acculturation takes place. In such cases, authors have considered aspects such as values, language, cultural traditions, social relations or identifications (e.g., Schwartz et al., 2010), but only a few studies have presented results differentiated by acculturation domains. Relatedly, Arends-Tóth and Van de Vijver (2004) differentiated between public (education, media) and private (family, religious celebrations) life domains, showing that Turkish adults in the Netherlands valued the host and origin culture differently depending on the life domain considered (public vs. private). Taking the division established by Leunda (1996) as a point of reference, the RAEM considered different areas of socio-cultural reality, classified in *peripheral* domains (including areas where the culture of the host society is prevalent and impossible to be excluded, e.g., work, consumer habits) and *central* domains (including areas where the heritage culture of the immigrant group is more difficult to be excluded, e.g., family relations, religion, values). The RAEM predicts that in peripheral domains a prevalent orientation to adopt the host culture is expected (e.g., assimilation). On the other hand, acculturation orientations respecting the original culture (e.g., separation) are expected more in central domains.

Acculturation options or strategies

As a further proof of the *complexity* of the acculturation process, the literature has identified more than the four classical options proposed by Berry (1997): *integration* (maintaining the original culture and adopting the host culture); *assimilation* (adopting the host culture without maintaining the original culture); *separation* (maintaining the original culture without adoption) and *marginalisation* (neither maintenance nor adoption). These acculturation options were identified a priori, with the theoretical model assuming that all four categories exist and are equally valid. However, different results emerged when more rigorous ways of classifying individuals have been used by some studies, such as latent class analysis (LCA), a technique which does not assume any particular theoretical model (Eshghi, Haughton, Legrand, Skaletsky, & Woolford, 2011). Three psychological acculturation patterns were revealed by Stevens, Pels, Vollebergh, and Crijnen (2004) among Moroccan adult and adolescent population living in the Netherlands. These three classes were similar for both populations and showed different combinations of scores on Dutch (D-PSA) and Moroccan (M-DPSA) Psychological Acculturation Scales. The first class was characterised by medium scores on both scales, the second class by high

scores on both scales and the third class by low scores on the D-PAS and high scores on the M-PAS. In a study from the minority's perspective, Schwartz and Zamboanga (2008) used measures of heritage (H) and American cultural (AC) orientations to create the latent classes. They found six acculturation classes: *Undifferentiated* (scored lowest on the both scales), *Assimilation* (scored high on the AC orientation scale and low on the H scale), *Partial Biculturalism* (scored medium on the both scales), *American-Oriented Biculturalism* (scored medium on the H scale and high on the AC orientation scale), *Separated* (scored high on the H scale and medium on the AC orientation scale), and *Full Biculturalism* (scored highest on both scales). On the other hand, in a study with a big sample of Mexican-heritage preadolescents (from fifth grade), Nieri, Lee, Kulis, and Marsiglia (2011) combined different measures (including attitudinal, behavioural and linguistic acculturation, generation status, time in the United States, ethnic identification, and contact with the origin culture), in order to determine how many and what classes of acculturation were experienced by this sample. The LCA identified five classes of acculturation: *less acculturated children* (mainly first generation, behaviours most often aligned toward Mexican culture), *moderately bicultural* (mostly first generation but with a longer stay than the previous class in the United States; behaviour reflecting the culture of both the United States and Mexico), *strongly bicultural* (mostly second generation, they described their behaviour as being like that in both the United States and Mexico), *highly acculturated* (mostly third generation, they described their behaviour as being like that in the United States) and *marginalised children* (they had low affinities to both cultures and were distributed more evenly across the ranges of values for the other acculturation indicators). Using cluster analysis to combine *behavioural* (language and communication, social interactions and daily living habits) and *value* acculturation domains (belief systems, worldviews and political ideologies), Miller et al. (2013) study confirmed that most of the participants (Asian Americans) used different acculturation options across different domains.

These findings suggest that Berry's four acculturation options may not exist in a given sample and that the option of integration may have multiple subtypes depending on the level of adoption and maintenance. Nevertheless, having obtained different acculturation options considering either general (Nieri et al., 2011; Schwartz & Zamboanga, 2008) or intra-domain (Miller et al., 2013) dimensions of maintenance and adoption, only one variant of biculturalism has been found: that linked to the extent (weakly or strongly) of endorsement of two cultural streams (Schwartz et al., 2016). This work sought to explore the presence of other variants of biculturalism such as those related to the alternation model (LaFromboise et al., 1993).

The present study

In light of the research cited above, the present study aimed to determine the acculturation options by combining measures of maintenance and adoption both in peripheral (school, consumer habits) and central (family relations, religion, values) domains in samples of host and migrant adolescents who were residing in two European countries (Italy and Spain). Accordingly, this study used LCA to explore whether, alongside the classical acculturation options (separation, assimilation and marginalisation), different variants of biculturalism could be individuated and whether they depended on life domains (i.e., peripheral and central). We expected that some variants of biculturalism would not be sensitive to life domains, and also expected to find "alternate" or "switching" bicultural acculturation options. Specifically, we assumed that while some migrant and host adolescents could moderately or strongly endorse both cultural streams (Nieri et al., 2011; Schwartz & Zamboanga, 2008), others could switch from the culture of origin to the host culture depending on the central or peripheral domains that they have to face (LaFromboise et al., 1993; Mancini & Porretti, 2017).

As some studies showed (e.g., Miller et al., 2009), the variants that biculturalism can take often vary across participants and across receiving contexts. Despite the general similarities between Italy and Spain on attitudes toward immigration (Transatlantic Trends, 2013), Italy's conditions for integration are today slightly less favourable than those in Spain (Huddleston, Niessen, Ni Chaoimh, & White, 2011). The more widespread perception of discrimination based on ethnic origin and/or religion beliefs existing in Italy with respect to Spain (European Commission, 2012) is probably a consequence of this condition, and may partially explain why Spanish adolescents, more than Italian adolescents, perceive and prefer to maintain and adopt in peripheral as well as in central domains (López-Rodríguez et al., 2014). Furthermore, as other studies have highlighted (e.g., Berry et al., 2006), biculturalism may be more difficult to develop and maintain when migrants are discriminated by members of the receiving society. In line with these results, we therefore aimed to explore whether options in which participants switch from one culture to another depending on peripheral or central domains, were more frequent in Italian host and migrant adolescents, while moderate or high endorsement of both cultures was more frequent among Spanish host and migrant adolescents.

METHOD

Participants

Six hundred and fifty four (migrant and host) adolescents ($M_{age} = 16.20$; 52.4% females), currently living in Italy

($n = 359$) and Spain ($n = 295$), completed a questionnaire (see Table 1). Around 47% (47.7%; $n = 312$) of participants were migrants, and 52.3% ($n = 342$) were host adolescents. Most of the adolescents in the migrant group were born abroad (95.2%), with the exception of 15 Italian migrants (8.7%) and 1 Spanish migrant, who were born in their respective host countries or in other western European countries. None of their parents (father and mother) where born in Italy, Spain or in other European countries.

Adolescents were recruited in urban high schools, which have been selected through a convenient sampling. Agreement from parents was obtained from the authorities of the schools involved in the research. Classes attended by one or more migrant people have been identified and invited to participate. The anonymity of participants was guaranteed and preserved, and the questionnaire was collectively administered in classes, always in the presence of a trained researcher. To minimise the risk that participants would suffer harm or psychological discomfort the researcher read aloud the instructions that stated that they could abandon the questionnaire at any point and contact the researcher if they felt upset or offended by anything in the questionnaire.

Measures

On the basis of the RAEM, measures of acculturation *perceptions* and *preferences* regarding five different life domains (school, consumer habits, family relations, religion and values) were developed. According to Berry's bi-dimensional model, acculturation measures were derived from four questions regarding maintenance of the original culture and adoption of the host culture that *migrants* perceive to practice (*perceptions*) and would like to practice if they could choose to (*preferences*) in the host society (e.g., To what extent do you currently maintain/have adopted the customs or traditions of your original country regarding the following domains? If you could choose, to what extent would you like to maintain the customs or traditions of your original country/to adopt the customs or traditions of this country, regarding the following domains?); and regarding how hosts perceive immigrants to be practicing (*perceptions*) and how they would like migrants to practice (*preferences*) (e.g., To what extent do you think the young migrants who live here currently maintain/have adopted the Spanish/Italian customs regarding the following domains? If you could choose, to what extent would you like the young migrants who live here to maintain the customs or traditions of their original country/to adopt the customs or traditions of this country regarding the following domains?). Participants answer to 20 items: 10 of them regarding their *perceptions* (five items as there were five domains) and *preferences* (five items) of the *maintenance* of the original culture, and 10 regarding their *perceptions* and *preferences* about

the *adoption* of the host culture. They provided their responses using a 5-point Likert scale ranging from 1 (*not at all*) to 5 (*very much*). All measures were completed in Italian or Spanish, depending on the subsamples.

In a previous study (López-Rodríguez et al., 2014), a Confirmatory Factor Analysis (CFA) with these data was conducted considering perceptions and preferences combined into 10 aggregate item parcels. The analysis confirmed that the different RAEM domains could be grouped into peripheral (school, consumer habits) and central ones (family relations, religion and values) for both maintenance and adoption, and for both Italian and Spanish migrant and host samples. Reliability indexes for perceptions/preferences for maintenance in peripheral ($\alpha = .66$) and central domains ($\alpha = .77$) and for perceptions/preferences for adoption in peripheral ($\alpha = .65$) and central domains ($\alpha = .77$) were acceptable considering the low number of items included in these. These four combined measures have been used to reach the aim of this study.

RESULTS

Descriptive statistics

Means, standard deviations and correlations between the eight (four for perceptions and four for preferences) not combined variables are presented in Tables 2 and 3. *T*-test comparisons between migrant and host adolescents within each country were considered (for statistical comparison between Italy and Spain, see López-Rodríguez et al., 2014).

Regarding the Italian samples (Table 2), regardless of domains migrants scored significantly higher than hosts in perception of adoption ($p < .001$), and in preferences of maintenance ($p < .001$). On the contrary, hosts scored higher than migrants in perception of maintenance ($p < .05$ for peripheral and $p < .01$ for central), and in preferences of adoption ($p < .01$ for peripheral and $p < .001$ for central). Peripheral and central domains were always positively, highly and significantly correlated with each other in both migrant and host Italian adolescents (italicised in Table 2). Measures of perceptions and preferences were positively and significantly correlated with each other (bold values in Table 2) in migrant adolescents, while only measures of adoption in peripheral domains were positively and significantly correlated in Italian host adolescents.

Regarding the Spanish samples (Table 3), with the exception of preferences of adoption in central domains—in which no significant differences emerged—migrants scored significantly higher than hosts on all measures ($p < .001$). Peripheral and central domains were always positively, highly and significantly correlated with each other in both migrant and host

TABLE 1
Socio-demographic characteristics by migrant and host groups

		Italy		Spain	
		Migrants N (%)	Hosts N (%)	Migrants N (%)	Hosts N (%)
Gender	Male Female	69 (40.1) 103 (59.9)	103(55.4) 83 (44.6)	88 (63.8) 50 (36.2)	81 (52.3) 74 (47.7)
Age M (SD)		17.06 (1.59)	16.83 (1.45)	15.44 (1.27)	15.10(1.13)
Country of birth	Western Europe[a]	15 (8.7)	186 (100.0)	1 (.7)	156 (100.0)
	East-Europe[b]	62 (35.8)	—	40 (28.8)	—
	Central, South America[c]	25 (14.5)	—	49 (35.3)	—
	Asia[d]	20 (11.6)	—	—	—
	North Africa[e]	16 (9.2)	—	49 (35.3)	—
	South Africa[f]	34 (19.7)	—	—	—
Family origin (father and mother)	Western Europe[a]	—	139 (100.0)	—	156 (100.0)
	East-Europe[b]	62 (35.8)	—	41 (29.5)	—
	Central, South America[c]	26 (15.0)	—	49 (35.3)	—
	Asia[d]	22 (12.7)	—	—	—
	North Africa[e]	23 (13.3)	—	49 (35.3)	—
	South Africa[f]	40 (23.1)	—	—	—
Total		173 (26.5)	186 (28.4)	139 (21.3)	156 (23.9)

[a]Italy, Spain and so forth. [b]Moldova, Romania, Albania and so forth. [c]Equator, Brazil, Peru and so forth. [d]China, Philippines, India and so forth. [e]Morocco, Tunisia and so forth. [f]Cameroon, Ghana and so forth.

TABLE 2
Descriptive (means, standard deviations and bivariate correlations) on study's variables for Italian migrant and host adolescents

		Migrants (n 173)		Hosts (n 186)		1	2	3	4	5	6	7	8
		M	SD	M	SD								
Perceptions	1. Maintenance peripheral	3.04	1.21	3.31	.94	1	*.40****	−.12	−.10	**.04**	.01	.10	.14
	2. Maintenance central	3.89	.96	4.19	.96	*.43****	1	.05	−.19*	−.12	**−.10**	.06	.28***
	3. Adoption peripheral	3.80	1.03	2.71	1.00	−.17*	−.14	1	*.43****	.30***	.32***	**.21****	.07
	4. Adoption central	3.09	1.12	1.87	.91	.07	−.11	*.43****	1	.35***	.30***	.02	**.03**
Preferences	5. Maintenance peripheral	3.23	1.08	2.36	1.10	**.47*****	.42***	−.30***	−.09	1	*.67****	.09	−.05
	6. Maintenance central	3.86	1.00	2.52	1.25	.38***	**.63*****	−.14	−.13	*.55****	1	.04	−.18*
	7. Adoption peripheral	3.40	.96	3.72	1.08	−.18*	−.18*	**.42*****	.29***	−.18*	−.16*	1	*.51****
	8. Adoption central	2.85	.98	3.40	1.21	.01	.01	.24**	**.53*****	−.02	−.04	*.45****	1

Note: Upper half shows correlations for hosts ($n = 186$). Lower half shows correlations for migrants ($n = 173$). The italics values show inter-domain (peripheral and central) correlations; bold values show inter-plane (perceptions and preferences) correlations.
***$p < .001$. **$p < .01$. *$p < .05$.

Spanish adolescents (italicised in Table 3). Measures of perceptions and preferences were positively and significantly correlated with each other (bold values in Table 3) in migrant adolescents, while only measures of maintenance and adoption in central domains were positively and significantly correlated in Spanish host adolescents.

Testing acculturation options

Four LCAs were conducted separately for Italian migrant, Italian host, Spanish migrant and Spanish host adolescents using M-Plus 7.1 (Muthén & Muthén, 2006). Following previous research (Mancini & Porretti, 2017; Nieri et al., 2011; Schwartz & Zamboanga, 2008; Stevens et al., 2004), the aim was to empirically identify groups of participants with similar patterns of scores on combined (perception and preferences) measures of maintenance and adoption in peripheral and central domains. A maximum likelihood algorithm was used to create the k-category latent variables underlying the data set (Eshghi et al., 2011). We specifically examined a range of different solutions, with models ranging from 3

TABLE 3
Descriptive (means, standard deviations and bivariate correlations) on study's variables for Spanish migrant and host adolescents

		Migrants (n 139)		Hosts (n 156)									
		M	SD	M	SD	1	2	3	4	5	6	7	8
Perceptions	1. Maintenance peripheral	3.51	1.03	2.88	.81	1	.50***	.19*	.16*	**.12**	.08	.27**	.19*
	2. Maintenance central	3.95	.90	3.20	.84	.64***	1	.35***	.33***	.18*	**.17***	.35***	.34***
	3. Adoption peripheral	3.87	.85	2.85	.80	−.14	.05	1	.58***	.17*	.26**	**.15**	.19*
	4. Adoption central	3.64	.91	2.73	.83	.05	.13	.39**	1	.36***	.46***	.08	**.24****
Preferences	5. Maintenance peripheral	3.75	1.07	3.09	1.09	**.52***	.56***	−.02	.03	1	.71***	.43***	.37***
	6. Maintenance central	3.98	1.05	3.23	1.00	.53***	**.77***	.04	.10	.79***	1	.31***	.39***
	7. Adoption peripheral	3.82	.90	3.52	.98	−.05	.12	**.45***	.37***	−.05	.06	1	.69***
	8. Adoption central	3.70	.93	3.54	.93	.01	.13	.24**	**.67***	−.07	.05	.54***	1

Note: Upper half shows correlations for hosts ($n = 156$). Lower half shows correlations for migrants ($n = 139$). The italics values show inter-domain (peripheral and central) correlations; the bold values show inter-plane (perceptions and preferences) correlations.
***$p < .001$. **$p < .01$. *$p < .05$.

to 6 latent classes for each sample. A multistage decision process, combining fit statistics and substantive inter-pretability, was used to decide the appropriate number of classes (Nylund, Asparouhov, & Muthén, 2007). Firstly, values of the sample size adjusted Bayesian information criteria (BIC$_a$) were used to estimate the optimal number of classes. Secondly, we used the entropy value (*E*) and the probability of a case belonging to each class as overall measures of the solution reliability and stability (values equal to or higher than .70 were considered adequate). Thirdly, using the Adjusted Lo-Mendell-Rubin test (aLRT), we selected the solution that provided a signif-icant improvement in the fit achieved in a solution with $k − 1$ classes (fit statistics from three to six classes are presented in Table 4). To choose the best class solution, criteria of at least 1% of the sample in each class were also considered, as well as their conceptual distinction. Maximum likelihood estimation with robust standard errors (MLR) algorithm was used to create the classes. Class profiles obtained for each LCA and sample sizes are illustrated in Figures 1–4. The *y*-axis depicts the scores of combined measures of maintenance and adoption in peripheral and central domains, and class profiles are represented taking the theoretical median (3) of the scales as a standard line. The latent class names attributed to the classes were derived from the acculturation literature and took into account the distances from the midpoint of the scales (3).

Italian migrant adolescents group

Fit statistics (Table 4) best supported a four-class solu-tion that was sufficiently reliable. The classification accu-racy rates for all four classes were: $c1 = .88$, $c2 = .87$, $c3 = .97$, $c4 = .88$.

Three of the four classes seemed not to be sensi-tive to the life domains (Figure 1): *full-separation* (high scores on maintenance, low scores on adoption, especially in central domains), *full-assimilation* (high scores on

TABLE 4
Sample size adjusted Bayesian information criteria (BIC$_a$), entropy (*E*) and adjusted Lo-Mendell-Rubin test (aLRT) from three to six classes for migrant and host adolescents living in Italy and in Spain

		BIC$_a$	E	aLRT	P
Italian migrants	3 cl	1723.49	.85	53.65	.272
	4 cl	**1684.81**	**.79**	**46.79**	**.014**
	5 cl	1670.48	.79	23.36	.552
	6 cl	1658.95	.79	20.66	.389
Italian hosts	3 cl	1638.23	.66	20.88	.280
	4 cl	**1612.45**	**.78**	**37.74**	**.001**
	5 cl	1606.34	.86	15.80	.553
	6 cl	1589.66	.84	25.95	.104
Spanish migrants	3 cl	1200.86	.85	93.32	.007
	4 cl	**1158.26**	**.89**	**49.48**	**.051**
	5 cl	1132.85	.90	32.93	.146
	6 cl	1104.73	.93	35.53	.034
Spanish hosts	**3 cl**	**1115.06**	**.88**	**72.01**	**.011**
	4 cl	1088.01	.82	35.08	.277
	5 cl	1076.73	.82	19.91	.279
	6 cl	1064.90	.86	29.44	.299

*Note*: The best class solution for each sample is in bold.

adoption, and low scores on maintenance, especially in peripheral domains) and *full-high integration* (high scores on maintenance and adoption in both domains). However, the largest group ($n = 78$) was an *alternate-biculturalism* class, where participants had medium–high scores on maintenance and medium–low scores on adoption (sep-aration) in central domains, and medium–low scores on maintenance and medium–high scores on adoption (assimilation) in peripheral domains.

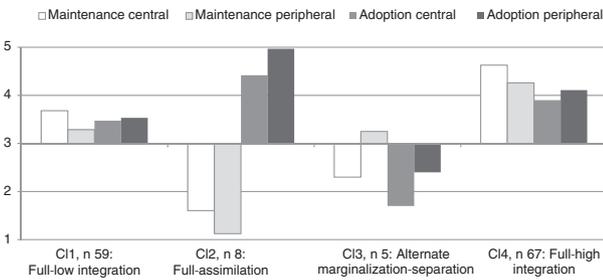### Italian host adolescents group

Fit statistics (Table 4) best supported a four-class solu-tion that was sufficiently reliable, and the classification accuracy rates for all four classes were: $c1 = .99$, $c2 = .88$, $c3 = .98$, $c4 = .84$.
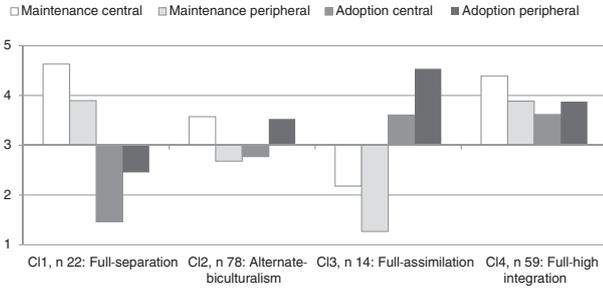
Figure 1. Acculturation latent class options in Italian migrant adolescents.
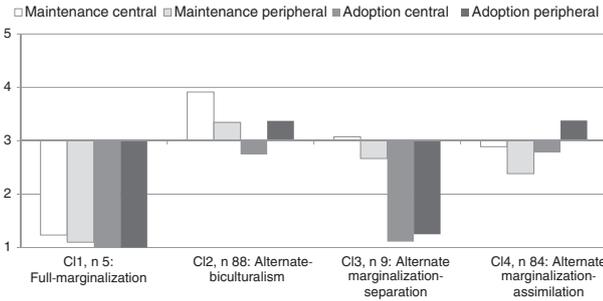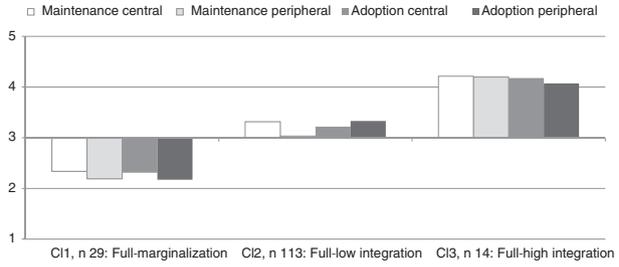

Figure 2. Acculturation latent class options in Italian host adolescents.

Figure 3. Acculturation latent class options in Spanish migrant adolescents.

Classes in the host adolescents group differed a little from those of the Italian migrants (Figure 2): a *full-marginalisation* class (low scores on maintenance and on adoption in both domains), and three "alternate" classes emerged. The first of these "alternate" classes (Cl2) was characterised by an option of separation in central domains and integration in peripheral domains (*alternate-biculturalism*); the second (Cl3) by an option of separation in central domains and marginalisation in peripheral domains (*alternate marginalisation-separation*); the third (Cl4) by an option of marginalisation in central domains and assimilation in peripheral domains (*alternate marginalisation-assimilation*). Therefore, with the exception of the full-marginalisation class, all classes seemed sensitive to the domains. Alternate-biculturalism and alternate marginalisation-assimilation aggregated most of the participants of the study (79.2%).

Figure 4. Acculturation latent class options in Spanish host adolescents.

Spanish migrant adolescents group

Fit statistics (Table 4) best supported a four-class solution that was very reliable, even if aLRT was slightly above the significance level ($p = .051$). The classification accuracy rates for all four classes were: $c1 = .94$, $c2 = 1.00$, $c3 = .99$, $c4 = .93$.

Three of the four classes were consistent with classical acculturation categories and not sensitive to the life domains (Figure 3): *full-low integration* (medium–high scores on maintenance and on adoption in both domains), *full-assimilation* (high scores on adoption and low scores on maintenance) and *full-high integration* (high scores on maintenance and adoption in both domains). Sensitive to the life domains was instead the class named *alternate marginalisation-separation*, characterised by medium–low scores on maintenance and adoption (marginalisation) in central domains and by medium–high scores on maintenance and medium–low scores on adoption (separation) in peripheral domains. It should be note that this class aggregated only five participants. The largest groups were the classes we named full-low and full-high integration, which, together, aggregated 90.6% of participants.

Spanish host adolescents group

The fit statistics (Table 4) best supported a three-class solution that was sufficiently reliable. The classification accuracy rates were: $c1 = .95$, $c2 = .95$, $c3 = .91$.

Three types of acculturation options consistent with classical ones were found in this sample (Figure 4): *full-marginalisation* (low scores on maintenance and on adoption in both domains), *full-low integration* (medium–high scores on maintenance and adoption in both domains) and *full-high integration* (high scores on maintenance and adoption in both domains). No classes were sensitive to the life domains. The class with most of the participants (72.4%) was full-low integration.

Comparisons among the four samples

Table 5 describes the acculturation options obtained by LCA applied to the four groups of participants. Among

TABLE 5
Acculturation options among the four samples

		Italy		Spain	
		Migrants	*Hosts*	*Migrants*	*Hosts*
Classical options	Full-separation	22	—	—	—
	Full-assimilation	14	—	8	—
	Full-marginalisation	—	5	—	29
Alternate options	Marginalisation-separation	—	9	5	—
	Marginalisation-assimilation	—	84	—	—
	Alternate-biculturalism	78	88	—	—
Endorsement of both cultural streams	Full-low integration	—	—	59	113
	Full-high integration	59	—	67	14

the "classic" acculturation options, full-separation was detected only in Italian migrants, full-assimilation in migrants of both countries, and full-marginalisation only in host adolescents from both Italy and Spain. These acculturation options were less frequent ($n = 78$) than "alternate" acculturation options ($n = 264$) found in both migrant and host adolescents living in Italy, but very rarely ($n = 5$) in participants living in Spain. In Spain, both migrant and host adolescents were largely characterised by a low or high endorsement of both cultural streams ($n = 253$ vs. 59 in Italy), showing that they perceived/preferred to both maintain and adopt, regardless of the domain considered.

DISCUSSION

Using samples of migrant and host adolescents living in Italy and Spain, this study confirmed that most migrant adolescents were commonly bicultural (e.g., Berry et al., 2006; Jensen & Arnett, 2012) and that a large majority of their host pairs recognised this fact. However, several variants of biculturalism emerged from the data, and only some of these variants were sensitive to life domains.

Specifically, this study established the presence of two variants of bicultural individuals—full-low integration and full-high integration—that differed in the extent of endorsement of the two cultural streams (Schwartz et al., 2016). It confirmed the options of medium and high integration found by Stevens et al. (2004), those of moderately or strongly bicultural derived from Nieri et al. (2011), and those of partial and full biculturalism from the study by Schwartz and Zamboanga (2008). Also, migrant and host adolescents could moderately or strongly endorse both their original culture and the culture of the receiving country regardless of the life domains considered. However, other different variants of bicultural options emerged in the samples of migrant and host adolescents. Specifically, variants emerged in which participants alternated from the culture of origin to the host culture depending on the central or peripheral domains that they have to consider. We named one of these options

alternate-biculturalism because they seem to express a form of biculturalism similar to that described by the alternation model of LaFromboise et al. (1993). As this model supposed, participants aggregated in this class emphasise the culture of origin or the host culture depending on the specific situation at hand. None of the other "alternate" acculturation options are examples of biculturalism, with the alternation characterised by a switch between marginalisation and separation in some cases, and between marginalisation and assimilation in others.

Therefore, these results suggest that variants of one or more of Berry's acculturation options could depend on adoption and/or maintenance in different life domains. Furthermore, it also provides additional empirical evidence that variants of biculturalism can differ across participants and across receiving contexts (e.g., Miller et al., 2009). Results of this study confirmed our assumption, showing that only migrant and host adolescents in Italy alternate from one culture to another, while migrant and host adolescents in Spain moderately and highly endorsed both cultural streams more than Italian adolescents did.

Explaining why these differences occurred in the absence of other clarifying variables is not a simple task. We can suppose that differences could depend on the different political and social climates in the two nations (European Commission, 2012; Huddleston et al., 2011). Given this situation, it therefore seems plausible that Italian adolescents might be inclined to perceive/prefer "alternate" options to a greater extent than their Spanish peers. It could be the case that two aspects are involved in "alternate" options, particularly when referred to the migrant adolescents. Firstly, migrants included in this class probably need to adjust and adapt their self-image to be fully accepted in public contexts—where intergroup contacts seem inevitable and expected by hosts—and, secondly, they probably need to maintain their original culture in private domains, where cultural heritage gains importance for their self-definition. A recent study (Mancini & Porretti, 2017) seems to confirm this hypothesis. It showed that alternate-biculturalism was not the best acculturation option in order to promote the construction

of an overlapped and harmonic bicultural identity. Future research should also explore how the different acculturation options relate to the perception of threat and prejudice in host adolescents.

The study was not free of limitations. First of all, combining perceptions and preferences measures does not allow considering whether the acculturation options differ according to the level of reality. Second, the use of a convenient sampling method does not allow the generalisation of the results. Therefore, the inferences derived from these findings should be interpreted carefully. Moreover, it did not include socio-demographic variables, as well as psychological and socio-cultural adaptation variables, which could enable comparisons between alternate-bicultural and full-bicultural adolescents. Future research should build on these findings for a full comprehension of the processes. Despite these limitations, these explorative results suggest that adolescents seem to take into account the specific domain that they are in in order to adapt to the cultural expectations of the people with whom they interact.

<div align="right">Manuscript received April 2016
Revised manuscript accepted April 2017</div>

REFERENCES

Arends-Tóth, J., & Van de Vijver, F. J. R. (2004). Domains and dimensions in acculturation: Implicit theories of Turkish-Dutch. *International Journal of Intercultural Relations*, *28*, 19–35. https://doi.org/10.1016/j.ijintrel.2003.09.001.

Berry, J. W. (1997). Immigration, acculturation, and adaptation. *Applied Psychology. An International Review*, *46*, 5–34. https://doi.org/10.1111/j.1464-0597.1997.tb01087.

Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (Eds.) (2006). *Immigrant youth in cultural transition: Acculturation, identity and adaptation across national contexts*. Mahwah, NJ: Erlbaum.

Bourhis, R. Y., Moïse, L. C., Perreault, S., & Senécal, S. (1997). Towards an interactive acculturation model: A social psychological approach. *International Journal of Psychology*, *32*, 369–386. https://doi.org/10.1080/002075997400629.

Eshghi, A., Haughton, D. M., Legrand, P., Skaletsky, M., & Woolford, S. W. (2011). Identifying groups: A comparison of methodologies. *Journal of Data Science*, *9*, 271–291.

European Commission (2012). *Special Eurobarometer 393: Discrimination in the EU in 2012*. Brussels, Belgium: European Commission.

Huddleston, T., Niessen, J., Ni Chaoimh, E., & White, E. (2011). *Migrant Integration Policy Index, MIPEX III*. British Council and Migration Policy Group. Retrived from http://www.mipex.eu/sites/default/files/downloads/migrant_integration_policy_index_mipexiii_2011.pdf.

Jensen, L. A., & Arnett, J. J. (2012). Going global: New pathways for adolescents and emerging adults in a changing world. *Journal of Social Issues*, *68*, 473–492. https://doi.org/10.1111/j.1540-4560.2012.01759.x.

LaFromboise, T., Coleman, H. L. K., & Gerton, J. (1993). Psychological impact of biculturalism: Evidence and theory. *Psychological Bulletin*, *114*, 395–412. https://doi.org/10.1037/0033-2909.114.3.395.

Leunda, J. (1996). Relaciones entre grupo y sociedad. In A. Acoge (Ed.), *El acercamiento al otro: formación de mediadores interculturales* (pp. 100–109). Sevilla, Spain: Junta de Andalucía.

López-Rodríguez, L., Bottura, B., Navas, M., & Mancini, T. (2014). Acculturation strategies and attitudes in migrant and host adolescents: The RAEM in different national contexts. *Psicologia Sociale*, *2*, 133–158. https://doi.org/10.1482/77473.

Mancini, T., & Bottura, B. (2014). Acculturation processes and intercultural relations in peripheral and central domains among native Italian and migrant adolescents. An application of the Relative Acculturation Extended Model (RAEM). *International Journal of Intercultural Relations*, *40*, 49–63. https://doi.org/10.1016/j.ijintrel.2013.12.002.

Mancini, T., & Porretti, A. (2017). Acculturation orientations and construction of bicultural identity in a group of migrant adolescents. *Psicologia Sociale*, *1*, 77–100.

Miller, A. M., Birman, D., Zenk, S., Wang, E., Sorokin, O., & Connor, J. (2009). Neighborhood immigrant concentration, acculturation, and cultural alienation in Former Soviet immigrant women. *Journal of Community Psychology*, *37*, 88–105.

Miller, M. J., Yang, M., Lim, R. H., Hui, K., Choi, N., Fan, X., … Blackmon, S. (2013). A test of the domain-specific acculturation strategy hypothesis. *Cultural Diversity and Ethnic Minority Psychology*, *19*, 1–12. https://doi.org/10.1037/a0030499.

Muthén, L. K., & Muthén, B. (2006). *Mplus user's guide (version 4)*. Los Angeles, CA: Muthén & Muthén.

Navas, M. S., García, M. S., Sánchez, J., Rojas, A. J., Pumares, P., & Fernández, J. S. (2005). Relative Acculturation Extended Model (RAEM): New contributions with regard to the study of acculturation. *International Journal of Intercultural Relations*, *29*, 21–37. https://doi.org/10.1016/j.ijintrel.2005.04.001.

Navas, M. S., Rojas, A. J., García, M. C., & Pumares, P. (2007). Acculturation strategies and attitudes according to the Relative Acculturation Extended Model (RAEM): The perspectives of natives versus migrants. *International Journal of Intercultural Relations*, *31*, 67–86. https://doi.org/10.1016/j.ijintrel.2006.08.002.

Nieri, T., Lee, C., Kulis, S., & Marsiglia, F. F. (2011). Acculturation among Mexican-heritage preadolescents: A latent class analysis. *Social Sciences Research*, *40*, 1236–1248. https://doi.org/10.1016/j.ssresearch.2011.02.005.

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation. *Structural Equation Modeling*, *14*, 535–569. https://doi.org/10.1080/10705510701575396.

Schwartz, S. J., Birman, D., Benet-Martínez, B., & Unger, J. (2016). Biculturalism: Negotiating multiple cultural streams. In S. J. Schwartz & J. Unger (Eds.), *The Oxford handbook of acculturation and health*. Oxford: Oxford Handbook Online. https://doi.org/10.1093/oxfordhb/9780190215217.013.3

Schwartz, S. J., Unger, J. B., Zamboanga, B. L., & Szapocznik, J. (2010). Rethinking the concept of acculturation: implications for theory and research. *American Psychologist*, *65*, 237–251. https://doi.org/10.1037/a0019330.

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*, 275–285. https://doi.org/10.1037/a0012818.

Stevens, G. W. J. M., Pels, T. V. M., Vollebergh, W. A. M., & Crijnen, A. A. M. (2004). Patterns of psychological acculturation in adult and adolescent Moroccan immigrants living in the Netherlands. *Journal of Cross-Cultural Psychology*, *35*, 689–704. https://doi.org/10.1177/0022022104270111.

Transatlantic Trends. (2013). Key findings 2013. Retrieved from http://trends.gmfus.org/transatlantic-trends/