The importance of family in acculturation process of adolescents of Moroccan origin in Spain

Andrea Blanc[1] , **Marisol Navas[2], Sonsoles Calderón[3],
and María Sánchez-Castelló[2]**

[1]Department of Clinical and Experimental Psychology, University of Huelva, Spain
[2]Department of Psychology, University of Almería, Spain. Centre of Study of Migrations and
Intercultural Relations. CEMyRI,
[3]Department of Psychology, University of Castilla, Spain

*T*he objective of this study was to analyse the relationship between variables of the family context (perceived family support, quality of parent–adolescent communication and family ethnic socialisation) and the acculturation process (perceptions and preferences of cultural maintenance and adoption) among adolescents of Moroccan origin living in Spain. The sample consisted of 360 Moroccan adolescents (58.7% females) between 12 and 19 years old, enrolled in different schools, who filled out a self-report questionnaire. Results showed positive and significant relationships between family variables and acculturation, especially for cultural maintenance. Mediation models showed that perceived family support predicts cultural maintenance (perceptions), with quality of communication with the mother, family ethnic socialisation and preferences of cultural maintenance acting as serial mediators (in the first model), and with quality of communication with the father and preferences of cultural maintenance acting as serial mediators (in the second model). These results evidence the importance of family variables in the acculturation process of Moroccan adolescents, especially in the maintenance of their origin culture.

Keywords: Family support; Parent–adolescent communication; Family ethnic socialisation; Acculturation process; Moroccan-origin adolescents.

Migration involves engaging in direct and permanent contact with people from different cultures. As a consequence, cognitive, emotional and behavioural changes occur, a phenomenon known in the literature as "acculturation process" (Berry, 1997).

Adolescents face similar changes as adults during their migration process. However, the critical developmental period they are going through forces them to simultaneously confront the specific challenges of their age together with the demands of transition to a new culture (García-Coll & Marks, 2009).

During these multiple transitions, family context plays a very important role. The literature show family variables (i.e., perceived family support, family ethnic socialisation and parent–adolescent communication) are crucial in the process of acculturation and adaptation of migrant adolescents to the new society (Davidson & Cardemil, 2009; Rivera, 2007; Umaña-Taylor et al., 2009).

The number of immigrants arriving in Spain has increased considerably in the last decades, with consequent growth of families and adolescents of foreign origin living in the country. Currently, foreigners represent 10.69% of the total population of Spain and 9.24% of the adolescents between 12 and 19 years old, being Moroccan the biggest group (16.17% of the total foreign adolescents, INE, 2019).

For geographical (sharing a border) and political reasons (former Spanish protectorate of current Morocco) Spain and Morocco have traditionally been in contact. Since the 1980s, migratory movements from Morocco to Spain grew due to the demands of labour in intensive agriculture, construction and services (De Haas, 2014).

Despite this long relationship and the mutual influence, in Spain Moroccan immigrants are perceived by Spaniards less similar (in aspects such as family relations, religion or values), elicit more threat and are worse evaluated than other groups (e.g., Romanians and Ecuadorians) (López-Rodríguez, Navas, et al., 2014). More information about the socio-economic and ethno-cultural features of the context of the study is as Supporting Information (Introduction). Supporting Information (SM) is available at https://osf.io/r8tfx/.

Given the number of Moroccan families and adolescents who have migrated to Spain and the specific characteristics of this group (devaluated and underrepresented in research), the purpose of the study was to analyse the relations between family variables and the acculturation process of these adolescents.

Immigrant adolescents and the acculturation process

Psychological acculturation is a complex process that usually has a stronger effect on the immigrant group. A number of individual, intergroup and contextual variables influence this process. Classic bi-dimensional models of psychological acculturation (e.g., Berry, 1997) consider two independent dimensions that determine the results of this process: the maintenance of elements of the origin culture; and the adoption of elements of the host culture or participation in the receiving society. Based on these models, the relative acculturation extended model was developed in the Spanish context (RAEM, Navas et al., 2005). This model makes an additional distinction between real plane (perceptions of cultural maintenance and adoption, strategies) and ideal plane (preferences of cultural maintenance and adoption, attitudes) of the acculturation process. For immigrants, perceptions (or strategies) refer to the way in which they perceive that they are acculturating, while preferences (or attitudes) refer to the way in which they would like to acculturate if they could choose. To differentiate between acculturation perceptions and preferences is relevant because sometimes immigrants would like to acculturate in a certain way (they have certain preferences or attitudes), but they cannot do so (e.g., host society could encourage or prevent certain acculturation options). Consequently, they finally put into practice acculturation options that are not always preferred. Although attitudes and behaviours are closely related, and attitudes tend to predict intentional behaviour (e.g., Ajzen & Fishbein, 2005), other factors (e.g., the context) could make it difficult for a person to perform the preferred behaviour.

Finally, from RAEM, acculturation perceptions and preferences are considered across different domains, from the most public/peripheral (i.e., political, social welfare, work, economy) to the most private/central (i.e., social,

family, religion and values). According to RAEM, for immigrants, the acculturation process consists of a combination of cultural elements from the origin culture that people maintain (or would maintain) and from the new culture that they adopt (or would adopt) in the different domains (Navas et al., 2005).

A number of aspects influence the acculturation process of first- and second-generation immigrant adolescents, including different characteristics of the family context (Davidson & Cardemil, 2009; Rivera, 2007; Umaña-Taylor et al., 2009). However, in Spain, to date, no studies have been conducted where the family role in the acculturation process of immigrant adolescents is analysed by simultaneously considering perceptions and preferences of cultural maintenance and adoption, as established by RAEM.

Family aspects influencing the acculturation process of immigrant adolescents

During adolescence, the distance between parents and children increases as a consequence of the autonomy gained, their incorporation into new social contexts and the relevance of peers in a recently started process of self-identity definition (Steinberg, 2001). However, researchers agree that during adolescence the parental role is crucial for different aspects of child development, such as the learning of values, rules, beliefs or traditions. For this reason, immigrant families may have an important influence on adolescents, not only by transmitting elements of the origin culture, but also as a reference to the way that family members incorporate cultural aspects of the host country (Sabatier, 2008).

In addition, parents and adolescents participate in a complex process of realignment in which roles and family dynamics are modified to adapt to the increased autonomy of children. During this process, the capacity of the family to maintain a positive emotional climate and appropriate levels of communication will be essential to keep a certain level of influence on their children (Steinberg, 2001).

Consequently, to analyse how immigrant families contribute to the acculturation process of adolescents (i.e., maintenance of origin culture and adoption of host culture), it is necessary to consider together the variables related to emotional and communicative functioning of the families—perceived family support (Rivera, 2007) and quality of parent–adolescent communication (Davidson & Cardemil, 2009)—and ethnic/cultural family socialisation (Umaña-Taylor et al., 2009).

Perceived family social support

In general, social support includes tangible emotional support, the opportunity to share common interests

and conditions for which people feel understood and respected. Adolescents receive social support from different sources: family, ethnic/national friends, teachers and so on. According to the literature, different sources of social support may have different influences on the acculturation process (Choi & Thomas, 2009; Oppedal et al., 2004; Oppedal & Idsoe, 2015). Some studies show that the support of family and friends from the same ethnic group is connected with the development of competence in the origin culture, contributing to ethnic identity and cultural maintenance. Contact with family involves a cultural continuation that stimulates a higher development of the origin culture (Costigan & Dokis, 2006), whereas social support provided by people from the majority culture (especially friends) is linked with a higher incorporation of knowledge and competence from the host culture, facilitating adaptation to the new country (Oppedal et al., 2004; Oppedal & Idsoe, 2015). On the other hand, perceived family support has been also related to another family variable, such as the quality of parent-adolescent communication. Malinakova et al. (2019) found that communication with mother and with father were positively correlated with perceived emotional support.

Quality of parent−adolescent communication

Parent-adolescent communication is a fundamental process through which parents convey ideas, values, beliefs, expectations, information and knowledge to their children (Jerman & Constantine, 2010). There are few studies that analyse the relationship between quality parent-adolescent communication and adolescents' acculturation process and they present diverse results. Sullivan et al. (2007) found that the quality of communication is better among those adolescents who adopt aspects of the majority culture and maintain traditions from the origin culture, and among those that only maintain traditions from the origin culture. However, Tseng and Fuligni (2000) found that it is better among those who adopt less elements of the majority culture and maintain more traditions from the origin culture, such as language.

Parent-adolescent communication is also relevant in the acculturation process because parent communicate to their children's behaviours, perceptions, values, attitudes of their culture of origin. Although empirical evidence of the effects of the quality of parent−adolescent communication on family ethnic socialisation is limited, ethnic socialisation practices developed in the family context are embedded in other aspects of parenting, such as parent−child relationship quality (Hughes et al., 2006). Therefore, parent-adolescent communication contributes to family ethnic socialisation.

Family ethnic socialisation

It refers to the process by which family members contribute to the adolescents' acquisition of behaviours, perceptions, values and attitudes of their ethnic culture and self-perception as a member of that ethnic group (Umaña-Taylor et al., 2009). Family is a relevant context to expose adolescents to perceptions, values and attitudes from their origin culture and when the host culture differs notably from their own ethnic culture the importance of these contexts increases (Umaña-Taylor & Yazedjian, 2006). Moreover, immigrant youths learn about their origin culture mainly from their families, and for this reason family ethnic socialisation is a key process in the transmission of ethnic culture and identity (Umaña-Taylor et al., 2009). Furthermore, youths who report a higher maintenance of their ethnic culture live in families where the origin culture is prevalent (Doucerain, 2018) and they show higher levels of family ethnic socialisation than others who only adopt certain aspects of the majority culture or who neither adopt nor maintain (Schwartz & Zamboanga, 2008).

The present study

The studies reviewed clearly show that there is a relation between aspects of family functioning (perceived family support, quality of parent−adolescent communication and family ethnic socialisation) and the acculturation of adolescents from different ethnic groups. Considering these results together, it seems that those adolescents who perceive support from their families, have good communication with their parents and/or participate in their family context of traditions, values and attitudes considered to be characteristics of their origin culture show a higher orientation towards the maintenance of their home culture. However, none of these studies have taken into account simultaneously the family variables previously mentioned and none have been conducted in Spain. The present study will cover these limitations by analysing how these family variables are connected with the acculturation process of Moroccan origin adolescents living in Spain—the largest immigrant group (INE, 2019).

Considering the reviewed literature, we expected positive and significant relations between family variables and both acculturation perceptions (strategies) and preferences (attitudes) of adolescents of Moroccan origin. We expected stronger relations with the dimension of cultural maintenance than with adoption, meaning that higher levels of perceived family support, better parent−adolescent communication and higher family ethnic socialisation would be connected with stronger acculturation perceptions and preferences, especially with the maintenance of the origin culture (Hypothesis 1). In the present study, we test two mediation models to analyse the role that family variables play in the acculturation process of Moroccan

TABLE 1
Differences between adolescents born in Spain and born in Morocco in all variables

	Spain M (SD)	Morocco M (SD)	t	p
Acculturation perceptions: maintenance	3.79 (0.75)	3.86 (0.69)	−0.833	.406
Acculturation perceptions: adoption	3.36 (0.75)	3.29 (0.72)	0.882	.378
Acculturation preferences: maintenance	3.82 (0.81)	3.87 (0.86)	−0.494	.622
Acculturation preferences: adoption	3.37 (0.87)	3.28 (0.82)	0.903	.367
Perceived family support	4.08 (0.91)	4.07 (0.90)	0.112	.911
Quality of mother-adolescent communication	3.77 (0.91)	3.67 (0.94)	0.991	.322
Quality of father-adolescent communication	3.43 (1.10)	3.33 (1.09)	0.858	.392
Family ethnic socialisation	3.96 (0.67)	3.97 (0.64)	−0.107	.915

origin adolescents. We expected that higher perceived family support would predict better parent–adolescent communication, leading to higher family ethnic socialisation and to higher acculturation preferences of cultural maintenance and consequently to the adolescents' maintaining their ethnic culture to a higher degree. Thus, perceived family support would predict adolescents' ethnic culture maintenance (acculturation perceptions), with quality of parent–adolescent communication, family ethnic socialisation and acculturation preferences of maintenance functioning as serial mediators in the models (Hypothesis 2).

METHOD

Participants

A total of 360 adolescents of Moroccan origin (58.7% women) who were enrolled in different public secondary schools in Spain participated in the study; 36.4% were born in Spain and 62.2% in Morocco. The average age of arrival to the country was 4.84 years ($SD = 4.39$). Most of the parents (97.8% of fathers and 98.6% of mothers) were born in Morocco. The age of the participants ranged from 12 to 19 years ($M = 15.16$; $SD = 1.36$). No significant differences were found in any of the study variables between adolescents born in Spain and those born in Morocco (see Table 1).

Variables and instruments

A questionnaire was applied containing the following instruments to measure the variables of interest. The reliability coefficients estimated for each measure are presented in Table 2.

Acculturation perceptions and preferences

These variables were measured using two scales: maintenance of customs of origin country and adoption of Spanish customs. Each scale contained six items referring to the different RAEM domains adapted to adolescents (López-Rodríguez, Bottura, et al., 2014): academic (*the high school*), economic (*your consumption habits*), social (*your social relationships*), family (*your family relationships*), religious (*your religious beliefs and practices*) and values (*your values*). Items were rated on a 5-point Likert scale from 1 (*nothing*) to 5 (*much*). Average scores for each scale were calculated (ranging from 1 to 5). Higher scores on the maintenance scale (versus the adoption scale) indicated greater maintenance (or preferences to maintain) of Moroccan customs (versus greater adoption—or preferences to adoption—of Spanish customs). The full scales in Spanish and in English are as SM (Instruments).

TABLE 2
Descriptive statistics and reliability of the measures

	Minimum	Maximum	M	SD	α	Split-half (Spearman-Brown)
Acculturation perceptions: maintenance	1.33	5.00	3.83	0.72	.69	.79
Acculturation perceptions: adoption	1.00	5.00	3.31	0.73	.66	.75
Acculturation preferences: maintenance	1.00	5.00	3.85	0.85	.83	.84
Acculturation preferences: adoption	1.00	5.00	3.31	0.84	.77	.83
Perceived family support	1.00	5.00	4.07	0.90	.85	.88
Quality of mother-adolescent communication	1.00	5.00	3.71	0.93	.88	.90
Quality of father-adolescent communication	1.00	5.00	3.37	1.10	.91	.92
Family ethnic socialisation	1.75	5.00	3.96	0.65	.86	.86

Perceived family support

It was measured using the subscale of perceived family support of the Multidimensional Scale of Perceived Social Support (Zimet et al., 1988) that consisted of four items (e.g., *My family really tries to help me*). Participants indicated their degree of agreement with these items using a 5-point Likert scale (1 = *strongly disagree*; 5 = *strongly agree*). Average scores were calculated (ranging from 1 to 5). The higher the score, the more the perceived family support.

Quality of communication with parents

This was measured using two scales, one referring to communication with the mother and the other to with the father. The scales measure how often parents and their children try to work things out by talking about them. Each scale consisted of seven items (e.g., *She/He talks to you about what's going on in your life*). Both scales were adapted versions (Krohn et al., 1992) of the Revised Parent–Adolescent Communication Form (Loeber et al., 1991). Items were rated using a 5-point scale from 1 (*never*) to 5 (*always or almost always*). Average scores for each scale were calculated (ranging from 1 to 5), with high scores indicating better quality of communication with mother (or father) and adolescent.

Family ethnic socialisation

A 12-item scale (Umaña-Taylor et al., 2004) was used where participants indicated their answers using a 5-point Likert scale (from 1 = *never* to 5 = *always or almost always*). The scale measures the degree to which adolescents perceived that their families were socialising them to their origin culture (e.g., *My family teaches me things about our country of origin*). Average scores were calculated, ranging from 1 to 5, with high scores indicating greater family ethnic socialisation.

Socio-demographic variables

Participants were informed about gender, age, country of birth of adolescent, country of birth of parents (father and mother) and age of arrival in Spain.

Procedure

Analysis of population registers (INE, 2019) was carried out to determine the number, geographical distribution and countries of origin of adolescents of immigrant background living in Spain, among which Morocco was one of the most numerous. Subsequently, public high schools with a high number of Moroccan origin adolescents were selected in areas with a high presence of this population.

Schools were contacted and the appropriate permits were requested. The parents/legal guardians of the adolescents signed an informed consent form. Teachers, families and adolescents were informed of different aspect of the research (objectives, people in charge, voluntary participation, possibility of stopping at any time and that data collected would be treated anonymously, confidentially, globally and statistically). The questionnaires were completed in paper and pencil format, by trained personnel, in the classrooms of 16 public high schools in five provinces of Spain. The study was approved by the Human Research Bioethics Committee of the researchers' university. More information about the location of the schools, how Moroccan origin was measured, participation rate in the classroom and ethnic-cultural composition of the schools can be found in the SM (Procedure).

Data analysis

First, missing data were treated using the EM algorithm (see SM, Data analysis). After data cleaning, descriptive statistics (minimum, maximum, *M* and *SD*) were calculated. To check if average scores were above or below the midpoint of the scales the *t*-test for a sample was used. Moreover, some variables were compared by using a comparison of means of related measures, and Pearson's correlation coefficients between all variables were obtained. Finally, two multiple mediation models were carried out in series, where cultural maintenance (perceptions) was used as a dependent variable (Y) and perceived family support as independent (X). The mediating variables were quality of communication with the mother or father (depending on the model, M_1), family ethnic socialisation (M_2) and preferences of cultural maintenance (M_3). When the quality of communication with the mother was M_1, the quality of communication with the father was included as a covariate (in order to be controlled, given their high correlation); and when the quality of communication with the father was M_1, the quality of communication with the mother was included as a covariate. Gender, generational status and age were also included as covariates in both models. Analyses were performed using SPSS version 25 and the macro-PROCESS. In the mediation analyses, 5000 bootstrapped samples were used and the level of confidence to construct the intervals and determine the statistical significance of the indirect effect was 95%. Indirect effects were significant when the confidence interval does not include the value zero. The database is available at https://osf.io/r8tfx/.

All procedures performed in this study were in accordance with the ethical standards of the institutional research committee and with the 1964 Helsinki Declaration and its later amendments.

The parents/legal guardians of the adolescents signed an informed consent form in order to permit their participation in this study.

RESULTS

Descriptive results and comparisons between variables

Descriptive statistics are shown in Table 2. Mean scores in acculturation perceptions and preferences were above the midpoint of the scale (for both maintenance and adoption), meaning that adolescents of Moroccan origin maintain ($t_{(351)} = 21.76$, $p < .001$, $d = 1.16$) and prefer to maintain ($t_{(348)} = 18.70$, $p < .001$, $d = 1.00$) customs of their country of origin, as well as adopt ($t_{(345)} = 7.93$, $p < .001$, $d = 0.43$) and prefer to adopt ($t_{(345)} = 6.95$, $p < .001$, $d = 0.37$) Spanish customs. However, the results of mean comparisons for related measures showed that adolescents maintain more customs of their country of origin than adopt Spanish customs ($t_{(345)} = 9.97$, $p < .001$, $d = 0.72$), and prefer to maintain more than to adopt ($t_{(344)} = 9.31$, $p < .001$, $d = 0.63$).

Mean scores for family variables also were above the midpoint of the scale. This indicates that adolescents of Moroccan origin perceive high family social support ($t_{(358)} = 22.45$, $p < .001$, $d = 1.19$), report being exposed to family ethnic socialisation practices ($t_{(350)} = 27.57$, $p < .001$, $d = 1.47$) and quality of communication with their parents is reasonable ($t_{(356)} = 14.42$, $p < .001$, $d = 0.76$; $t_{(350)} = 6.27$, $p < .001$, $d = 0.34$), although quality of communication with the mother is better than with the father ($t_{(348)} = 6.59$, $p < .001$, $d = 0.37$).

Correlations between variables

Pearson's correlation coefficients are presented in Table 3. Specifically, positive and statistically significant correlations between all family variables and the perceptions and preferences of cultural maintenance were obtained. Moreover, positive and statistically significant correlations between perceived family support and perceptions and preferences of cultural adoption were obtained. In addition, positive and statistically significant correlations were observed between the quality of parent-adolescent communication and perceptions of

cultural adoption. Finally, all family variables were also positively correlated.

Mediation models: Family variables and acculturation process

Based on the literature and the correlation results obtained, two mediation analyses working serially were carried out to test whether the effect of perceived family support on cultural maintenance (perceptions) was mediated by the quality of communication with parents, family ethnic socialisation and preferences of cultural maintenance. Results are shown in Figures 1 and 2.

Figure 1 shows that quality of communication with the mother (M_1), family ethnic socialisation (M_2) and preferences of cultural maintenance (M_3), sequentially mediate the relationship between perceived family support and perceptions of cultural maintenance (indirect effect: $B = 0.021$, $SE = 0.001$, CI = [0.009, 0.037]).

Figure 2 shows that quality of communication with the father (M_1), family ethnic socialisation (M_2) and preferences of cultural maintenance (M_3), do not mediate serially the relationship between perceived family support and perceptions of cultural maintenance (indirect effect: $B = 0.003$, $SE = 0.003$, CI = [−0.002, 0.009]). However, another indirect effect is significant: $X \rightarrow M_1 \rightarrow M_3 \rightarrow Y$ ($B = 0.011$, $SE = 0.007$, CI = [0.001, 0.028]).

In summary, the two mediation models show that perceived family support predicts cultural maintenance of adolescents of Moroccan origin with quality of communication with the mother, family ethnic socialisation and preferences of cultural maintenance acting as serial mediators (in the first model), and with quality of communication with the father and preferences of cultural maintenance acting as serial mediators (in the second model). The indirect effects were not significant when cultural adoption (perceptions) was used as dependent variable and preferences of cultural adoption as mediating variable (M_3): $X \rightarrow M_1 \rightarrow M_2 \rightarrow M_3 \rightarrow Y$ ($B = 0.007$, $SE = 0.042$, CI = [−0.006, 0.011]) when quality of mother-adolescent communication is used as first mediator (M_1); $X \rightarrow M_1 \rightarrow M_2 \rightarrow M_3 \rightarrow Y$

TABLE 3
Correlations between variables

|	2	3	4	5	6	7	8
1. Acculturation perceptions: maintenance	.11*	.62**	.08	.27**	.32**	.25**	.39**
2. Acculturation perceptions: adoption	—	.12*	.60**	.11*	.13*	.12*	.04
3. Acculturation preferences: maintenance		—	.20**	.42**	.43**	.36**	.48**
4. Acculturation preferences: adoption			—	.12*	.10	.04	.08
5. Perceived family support				—	.63**	.47**	.25**
6. Quality of mother-adolescent communication					—	.56**	.36**
7. Quality of father-adolescent communication						—	25**
8. Family ethnic socialisation							—

*$p < .05$. **$p < .01$.
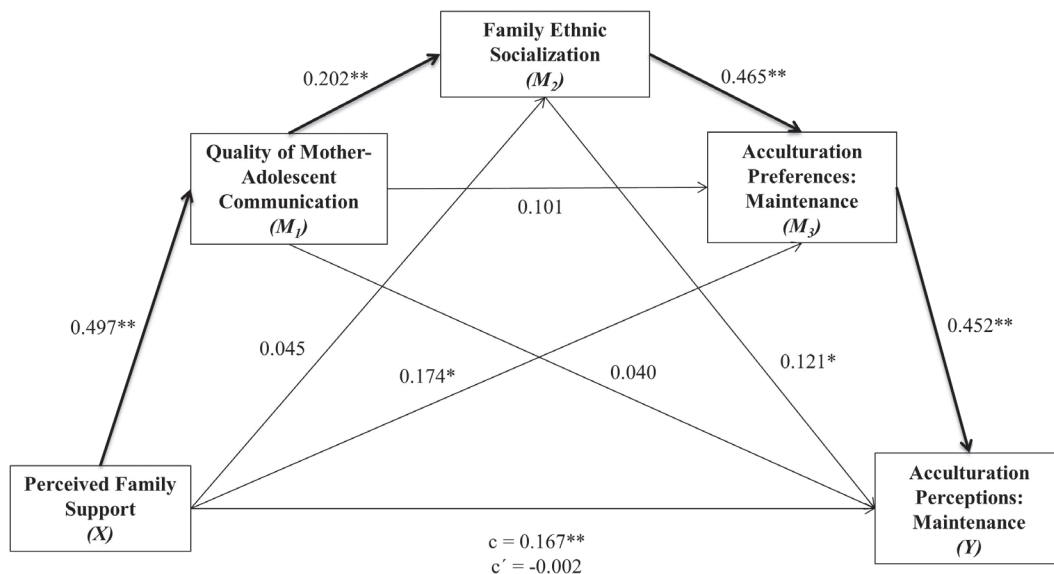
Figure 1. Serial mediating effect of quality of mother-adolescent communication, family ethnic socialisation and preferences of cultural maintenance on the relationship between perceived family support and perceptions of cultural maintenance (covariates: quality of father-adolescent communication, gender, generational status and age), *p < .05, **p < .001.
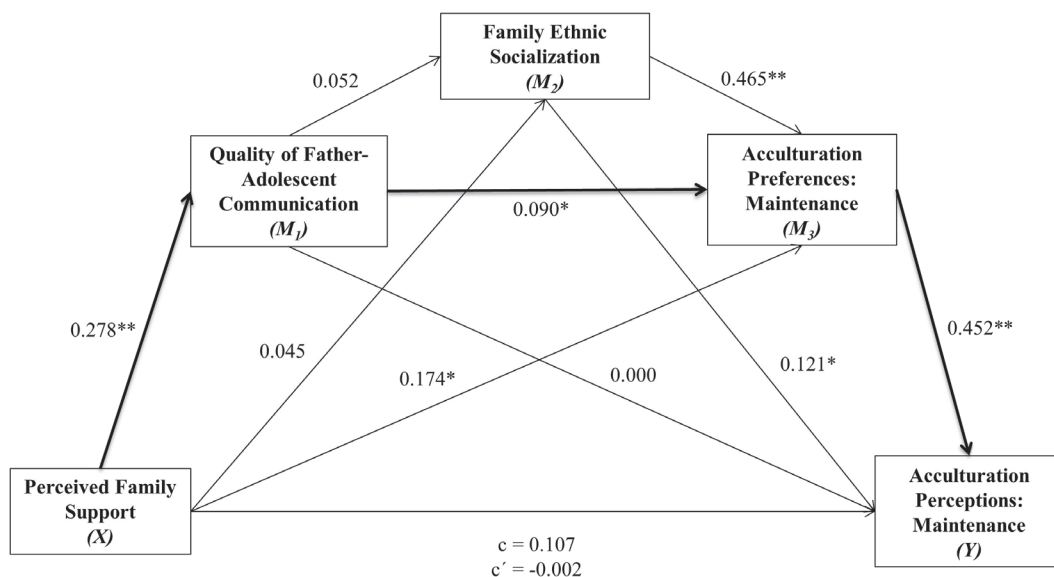

Figure 2. Serial mediating effect of quality of father-adolescent communication, family ethnic socialisation and preferences of cultural maintenance on the relationship between perceived family support and perceptions of cultural maintenance (covariates: quality of mother-adolescent communication, gender, generational status and age), *p < .05, **p < .001.

($B = 0.002$, $SE = 0.007$, CI $= [-0.001, 0.002]$) and X → M_1 → M_3 → Y ($B = 0.008$, $SE = 0.008$, CI $= [-0.025, 0.009]$) when quality of father-adolescent communication is used as first mediator (M_1) (see Figures 3 and 4).

DISCUSSION

The purpose of this study was to analyse the relationship between different family variables (i.e., perceived family support, quality of parent–adolescent communication and family ethnic socialisation) and the acculturation perceptions and preferences among adolescents of Moroccan origin living in Spain. First, as expected (Hypothesis 1), we found a positive relationship between family variables and adolescents' acculturation perceptions and preferences, especially in terms of cultural maintenance. On the one hand, the greater the perceived family support, the more they maintain and prefer to maintain customs from their country of origin, confirming previous results
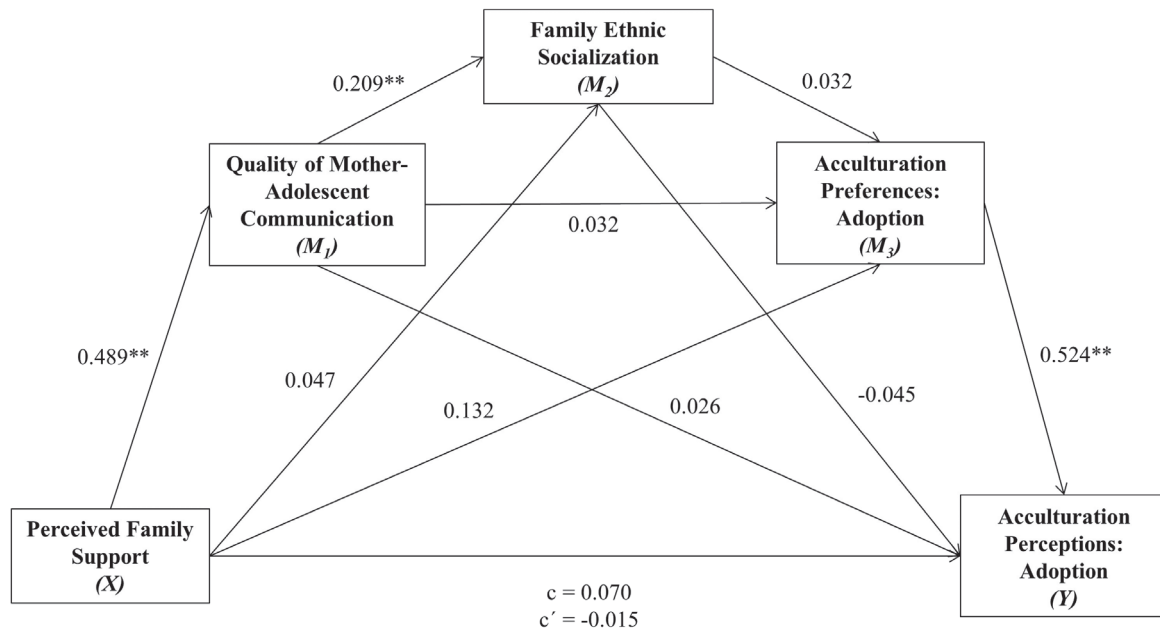
Figure 3. Serial mediating effect of quality of mother-adolescent communication, family ethnic socialisation and preferences of cultural adoption on the relationship between perceived family support and perceptions of cultural adoption (covariates: quality of father-adolescent communication, gender, generational status and age), $p < .001$**.
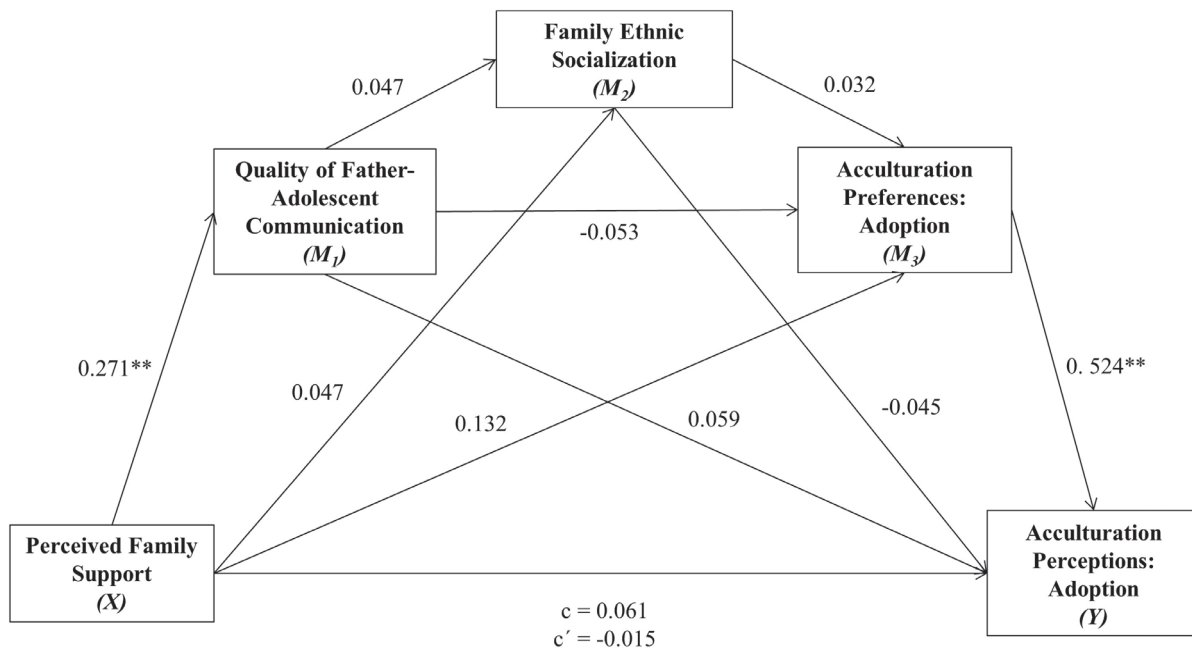

Figure 4. Serial mediating effect of quality of father-adolescent communication, family ethnic socialisation and preferences of cultural adoption on the relationship between perceived family support and perceptions of cultural adoption (covariates: quality of mother-adolescent communication, gender, generational status and age), **$p < .001$.

obtained in different contexts (Oppedal et al., 2004; Oppedal & Idsoe, 2015). On the other hand, the greater the perceived family support, the more they adopt and prefer to adopt Spanish customs, although the correlation size in this case was smaller. Although some studies are contrary to this finding (e.g., Choi & Thomas, 2009),

others studies (e.g., Sabatier, 2008) show that a positive family relationship is related not only to a greater orientation towards the origin culture but also towards the host culture in adolescents. In conclusion, those adolescents who perceive more family support maintain and prefer to maintain Moroccan customs and adopt and prefer to

adopt Spanish customs to a higher degree. In this study, family support was linked with both dimensions (cultural maintenance and adoption), indicating that stronger perceived family support is linked with more integration in their acculturation process.

In addition, and in line with other studies (Sullivan et al., 2007; Tseng & Fuligni, 2000), adolescents of Moroccan origin who report better communication with their parents and whose families contribute to their ethnic socialisation maintain and prefer to maintain more strongly the customs of their origin country. These results are in line with other findings from studies conducted with Latino adolescents in the United States (Schwartz & Zamboanga, 2008; Umaña-Taylor et al., 2009). However, it is clear that the connection between family variables and maintenance of Moroccan customs (both acculturation perceptions and preferences) is stronger than the link with the adoption of Spanish customs. This result emphasises the key role of family for their children to learn cultural competencies from their origin country and their maintenance in the new cultural context (Umaña-Taylor et al., 2009). Relationships between family variables were positive, in line with other studies (e.g., Hughes et al., 2006; Malinakova et al., 2019).

Regarding the mediation models that we anticipated (Hypothesis 2), the results obtained confirm some of our predictions. As expected, quality of mother-adolescent communication, family ethnic socialisation and preferences of cultural maintenance serially mediated the relation between perceived family support and cultural maintenance (perceptions). However, if we look at the quality of communication with the father, the results do not confirm the hypothesized mediation model. In this case, the quality of father-adolescent communication and preferences of cultural maintenance mediates the relation between perceived social support and cultural maintenance (perceptions). Therefore, father-adolescent communication seems to work as a context for the transmission of cultural attitudes.

These results emphasise the great influence that immigrant families have on the development, maintenance and continuity of the origin culture in the arriving society (Costigan & Dokis, 2006). When it comes to adopting the traditions of the receiving society, other variables beyond the family context may intervene, such as perceived social support from the peer group (both ethnic and national), quantity and quality of contact with national peers, level of prejudice towards host society, among others.

Our results emphasise the key role of Moroccan mothers living in Spain as transmitters of the origin culture to their children, given the relationship between communication with mothers and family ethnic socialisation. Unlike the father-adolescent communication, mother-adolescent communication is related to (in the presence of the other variables) family ethnic socialisation. These results are in line with previous studies that showed that mother ethnic socialisation have a greater influence than father ethnic socialisation on the development of children's values (e.g., Bao et al., 1999).

The strong division of roles, characteristic of families from traditional cultures such as Moroccan, might explain the different relationship between communication with mothers (versus fathers) and the transmission of values and traditions of the origin culture. Mothers, with whom adolescents report they have better and more fluid communication, could be their reference in the private context: housekeepers, caregivers, a reference for everyday decisions and who more actively socialise their children in the values and cultural references of their home culture. Fathers, with whom the participants affirm they have worse quality communication, could be perceived as the head of the family, the authority figure, the financial provider, not as relevant in terms of everyday family functioning but still a model in terms of acculturation preferences. Nevertheless, we did not measure gender role division or adolescents' perceptions of their parents regarding this aspect, therefore we cannot conclude anything clear about this point.

In any case, our results bring to light the relevant relationship between family aspects (perceived social support, parent-adolescent communication and family ethnic socialisation) and the acculturation process of Moroccan origin adolescents, especially on the maintenance of their origin culture.

This study also has some limitations. First, all variables were measured only from the adolescents' perspective. It would be interesting to include the point of view of parents in the case of family ethnic socialisation. For example, as it could happen that adolescents were not properly identifying the behaviours of the family members as cultural practices but instead were considering them as characteristics of their own families, not connected with their home culture. Second, the study focuses only on one ethnic group, Moroccan. It would be convenient to study these variables, especially family ethnic socialisation, in adolescents of other cultural groups (e.g., of Latin origin) in order to analyse their role and strength).

Regardless of these limitations, the present study provides new and relevant results that shed light on the relations between family functioning and acculturation process during adolescence in a population of Moroccan origin residing in Spain, a research topic about which little is known to date. Moreover, the results could be used to guide preventive intervention and counselling with immigrant families on the importance of family support, communication and socialisation in the cultural practices of their home culture to make a positive contribution to the acculturation process of their children.

REFERENCES

Ajzen, I., & Fishbein, M. (2005). The influence of attitudes on behaviour. In D. Albarracin, B. T. Jonhson, & M. P. Zanna (Eds.), *The handbook of attitudes* (pp. 173–221). Lawrence Erlbaum.

Bao, W. N., Whitbeck, L. B., Hoyt, D. R., & Conger, R. D. (1999). Perceived parental acceptance as a moderator of religious transmission among adolescent boys and girls. *Journal of Marriage and the Family*, *61*, 362–374. https://doi.org/10.2307/353754

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

Choi, J., & Thomas, M. (2009). Predictive factors of acculturation attitudes and social support among Asian immigrants in the USA. *International Journal of Social Welfare*, *18*, 76–84. https://doi.org/10.1111/j.1468-2397.2008.00567.x

Costigan, C. L., & Dokis, D. P. (2006). Relations between parent-child acculturation differences and adjustment within immigrant Chinese families. *Child Development*, *77*, 1252–1267. https://doi.org/10.1111/j.1467-8624.2006.00932.x

Davidson, T. M., & Cardemil, E. V. (2009). Parent-child communication and parental involvement in Latino adolescents. *Journal of Early Adolescence*, *29*, 99–121. https://doi.org/10.1177/0272431608324480

De Haas, H. (2014). *Morocco: Setting the stage for becoming a migration transition country?* Migration Policy Institute https://www.migrationpolicy.org/article/morocco-setting-stage-becoming-migration-transition-country

Doucerain, M. M. (2018). Heritage acculturation is associated with contextual factors at four different levels of proximity. *Journal of Cross-Cultural Psychology*, *49*, 1539–1555. https://doi.org/10.1177/0022022118796976

García-Coll, C., & Marks, A. K. (2009). *Immigrant stories: Ethnicity and academics in middle childhood*. Oxford University Press.

Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, *42*, 747–770. https://doi.org/10.1037/0012-1649.42.5.747

Instituto Nacional de Estadística. (2019). *Estadística del padrón continuo. Datos provisionales a 1 de enero de 2019*. http://www.ine.es/dynt3/inebase/index.htm?type=pcaxis&path=/t20/e245/p04/provi&file=pcaxis&dh=0&capsel=0

Jerman, P., & Constantine, N. A. (2010). Demographic and psychological predictors of parent–adolescent communication about sex: A representative statewide analysis. *Journal of Youth and Adolescence*, *39*, 1164–1174. https://doi.org/10.1007/s10964-010-9546-1

Krohn, M. D., Stern, S. B., Thornberry, T. P., & Jang, S. J. (1992). The measurement of family process variables: The effect of adolescent and parent perceptions of family life on delinquent behavior. *Journal of Quantitative Criminology*, *8*, 287–315. https://doi.org/10.1007/BF01064550

Loeber, R., Stouthamer-Loeber, M., Van Kammen, W., & Farrington, D. P. (1991). Initiation, escalation, and desistance in juvenile offending and their correlates. *Journal of Criminal Law and Criminology*, *82*, 36–82. https://doi.org/10.2307/1143789

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

López-Rodríguez, L., Navas, M., Cuadrado, I., Coutant, D., & Worchel, S. (2014). The majority's perceptions about adaptation to the host society of different immigrant groups: The distinct role of warmth and threat. *International Journal of Intercultural Relations*, *40*, 34–48. https://doi.org/10.1016/j.ijintrel.2014.02.001

Malinakova, K., Trnka, R., Bartuskova, L., Glogar, P., Kascakova, N., Kalman, M., van Dijk, J. P., & Tavel, P. (2019). Are adolescent religious attendance/spirituality associated with family characteristics? *International Journal of Environmental Research and Public Health*, *16*, 2947. https://doi.org/10.3390/ijerph16162947

Navas, M. S., García, M. S., Sánchez, J., Rojas, A. J., Pumares, P., & Fernández, J. S. (2005). Relative acculturation extended model: 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

Oppedal, B., & Idsoe, T. (2015). The role of social support in the acculturation and mental health of unaccompanied minor asylum seekers. *Scandinavian Journal of Psychology*, *56*, 203–211. https://doi.org/10.1111/sjop.12194

Oppedal, B., Roysamb, E., & Sam, D. L. (2004). The effect of acculturation and social support on change in mental health among young immigrants. *International Journal of Behavioral Development*, *28*, 481–494. https://doi.org/10.1080/01650250444000126

Rivera, F. I. (2007). Contextualizing the experience of young Latino adults: Acculturation, social support and depression. *Journal of Immigrant and Minority Health*, *9*, 237–244. https://doi.org/10.1007/s10903-006-9034-6

Sabatier, C. (2008). Ethnic and national identity among second-generation immigrant adolescents in France: The role of social context and family. *Journal of Adolescence*, *31*, 185–205. https://doi.org/10.1016/j.adolescence.2007.08.001

Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent. *Cultural Diversity and Ethnic Minority Psychology*, *14*, 275–285. https://doi.org/10.1037/a0012818

Steinberg, L. (2001). We know some things: Parent–adolescent relationships in retrospect and prospect. *Journal of Research on Adolescence*, *11*, 1–19. https://doi.org/10.1111/1532-7795.00001

Sullivan, S., Schwartz, S. J., Prado, G., Huand, S., Pantin, H., & Szapocznik, J. (2007). A bidimensional model of acculturation for examining differences in family functioning and behavior problems in Hispanic immigrant adolescents. *Journal of Early Adolescence*, *27*, 405–430. https://doi.org/10.1177/0272431607302939

Tseng, V., & Fuligni, A. J. (2000). Parent-adolescent language use and relationships among immigrant families with east Asian, Filipino, and Latin American backgrounds. *Journal of Marriage and the Family*, *62*, 465–476. https://doi.org/10.1111/j.1741-3737.2000.00465.x

Umaña-Taylor, A. J., Alfaro, E. C., Bámaca, M. Y., & Guimond, A. B. (2009). The central role of familial ethnic socialization in Latino adolescents' cultural orientation. *Journal of Marriage and Family*, *71*, 46–60. https://doi.org/10.1111/j.1741-3737.2008.00579.x

Umaña-Taylor, A. J., & Yazedjian, A. (2006). Generational differences and similarities among Puerto Rican and Mexican mothers' experiences with familial ethnic socialization. *Journal of Social and Personal Relationships*, *23*, 445–464. https://doi.org/10.1177/0265407506064214

Umaña-Taylor, A. J., Yazedjian, A., & Bámaca-Gómez, M. Y. (2004). Developing the ethnic identity scale using Eriksonian and social identity perspectives. *Identity*, *4*, 9–38. https://doi.org/10.1207/S1532706XID0401_2

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment*, *52*, 30–41. https://doi.org/10.1207/s15327752jpa5201_2