

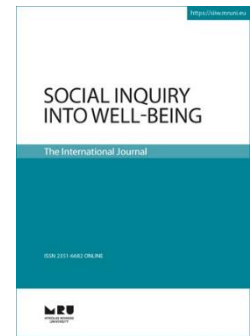


MYKOLAS ROMERIS
UNIVERSITY

<http://siw.mruni.eu>
2015, Vol. 1, No. 1(1)

DOI:10.13165/SIIW-15-1-1-06

Social Inquiry into Well-being



E-ISSN 2351-6682

Acculturation Profiles and Perceived Discrimination: Associations with Psychosocial Well-being Among Tunisian Adolescents in Italy

Pasquale Musso^a, Cristiano Inguglia^a, Alida Lo Coco^a

^aDepartment of Psychological, Educational and Training Sciences, Università degli Studi di Palermo, Viale delle Scienze, Ed.15, 90128 Palermo, Italy, Tel. +39 09123897720

* Corresponding author email address: pasquale.musso@unipa.it; muspasq@gmail.com

Abstract

Research usually analyzed the relationships between acculturation or perceived discrimination and immigrants' well-being, but few studies used an integrative perspective. Framed from a person-oriented approach, the current paper tried to advance the literature examining how acculturation profiles and perceived (group and personal) discrimination were associated with psychosocial well-being in a sample of 348 Tunisian adolescents (females = 48.28%; mean age = 15.72) living in southern Italy. Cluster analytic methods on the scores of acculturation strategies, ethnic and national identities, ethnic and national languages, ethnic and national peer social contacts produced three acculturation profiles: integrated, ethnic, and national. Adolescents of both integrated and national profiles reported higher levels of psychosocial well-being than those of the ethnic profile in terms of self-esteem and socio-cultural competence, whereas Tunisian adolescents of ethnic profile reported higher levels of perceived personal discrimination than the others. Also, the acculturation profile moderated the relationships between perceived discrimination and adolescents' psychosocial well-being. Specifically, across integration and national profiles perceived group discrimination significantly predicted decreases in psychosocial well-being, but there was no significant association considering the ethnic profile group. The association between perceived personal discrimination and psychosocial well-being was moderated since it was more negative for adolescents of an ethnic profile than the others. Findings are discussed in the light of theoretical expectations, research context, and limitations as well as suggesting implications for the practitioners in the field.

Keywords: Acculturation profiles, perceived discrimination, psychosocial well-being, person-oriented approach, immigrant adolescents

1. Introduction

Several studies have focused their interest on factors and processes underlying immigrants' psychosocial well-being in adolescence using an acculturation framework (Berry, 2013; Motti-Stefanidi, Asendorpf, & Masten, 2012; Nguyen & Benet-Martinez, 2013; Rogers-Sirin, Ryce, & Sirin, 2014). In this approach, the key concept is indeed acculturation referring to the processes by which different cultural groups adapt to one another (Brown & Zagefka, 2011; Redfield, Linton, & Herskovits, 1936). Within different acculturation theories in psychology, one of the most influential is the model developed by Berry (1997).

Berry's bidimensional model of acculturation (1997) focuses on two relevant dimensions for immigrants' well-being: the preference for maintenance of own culture (cultural maintenance) and the preference for involvement or contact with the host society (cultural contact). By combining these dimensions, four acculturation strategies are distinguished: integration (high maintenance and high contact), assimilation (low maintenance and high contact), separation (high maintenance and low contact), and marginalization (low maintenance and low contact). Framed from this model, many scholars have analyzed how acculturation strategies do affect immigrant adolescents' well-being showing that integration is the most adaptive

outcome, whereas marginalization the worst (Berry et al., 2006a, 2006b; Giang & Wittig, 2006; Gngr, 2007; Motti-Stefanidi, Berry, Chrysochoou, Sam, & Phinney, 2012; Neto, 2002).

However, some other scholars (Brown & Zagefka, 2011; Rudmin, 2003, 2009; Schwartz, Unger, Zamboanga, & Szapocznik, 2010) have criticized the research using this model for several reasons. One of the most recurring criticism is related to the prevalent use of a variable-oriented approach (Bergman & Magnusson, 1997) that focuses only on acculturation strategies without seeing the individual in his/her totality. Instead, when researchers use empirically rigorous ways of classifying individuals (e.g., cluster analysis and latent class analysis), they may not extract all of the classes considered in the bidimensional model of acculturation (e.g., Inuglia & Musso, 2015; Schwartz & Zamboanga, 2008), suggesting that not all of Berry's categories may exist in a given population (Schwartz et al., 2010).

Beyond acculturation, another key factor for immigrants' psychosocial well-being is perceived discrimination, namely the perception of receiving an unfair and differential treatment on the basis of ethnicity or race (Blank, Dabady, & Citro, 2004; Cristini, Scacchi, Perkins, Santinello, & Vieno, 2011). Experiencing and perceiving discrimination can have negative psychological consequences for immigrant youth, including higher levels of anxiety and lower levels of personal self-esteem (Armenta & Hunt, 2009; Motti-Stefanidi & Asendorpf, 2012).

Although there is a certain interest in analyzing the relationships between acculturation, perceived discrimination and immigrants' well-being, very few studies have investigated these associations using a person-oriented approach (e.g., Berry et al., 2006b). In the current paper we tried to advance the literature in this field by using such an approach in order to detect patterns of relationships between factors related to adolescents' acculturation, defined as acculturation profiles, analyzing how these acculturation profiles are related to psychosocial well-being and perceived discrimination of Tunisian adolescents living in Sicily (Italy), as well as investigating the moderating role of acculturation profiles in the relationship between perceived discrimination and psychosocial well-being.

2. Acculturation Profiles

In light of the criticism of the bidimensional model of acculturation as referring to a variable-oriented approach that focuses on the links between acculturation processes and relevant correlates, several authors (Berry et al., 2006b; Brown, Gibbons, & Hughes, 2013; Schwartz et al., 2010) have suggested to move toward the use of a person-oriented approach (Bergman & Magnusson, 1997), that focuses on differences among individuals classified into various profiles. These scholars recommend using clustering methods with acculturation data to identify profiles describing classes of people with respect to their acculturation outcomes. Some studies have followed these recommendations finding different acculturation profiles in immigrant youth, some resembling Berry's (1997) model, others looking different from it.

For instance, Berry et al. (2006b) carried out a cluster analysis with factors associated with the acculturation process, such as acculturation strategies, ethnic and national identities, language use, ethnic and national peer social contacts, on data collected in the ICSEY (International Comparative Study of Ethnocultural Youth) project that are referred to immigrant adolescents living in different countries (e.g., Australia, Canada, France, Israel, New Zealand, Portugal, and USA). Following this procedure, they have identified four acculturation patterns or profiles named integration, national, ethnic, and diffuse.

Adolescents who belong to the integration profile (36.40% of the sample) are characterized by a positive orientation towards both original and host society cultures with high levels of both ethnic and national identities, frequent social contacts with people who belong to both their own group and to the host society, and low levels of assimilation, separation, and marginalization. Adolescents who belong to the national profile (18.70%) are characterized by a strong orientation toward the host society with high levels of national identity, assimilation, social contacts with members of the national group, and low levels of ethnic identity. Adolescents who belong to the ethnic profile (22.50%) show a strong orientation towards their own group with high levels of ethnic identity, separation, and social contacts with their co-ethnic peers, together with low levels of assimilation and national identity. Finally, adolescents who belong to the diffuse profile (22.40%) are uncertain about their role in the host society, showing high proficiency in the ethnic language, high levels of assimilation, marginalization, and separation, low ethnic identity, low national identity and low social contacts with peers of the host country.

Other studies that employed similar methods have revealed more complex results that only partly coincide with the four acculturation strategies. For instance, Schwartz and Zamboanga (2008) conducted a latent class analysis on scores related to acculturation strategies, orientation toward heritage and American cultural practices in areas such as language use and entertainment among Hispanic college students living in Miami. They identified six classes corresponding to acculturation profiles. In particular, two of them resembled variants of biculturalism (named full bicultural and partial bicultural), other two resembled a combination of assimilation and biculturalism (American oriented bicultural and assimilated), one resembled a combination of separation and biculturalism (separation), and one (undifferentiated) that did not remind any of Berry's typologies. The clusters characterized by a combination of assimilation and biculturalism were the most frequent in the sample considered in the study.

Moreover, Brown et al. (2013) conducted a cluster analysis using five clustering variables: (a) heritage practices, (b) U.S. practices, (c) heritage attitudes, (b) U.S. attitudes, and (e) heritage identity. Following this approach, the authors found four clusters among immigrant university students living in the USA. One cluster, labeled U.S. practices, was similar to assimilation, whereas cluster labeled heritage practices closely resembled the category of separation. The other two clusters labelled bicultural attitudes, and bicultural practices & heritage identity, were

similar to integration (i.e., biculturalism). None of the clusters resembled marginalization.

More recently, Inguglia and Musso (2015) performed a cluster analysis on scores of acculturation strategies, ethnic and national identities, ethnic and national peer social contacts of Tunisian adolescents living in Italy. The authors identified two acculturation profiles, an ethnic profile and integrated national profile. The ethnic profile is characterized by a strong preference towards separation as acculturation strategy and by a predilection for maintaining social contacts with people of the same ethnic group. The integrated national profile is characterized by a preference towards integration as acculturation strategy, a strong identification with an autochthonous group (Italians) and a preference towards social contact with Italians.

Taken together, these findings highlight that not all of Berry's categories may exist in a sample or population, as stated by Schwartz et al. (2010). In particular, many studies did not reveal a marginalization cluster (e.g., Brown et al., 2013; Schwartz & Zamboanga, 2008; Inguglia & Musso, 2015). For many immigrant people, especially attending high schools or colleges, marginalization does not seem a relevant category.

3. Acculturation Profiles and Perceived Discrimination

A very small number of studies has dealt with the relationships between acculturation profiles and perceived discrimination. Thus, little is known about this topic. However, previous studies focused on acculturation strategies showed that individuals adopting a separated approach to acculturation are most likely to experience discrimination from members of the receiving society (Piontkowski, Florack, Hoelker, & Obdrzalek, 2000), whereas assimilated and integrated individuals are expected to perceive low levels of discrimination. These trends are also confirmed by few researches focused on acculturation profiles. For instance, Berry et al. (2006b) found that immigrant adolescents in both the integration and national profile reported less discrimination than the adolescents of the other two profiles. Similarly, Schwartz and Zamboanga (2008) revealed that individuals in the profile resembling separation reported the most discrimination compared to the others.

4. Associations of Acculturation Profiles and Perceived Discrimination with Well-being

More studies investigated the relationships between acculturation profiles and immigrant adolescents' well-being (Berry et al., 2006b; Brown et al., 2013; Inguglia & Musso, 2015). Most of them have analyzed the effects of acculturation profiles on two forms of well-being: psychological and sociocultural (Berry et al., 2006b). The former refers to mental and physical well-being, whereas the latter emphasizes immigrants' success in effectively organizing their daily lives in the new context (e.g., learning the new language, gaining cultural knowledge, and establishing social relations).

Berry and colleagues (2006b) have found that immigrant adolescents of the integration profile show higher levels of

psychological and sociocultural well-being than those of the other profiles, whereas adolescents who belong to the diffuse profile display the lower levels of psychological and sociocultural well-being than the others. Moreover, adolescents who belong to the national profile show relatively low levels of psychological well-being in terms of self-esteem, life satisfaction and psychological problems, whereas they were not clearly distinct from other profiles with respect to sociocultural well-being. Finally, adolescents who belong to the ethnic profile show high levels of psychological well-being but low levels of sociocultural well-being, showing some difficulties in organizing their daily lives in the new context. However, these results need to be confirmed by other studies involving adolescents living in different countries from those considered by these authors.

Also, Brown et al. (2013) found that immigrants who belonged to either of the clusters resembling biculturalism (bicultural attitudes or bicultural practices & heritage identity) reported significantly higher life satisfaction than the participants who belonged to the cluster that resembled separation (heritage practices). Finally, Inguglia & Musso (2015) showed that adolescents in the integrated national profile showed higher levels of self-esteem, life satisfaction, and sociocultural competence than those in the ethnic profile. Taken together these findings are quite concordant with Berry's integration hypothesis (2013) stating that individuals feel well and do well if they are engaged both in their own culture and in the host culture.

In addition to acculturation processes, another variable that has implications for immigrants' psychosocial well-being is perceived discrimination. This is valid especially for adolescents who are very sensitive to social stimuli (Delgado, Updegraff, Roosa, & Umana-Taylor, 2011; Liebkind, Jasinskaya-Lathi, & Mahonen, 2012; Motti-Stefanidi & Asendorpf, 2012). High levels of perceived discrimination are often associated with high rates of depressive symptoms, stress and behavioural problems (Brody et al., 2006; Szalacha et al., 2003), low levels of self-esteem (Liebkind et al., 2012), and poor school adjustment (Liebkind, Jasinskaya-Lathi, & Solheim, 2004; Wong, Eccles, & Sameroff, 2003).

Several scholars (e.g., Bourguignon, Seron, Yzerbyt, & Herman, 2006; Motti-Stefanidi & Asendorpf, 2012) suggest to distinguish between perceived discrimination against one's ethnic group (perceived group discrimination - PGD) and perceived discrimination against the self (perceived personal discrimination - PPD). In general, people of minority groups tend to perceive a higher level of PGD than PPD due to the action of motivational and cognitive processes, such as minimization of personal discrimination. According to this view, people of minority tend to underestimate the extent to which they are personally targets of discrimination. Rather, they perceive discrimination as something directed towards the other members of their own group. In Motti-Stefanidi & Asendorpf (2012)'s opinion, it can be explained by the "better-than-average" phenomenon, whereby people tend to evaluate themselves as better off than the other members of their own minority group.

However, most studies that have included measures of both PPG and PPD converge on the finding that PPD has a stronger impact on immigrant youth's well-being than PGD (e.g., Motti-Stefanidi & Asendorpf, 2012). Among immigrant youth, PPD was found to be associated with higher levels of depression, stress, and behavioral problems (e.g., Brody et al., 2006; Szalacha et al., 2003), and lower self-esteem (e.g., Verkuyten, 1998), academic achievement and, generally, school adjustment (e.g., Liebkind et al., 2004; Wong et al., 2003).

According to the integrative model of Garcia Coll et al. (1996) the magnitude of the association between perceived discrimination and well-being can be moderated by specific variables, such as acculturation strategies (Delgado et al., 2011). For instance, Umana-Taylor and Updegraff (2007) found that a positive orientation toward the ethnic culture buffers the associations between perceived discrimination and both self-esteem and internalizing problems among Latino adolescent boys. Strong ties with the ethnic group can minimize the potentially negative impact of perceived discrimination, as Mandara, Gaylor-Harden, Richards, and Ragsdale (2009) showed in a sample of African-American adolescents. Contrariwise, an involvement in the mainstream culture may exacerbate the association between discrimination and poor well-being. Umana-Taylor and Updegraff (2007) showed that the orientation toward the majority U.S. culture may worsen the relationships between perceived discrimination and self-esteem.

Also the Rejection-Identification model (RIM; Branscombe, Schmitt, & Harvey, 1999) and the Rejection-Disidentification Model (RDIM; Jasinskaja-Lahti, Liebkind, & Solheim, 2009) lead to similar considerations about the role of the identification with the ethnic ingroup in the relationship between perceived discrimination and psychosocial well-being. According to RIM, members of low-status social groups maintain psychological well-being in the face of discrimination by becoming more highly identified with their ethnic ingroup and rejecting the negative evaluations of outgroup members. Moreover, RDIM argues that increased ethnic identification may be seen as a key factor protecting the psychological health of minority members from the detrimental effects of perceived discrimination. There is some empirical evidence for these models (Cronin, Levin, Branscombe, van Laar, & Tropp, 2012; Jasinskaja-Lahti et al., 2009).

In summary, few studies have distinguished between PGD and PPD in analyzing the relationships between perceived discrimination and psychosocial well-being in function of identification with the ethnic culture. Among them, Bourguignon et al. (2006) and Armenta and Hunt (2009) found that such an identification seems to protect adolescents' self-esteem from the effects of PGD but not from the effects of PPD that is associated with lower levels of personal self-esteem.

5. Immigration in Italy: The Tunisian group

Italy is increasingly becoming more ethnically and culturally diverse. In the last years, the foreign-born population in the country has strongly grown. According to the Caritas Italiana & Fondazione Migrantes (2013), the total

amount of legal immigrants who are permanent residents in Italy has changed from about 1,000,000 in 2001 to about 5,000,000 in 2013. Such an enlargement is related to a greater frequency of migration flows towards Italy, directed especially to its southern regions. Currently, a big part of immigrants come from Africa due to the geographical closeness, throughout countries such as Libya or Tunisia. For these causes, Italy, and particularly its southern regions as Sicily, is an interesting context for the study of intercultural relations because of the patchwork of religions, cultures and people, who are looking for new patterns of intercultural coexistence.

Among immigrant groups living in western Sicily, one of the most interesting and understudied is the Tunisian group. Tunisians are the tenth immigrant group in Italy (about the 4% of the total immigrant population). They are prevalently men (63.50%) and young with a mean age under 30 years old. Children and adolescents are about 31% of them. Their socio-economic status is low-medium such as the other immigrant groups living in Italy. Moreover, about 25% of the group has successfully completed the secondary school, whereas only 3.60% has a University degree. About 54% of the population is employed, although in jobs characterized by low income (about 50% has salary lesser than 1,000 Euros per month).

As specifically regards their presence in Sicily, Tunisians are the second immigrant group (about 18,000 persons). They have a long history of exchanges with this region that began in the 60s of the XX century. As a consequence, the Tunisian community living in Sicily is characterized by strong ties with the heritage culture that are facilitated by the presence of many resources available, such as Tunisian primary schools, places of worship, community centres, and typical restaurants. Such a situation allowed Tunisians living in Sicily to preserve their heritage culture and to maintain a strong sense of belonging to their ethnic group (Inguglia & Musso, 2015).

Considering Tunisian and Sicilian groups at the same time, they are characterized by some similarities and differences. On the one hand, Tunisia and Sicily are geographically close and marked out by cultural exchanges that often has resulted in similar habits, for instance, with regard to food (couscous, kebab), architecture, family culture or values. On the other hand, there are differences between the two groups related to spoken languages, practiced religions, and the legal status of immigrant that contribute to creating real barriers. Thus, Tunisians have established good and integrative relations with Sicilian people, usually quite a little discriminating (Inguglia & Musso, 2013), even if they may encounter stressors as limited social resources, language barriers or discrimination that may serve as risk factors that negatively impact their well-being.

6. The current study

The overall goal of the present study was to analyze how acculturation profiles and perceived discrimination (in terms of PGD and PPD) are associated with psychosocial well-being of Tunisian adolescents living in Sicily. In particular, we initially tried to identify some acculturation profiles

among Tunisian adolescents on the basis of their scores of acculturation strategies, ethnic and national identities, ethnic and national languages, ethnic and national peer social contacts. Then, we investigated the differences between acculturation profiles with respect to psychosocial well-being (in terms of self-esteem, psychological problems, and sociocultural competence) and perceived discrimination (both group and personal). Finally, we focused on the analysis of the moderating role of acculturation profiles in the relationships between PGD, PPD, and psychosocial well-being. Consistent with prior work, we expected the following hypotheses (Berry, 2013; Berry et al., 2006b; Branscombe et al., 1999; Brown et al., 2013; Inguglia & Musso, 2015; Jasinskaja-Lahti et al., 2009; Umana-Taylor & Updegraff, 2007).

H1: *In accordance with Berry's model (2013) and with the results of the other studies using a similar approach (Berry et al., 2006b; Brown et al., 2013), we expected to identify at least three acculturation profiles: one resembling integration, one resembling assimilation, and one resembling separation.*

H2: *On the basis of the integration hypothesis (Berry, 2013), we expected that adolescents who belong to the profile resembling integration would show higher levels of both psychological and sociocultural well-being than the other profiles.*

H3: *We expected that adolescents who are in the profile resembling separation would show higher levels of PGD and PPD than the others (Berry et al., 2006b).*

H4: *We expected that the identification with ethnic culture would protect adolescents from the detrimental effects of PGD but not from those of PPD (Armenta & Hunt, 2009; Jasinskaja-Lahti et al., 2009; Umana-Taylor & Updegraff, 2007).*

In summary, the present study attempted to improve upon existing knowledge in the following ways. First, we analyzed together rather separately key research topics previously independently identified as potentially important for immigrant youth's well-being, such as acculturation and perceived discrimination (e.g., Berry, 2013; Inguglia & Musso, 2015; Motti-Stefanidi & Asendorpf, 2012). Second, in order to identify acculturation profiles we used a holistic person-oriented approach that provides information concerning which combinations of factors related to acculturation are significant and prevalent and how such combinations may change for different subgroups of adolescents (Bergman & Trost, 2006; Magnusson, 2003). Such an approach allows us to determine whether the influence of isolated acculturation variables (e.g., acculturation strategies) on adolescents' well-being and perceived discrimination as well as on their relationships keeps its actuality when we consider multivariable systems as intercultural profiles. Finally, in an innovative way we examined the effects of both PGD and PPD on adolescents' psychosocial well-being, considering the moderating role of acculturation profiles in these relationships. It allows us to analyze comprehensively how perceived discrimination, and well-being are related depending on the specific acculturation profile to which immigrant adolescents belong to.

7. Method

7.1. Participants

Data comes from the Italian section of the International collaborative project Mutual Intercultural Relations in Plural Societies (MIRIPS).¹ The total group of participants consisted of 348 second-generation Tunisian adolescents aged from 14 to 18 years (females = 48.28%; mean age = 15.72, $SD = 1.36$), born and living in western Sicily (Italy) in towns with more than 50,000 inhabitants. About seventy percent of immigrant youngsters attended a secondary school while about 30.00% were workers or unemployed. All of them were living in one household with their parents and 92.53% of them came from intact two-parents families, whereas 7.47% had separated/divorced parents or came from a family in which one of the parents had died. Socio-economic status (SES) of their families was prevalently low-medium; based on the Barratt Simplified Measure of Social Status (BSMSS, Barratt, 2006), 65.50% fell into the low-medium stratum and 34.50% into the high.

7.2. Procedure and Measures

The study, as part of the MIRIPS project, was approved by the local Psychology Department's ethics committee and was performed by the Italian Association of Psychology ethical principles for psychological research. Data collection involved a completion of the structured version of MIRIPS questionnaire (Annis, Gibson, & Berry, 2010). All participants were contacted in schools as well as in community centers. After having received permission from the respective principals, participants' parents were informed about the purpose of the research, the voluntariness of participation and the anonymity of responses through specific parent meetings. During the meetings, parents provided informed consent for their son's or daughter's participation. Less than 5% of the parents did not allow their son or daughter to participate. Nonetheless, adolescent participants provided signed assent agreeing to participate, also. The data were collected by Italian research assistants and young graduate trainees. Questionnaires were single-administered with the support of two cultural mediators. The questionnaire assessed a wide range of variables. For the goals of this paper, only some measures were taken into account. These measures were successfully used in other relevant studies (e.g., Berry et al., 2006b; Inguglia & Musso, 2015; Lebedeva & Tatarko, 2013; Robinson, 2009; Schmitz & Berry, 2009) and were adapted in different countries, including Italy (Berry, 2015).

Demographic Variables

Respondents were asked to indicate their gender (0 = female; 1 = male), age, state of birth, and current occupation. Family characteristics, the number of parents, paternal and/or maternal level of school completed, and their occupation were assessed using BSMSS (Barratt, 2006).

Ethnic Language

Four items assessed the ethnic language proficiency (Berry et al., 2006b). The items are: "How well do you understand/speak/read/write the Tunisian language".

Participants responded on a scale ranging from *not at all* (1) to *very well* (5). In the present study, Cronbach's α was .89.

National Language

Four items assessed the national language proficiency (Berry et al., 2006b). The items are: "How well do you understand/speak/read/write the Italian language?". Participants responded on a scale ranging from *not at all* (1) to *very well* (5). In the present study, Cronbach's α was .90.

Ethnic Peer Contact

Two items assessed the number and the frequency of contacts with co-ethnic friends (Berry et al., 2006b). The items are respectively: "How many close Tunisian friends do you have?" and "How often to you meet with?" Participants responded on a scale ranging from *none* (1) to *many* (5) in the former case and from *never* (1) to *daily* (5) in the latter case. The ethnic peer contact was measured as a composite variable by extracting the square root of the product of the two items.

National Peer Contact

Two items assessed the number and the frequency of contacts with national peers (Berry et al., 2006b). The items are respectively: "How many close Italian friends do you have?" and "How often to you meet with?". Participants responded on a scale ranging from *none* (1) to *many* (5) in the former case and from *never* (1) to *daily* (5) in the latter case. The national peer contact was measured as a composite variable by extracting the square root of the product of the two items.

Cultural Identity

Ethnic identity was measured with a 7-item scale assessing ethnic affirmation (e.g. sense of belonging, positive feelings about being group member) (Phinney, 1992). A sample item is "I feel that I am part of Tunisian culture". The items were presented as declarative statements; participants were asked to indicate on a 5-point scale (from 1 = *very untrue* to 5 = *very true*) the extent to which each statement was true for them. In the present study, Cronbach's α was .82. National identity was assessed with a 3-item scale assessing national affirmation and the importance of one's national identity (Phinney & Devich-Navarro, 1997). A sample item is: "I am happy that I am Italian". The items were presented as declarative statements; participants were asked to indicate on a 5-point scale (from 1 = *very untrue* to 5 = *very true*) the extent to which each statement was true for them. In the present study, Cronbach's α was .90.

Immigrants' Acculturation Attitudes

A 12-item scale assessed three acculturation attitudes: assimilation, integration, separation (Berry, Kim, Power, Young, & Bujaki, 1989). The items concern four domains of life of non-dominant group adolescents: cultural traditions, language, social activities, and friends. For example, the items in the social activities domain include three questions: "I prefer social activities that involve both Italians and Tunisians" (integration); "I prefer social activities which involve Italians only" (assimilation); and "I prefer social activities which involve Tunisians only" (separation). The items were presented as declarative statements and participants were asked to indicate on a 5-point scale (from 1 = *very untrue* to 5 = *very true*) the extent to which each statement was true for them. In the present study, the

subscales had adequate internal consistency with Cronbach's α ranged from .69 to .76. It is noteworthy that, differently from the original scale, we did not include in the present study items measuring marginalization because the construct has been regarded as conceptually questionable (Kunst & Sam, 2013; Rudmin & Ahmadzadeh, 2001; Schwartz & Zamboanga, 2008).

Psychosocial Well-being

It was assessed via three indicators: self-esteem, psychological problems, and socio-cultural competence. Self-esteem was measured by the Rosenberg Self-Esteem Scale (1965; Italian adaptation by Prezza, Trombaccia, & Armento, 1997) which consists of 10 items. A sample item is "On the whole I am satisfied with myself". The items were presented as declarative statements and participants were asked to indicate on a 5-point scale (from 1 = *very untrue* to 5 = *very true*) the extent to which each statement was true for them. In the present study, Cronbach's α was .77. Psychological problems were measured by a 15-item scale assessing depression, anxiety, and psychosomatic symptoms (Berry et al., 2006b). A sample item is: "My thoughts are confused". The items were presented as declarative statements and participants were asked to indicate on a 5-point scale (from 1 = *very untrue* to 5 = *very true*) the extent to which each statement was true for them. In the present study, Cronbach's α was .87. Socio-cultural competence was measured with a 20-item scale (Ward & Kennedy, 1999) assessing difficulty for non-dominant group adolescents to live in the host country. It focuses on the skills needed to cope with everyday social situations encountered in a new culture. A sample item is: "Please indicate how much difficulty you experience living here in Sicily in each of these areas: e.g., Making friends". Participants were asked to indicate on a 5-point scale (from 1 = *no difficulty* to 5 = *many difficulties*) the extent to which each statement was true for them. The final score was reversed, with higher scores indicating lesser problems and higher levels of socio-cultural competence. In the present study, Cronbach's α was .89.

Perceived Discrimination

Ethnic discrimination was measured using 5 items coded on a 5-point scale (from 1 = *strongly disagree* to 5 = *strongly agree*) (Annis, Gibson, & Berry, 2010; Schmitz & Schmitz, 2012). To distinguish between PGD and PPD, we conducted both explorative and confirmatory factor analyzes. They revealed that one item assesses PGD ("I think that others have behaved in an unfair or negative way towards my ethnic group"), one factor assesses PPD (2 items; "I don't feel accepted by Italians" and "I feel Italians have something against me"), and another factor assesses general perceived experience of discrimination (2 items; "I have been teased or insulted because of my ethnic background" and "I have been threatened or attacked because of my ethnic background"). In line with the goals of this study, we considered only the first two measures. Cronbach's α for the PPD was 0.81.

7.3. Plan of analysis

Data analysis had three main steps. First, to identify the groups corresponding to different acculturation profiles, we conducted a cluster analysis based on the scores obtained in

ethnic and national languages, ethnic and national social contacts, ethnic and national identities, and acculturation strategies (integration, assimilation, separation). Specifically, we determined the number of clusters through an agglomerative hierarchical cluster analysis, examining solutions from 2 to 6 clusters, and using the Ward's method based on the squared Euclidean distance (Aldenderfer & Blashfield, 1984). After determining this number, we grouped the study participants by *K*-means cluster analysis procedures. Next, to examine the adequacy of the conceptual solution and the characteristics of the identified clusters, we calculated unstandardized and standardized mean values of the grouping variables for each cluster and we also performed a multivariate analysis of variance (MANOVA) with acculturation profile as a factor. With the aim to further validate the obtained solution, we conducted a replication (or cross-validation) analysis, as indicated by Breckenridge (2000). We divided randomly the data into two samples (A and B), performing a full cluster analysis on each of them. We then classified the sample B into clusters according to the cluster centres derived from sample A and we computed the agreement between the two sample B solutions using

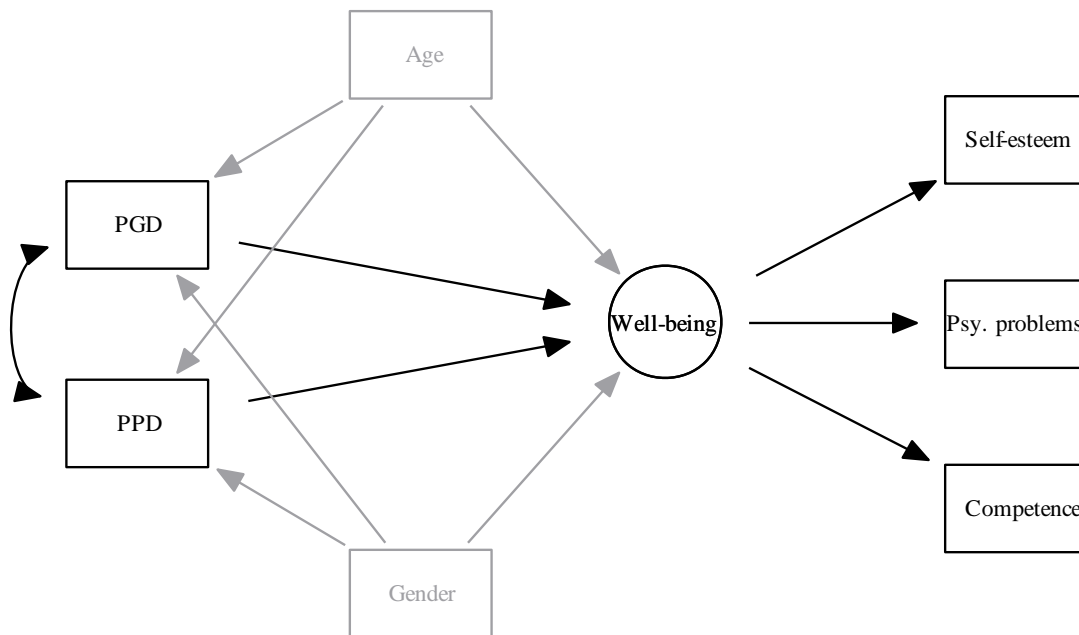
Cohen's kappa, with higher agreement between the two solutions indicative of a more reliable or stable cluster solution.

Second, to examine the effects of acculturation profiles on psychosocial well-being and perceived discrimination, we performed a MANCOVA using acculturation profiles as factor and age and gender as covariates.

Third, to explore the moderator role of acculturation profiles in the relationship between perceived discrimination and psychosocial well-being, we conducted a multiple-group covariance structure analysis in EQS (Bentler, 2006) with acculturation profile as the grouping variable. Specifically, we examined whether the associations between PGD and PPD, on the one hand, and the latent variable with three indicators of well-being (i.e., self-esteem, psychological problems, and socio-cultural competence), on the other hand, were moderated by acculturation profile. All the variables were tested simultaneously, allowing for the natural covariation between PGD and PPD to be represented in the results. Furthermore, our model controlled for age and gender (see Figure 1).

Figure 1.

Model of relationships between perceived discrimination and psychosocial well-being with control variables in light gray.



Note. PGD = Perceived Group Discrimination, PPD = Perceived Personal Discrimination.

According to Bollen and Long (1993), Faraci and Musso (2013), and Kline (2011), we assessed model fit using different indices (adopted cut-offs in parentheses): the chi-square (χ^2) with the associated *p*-value ($p > .05$), the non-normed fit index ($NNFI \geq .97$), the comparative fit index ($CFI \geq .97$), and the root-mean-squared error of approximation ($RMSEA \leq .05$, $RMSEA\ 90\% \text{ CI} \leq .10$). Nested model comparisons were used to examine whether or not paths differed by acculturation profile; for this test, if the χ^2 difference ($\Delta\chi^2$) was significant then the constraints were not tenable suggesting that there was moderation by group

membership. In comparison, if the $\Delta\chi^2$ test was not significant, the associations were assumed to be equal amongst all groups. In addition, to confirm the adequacy of the $\Delta\chi^2$ test, two fit statistics was also evaluated comparing the more restrictive and the less restrictive models: the difference in CFI values (ΔCFI) and the difference in RMSEA values ($\Delta RMSEA$). The null hypothesis of equivalent fit would be retained provided that $\Delta CFI > -.010$ and $\Delta RMSEA < .015$ (Chen, 2007; Cheung & Rensvold, 2002). Descriptive statistics for all study constructs are presented in Table 1.

Table 1.
Correlations, Means, and Standard Deviations for Key Study Constructs.

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Ethnic language	-															
2. National language	-.28***	-														
3. Ethnic social contact	.35***	-.05	-													
4. National social contact	-.30***	.57***	-.08	-												
5. Ethnic identity	.31***	-.09	.32***	-.12*	-											
6. National identity	-.32***	.57***	-.11*	.45***	-.24***	-										
7. Integration	-.03	.16**	.18***	.23***	.21***	.28***	-									
8. Assimilation	-.17**	.05	-.29***	.19***	-.36***	.25***	-.11*	-								
9. Separation	.27***	-.32***	.21***	-.28***	.22***	-.39***	-.35***	.01	-							
10. Self-esteem	.05	.23***	.06	.15**	.14*	.28***	.17**	-.06	-.27***	-						
11. Psychological problems	.06	-.09	-.01	-.03	.00	-.12*	-.03	-.16**	.16**	-.52***	-					
12. Socio-cultural adaptation	-.01	.35***	-.05	.23***	.00	.28***	.17**	.08	-.30***	.56***	-.53***	-				
13. PGD	.08	-.07	.07	-.02	.16**	-.16**	-.06	-.06	.26***	-.31***	.41***	-.35***	-			
14. PPD	.18***	-.32***	.05	-.22***	-.04	-.22***	-.17**	.03	.35***	-.37***	.40***	-.40***	.52***	-		
15. Age	.43***	-.20***	.12*	-.24***	.11*	-.22***	-.14**	-.14**	.14**	-.05	.07	-.09	.21***	.21***	-	
16. Gender	-.01	-.09	.12*	.04	-.06	-.14**	-.07	.05	.17**	.01	-.10	.02	-.08	-.02	-.01	-
<i>M</i>	4.12	4.38	3.66	4.12	4.21	3.65	4.16	2.04	2.19	3.95	2.15	4.09	2.37	1.70	15.72	0.52
<i>SD</i>	1.10	0.74	0.98	0.99	0.73	1.06	0.78	0.91	0.76	0.62	0.64	0.66	1.25	0.92	1.36	0.50

Note. PGD = Perceived Group Discrimination, PPD = Perceived Personal Discrimination. * $p < .05$, ** $p < .01$, *** $p < .001$.

8. Results

8.1. Acculturation process cluster analysis

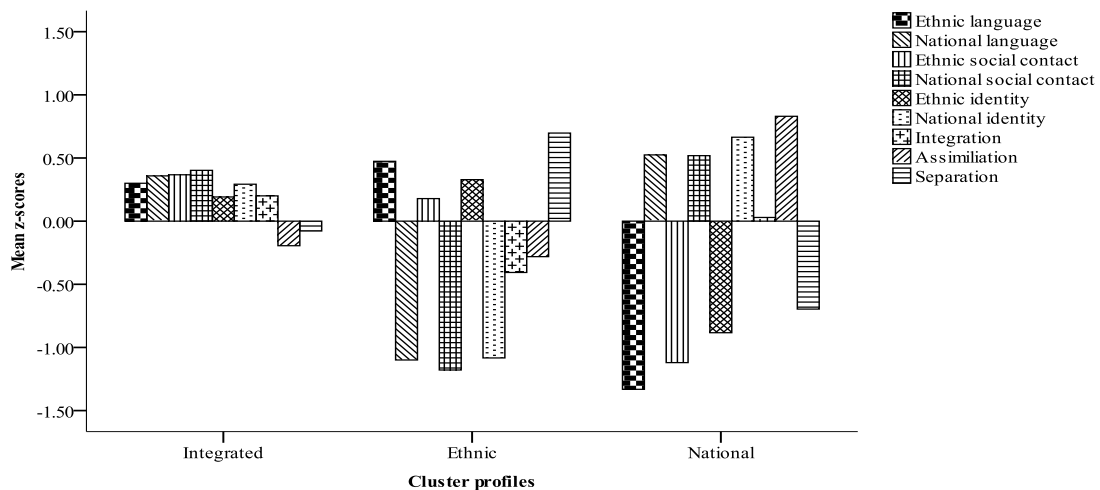
On the basis of the examination of agglomeration schedule, dendrogram and distances between clusters, a 3-cluster solution best represented the data because the cluster profiles were most interpretable. This solution was,

therefore, used to assign observations to each cluster.

After examining the means of grouping variables for each group in comparison to the overall sample means (see Table 1 and 2), the solution was conceptually considered adequate. That is, the cluster analysis revealed an integration group (51.73%), an ethnic group (27.01%), and a national group (21.26%). Examination of standardized means provided further validity to the solution (see Figure 2).

Figure 2.

Acculturation profiles, showing standardized scores on 9 intercultural variables.



The MANOVA computed on the grouping variables revealed a significant multivariate effect, Wilks' Lambda = .10, $F(18, 674) = 82.93$, $p < .001$, $\eta^2 = .69$, indicating that about 69% of the variability in acculturation process was

accounted for by group differences among the three clusters. Univariate analysis of variance (ANOVAs) of each clustering variable for the three clusters were then performed.

Table 2.

Grouping Variable Means, Standard Deviations, and Univariate Tests for Cluster Profiles.

Grouping variable	Cluster profile means (standard deviations)			<i>F</i> (2,345)	<i>p</i>	η^2
	Integration (<i>n</i> = 180)	Ethnic (<i>n</i> = 94)	National (<i>n</i> = 74)			
Ethnic language	4.45 ^a (0.70)	4.64 ^a (0.66)	2.66 ^b (1.09)	162.88	.00	0.49
National language	4.65 ^a (0.45)	3.57 ^b (0.79)	4.77 ^a (0.37)	142.69	.00	0.45
Ethnic social contact	4.02 ^a (0.75)	3.84 ^a (0.70)	2.56 ^b (0.99)	91.35	.00	0.35
National social contact	4.52 ^a (0.55)	2.96 ^b (0.87)	4.64 ^a (0.73)	185.17	.00	0.52
Ethnic identity	4.35 ^a (0.62)	4.45 ^a (0.54)	3.57 ^b (0.81)	47.18	.00	0.21
National identity	3.96 ^a (0.84)	2.51 ^b (0.72)	4.35 ^c (0.68)	144.85	.00	0.46
Integration	4.32 ^a (0.70)	3.84 ^b (0.92)	4.18 ^a (0.69)	12.14	.00	0.07
Assimilation	1.86 ^a (0.88)	1.78 ^a (0.67)	2.80 ^b (0.88)	39.95	.00	0.19
Separation	2.13 ^a (0.65)	2.72 ^b (0.74)	1.66 ^c (0.59)	53.99	.00	0.24

Note. Different superscripts (a, b, or c) within a row indicate significant differences between means.

As can be seen in Table 2, all ANOVAs were significant. However, the pseudo-*F* tests should be used only for descriptive purposes, and not as tests of hypotheses, as the clusters have been chosen to maximize the differences between clusters (Norusis, 1994). According to Cohen (1988), eta-squared (η^2) effect sizes of greater than or equal to .02, .13 and .26 are considered small, medium and large, respectively; thus, (a) the mean level difference between groups on integration was small, (b) the differences in ethnic identity, assimilation and separation were medium, and (c) the differences on ethnic language, national language, ethnic social contact, national social contact and national identity were large. On the basis of the largest discriminating variables, the most salient characteristics of the three acculturation profiles were identified. Integration profile exhibits high levels of ethnic and national language, ethnic and national social contact, and national identity. High levels of ethnic language and ethnic social contact and significantly lower levels than the other two profiles on national language, national social contact, and national identity distinguish the ethnic profile. High levels of national language and national social contact, significantly higher levels than the other two profiles on national identity, and significantly lower levels than the other two profiles on ethnic language and ethnic social contact characterize the national profile. However, it is noteworthy that the national profile is also significantly

lower than the other two profiles on ethnic identity and separation and higher on assimilation, whereas the ethnic profile exhibits high levels of ethnic identity and low levels of assimilation as well as it is also significantly higher than the other two profiles on separation. Integration as acculturation strategy is the least important variable in classifying the three cluster profiles. In concluding the analysis of this step, the cross-validation procedure indicated that the 3-cluster solution was the best for both sample A and sample B, and that the agreement between the two different solutions of the sample B was .81, indicating a high reliability.

7.2. Differences in psychosocial well-being and perceived discrimination

The MANCOVA for the well-being variables resulted in a significant multivariate effect of acculturation profile, Wilks' Lambda = .85, $F(6, 682) = 9.37$, $p < .001$, $\eta^2 = .08$, after controlling for age and gender. Univariate analysis of covariance tests showed that acculturation profile had a significant effect on self-esteem and socio-cultural adaptation, but not for psychological problems. Pairwise comparisons based on Bonferroni adjustments identified that immigrant adolescents in the ethnic profile had significantly lower self-esteem and socio-cultural competence compared with the other two profiles (see Table 3).

Table 3.

Well-Being Variables' Means and Univariate Tests for Acculturation Profiles.

Variable	Integration profile	Ethnic profile	National profile	<i>F</i> (2,343)	η^2
	<i>M</i>	<i>M</i>	<i>M</i>		
Self-esteem	4.07 ^a	3.69 ^b	3.96 ^a	11.34 ^{***}	.06
Psychological problems	2.18 ^a	2.19 ^a	2.03 ^a	1.52 ^{ns}	.01
Socio-cultural adaptation	4.17 ^a	3.77 ^b	4.29 ^a	14.61 ^{***}	.08

Note. Different superscripts (a or b) within a row indicate significant differences between means on the basis of post hoc pairwise comparisons with Bonferroni adjustments. ^{***} $p < .001$, ^{ns} = not significant.

We used another MANCOVA for PGD and PPD. This analysis resulted in a significant multivariate effect of the acculturation profile, Wilks' Lambda = .91, $F(4, 684) = 8.68$, $p < .001$, $\eta^2 = .05$, after controlling for age and gender. Univariate analysis of covariance tests showed that

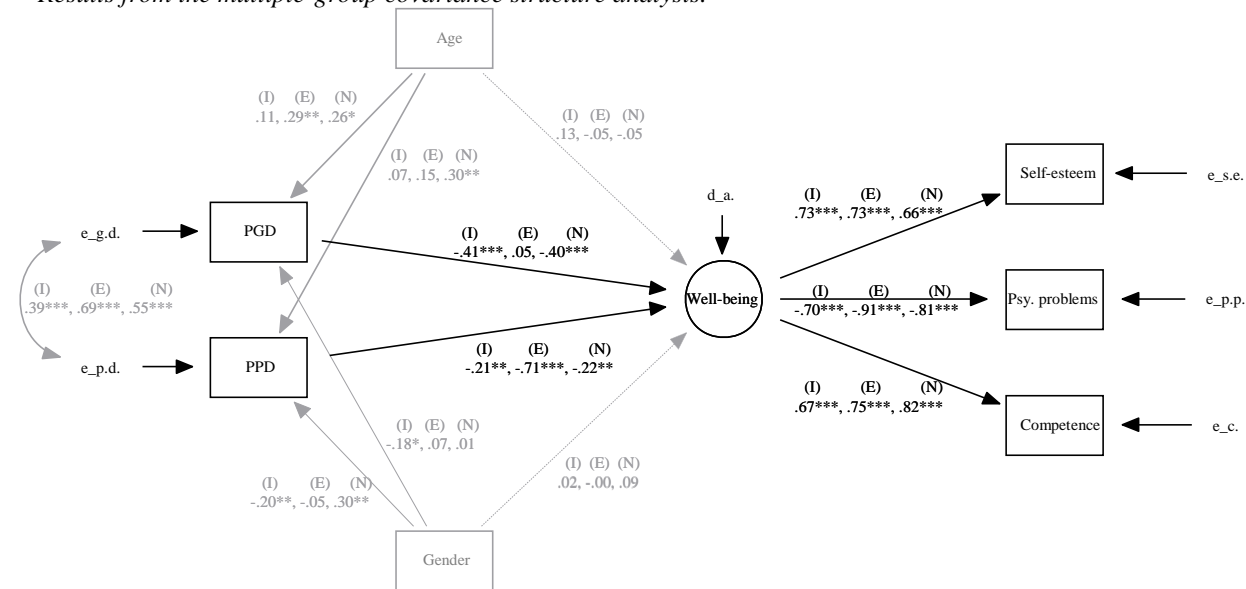
acculturation profiles had a significant effect on PPD, but not for PGD. Pairwise comparisons based on Bonferroni adjustments revealed that immigrant adolescents in the ethnic profile had significantly higher PPD compared with the other two profiles (see Table 4).

Table 4.
PGD and PPD Means and Univariate Tests for Acculturation Profiles.

Variable	Integration profile	Ethnic profile	National profile	F (2,343)	η^2
	M	M	M		
PGD	2.43 ^a	2.40 ^a	2.20 ^a	0.94 ^{ns}	.01
PPD	1.57 ^a	2.11 ^b	1.52 ^a	12.73 ^{***}	.07

Note. Different superscripts (a or b) within a row indicate significant differences between means on the basis of post hoc pairwise comparisons with Bonferroni adjustments. PGD = Perceived Group Discrimination, PPD = Perceived Personal Discrimination. *** $p < .001$, ^{ns} = not significant.

Figure 3.
Results from the multiple-group covariance structure analysis.



Note. Standardized coefficients are shown. Control variables and covariation are presented in light gray. PGD = Perceived Group Discrimination, PPD = Perceived Personal Discrimination, I = Integration profile, E = Ethnic profile, N = National profile. Dashed lines represent non-significant pathways and solid lines represent significant pathways. * $p < .05$, ** $p < .01$, *** $p < .001$.

7.3. Multiple-group covariance structure analysis

To examine whether the associations among PGD/PPD and psychosocial well-being differed by acculturation profile, we tested a series of nested multiple-group models. An initial model was fit so that all pathways were freely estimated across all groups, except for factor loadings constrained to be equal. This model had good fit ($\chi^2(31) = 39.20, p = .15$; NNFI = .970; CFI = .985; RMSEA = .048 [90% C.I. = .000 - .089]). Next, we constrained the pathway from PGD to psychosocial well-being to be equal across groups. This model had significantly worse fit compared to the initial model ($\Delta\chi^2(2) = 8.96, p < .05$; $\Delta CFI = -.012$; $\Delta RMSEA = .015$), suggesting that the path could not be constrained to be equal across groups because the association between PGD and psychosocial well-being differed by acculturation profile. A series of post-hoc tests revealed that the path could be constrained for the integration and national profiles, but not for the ethnic

profile ($\Delta\chi^2(1) = 0.64, p > .05$; $\Delta CFI = .001$; $\Delta RMSEA = -.002$). Thus, across integration and national profile groups, PGD significantly predicted decreases in psychosocial well-being ($\beta = -.41$ and $\beta = -.40$, respectively), but there was no significant association for ethnic profile group. While keeping this constraint, we next constrained the association between PPD and psychosocial well-being to be equal across acculturation profile groups. The change in chi-square values was significant as well as the difference in CFI values was not acceptable ($\Delta\chi^2(2) = 8.03, p < .05$; $\Delta CFI = -.011$; $\Delta RMSEA = .014$), suggesting that the association between PPD and psychosocial well-being was moderated by acculturation profile. Again, a series of post-hoc tests revealed that the path could be constrained for the integration and national profiles, but not for the ethnic profile ($\Delta\chi^2(1) = 0.01, p > .05$; $\Delta CFI = .002$; $\Delta RMSEA = -.004$). Thus, across acculturation profile groups, PPD significantly predicted decreases in psychosocial well-being, although small in nature for integration and national profile

groups ($\beta = -.21$ and $\beta = -.22$, respectively) and high for ethnic profile adolescents ($\beta = -.71$). The final model (shown in Fig. 3) had good fit ($\chi^2(33) = 39.85, p = .19$; NNFI = .976; CFI = .988; RMSEA = .042 [90% C.I. = .000 - .084]).

8. Discussion

The overall goal of the present study was to analyze how acculturation profiles and perceived discrimination (in terms of PGD and PPD) are associated with psychosocial well-being of Tunisian adolescents living in Sicily (Italy). Some of these relationships were examined by other scholars. However, few studies have used an integrative approach by investigating together a number of key research topics in this field.

Initially, we tried to identify some acculturation profiles among Tunisian adolescents on the basis of their scores of acculturation strategies, ethnic and national identities, ethnic and national languages, ethnic and national peer social contacts. In line with our prediction, we found three acculturation profiles: integrated (51.73% of the sample), ethnic (27.01%), and national (21.26%). Integrated profile is characterized by high levels of involvement in both Italian and Tunisian cultures in terms of language, identity and social contacts with peers, as well as high levels of integration along with low levels of assimilation and separation. Ethnic profile is defined by high levels of involvement only in Tunisian culture in terms of ethnic identity, proficiency in Arab language and social contacts with Tunisian peers, along with high levels of separation. National profile is characterized by high levels of involvement in Italian culture in terms of national identity, proficiency in Italian language, and social contacts with Italian peers, along with high levels of assimilation and integration. Our study provides further support to the existence of some of Berry's categories (1997) through the use of a person-oriented approach. Nevertheless, it suggests that not all of Berry's categories may exist in a given sample or population. Even if we did not use items measuring directly marginalization, the absence of a cluster characterized by low levels of involvement in both ethnic and host society culture is similar to the findings of other studies that have found small or nonexistent marginalization groups (e.g., Schwartz & Zamboanga, 2008; Schwartz et al., 2010).

However, it has to be underlined that these findings are partly different from those of a previous study conducted in the same context and with same population (Inguglia & Musso, 2015), in which the authors highlighted the existence of only two profiles, one resembling both integration and assimilation (integrated national) and the other resembling separation (ethnic). Several reasons can be used to explain such different results. First, in the current study we used as clustering variables also the spoken languages (Arab and Italian) adding two more variables with respect to the study of Inguglia and Musso (2015). Second, the sample of the current study is bigger than the other study (348 vs. 156 participants). Third, the participants to the present study are only second-generation immigrants whereas the participants to the study of Inguglia & Musso were both first and second-generation immigrants. On the one hand, the language variables are particular meaningful because linguistic

exposure is a key factor associated with the levels of ethnic and/or national identity (Homma et al., 2014). For instance, heritage language proficiency is a powerful tool to learn about one's heritage culture, by reading books and talking to same-ethnic members. On the other hand, the characteristics of a new different sample can contribute to a larger differentiation among the acculturation profiles. Thus, the integrated-national profile of the previous study seems to result into two different profiles in the present study, integrated and national.

With regard to the relationships between acculturation profiles and adolescents' psychosocial well-being, our results showed that adolescents of both integrated and national profiles report a better well-being than those of the ethnic profile in terms of self-esteem and socio-cultural competence. However, no significant differences between profiles were found with regard to the levels of psychological problems. Thus, our findings are partially consistent with the integration hypothesis (Berry, 2013). For the Tunisian youth living in Sicily the levels of well-being seem to be linked in a certain way to the involvement in Italian culture because there are not significant differences between integrated and national profiles. These data are not surprising if we consider two aspects. First, Italy is a country of recent immigration in which a positive attitude towards the mainstream culture is considered a fundamental requirement for immigrants' inclusion. Thus, immigrant youth who report high rates of involvement with the Italian culture is likely to show higher levels of psychosocial well-being. Second, our sample is composed by second-generation immigrants who were born in Italy and is reasonable to expect that for them is more adaptive to develop strong ties with the mainstream culture.

Our findings about the relationships between acculturation profiles and both forms of perceived discrimination are partly in line with the hypotheses affirming that adolescents who are in the profile resembling separation would show higher levels of PGD and PPD than the others. According to our results, this prediction is valid only for PPD and not for PGD because Tunisian adolescents of ethnic profile reported higher levels of PPD than others. Thus, our study highlights the importance of considering the distinction between the two forms of perceived discrimination (Motti-Stefanidi & Asendorpf, 2012) in order to better understand their links with acculturation profiles.

Finally, our predictions about the moderating role of acculturation profiles in the relationships between two types of perceived discrimination (group and personal) and immigrant youth's psychosocial well-being were fully confirmed. Specifically, when we analyzed the relationship between PGD and adolescents' well-being we found that across integration and national profiles PGD significantly predicted decreases in psychosocial well-being, whereas there was no significant association considering the ethnic profile group. This finding is in line with previous studies, showing that strong ties with the ethnic group can minimize the potentially negative impact of perceived discrimination on immigrant youth (Cronin et al., 2012; Jasinskaja-Lahti et al., 2009; Umana-Taylor & Updergraff, 2007). Also, the association between PPD and psychosocial well-being was moderated by acculturation profile in the sense that, although in all clusters high levels of PPD significantly

predicted decreases in well-being, this association was noticeably higher in nature for adolescents of ethnic profile. This marked difference between ethnic and both national and integrated profiles is concordant with Armenta and Hunt (2009) stating that the identification with ethnic culture do not protect adolescents from the detrimental effects of PPD, rather it can worsen them. In our Tunisian sample, for a second-generation immigrant adolescent perceiving high levels of PPD because of his/her ethnic belonging the attachment to the ethnic culture is likely to be a risk factor for the psychosocial well-being, when measured in terms of self-esteem (Armenta & Hunt, 2009), psychological problems and sociocultural competence. This is probably valid for Tunisian adolescents living in Sicily who are characterized by both a strong desire to be liked by Italians by virtue of geographical and cultural closeness with them, and a sensitivity to social comparison by virtue of social and cultural differences with the mainstream culture.

Several limitations and future directions should be noted. Among the limitations, the study is focused only on a specific group of immigrants (Tunisians) and it would be useful to consider also other cultural groups living in the same region as well as in other countries. Second, the cross-sectional nature of the study design precludes us from clearly concluding the direction of the associations among the study variables. Thus, it would be important to conduct future longitudinal researches following the same participants during adolescence in order to draw clearer conclusions about the direction of associations between these variables and about the developmental processes involved. Third, group and personal perceived discrimination measures used in this study consist only of one and two items, respectively, as well as generally we used scales with a reduced number of items. This was inevitable to keep participants'

concentration; nonetheless, future research should use more comprehensive measures to increase the reliability of assessment. Despite these limitations the current study has interesting implications for the study of immigrant's well-being in adolescence. First, it brings together contributions from different theories and takes into account diverse topics through an integrative perspective that allow us to answer some key questions about immigrant youth's psychosocial well-being in a comprehensive manner. Second, it provides some evidence for the integration hypothesis with regard to the Tunisian adolescents living in Sicily, a group that has not already been considered by the scholars. Third, it contributes to the extant literature showing that it is important to consider different levels of perceived discrimination because the relationships between PGD, PPD and adolescents' psychosocial well-being are dissimilarly moderated by the acculturation profile.

Such pursuits would provide insights for practitioners to design effective programs to enhance Tunisian youth's psychosocial well-being, highlighting that in general it would be useful to design programs aimed at contrasting PPD that has maladaptive effects. According to our results, the effects of PPD could be prevented by putting in contact immigrant youth with mainstream culture and dominant group members. Nevertheless, when adolescents report only high levels of PGD, we could bring them towards the involvement in ethnic culture as protective factor to buffer the negative effects of discrimination on youth's well-being. Thus, in general, social policies should contribute to promote integration and biculturalism among immigrant youth living in plural societies in order to safeguard their psychosocial well-being (Berry, 2013), but encouraging also more specifically and intensely ethnic maintenance in contexts in which high levels of PGD are perceived.

Footnote

This study was part of the MIRIPS project, led by John Berry. MIRIPS project is currently being carried out in a number of countries (e.g., Australia, Canada, Greece, Italy, New Zealand, Norway, etc.), using a common research framework and a common research instrument. See <http://www.victoria.ac.nz/cacr/research/mirips>.

References

- Aldenderfer, M. S., & Blashfield, R. K. (1984). *Cluster analysis*. Beverly Hills, CA: Sage Publications.
- Annis, R., Gibson, R., & Berry, J. W. (2010, October). *Intercultural relations in a rural Canadian prairie city*. Paper presented at Mi/Más Konferencia, Eger, Hungary. Retrieved from <https://www.brandonu.ca/rdi/projects/mutual-intercultural-relations-in-plural-societies/>
- Armenta, B. E., & Hunt, J. S. (2009). Responding to Societal Devaluation: Effects of Perceived Personal and Group Discrimination on the Ethnic Group Identification and Personal Self-Esteem of Latino/Latina Adolescents. *Group Processes & Intergroup Relations*, 12, 23-39. doi: 10.1177/1368430208098775
- Barratt, W. (2006). *The Barratt Simplified Measure of Social Status (BSMSS)*. Unpublished manuscript, Indiana State University, Indiana. Retrieved from http://socialclass-bpd.wikispaces.com/file/view/Barratt_Simplified_Measure_of_Social_Status.pdf
- Bentler, P.M. (2006). *EQS 6.1* [Computer software]. Encino, CA: Multivariate Software.
- Bergman, L. R., & Magnusson, D. (1997). A person-oriented approach in research on developmental psychology. *Development and Psychopathology*, 9, 291-319. doi: 10.1017/S095457949700206X
- Bergman, L. R., & Trost, K. (2006). The person-oriented versus the variable-oriented approach: Are they complementary, opposites, or exploring different worlds? *Merrill-Palmer Quarterly*, 52, 601-632. doi: 10.1353/mpq.2006.0023
- Berry, J. W. (1997). Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46, 5-68. doi: 10.1111/j.1464-0597.1997.tb01087.x
- Berry, J. W. (2013). Intercultural Relations in Plural Societies: Research Derived from Multiculturalism Policy. *Acta de investigación psicológica*, 3, 1122-1135. doi: 10.1016/S2007-4719(13)70955-4

- Berry, J. W. (2015). *Mutual Intercultural Relations in Plural Societies (MIRIPS) questionnaire*. Retrieved from <http://www.victoria.ac.nz/cacr/research/mirips>.
- Berry, J. W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology, 38*, 185-206. doi: 10.1111/j.1464-0597.1989.tb01208.x
- Berry, J. W., Phinney, J. S., Sam, D. L. & Vedder, P. (2006a). *Immigrant youth in cultural transition: Acculturation, identity and adaptation across national contexts*. Mahwah, NJ: Erlbaum.
- Berry, J. W., Phinney, J. S., Sam, D. L. & Vedder, P. (2006b). Immigrant youth: Acculturation, identity and adaptation. *Applied Psychology: An International Review, 55*, 303-332. doi: 10.1111/j.1464-0597.2006.00256.x
- Blank, R. M., Dabady, M., & Citro, C. F. (2004). *Measuring racial discrimination*. Washington, DC: The National Academies Press.
- Bollen, K. A., & Long, J. S. (1993). *Testing structural equation models*. Newbury Park, CA: Sage.
- Bourguignon, D., Seron, E., Yzerbyt, V., & Herman, G. (2006). Perceived group and personal discrimination: Differential effects on personal self-esteem. *European Journal of Social Psychology, 36*, 773-789. doi: 10.1002/ejsp.326
- Branscombe, N. R., Schmitt M. T., & Harvey R. D. (1999). Perceiving pervasive discrimination among African Americans: Implications for group identification and well-being. *Journal of Personality and Social Psychology, 77*, 135-149. doi: 10.1037/0022-3514.77.1.135
- Breckenridge, J. N. (2000). Validating cluster analysis: consistent replication and symmetry. *Multivariate Behavioral Research, 35*(2), 261-285. doi: 10.1207/S15327906MBR3502_5
- Brody, G. H., Chen, Y., McBride Murry, V., Ge, X., Simons, R. L., Gibbons, F. X. ... Cutrona, C. E. (2006). Perceived discrimination and the adjustment of African American youths: A five-year longitudinal analysis with contextual moderation effects. *Child Development, 77*, 1129-1520. doi: 10.1111/j.1467-8624.2006.00927.x
- Brown, C. M., Gibbons, J. L., & Hughes, H. M. (2013). Acculturation Clusters and Life Satisfaction. *Acta de investigación psicológica, 3*, 1108-1121. doi: 10.1016/S2007-4719(13)70955-4
- Brown, R., & Zagefka, H. (2011). The Dynamics of Acculturation: An Intergroup Perspective. *Advances in Experimental Social Psychology, 44*, 129-184. doi: 10.1016/B978-0-12-385522-0.00003-2
- Caritas Italiana, & Fondazione Migrantes. (2013). *XXIII Rapporto Immigrazione 2013: Tra crisi e diritti umani [XXIII Migration Report 2013: Between crisis and human rights]*. Todi, Italy: TAU.
- Chen, F. F. (2007). Sensitivity of goodness of fit indexes to lack of measurement invariance. *Structural Equation Modeling, 14*, 464-504. doi:10.1080/10705510701301834
- Cheung, G. W., & Rensvold, R. B. (2002). Evaluating goodness-of-fit indexes for testing measurement invariance. *Structural Equation Modeling, 9*, 233-255. doi: 10.1207/S15328007SEM0902_5
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Hillsdale, NJ: Erlbaum.
- Cristini, F., Scacchi, L., Perkins, D. D., Santinello, M., & Vieno, A. (2011). The Influence of Discrimination on Immigrant Adolescents' Depressive Symptoms: What Buffers its Detrimental Effects? *Psychosocial Intervention, 20*, 243-253. doi: 10.5093/in2011v20n3a2
- Cronin, T. J., Levin, S., Branscombe, N., van Laar, C., & Tropp, L. R. (2012). Ethnic identification in response to perceived discrimination protects well-being and promotes activism: A longitudinal study of Latino college students. *Group Processes & Intergroup Relations, 15*, 393-407. doi: 10.1177/1368430211427171
- Delgado, M. Y., Updegraff, K. A., Roosa, M. W., & Umaña-Taylor, A. J. (2011). Perceived Discrimination and Mexican-origin Youth Adjustment: The Moderating Roles of Mothers' and Fathers' Cultural Orientations and Values. *Journal of Youth & Adolescence, 40*, 125-139. doi: 10.1007/s10964-009-9467-z
- Faraci, P., & Musso, P. (2013). La valutazione dei modelli di equazioni strutturali [The evaluation of structural equation models]. In C. Barbaranelli & S. Ingoglia (Eds.), *I modelli di equazioni strutturali: Temi e prospettive* (pp. 111-150). Milano: LED. doi: 10.7359/649-2013-fara
- Garcia Coll, C., Crnic, K., Lamberty, G., Wasik, B. H., Jenkins, R., Vazquez Garcia, H., McAdoo, H. P. (1996). An integrative model for the study of developmental competencies in minority children. *Child Development, 67*, 1891-1914. doi: 10.1111/j.1467-8624.1996.tb01834.x
- Giang, M. T., & Wittig, M. A. (2006). Implications of adolescents' acculturation strategies for personal and collective self-esteem. *Cultural Diversity & Ethnic Minority Psychology, 12*, 725-739. doi: 10.1037/1099-9809.12.4.725
- Güngör, D. (2007). The interplay between values, acculturation and adaptation: A study on Turkish-Belgian adolescents. *International Journal of Psychology, 42*, 380-392. doi: 10.1080/00207590600878657
- Homma, Y., Zumbo, B. D., Saewyc, E. M., & Wong, S. T. (2014). Psychometric Evaluation of the Six-Item Version of the Multigroup Ethnic Identity Measure with East Asian Adolescents in Canada. *Identity: An International Journal of Theory and Research, 14*, 1-18, doi: 10.1080/15283488.2013.858227
- Inguglia, C., & Musso, P. (2013). In-group favouritism and out-group derogation towards national groups: Age-related differences among Italian school children. *International Journal of Intercultural Relations, 37*, 385-390. doi: 10.1016/j.ijintrel.2013.02.005
- Inguglia, C., & Musso, P. (2015). Intercultural Profiles and Adaptation among Immigrant and Autochthonous Adolescents. *Europe's Journal of Psychology, 11*, 79-99, doi: 10.5964/ejop.v11i1.872
- Jasinskaja-Lahti, I., Liebkind, K., & Solheim, E. (2009). To identify or not to identify? National disidentification as an alternative reaction to perceived ethnic discrimination. *Applied Psychology: An International Review, 58*, 105-128. doi: 10.1111/j.1464-0597.2008.00384.x
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York: The Guilford Press.
- Kunst, J. R., & Sam, D. L. (2013). Relationship between perceived acculturation expectations and Muslim minority youth's acculturation and adaptation. *International Journal*

- of *Intercultural Relations*, 37(4), 477-490. doi: 10.1016/j.ijintrel.2013.04.007
- Lebedeva, N., & Tatarko, A. (2013). Multiculturalism and immigration in post-Soviet Russia. *European Psychologist*, 18, 169-178. doi: 10.1027/1016-9040/a000161
- Liebkind, K., Jasinskaja-Lahti, I., & Mähönen, T. A. (2012). Specifying social psychological adaptation of immigrant youth: Intergroup attitudes, interactions, and identity. In A. M. Masten, D. Hernandez, & K. Liebkind (Eds.), *Capitalizing on migration: The potential of immigrant youth* (pp. 203-229). Cambridge, UK: Cambridge University Press. doi: 10.1017/CBO9781139094696.011
- Liebkind, K., Jasinskaja-Lahti, I., & Solheim, E. (2004). Cultural identity, perceived discrimination, and parental support as determinants of immigrants' school adjustment: Vietnamese youth in Finland. *Journal of Adolescent Research*, 19, 635-656. doi: 10.1177/0743558404269279
- Magnusson, D. (2003). The person approach: Concepts, measurement models, and research strategy. *New Directions for Child and Adolescent Development*, 101, 3-23. doi: 10.1002/cd.79
- Mandara, J., Gaylord-Harden, N. K., Richards, M. H., & Ragsdale, B. L. (2009). The Effects of Changes in Racial Identity and Self-Esteem on Changes in African American Adolescents' Mental Health. *Child Development*, 80(6), 1660-1675. doi: 10.1111/j.1467-8624.2009.01360.x
- Motti-Stefanidi, F., & Asendorpf, J. (2012). Perceived discrimination of immigrant adolescents in Greece: How does group discrimination translate into personal discrimination? *European Psychologist*, 17, 93-104. doi: 10.1027/1016-9040/a000116
- Motti-Stefanidi, F., Asendorpf, J. B., & Masten, A. S. (2012). The adaptation and psychological well-being of adolescent immigrants in Greek schools: A multilevel, longitudinal study of risks and resources. *Development and Psychopathology*, 24, 451-473. doi:10.1017/S0954579412000090
- Motti-Stefanidi, F., Berry, J. W., Chrysochoou, X., Sam, D. L., & Phinney, J. S. (2012). Positive immigrant youth adaptation in context: Developmental, acculturation, and socialpsychological perspectives. In A. S. Masten, K. Liebkind & D. J. Hernandez (Eds.), *Realizing the potential of immigrant youth* (pp. 117-158). Cambridge, UK: Cambridge University Press. doi: 10.1017/CBO9781139094696.008
- Neto, F. (2002). Acculturation strategies among adolescents from immigrant families in Portugal. *International Journal of Intercultural Relations*, 26, 17-38. doi: 10.1016/S0147-1767(01)00036-0
- Nguyen, A. M. D., & Benet-Martínez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-Cultural Psychology*, 44, 122-159. doi: 10.1177/0022022111435097
- Norusis, M. J. (1994). *SPSS professional statistics 6.1*. Chicago: SPSS.
- Phinney, J. S. (1992). The Multigroup Ethnic Identity Measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, 7, 156-176. doi: 10.1177/074355489272003
- Phinney, J. S., & Devich-Navarro, M. (1997). Variations in bicultural identification among African American and Mexican American adolescents. *Journal of Research on Adolescence*, 7, 3-32. doi: 10.1207/s15327795jra0701_2
- Piontkowski, U., Florack, A., Hoelker, P., & Obdrzalek, P. (2000). Predicting acculturation attitudes of dominant and non-dominant groups. *International Journal of Intercultural Relations*, 24, 1-26. doi: 10.1016/S0147-1767(99)00020-6
- Prezza, M., Trombaccia, F. R., & Armento, L. (1997). La scala dell'autostima di Rosenberg: Traduzione e validazione italiana [Rosenberg self-esteem scale: Italian translation and validation]. *Bollettino di Psicologia Applicata*, 223, 35-44. Retrieved from <http://www.giuntios.it/catalogo/rivista/bollettino-di-psicologia-applicata>
- Redfield, R., Linton, R., & Herskovits, M. J. (1936). Memorandum for the study of acculturation. *American anthropologist*, 38(1), 149-152. doi: 10.1525/aa.1936.38.1.02a00330
- Robinson, L. (2009). South Asians in Britain: Acculturation, cultural identity and perceived discrimination. *International Journal of Diversity in Organizations, Communities and Nations*, 9, 71-84. Retrieved from <http://ijd.cgpublisher.com/product/pub.29/prod.851>
- Rogers-Sirin, L., Ryce, P., & Sirin, S. R. (2014). Acculturation, Acculturative Stress, and Cultural Mismatch and Their Influences on Immigrant Children and Adolescents' Well-Being Global perspectives on well-being in immigrant families. In R. Dimitrova, M. Bender, & F. van de Vijver (Eds.), *Global Perspectives on Well-Being in Immigrant Families, Advances in Immigrant Family Research*. New York: Springer Science (pp. 11-30). doi: 10.1007/978-1-4614-9129-3_2
- Rosenberg, M. (1965). *Society and the adolescent self-image*. Princeton, NJ: Princeton University Press.
- Rudmin, F. W. (2003). Critical history of the acculturation psychology of assimilation, separation, integration, and marginalization. *Review of General Psychology*, 7, 3-37. doi: 10.1037/1089-2680.7.1.3
- Rudmin, F. W. (2009). Constructs, measurements, and models of acculturation and acculturative stress. *International Journal of Intercultural Relations*, 33, 106-123. doi: 10.1016/j.ijintrel.2008.12.001
- Rudmin, F. W., & Ahmadzadeh, V. (2001). Psychometric critique of acculturation psychology: The case of Iranian migrants in Norway. *Scandinavian Journal of Psychology*, 42, 41-56. doi: 10.1111/1467-9450.00213
- Schmitz, P. G., & Schmitz, F. (2012). Emotional intelligence and acculturation. *Behavioral Psychology*, 20(1), 15-41.
- Schmitz, P., & Berry, J. W. (2009). Structure of acculturation attitudes and their relationships with personality and psychological adaptation: A study with immigrant and national samples in Germany. In F. Deutsch, M. Boehnke, U. Kühnen, & K. Boehnke (Eds.), *Rendering borders obsolete: Cross-cultural and cultural psychology as an interdisciplinary, multi-method endeavor* (pp. 52-70). Retrieved from International Association for Cross-Cultural Psychology website: http://iaccp.org/sites/default/files/bremen_pdf/Bremen%20Proceedings.pdf
- 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. doi: 10.1037/a0012818
- 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. doi: 10.1037/a0019330.
- Szalacha, L. A., Erkut, S., Garcia Coll, C., Alarcón, O., Fields, J. P., & Ceder, I. (2003). Discrimination and Puerto Rican children's and adolescents' mental health. *Cultural Diversity and Ethnic Minority Psychology*, 9, 141-155. doi: 10.1037/1099-9809.9.2.141
- Umana-Taylor, A., & Updegraff, K. A. (2007). Latino adolescents' mental health: Exploring the interrelations among discrimination, ethnic identity, cultural orientation, self-esteem, and depressive symptoms. *Journal of Adolescence*, 30, 549-567. doi: 10.1016/j.adolescence.2006.08.002
- Vandenberg, R. J., & Lance, C. E. (2000). A review and synthesis of the measurement invariance literature: Suggestions, practices, and recommendations for organizational research. *Organizational Research Methods*, 3, 4-70. doi: 10.1177/109442810031002
- Verkuyten, M. (1998). Perceived discrimination and self-esteem among ethnic minority adolescents. *The Journal of Social Psychology*, 138, 479-493. doi: 10.1080/00224549809600402
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 23, 659-677. doi: 10.1016/S0147-1767(99)00014-0
- Wong, C. A., Eccles, J. S., & Sameroff, A. J. (2003). The influence of ethnic discrimination and ethnic identification on African-Americans adolescents' school and socioemotional adjustment. *Journal of Personality*, 71, 1197-1232. doi: 10.1111/1467-6494.7106012