

Running Head: Religious flexibility and acculturation

Religiously flexible: acculturation of second generation Muslims in Europe

Marco Rizzo (a), Silvia Testa (b), Silvia Gattino (a), Anna Miglietta (a)

(a) Department of Psychology, University of Turin

(b) Department of Humanities and Social Sciences

Correspondence concerning this article should be addressed to: Silvia Gattino

Dipartimento di Psicologia, Università di Torino, Via Verdi 10, 10124 Torino, Italy.

Phone: ++390116702018

Fax: ++390116702061

E-mail: silvia.gattino@unito.it

Keywords: Muslim; Second generations; Acculturation; Religion; Existential Quest; Perceived religious discrimination

Religiously flexible: acculturation of second-generation Muslims in Europe

Abstract

Second-generation Muslims who follow their faith and feel discriminated against tend to maintain their heritage culture and distance themselves from the culture of the country where they grew up, setting the conditions for psychosocial maladjustment. Yet some second generation do find ways to adopt the mainstream culture while remaining attached to their heritage culture. To explain these contradictory observations, we investigated how second-generation Muslims manage to be part of both mainstream and heritage culture although their religion is commonly regarded as incompatible with Western values. To do this, we examined the role of flexibility in existential quest (EQ) in the acculturation of second-generation Muslims. Our hypothesis was that second generation integration is fostered by their ability to be flexible on EQ, which allows them to reflect on cultural and religious issues and to create a safe psychological place where they can practice their faith without feeling they need to withdraw from mainstream society. Two samples of second-generation Muslims, one from Italy (N=240) and one from Belgium (N=209), completed an online questionnaire. A multi-group structural equation model was tested. Religiosity, perceived discrimination, and sociodemographic variables were also considered. We noted a positive association between EQ and mainstream culture only for the Italian sample. Our findings suggest that flexibility on EQ is one aspect of the acculturation of second-generation Muslims and that it can provide a resource for coping with the challenge of growing up under dual cultural pressures.

Keywords: Muslim; Second generations; Acculturation; Religion; Existential Quest; Perceived discrimination

Introduction

The growing number of second-generation Muslims in Europe (Pew Research Center, 2017) has prompted scholars to examine how they face the challenges of their integration into European societies (Crul et al., 2012; Phalet et al., 2018; Voas & Fleischmann, 2012). Like other second generations, young Muslims try to reconcile the cultural sets of which they are part. Unlike other second generations, however, the sets include a minority religion in secular and Christian contexts (Güngör et al., 2013; van Heelsum & Koomen, 2016).

Academic research has underscored that religion is an important element in acculturation (Berry et al., 2006; Güngör et al., 2013; Saroglou & Mathijsen, 2007; Voas & Fleischmann, 2012). There is ample evidence that second-generation who follow Islamic practices and traditions tend to distance themselves from the mainstream society where they grew up and to remain attached to their heritage culture (Güngör et al., 2011; Saroglou & Mathijsen, 2007) in reaction to widespread anti-Islamic sentiment (Perocco, 2018), which undermines full integration into European society, and repeated exposure to religious discrimination (Giuliani et al., 2018). It is not surprising, therefore, that second-generation Muslims who report high levels of perceived discrimination tend to distance themselves from the host society, although this can impact on their psychological well-being (e.g., anxiety, depression; Maes et al., 2014).

Moreover, second-generation Muslims wanting to preserve their cultural heritage may prefer associating with peers within their own religious and cultural groups and adopt the culture and values of their country of origin (Güngör et al., 2011). A strict preference for the heritage culture may preclude contact with cultural and religious groups in the mainstream society, however, potentially leading to social withdrawal, religious fundamentalism (Saroglou et al., 2020) or social maladjustment (Berry et al., 2006; Spiegler et al., 2019).

Recent research into the religiosity of young immigrant Muslims has shown that second generation can find ways to reconcile their religious beliefs with Western cultural traditions. Empirical evidence suggests that second-generation Muslims conceptualize Islam less in terms of practices and traditions

(e.g., religious vitality; Fleischmann & Phalet, 2012) and more in terms of a spiritual, private, and symbolic conceptualization of being Muslim (Rizzo et al., 2020; Skandrani et al., 2012). This renewed religiosity can be seen as a means to deal with the pressure the second generation faces in European society. These findings are not contradictory according to acculturation theory. Berry's bidimensional model (1997) states that high cultural maintenance helps define two acculturation strategies: separation and integration. The choice of the one or the other depends on the relationship between cultural maintenance and cultural adaptation, i.e., the second driver of acculturation. In other words, a high commitment to cultural heritage does not necessarily mean that the acculturation strategy of separation will be chosen. It may also be consistent with integration if there is a willingness to participate in a pluralistic society (Berry et al., 2006).

With the present study we wanted to investigate the factors that may promote cultural adaptation by second-generation Muslims who wish to maintain attachment to their heritage culture. Our hypothesis was that a willingness to grapple with existential issues may promote a willingness of second-generation Muslims to adopt mainstream culture. Indeed, adoption of mainstream culture may be fostered by the ability of second generation to reflect on existential issues, such as conceptualizing religion differently from that of their parents or first generation (van Heelsum & Koomen, 2016), while maintenance of the heritage culture refers primarily to adherence to Islam (Saroglou & Mathijsen, 2007).

Against this background, second-generation Muslims need to reconcile two sometimes opposing cultural perspectives (van Heelsum & Koomen, 2016). Like other second generations, young Muslims receive intergenerational transmission of cultural heritage through their family and ethnic community, which includes religious education. This reflects the parents' desire and concern to fulfil their moral and religious duty to pass on Islamic principles to their children (Güngör et al., 2011). Young Muslim generations are oriented not only to their cultural heritage but are also acculturated into the culture of the host country through educational and socialization instances (e.g., school and workplace). Second-generation Muslims who receive religious education from their parents (e.g., mosque

attendance) and who have meaningful like-minded and like-religious friends tend to reinforce their heritage culture and reject mainstream culture (Maliepaard & Lubbers, 2013; Güngör et al., 2011). Differently, young Muslims who receive support from native peers in social settings outside the family and the ethnic community, such as school, are more apt to adopt the mainstream culture (Schachner et al., 2017).

Studies have also shown that countries with broader multicultural policies can foster the integration of second-generation Muslims, while less supportive policies toward cultural pluralism may persuade second-generation Muslims not to adopt mainstream culture but rather to reinforce bonds with their heritage culture instead (Güngör et al., 2011; Saroglou & Mathijsen, 2007).

There is ample literature on the role of contextual aspects and intercultural relations in the second generation acculturation experience (Berry et al., 2006; Berry & Sabatier, 2010; Sabatier & Berry, 2008). However, whether individual aspects can promote the integration of different cultures and religions by second-generation Muslims who embrace Islam in Christian and secular contexts has received less attention. Acculturation studies have explored various individual dimensions such as the role of cognitive style (Kashima & Loh, 2006; Kosic et al., 2004), personality (Saroglou, 2009), or sociodemographic variables (e.g., gender; Güngör & Bornstein, 2009).

To the best of our knowledge, no study to date has examined the tendency to ask questions about existential issues in a complex situation where different cultural worlds must be reconciled. This aspect may be relevant for second-generation Muslims who need to make an individual effort to adapt flexibly to changing cultural circumstances rather than distance themselves from the host society. Within this perspective, second-generation Muslims may be motivated to reflect on the vital aspects of their existence and to question the dogmatic approaches toward religion typical of their parents (Saroglou et al., 2020). For example, young Muslims who seek to successfully integrate into a bicultural context have been noted to experience more complex cultural dissonance than those who opt for either the mainstream culture or the heritage culture (Saroglou & Mathijsen, 2007; Tadmor et al., 2009). Our hypothesis was that a willingness to grapple with existential questions may partially

help second-generation Muslims to embrace Western culture without feeling they should reject their religion.

To test this hypothesis, we believe that the concept of flexibility in existential quest, i.e., the tendency to legitimize different perspectives on existential issues (van Pachterbeke et al., 2012), can be included as an individual aspect for second-generation Muslims in the adoption of mainstream culture.

Second-generation Muslims have lived since childhood in a mixed cultural and religious context; they may take an approach to religion different from that of their parents who were born and raised in an Islamic country (Fleischmann & Phalet, 2012; Phalet et al., 2012). It is plausible that second-generation Muslims with a high degree of flexibility toward existential issues may be able to conceptualize Islam as a religion that can be questioned and that can coexist with other cultural sets. In summary, the main aim of the present study was to examine the role of flexibility in existential quest in the acculturation of second-generation Muslims residing in Europe who follow their faith, while taking into account the discrimination they perceive during their acculturation experience.

Flexibility in existential quest and acculturation: bridging the gap

Previous studies have reported that existential quest may be considered a concept that is part of a person's general cognitive style (van Pachterbeke et al., 2012; Rizzo et al., 2019). Individual cognitive style helps people process information and find a way to see the world (for a review, see Jost et al., 2003). The concept of existential quest extends along a continuum from rigidity at one end to flexibility at the other. It is defined as the willingness to legitimize different perspectives on existential issues: individual uncertainty about existential questions, positive valorisation of doubt, and changing one's perspectives over time (van Pachterbeke et al., 2012).

The literature has shown a close relationship between general cognitive style and the acculturation of immigrant groups (Brown & Zagefka, 2011; Kosic et al., 2004). The positioning of immigrants on the continuum between cognitive rigidity and flexibility indicates whether there is a tendency to

preserve the heritage or to adopt the mainstream culture. For example, the concept of a need for cognitive closure, defined as general close mindedness (Webster & Kruglanski, 1994), has been used to test the role of general cognitive style in acculturation: immigrants with a high need for cognitive closure tend to separate themselves from the host society, while those with a low need for cognitive closure tend to adopt the mainstream culture, reflecting an integrative pattern of acculturation (Kashima & Loh, 2006; Kosic et al., 2004).

No studies to date have investigated the role of existential quest in acculturation though there are some elements for a possible link. For example, existential quest resembles but does not overlap with the need for cognitive closure (Webster & Kruglanski, 1994). Cognitive closure refers to a general cognitive style that individuals use to achieve certainty and avoid ambiguity in their lives, while existential quest refers to an individual's tendency to think about broader existential issues, such as the meaning of life or life after death (van Pachterbeke et al., 2012). Given the conceptual affinity between existential quest and cognitive closure, it seems logical that flexibility in existential quest is closely related to acculturation (van Pachterbeke et al., 2012; Rizzo et al., 2019).

Moreover, the relationship between existential quest and acculturation is consistent with the acculturation of second generation, as reported by studies on cognitive rigidity (Kashima & Loh, 2006). Since young immigrants need to be open and flexible “to justify their conduct to representative members of both cultural groups” (Tadmor et al., 2009; p. 107) and to cope with the dual cultural pressures they face, it seems appropriate to examine the role that flexibility plays in existential quest in their acculturation (Saroglou & Mathijssen, 2007).

Aims and Hypotheses

The aim of the present study was to investigate the relationship between flexibility in existential quest and the acculturation orientation among second-generation Muslims. Based on the above, we expected to find a positive relationship between flexibility in existential quest and adoption of mainstream culture by second-generation Muslims. Differently for heritage orientation, we did not

expect a significant association with existential quest in second-generation Muslims. Religiosity and perceived discrimination, as well sociodemographic variables (gender, age, education level) were the control variables.

Method

The study context

For the present study, we recruited participants from Italy and Belgium to gain insight into the stability of the results in cultural settings of two European countries. Both share similarities in culture and religion but differ in the composition of the second-generation Muslim population and in their legal recognition. While both have large numbers of resident immigrants from Muslim majority countries (mainly Morocco), they differ in immigration history and composition of second generation. Belgium has a long history of immigration and a policy of open access to citizenship (Reniers, 1999): foreign nationals make up 12.4% of the population according to recent estimates (Statistics Belgium [STATBEL], 2020). In addition, there is a high proportion of second generation in the workforce and a growing number of third generation who acquire Belgian citizenship at birth. For example, Moroccans rank first in applying for Belgian citizenship (3698 naturalization procedures according to recent estimates), the majority of which are second generation (STATBEL, 2020).

In contrast, Italy has a more recent immigration history (Allievi, 2014) and a more complex legal path to citizenship. Second-generation Muslims are younger than in Belgium and have not yet entered the workforce: To date, foreign nationals legally residing in Italy make up about 8.7% of the total population (Italian National Institute of Statistics [ISTAT], 2018). Moroccans are the largest group of non-European nationals legally residing in Italy: 27.4% are minors and 40.6% are young adults under the age of 30 (ISTAT, 2018).

Belgium has a more multiethnic population than Italy and foreigners have greater opportunity to engage in civic activities and feel part of the social fabric. Belgian citizenship is regulated by a mixture of *ius soli* and *ius domicilii*; it can be obtained after three years of residence in the country.

Acquiring it is quite straightforward: second generation are automatically granted Belgian citizenship if their immigrant parents have resided in Belgium for at least 5 of the last 10 years before their birth. Differently, current Italian citizenship legislation is based on *ius sanguinis*, according to which a person born of at least one Italian parent automatically acquires Italian citizenship (Gattino & Miglietta, 2013). Individuals born to immigrant parents and living in Italy (i.e., second generation) must apply for Italian citizenship within one year after their 18th birthday, after which they are defined by law as foreign nationals residing in Italy.

Despite these differences and irrespective of multiethnic population make up and legal recognition, Islamophobic sentiment runs high in both countries, with episodes of religious discrimination against Muslims commonly reported. According to a recent report on Islamophobia (Alietti & Padovan, 2018), nationalism and intolerance towards Muslims have increased in Italy where violence and discrimination occur in public and in the workplace. Due to complex regulatory issues, the Italian state has yet to officially recognize Islam within its borders (Allievi, 2014), forcing cultural and Islamic associations to create alternative spaces for professing their faith, e.g., converting private spaces into a place of worship. While Muslims can exercise their religious practices and traditions, they cannot profess their faith fully.

Discrimination against Muslims has also increased in Belgium in the form of verbal and physical attacks on women wearing the Islamic veil and cases of vandalism at mosques, as reported in Easat-Daas (2018). In response to terrorist attacks, far-right political movements are gaining support in Belgium and waging campaigns against immigration and Islam. In general, these episodes reflect the contradictions regarding Islam in Belgium. Islam has been a fully recognised religion since 1974, and the federal government does not restrict Islamic practises. Ritual slaughtering is prohibited in some administrative districts and municipalities can ban wearing the hijab in schools. This anti-Islamic climate permeates workplaces and schools, often making it difficult for Muslims to practise their religion.

Participants

The initial total sample included 565 participants, 309 of which recruited in Italy and 256 in Belgium. Since the focus of the study was on second-generation Muslims, respondents who were first or third generation were identified and excluded from analysis.

According to Rumbaut (2004) participants were classified as second generation if they had been born in or had resided in a European country since the age of 6 and if at least one parent was from a country other than Italy or Belgium. The final total sample was 449 (N=240 Italian sample and N=209 Belgian sample). Table 1 presents the demographic variables of the two samples and the criteria for categorization as second generation. All identified as Sunni Muslims. The mean age was 22.1 (SD = 4.0) in the Italian and 30.9 (SD = 10.0) in the Belgian sample ($t(447) = 12.5, p < .001; d = 1.1$); women made up the majority in both samples ($t(447) = -1.1 p > .05$); most respondents in the Italian sample were university students, whereas most in the Belgian sample were employees; the educational level was higher in the Belgian than in the Italian sample ($t(447) = 9.82, p = .000; d = 0.4$).

For both samples, the majority of respondents' parents came from Morocco, while a non-negligible part of the Belgian sample had parents with discordant ethnic background (one parent Belgian) and accounted for about 24.9% of the total Belgian sample compared to 6.2% of the Italian sample.

The two samples differed somewhat in their sociodemographic composition. Consistent with the countries' immigration history, a non-negligible proportion of the Belgian sample had a job and/or at least one Belgian parent, whereas the majority in the Italian sample attended university and had both parents from a country other than Italy (usually Morocco).

[Table 1 here]

Procedures

Participants were recruited by snowballing for an online survey in Italy and Belgium. The majority of the Italian sample resided in northern Italy and the majority of the Belgian sample resided in the Walloon Region or the Brussels-Capital region, where the majority is French speaking. Data were

collected from January to June 2019. Representative members of cultural and religious associations in both countries were contacted to find participants. They provided contact with other religious associations or people in Islamic communities. Most of the recruitment took place through emails and online messages to administrators of Muslim groups on social media. People interested in participating in the study received a link to access the online survey which they could share with other Muslim group members. The link opened the first page of the questionnaire, which included the consent form, a brief introduction to the study, and a data privacy statement that ensured anonymity of respondents in accordance with current data protection laws. There was no obligation to answer all questionnaire items and participation was voluntary. The estimated time to complete the questionnaire was about 20 minutes. The study was approved by the local universities.

Instruments

The following measures, including a set of sociodemographic variables, were used:

Existential Quest. The Flexibility in Existential Quest Scale (van Pachterbeke et al., 2012) is composed of nine items that measure individual flexibility in existential questions (e.g., “Today, I still wonder about the meaning and goal of my life”). Participants responded on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Consistent with the Italian validation study (Rizzo et al., 2019), one reverse item, “I know perfectly well what the goal of my life is”, was excluded from analysis. The α coefficient was .69 in the Italian and .82 in the Belgian sample. The Italian and the French translated version of the scale was used.

Religiosity. The Four Basic Dimensions of Religiousness Scale (4BDRS; Saroglou, 2011) consists of four subscales that measure four religious dimensions: believing (e.g., “I feel attached to religion because it helps me to have a purpose in my life”), bonding (e.g., “Religious rituals, activities or practices make me feel positive emotion”), behaving (e.g., “Religion helps me to try to live in a moral way”), belonging (e.g., “In religion, I enjoy belonging to a group/community”). Each subscale is composed of three items, for a total of twelve items. Participants responded on a 7-point Likert

scale from 1 (strongly disagree) to 7 (strongly agree) The α coefficient of the religious dimensions was: believing (.87 in the Italian and .86 in the Belgian sample); bonding (.81 in the Italian and .77 in the Belgian sample); behaving (.90 in the Italian and .85 in the Belgian sample); belonging (.88 in the Italian and .86 in the Belgian sample). The Italian and the French translated version of the scale was used.

Acculturation. The Vancouver Index of Acculturation (VIA) measures acculturation on two dimensions: heritage orientation and mainstream orientation (Ryder et al., 2000). The scale includes twenty items: ten examining heritage culture and ten examining mainstream culture. The scale assesses various aspects of acculturation in the heritage and the mainstream culture, such as participation in cultural traditions or social relationships (e.g., “I often participate in my native cultural traditions”; “I often participate in mainstream *Italian/Belgian* cultural traditions”). The response scale was shortened from the original 9-point scale to a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree) (Testa et al., 2019). The α coefficient was: heritage orientation (.86 in the Italian and .82 in the Belgian sample); mainstream orientation (.74 in the Italian and .80 in the Belgian sample). The Italian and the French translated version of the scale was used.

Perceived discrimination. As in previous studies (Verkuyten & Yildiz, 2007), three items investigated perceived religious discrimination the respondents experienced personally: “I am often discriminated when looking for a job or internship”; “I am often discriminated in cafes and clubs”; “I am often discriminated in daily life”. Participants responded on a 5-point Likert scale from 1 (not at all) to 5 (completely). The α coefficient was .86 in the Italian and .83 in the Belgian sample. We originally developed the items in English and then forward-back translated the scale in Italian and French for the Italian and the Belgian questionnaire, respectively.

Data analysis

Statistical analysis was performed using MPLUS 8 (Muthén & Muthén, 2017) and IBM SPSS Statistics version 26.0 (IBM Corp, Armonk NY, USA). Missing data were imputed using the

expectation maximization (EM) procedure after determining that the missing values were completely random (MCAR; Little, 1998). The percentage of missing values for each scale ranged from 0.4% to 2.5% in the Italian sample and from 0.5% to 2.4% in the Belgian sample. We used frequency, means, standard deviation, and other descriptive statistics to summarize the sociodemographic characteristics of the samples; effect size was assessed according to Cohen's criteria (1988).

We performed confirmatory factor analysis (CFA) to investigate the measurement properties of the scales in both samples and the Mc Donald's omega coefficient (ω) to assess scale reliability. We estimated a multigroup structural equation model (SEM) to evaluate the measurement invariance of all scales across the Italian and the Belgian sample; we then in a second step estimated a structural invariance model to determine whether the relationships between independent and dependent variables were the same for the two samples.

Questionnaire items with a response range on the 7-point Likert scale were treated as continuous variables and items with a response range on the 5-point Likert scale as ordinal variables. Admittedly, treating items with few categories as continuous variables may be a weak strategy (Rhemtulla et al., 2012). Since the assumption of multivariate normality was not met in either sample, we used the Asparouhov and Muthén (2010) mean- and variance-adjusted ML method of estimation (MLMV) for continuous variables and the mean- and variance-adjusted weighted least squares (WLSMV) for ordinal variables.

The criteria for assessing the goodness of fit of the models were: root mean square error of approximation (RMSEA) \leq .080; comparative fit index (CFI) \geq .900; only for continuous variables standardized root mean square residual (SRMR) \leq .080 (Browne & Cudeck, 1993; Hu & Bentler, 1999).

Four increasingly restrictive models were estimated for measuring invariance in multigroup SEM for continuous variables (Vandenberg & Lance, 2000). First, the configural model in which all parameters are freely estimated across groups; second, the metric model, in which loadings are constrained to be equal across groups; third, the scalar model, in which loadings and intercepts are

constrained to be equal across groups; fourth, the uniqueness model imposing equality constrains also on the residual variances across groups. For each model, the goodness of fit was compared to that of the previous model (e.g., the metric *versus* the configural; the scalar *versus* the metric). As described in Bowen and Masa (2015), only two increasingly restrictive models were estimated and compared (the configural and the scalar) in the multi-group SEM for the ordinal variables. To test measurement a $\Delta CFI \leq -.005$, and a $\Delta RMSEA \geq .010$ implied a lack of invariance (Chen, 2007). According to Schermelleh-Engel and colleagues (2003), an additional fit criterion for both the continuous and the ordinal variables concerned the $\Delta\chi^2$. The lack of invariance was assumed when the ratio between $\Delta\chi^2$ and Δ degree of freedom (Δdf) was > 3 . Modification Indexes (MIs) were used to identify the parameters responsible for the lack of invariance in the measurement and structural models.

Results

Descriptive results

Table 2 presents mean, standard deviation, and mean difference between the two samples. Higher mean scores for existential quest were observed in the Italian compared to the Belgian sample, and the difference in the mean score was statistically significant. Higher mean scores for all religious dimensions, except for belonging, were noted in the Belgian sample, and the difference between the mean scores was statistically significant. Higher mean scores were found for perceived religious discrimination in the Italian sample, and the difference in the mean scores was statistically significant. Finally, the mean score for heritage orientation was significantly higher in the Italian than in the Belgian sample, as was the mean score for mainstream orientation, and the difference in the mean score was statistically significant for the heritage and the mainstream scores. A significant effect size was found only for mainstream.

[Table 2 here]

Bivariate correlations are presented in Appendix A.

Multigroup structural equation model

Measurement model

CFA of the existential quest scale showed a one-factor solution for both samples. Partial measurement invariance was obtained in the two samples in the scalar model which imposed equality of the intercepts. To reach partial invariance we relaxed the intercept of the following item: “In my opinion, doubt is important in existential questions”. The intercept resulted higher in the Italian than in the Belgian sample, meaning that, by holding the level of flexibility constant, it was easier for the Italian participants to endorse the item. The results of CFA and measurement invariance of the existential quest scale are presented in Appendix B.

CFA of the four religious dimension scores showed a bi-factor model as the best solution, which includes one main factor of religiosity and two group-factors of bonding and belonging; full measurement invariance was reached. Detailed results on CFA and measurement invariance of the four religious scale scores are given in Appendix C. Because specific factors were beyond the scope of the present study, the model was re-specified as a unidimensional model to measure the general factor in which the specificities of bonding and belonging items were modelled as correlation between residuals.

CFA of the two-factor structure (heritage and mainstream) of the acculturation orientation scale was confirmed in both samples, and full measurement invariance was reached. Detailed results of CFA and measurement invariance of the acculturation scale are given in Appendix D.

CFA of the perceived discrimination scale showed a one-factor solution, and full measurement invariance was reached. Detailed results of CFA and measurement invariance of the perceived discrimination scale are given in Appendix E.

In summary, the results show that the instruments in the two samples had the same meaning and, with negligible exceptions, the same psychometric properties. These results allowed us to investigate the structural invariance in testing the relationships between the variables in the two samples.

Structural model

We estimated a multigroup structural equation model to test whether existential quest was associated with mainstream orientation in second-generation Muslims, while controlling for religiosity, perceived discrimination, sex, educational level, and age. Starting from our hypotheses, we first tested an unconstrained baseline model in which all structural parameters were freely estimated across the samples. Specifically, we tested the relationship between existential quest and mainstream orientation, as well as the relationships between religiosity, perceived discrimination, sex, educational level, and age, and heritage and mainstream orientation. The fit of the baseline model was acceptable: $\chi^2(2053) = 2810.7$, $p < .001$; RMSEA = .041 (90% CI = .037, .044); CFI = .871. Only the CFI was slightly under the cut-off.

We then tested a structural model in which all hypothesized relationships were constrained to be equal across all samples and compared the model to the unconstrained baseline model. Comparison of the goodness of fit of the two models revealed a statistically significant worsening of fit in the constrained model ($\Delta\chi^2(11) = 20.2$, $p = 0.042$). According to the values of the MIs, the equality constraint on the relationship between existential quest and mainstream orientation was removed. The goodness of fit of the revised constrained model was acceptable: $\chi^2(2058) = 2794.3$, $p < .001$; RMSEA = .040 (90% CI = .036, .044); CFI = .875. Only the CFI was slightly under the cut-off. Comparison of the fit of this last constrained model with that of the unconstrained model showed a satisfactory difference in statistics ($\Delta\chi^2(10) = 14.3$, $p = 0.162$), indicating that partial structural invariance was achieved. The standardized coefficients of the partial invariant structural model are shown in Figure 1.

[Figure 1 here]

We found an expected positive relationship between existential quest and mainstream orientation only for the Italian sample. When we controlled for the other variables, religiosity was positively related to heritage orientation in both samples, consistent with the literature. An unexpected positive and significant relationship emerged, however, between religiosity and mainstream orientation in

both samples. Our data partially confirm the relationship between perceived discrimination and acculturation orientation reported in the literature. There was a significant negative relationship between perceived discrimination and mainstream orientation in both samples, but the relationship between perceived discrimination and heritage orientation was not statistically significant in either sample. Regarding the control for sociodemographic variables, we found a positive relationship between participant age and mainstream orientation in both samples. The explained variance was 16.6% for heritage orientation and 12.6% for mainstream orientation in the Italian sample and 19.7% for heritage orientation and 10.6% for mainstream orientation in the Belgian sample.

Discussion

In this study, we investigated acculturation in two samples of second-generation Muslims residing in Italy and Belgium, respectively. We wanted to determine the role flexibility in existential quest plays in the adoption of mainstream culture in second generation who follow Islam and accept their heritage culture. We controlled for religiosity, perceived discrimination, and sociodemographic variables such as sex, educational level, and age. We found partial support for our hypothesis: a positive association between flexibility in existential quest and adoption of mainstream culture only for the Italian sample. In the Italian sample, the tendency of second generation to grapple with existential issues seems to help strengthen their ability to deal with the dual cultural pressures they face and to aid their adoption of mainstream culture. In other words, since being religious does not *per se* imply distancing themselves from the host culture in which the second-generation Muslims grew up, flexibility in existential quest could be an individual aspect that helps second generation to feel they belong to mainstream Italian society while maintaining attached to their heritage culture (Crul et al., 2012; Voas & Fleischmann, 2012).

The acceptance of different cultural sets by second-generation Muslims through flexibility in existential quest appears to be consistent with previous studies and showed a positive effect on individual acceptance of other perspectives, including those related to controversial issues (van

Pachterbeke et al., 2012). For example, high levels of flexibility in existential quest have been shown to enable people to engage in prosocial behaviours, such as reducing prejudice (Uzarevic et al., 2019) or supporting moral behaviour on issues such as abortion or euthanasia (Deak & Saroglou, 2015).

A possible explanation for the difference between the Italian and the Belgian sample and the lack of association between existential quest and mainstream orientation in the Belgian sample could be the characteristics of the context and of the respondents. As regards the context, Belgium policy allows foreign nationals easier access to citizenship than Italy. Consistent with the ecological perspective on acculturation (Birman & Bray, 2017; Ward & Geeraert, 2016), this contextual aspect may facilitate active participation in the life of the country where these individuals grew up and so promote their cultural adaptation.

With regard to respondent characteristics, a plausible explanation is the different ethnic origins of the parents. Many Belgian respondents came from mixed households, i.e., families in which only one parent was from an Islamic country. In contrast, very few participants in the Italian sample grew up in a mixed household. Previous studies have shown that families play a central role in the acculturation of their children and that growing up in a multicultural family has implications for acculturation (Güngör et al., 2011; Portes & Rumbaut, 2001). Growing up in a mixed family may provide earlier exposure to a dual cultural frame of reference, and parents themselves could help children in their process of integration, regardless of the level of flexibility in existential quest. The role of the family context deserves further attention to how acculturation proceeds for new generations, especially in multicultural households (Cerchiaro, 2019).

Regarding the role of religiosity, perceived discrimination, and sociodemographics as control variables, our findings are shared in part by previous studies. In addition to the association between religiosity and heritage orientation in the two samples (Gattino et al., 2016; Güngör et al., 2013), we noted an unexpected positive association between religiosity and mainstream orientation in both. Such a pattern (religiosity with mainstream orientation) can be explained by the role that flexibility in existential quest played in the model. Consistent with previous studies (van Pachterbeke et al.,

2012; Uzarevic et al., 2019), we found a negative correlation between religiosity and flexibility in existential quest, suggesting that second-generation Muslims with high levels of existential flexibility are more likely to accept mainstream culture, regardless of their level of religiosity. In other words, they experiment with new ways of being Muslim in the European context. Existential flexibility may help them accept social practises that are incompatible with a dogmatic, orthodox approach to Islamic practises and traditions. This seems to be coherent with a privately and symbolically lived Islam (Rizzo et al., 2020; Skandrani et al., 2012), which would fit better in the European context than a liberal practise of the religion while respecting regulations and traditions (Phalet et al., 2012). Future research is needed to better explain the pattern of relationships between existential quest, religiosity, and acculturation.

Our findings for the role of perceived discrimination in the acculturation of second-generation Muslims are also partially shared by the literature. We found a negative relationship between perceived discrimination and mainstream culture adoption (Jasinskaja-Lahti et al., 2009; Kunst et al., 2012). In contrast to previous studies according to which Muslim youth respond to discrimination by reinforcing their heritage culture as a coping strategy (Berry et al., 2006; Martinovic & Verkuyten, 2012), our results showed no relationship between perceived discrimination and heritage orientation. In our study, repeated exposure to religious discrimination of second-generation Muslims in both countries generally appears to produce a stronger refusal of the mainstream culture rather than reinforcement of the heritage culture. This model of the relationship between perceived discrimination and acculturation orientation seems consistent with most studies that reported that second-generation Muslims tend not to identify with the national context when they feel discriminated against on ethnic and religious grounds (Saroglou & Mathijssen, 2007; Voas & Fleischmann, 2012). However, future studies are needed to better explain a positive relationship between perceived discrimination and heritage orientation. Indeed, previous studies have shown that second-generation Muslims strengthen their religious identity and attachment to cultural heritage to assert their rights as Muslims (Güngör et al., 2013; Verkuyten & Yildiz, 2007). Empirical studies describe, for example,

the civic and political activation of young Muslims who advocate for institutional recognition of Islam in Europe (Fleischmann et al., 2011).

Limitations and practical implications

This study has several limitations. First, the cross-sectional design precludes a causal understanding of the patterns of the findings. Longitudinal studies of second-generation Muslim are desirable. A second limitation is the homogeneity of the Italian sample in the distribution of age and educational level, which precludes further explanation of their role in acculturation. Age and education may be considered not only as control variables but also as potential moderators in the relationship between acculturation conditions and orientation. Like all new generations, young Muslims shape their identities during the transition from adolescence to adulthood during a period of uncertainty that may affect their level of existential quest and its association with acculturation orientation. A multigroup analysis of groups differing by age and educational level may help to shed light on the structural relationships that emerged in the present study. Third, the sampling method does not allow for generalization of the other findings found here. As the study focused on the religious affiliation of young people with a migrant background, participants were recruited mainly from public and private groups that share the importance of being Muslim, such as attending mosques or Islamic associations. This resulted in an overrepresentation of respondents who reported very high levels of religiosity. It could be interesting to explore what outcomes of acculturation lead second-generation immigrants raised in Muslim families to voluntarily abandon their religious practices and traditions. The inclusion of qualitative studies that allow atheist or agnostic respondents to better explain the reasons for the rejection of Islam could help to understand their acculturation (e.g., Fedi et al., 2019).

Limitations aside, the study provides insights for further research. The findings on the relationship between existential quest and acculturation may offer a starting point for future studies to better explain the role of this relatively new construct in acculturation studies. In addition, religion and

perceived discrimination have been shown to be relevant aspects in the acculturation experience of second-generation Muslims.

Overall, our study offers insights into the new generation of immigrants living in two European countries. Our findings show how they cope with the challenge of growing up between two worlds and the dual cultural pressures they face. The results show that some second-generation Muslims do not want to give up their cultural and religious traditions and practises but rather wish to express them in a social context that is generally reluctant to embrace Islam and its followers (Perocco, 2018). The active role the second generation plays in connecting two cultural and religious worlds deserves support, as it is likely that a major challenge for society in the years ahead will involve greater cultural and religious diversity (Crul et al., 2012; van Heelsum & Koomen, 2016). This is also reflected in demographic projections that predict continued growth of the Islamic population in the near future (Pew Research Center, 2017).

From a practical perspective, the study offers suggestions for the inclusion of the new Muslim generations in Europe by government policymakers and religious and cultural associations. The dual cultural affiliations of second-generation Muslims are an opportunity for national governments and the European Union to implement policies in favour of cultural and religious pluralism. Such an inclusive policy must occur through two forms of recognition so that young immigrants can perceive themselves as part of the larger society (Honneth, 1995). While legal recognition is a legislative form of recognition that ensures immigrants their rights, social recognition is a more complex form based on the recognition of immigrants' individual characteristics. In contemporary societies, stigmatisation as a foreigner or terrorist based on ethnicity makes it very difficult for these new generations to feel socially recognised based on their individual qualities (Perocco, 2018; van Heelsum & Koomen, 2016).

Moreover, lack of recognition can have consequences in daily life when looking for work or managing workplace relationships. To overcome such problems, these young people need to be socially recognised by the locals. This form of recognition can be fostered through educational

programmes that promote a positive valorisation of cultural pluralism that begins in childhood. Schools are an important context in which intercultural contact and acculturation develop (Schachner et al., 2017). School curricula that endorse cultural pluralism are the first step in reducing the tension associated with racial and religious discrimination and in improving intercultural relations and psychological well-being in young immigrants. In addition, educational programmes should foster among young immigrants and their native-born peers an attitude of openness toward other perspectives and social recognition of the individual qualities of others. Promoting flexibility in finding one's own existence can help young students to reflect on issues from different cultural perspectives. As Rumianowska (2020, p. 263) pointed out, the relevance of reflecting on existential issues in school “inspire individuals to become themselves, to become more reflexive, self-aware, emphatic and more human”.

Supplementary online materials

Appendix A. *Bivariate correlations of scale scores and sociodemographic variables*

Appendix B. *CFA and measurement invariance of existential quest scale in the Italian and the Belgian sample*

Appendix C. *CFA and measurement invariance of the Four Basic Dimensions of Religiousness Scale (4BDRS) in the Italian and the Belgian sample*

Appendix D. *CFA and measurement invariance of Vancouver Index of Acculturation (VIA) in the Italian and the Belgian sample*

Appendix E. *CFA and measurement invariance of perceived religious discrimination in the Italian and the Belgian sample*

References

- Alietti, A., & Padovan, D. (2018). *Islamophobia in Italy. National Report*. E. Bayraklı, & F. Hafez, European Islamophobia Report 2018, Istanbul, SETA. Retrieved from <http://www.islamophobiaeurope.com/wp-content/uploads/2019/09/ITALY.pdf>
- Allievi, S. (2014). Immigration, religious diversity and recognition of differences: The Italian way to multiculturalism. *Identities*, 21(6), 724–737. <https://doi.org/10.1080/1070289X.2013.82862>
- Asparouhov, T., & Muthén, B. (2010). Simple second order chi-square correction. *Mplus technical appendix*, 1–8. <http://www.statmodel.com/examples/webnote.shtml>
- Berry, J. W. (1997). Immigration, Acculturation, and Adaptation. *Applied Psychology*, 46(1), 5–34. <https://doi.org/10.1111/j.1464-0597.1997.tb01087.x>
- Berry, J. W., Phinney, J. S., Sam, D. L., & Vedder, P. (2006). Immigrant Youth: Acculturation, Identity, and Adaptation. *Applied Psychology: An International Review*, 55(3), 303–332. <https://doi.org/10.1111/j.1464-0597.2006.00256.x>
- Berry, J. W., & Sabatier, C. (2010). Acculturation, discrimination, and adaptation among second generation immigrant youth in Montreal and Paris. *International Journal of Intercultural Relations*, 34(3), 191–207. <https://doi.org/10.1016/j.ijintrel.2009.11.007>
- Birman, D., & Bray, E. (2017). Immigration, migration, and community psychology. In M. A. Bond, I. Serrano-García, C. B. Keys, & M. Shinn (Eds.), *APA handbook of community psychology: Methods for community research and action for diverse groups and issues* (pp. 313–326). American Psychological Association. <https://doi.org/10.1037/14954-018>
- Brown, R., & Zagefka, H. (2011). Chapter three—The Dynamics of Acculturation: An Intergroup Perspective. In J. M. Olson & M. P. Zanna (A c. Di), *Advances in Experimental Social Psychology* (Vol. 44, pagg. 129–184). Academic Press. <https://doi.org/10.1016/B978-0-12-385522-0.00003-2>
- Browne, M. W., & Cudeck, R. (1993). Alternative ways of assessing model fit. In: Bollen KA, Long JS, editors. Testing structural equation models. *Beverly Hills, CA: Sage*, 111–135.

[https://www.scirp.org/\(S\(i43dyn45teexjx455qlt3d2q\)\)/reference/ReferencesPapers.aspx?ReferenceID=213477](https://www.scirp.org/(S(i43dyn45teexjx455qlt3d2q))/reference/ReferencesPapers.aspx?ReferenceID=213477)

- Bowen, N. K., & Masa, R. D. (2015). Conducting Measurement Invariance Tests with Ordinal Data: A Guide for Social Work Researchers. *Journal of the Society for Social Work and Research*, 6(2), 229–249. <https://doi.org/10.1086/681607>
- Cerchiaro, F. (2019). ‘In the name of the children’: Mixed couples’ parenting analysed through their naming practices. *Identities*, 26(1), 51–68. <https://doi.org/10.1080/1070289X.2017.1353314>
- Chen, F. F. (2007). Sensitivity of Goodness of Fit Indexes to Lack of Measurement Invariance. *Structural Equation Modeling: A Multidisciplinary Journal*, 14(3), 464–504. <https://doi.org/10.1080/10705510701301834>
- Cohen, J. (1988). Set Correlation and Contingency Tables. *Applied Psychological Measurement*, 12(4), 425–434. <https://doi.org/10.1177/014662168801200410>
- Crul, M. R. J., Schneider, J., & Lelie, F. (2012). The European Second Generation Compared. Does the Integration Context Matter? In O. Sciences, N. Institute, & O. & P. of O. in Society (OPOS) (Trad.), *IMISCOE Research*. Amsterdam University Press. <https://research.vu.nl/en/publications/030ed0c6-0c2d-4ffc-aeca-10f430e1875b>
- Deak, C., & Saroglou, V. (2015). Opposing Abortion, Gay Adoption, Euthanasia, and Suicide. *Archive for the Psychology of Religion*, 37(3). https://brill.com/view/journals/arp/37/3/article-p267_3.xml
- Easat-Daas, A. (2018). *Islamophobia in Belgium. National Report*. E. Bayraklı, & F. Hafez, European Islamophobia Report 2018, Istanbul, SETA. Retrieved from <http://www.islamophobiaeurope.com/wp-content/uploads/2018/04/Belgium.pdf>
- Fedi, A., Mannarini, T., Brodsky, A., Rochira, A., Buckingham, S., Emery, L., Godsay, S., Scheibler, J., Miglietta, A., & Gattino, S. (2019). Acculturation in the discourse of immigrants and receiving community members: Results from a cross-national qualitative study. *American Journal of Orthopsychiatry*, 89(1), 1–15. <https://doi.org/10.1037/ort0000325>

- Fleischmann, F., & Phalet, K. (2012). Integration and religiosity among the Turkish second generation in Europe: A comparative analysis across four capital cities. *Ethnic and Racial Studies*, 35(2), 320–341. <https://doi.org/10.1080/01419870.2011.579138>
- Fleischmann, F., Phalet, K., & Klein, O. (2011). Religious identification and politicization in the face of discrimination: Support for political Islam and political action among the Turkish and Moroccan second generation in Europe. *British Journal of Social Psychology*, 50(4), 628–648. <https://doi.org/10.1111/j.2044-8309.2011.02072.x>
- Gattino, S. & Miglietta, A. (2013). The looking glass: From the citizen to the migrant in Italians' naïve imagery. *Journal of Language and Politics*, 12(2), 272–294. <https://doi.org/10.1075/jlp.12.2.06gat>
- Gattino, S., Miglietta, A., Rizzo, M., & Testa, S. (2016). Muslim Acculturation in a Catholic Country: Its Associations with Religious Identity, Beliefs, and Practices. *Journal of Cross-Cultural Psychology*, 47(9), 1194–1200. <https://doi.org/10.1177/0022022116661244>
- Giuliani, C., Tagliabue, S., & Regalia, C. (2018). Psychological well-being, multiple identities, and discrimination among first and second generation immigrant Muslims. *Europe's journal of psychology*, 14(1), 66–87. <https://doi.org/10.5964/ejop.v14i1.1434>
- Güngör & Bornstein, (2009). Gender, Development, Values, Adaptation, and Discrimination in Acculturating Adolescents: The Case of Turk Heritage Youth Born and Living in Belgium. *Sex Roles*, 60(7), 537–548. <https://doi.org/10.1007/s11199-008-9531-2>
- Güngör, D., Fleischmann, F., & Phalet, K. (2011). Religious Identification, Beliefs, and Practices Among Turkish Belgian and Moroccan Belgian Muslims: Intergenerational Continuity and Acculturative Change. *Journal of Cross-Cultural Psychology*, 42(8), 1356–1374. <https://doi.org/10.1177/0022022111412342>
- Güngör, D., Fleischmann, F., Phalet, K., & Maliepaard, M. (2013). Contextualizing religious acculturation: Cross-cultural perspectives on Muslim minorities in Western Europe. *European Psychologist*, 18(3), 203–214. <https://doi.org/10.1027/1016-9040/a000162>

- Honneth, A. (1995). *The Struggle for Recognition*. Cambridge, United Kingdom: Polity Press.
- Hu, L., & Bentler, P. M. (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1–55. <https://doi.org/10.1080/10705519909540118>
- Italian National Institute of Statistics (ISTAT). (2018). *Immigration statistical report: International and internal migration*. Retrieved from <https://www.istat.it/en/archive/immigrants>.
- 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*, 58(1), 105–128. <https://doi.org/10.1111/j.1464-0597.2008.00384.x>
- Jost, J. T., Glaser, J., Kruglanski, A. W., & Sulloway, F. J. (2003). Political conservatism as motivated social cognition. *Psychological Bulletin*, 129(3), 339–375. <https://doi.org/10.1037/0033-2909.129.3.339>
- Kashima, E. S., & Loh, E. (2006). International students' acculturation: Effects of international, conational, and local ties and need for closure. *International Journal of Intercultural Relations*, 30(4), 471–485. <https://doi.org/10.1016/j.ijintrel.2005.12.003>
- Kosic, A., Kruglanski, A. W., Pierro, A., & Mannetti, L. (2004). The Social Cognition of Immigrants' Acculturation: Effects of the Need for Closure and the Reference Group at Entry. *Journal of Personality and Social Psychology*, 86(6), 796–813. <https://doi.org/10.1037/0022-3514.86.6.796>
- Kunst, J. R., Tajamal, H., Sam, D. L., & Ulleberg, P. (2012). Coping with Islamophobia: The effects of religious stigma on Muslim minorities' identity formation. *International Journal of Intercultural Relations*, 36(4), 518–532. <https://doi.org/10.1016/j.ijintrel.2011.12.014>
- Little, R. J. A. (1998). A Test of Missing Completely at Random for Multivariate Data with Missing Values. *Journal of the American Statistical Association*, 83(404), 1198–1202. <https://doi.org/10.1080/01621459.1988.10478722>
- Maes, M., Stevens, G. W. J. M., & Verkuyten, M. (2014). Perceived Ethnic Discrimination and

- Problem Behaviors in Muslim Immigrant Early Adolescents: Moderating Effects of Ethnic, Religious, and National Group Identification. *The Journal of Early Adolescence*, 34(7), 940–966. <https://doi.org/10.1177/0272431613514629>
- Maliepaard, M., & Lubbers, M. (2013). Parental Religious Transmission after Migration: The Case of Dutch Muslims. *Journal of Ethnic and Migration Studies*, 39(3), 425–442. <https://doi.org/10.1080/1369183X.2013.733862>
- Martinovic, B., & Verkuyten, M. (2012). Host national and religious identification among Turkish Muslims in Western Europe: The role of ingroup norms, perceived discrimination and value incompatibility. *European Journal of Social Psychology*, 42(7), 893–903. <https://doi.org/10.1002/ejsp.1900>
- Muthén, L., & Muthén, B. Mplus Version 8 User’s Guide. 1998–2017. *Statistical analysis with latent variables*. https://www.statmodel.com/download/usersguide/MplusUserGuideVer_8.pdf
- Perocco, F. (2018). Anti-migrant Islamophobia in Europe. Social roots, mechanisms and actors. *REMHU: Revista Interdisciplinar da Mobilidade Humana*, 26, 25–40. <https://doi.org/10.1590/1980-85852503880005303>
- Pew Research Center. (2017). “Europe’s Growing Muslim Population”. Retrieved from <https://www.pewforum.org/2017/11/29/europes-growing-muslim-population/>
- Phalet, K., Fleischmann, F., & Hillekens, J. (2018). Religious identity and acculturation of immigrant minority youth: Toward a contextual and developmental approach. *European Psychologist*, 23(1), 32–43. <https://doi.org/10.1027/1016-9040/a000309>
- Phalet, K., Fleischmann, F., & Stojčić, S. (2012). Ways of “being Muslim”: Religious identities of second-generation Turks. In M. Crul, J. Schneider, & F. Lelie (Eds.), *The European second generation compared: Does the integration context matter?* (pp. 341–373). Amsterdam, Netherlands: Amsterdam University Press. Retrieved from <https://www.jstor.org/stable/pdf/j.ctt46mz12.12.pdf>
- Portes, A., & Rumbaut, R. G. (2001). *Legacies: The story of the immigrant second generation*. Univ

of California Press.

- Reniers, G. (1999). On the History and Selectivity of Turkish and Moroccan Migration to Belgium. *International Migration*, 37(4), 679–713. <https://doi.org/10.1111/1468-2435.00090>
- Rhemtulla, M., Brosseau-Liard, P., & Savalei, V. (2012). When can categorical variables be treated as continuous? A comparison of robust continuous and categorical SEM estimation methods under suboptimal conditions. *Psychological methods*, 17(3), 354–373. <https://doi.org/10.1037/a0029315>
- Rizzo, M., Miglietta, A., Gattino, S., & Fedi, A. (2020). I feel Moroccan, I feel Italian, and I feel Muslim: Second generation Moroccans and identity negotiation between religion and community belonging. *International Journal of Intercultural Relations*, 77, 151–159. <https://doi.org/10.1016/j.ijintrel.2020.05.009>
- Rizzo, M., Testa, S., Gattino, S., & Miglietta, A. (2019). Flexibility in Existential Beliefs and Worldview: Testing Measurement Invariance and Factorial Structure of the Existential Quest Scale in an Italian Sample of Adults. *Frontiers in Psychology*, 10, 2134. <https://doi.org/10.3389/fpsyg.2019.02134>
- Rumbaut, R. G. (2004). Ages, Life Stages, and Generational Cohorts: Decomposing the Immigrant First and Second Generations in the United States¹. *International Migration Review*, 38(3), 1160–1205. <https://doi.org/10.1111/j.1747-7379.2004.tb00232.x>
- Rumianowska, A. (2020). Existential perspectives on education. *Educational Philosophy and Theory*, 52(3), 261–269. <https://doi.org/10.1080/00131857.2019.1633915>
- Ryder, A. G., Alden, L. E., & Paulhus, D. L. (2000). Is acculturation unidimensional or bidimensional? A head-to-head comparison in the prediction of personality, self-identity, and adjustment. *Journal of personality and social psychology*, 79(1), 49. <https://doi.org/10.1037/0022-3514.79.1.49>
- Sabatier, C., & Berry, J. W. (2008). The role of family acculturation, parental style, and perceived discrimination in the adaptation of second-generation immigrant youth in France and Canada.

European Journal of Developmental Psychology, 5(2), 159–185. <https://doi.org/10.1080/17405620701608739>

Saroglou, V. (2009). Religiousness as a Cultural Adaptation of Basic Traits: A Five-Factor Model Perspective. *Personality and Social Psychology Review*, 14(1), 108–125. <https://doi.org/10.1177/1088868309352322>

Saroglou, V. (2011). Believing, Bonding, Behaving, and Belonging: The Big Four Religious Dimensions and Cultural Variation. *Journal of Cross-Cultural Psychology*, 42(8), 1320–1340. <https://doi.org/10.1177/0022022111412267>

Saroglou, V., Clobert, M., Cohen, A. B., Johnson, K. A., Ladd, K. L., Brandt, P. Y., ... & Valladares, J. T. (2020). Fundamentalism as dogmatic belief, moral rigorism, and strong groupness across cultures: Dimensionality, underlying components, and related interreligious prejudice. *Psychology of Religion and Spirituality*. Advance online publication. <https://doi.org/10.1037/rel0000339>

Saroglou, V., & Mathijssen, F. (2007). Religion, multiple identities, and acculturation: A study of Muslim immigrants in Belgium. *Archive for the Psychology of Religion*, 29(1), 177–198. <https://doi.org/10.1163/008467207X188757>

Schachner, M. K., He, J., Heizmann, B., & van de Vijver, F. J. R. (2017). Acculturation and School Adjustment of Immigrant Youth in Six European Countries: Findings from the Programme for International Student Assessment (PISA). *Frontiers in Psychology*, 8, 649. <https://doi.org/10.3389/fpsyg.2017.00649>

Schermelleh-Engel, K., Moosbrugger, H., & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of psychological research online*, 8(2), 23–74. Retrieved from <http://130.203.136.95/viewdoc/summary?doi=10.1.1.506.1827>

Skandrani, S. M., Taïeb, O., & Moro, M. R. (2012). Transnational practices, intergenerational relations and identity construction in a migratory context: The case of young women of

- Maghrebine origin in France. *Culture & Psychology*, 18(1), 76–98.
<https://doi.org/10.1177/1354067X11427462>
- Spiegler, O., Wölfer, R., & Hewstone, M. (2019). Dual Identity Development and Adjustment in Muslim Minority Adolescents. *Journal of Youth and Adolescence*, 48(10), 1924–1937.
<https://doi.org/10.1007/s10964-019-01117-9>
- Statistics Belgium (STATBEL). (2020). *Population by migration. Brussels, Belgium: General Directorate of Statistics and Economic Information*.
<https://statbel.fgov.be/en/themes/population/migration>
- Tadmor, C. T., Tetlock, P. E., & Peng, K. (2009). Acculturation Strategies and Integrative Complexity: The Cognitive Implications of Biculturalism. *Journal of Cross-Cultural Psychology*, 40(1), 105–139. <https://doi.org/10.1177/0022022108326279>
- Testa, S., Doucerain, M. M., Miglietta, A., Jurcik, T., Ryder, A. G., & Gattino, S. (2019). The Vancouver Index of Acculturation (VIA): New evidence on dimensionality and measurement invariance across two cultural settings. *International Journal of Intercultural Relations*, 71, 60–71. <https://doi.org/10.1016/j.ijintrel.2019.04.001>
- Uzarevic, F., Saroglou, V., & Muñoz-García, A. (2019). Are atheists unprejudiced? Forms of nonbelief and prejudice toward antiliberal and mainstream religious groups. *Psychology of Religion and Spirituality*. Advance online publication. <https://doi.org/10.1037/rel0000247>
- 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(1), 4–70. <https://doi.org/10.1177/109442810031002>
- van Heelsum, A., & Koomen, M. (2016). Ascription and identity. Differences between first- and second-generation Moroccans in the way ascription influences religious, national and ethnic group identification. *Journal of Ethnic and Migration Studies*, 42(2), 277–291.
<https://doi.org/10.1080/1369183X.2015.1102044>
- van Pachterbeke, M., Keller, J., & Saroglou, V. (2012). Flexibility in existential beliefs and

worldviews: Introducing and measuring existential quest. *Journal of Individual Differences*, 33(1), 2–16. <https://doi.org/10.1027/1614-0001/a000056>

Verkuyten, M., & Yildiz, A. A. (2007). National (Dis)identification and Ethnic and Religious Identity: A Study Among Turkish-Dutch Muslims. *Personality and Social Psychology Bulletin*, 33(10), 1448–1462. <https://doi.org/10.1177/0146167207304276>

Voas, D., & Fleischmann, F. (2012). Islam Moves West: Religious Change in the First and Second Generations. *Annual Review of Sociology*, 38(1), 525–545. <https://doi.org/10.1146/annurev-soc-071811-145455>

Ward, C., & Geeraert, N. (2016). Advancing acculturation theory and research: The acculturation process in its ecological context. *Current Opinion in Psychology*, 8, 98–104. <https://doi.org/10.1016/j.copsyc.2015.09.021>

Webster, D. M., & Kruglanski, A. W. (1994). Individual differences in need for cognitive closure. *Journal of Personality and Social Psychology*, 67(6), 1049–1062. <https://doi.org/10.1037/0022-3514.67.6.1049>

Table 1*Sample Characteristics*

<i>Sociodemographic variables</i>	Italy (N = 240)	Belgium (N = 209)
Mean age (SD)	22.1 (4.0)	30.9 (10.0)
range	18-50	18-62
Sex - %		
Female	71.7	67.0
Male	28.3	33.0
Employment status - %		
Student	77.9	33.0
Employed	17.5	57.9
Unemployed	4.6	9.1
Education level - %		
Junior high school	7.1	1.4
High school	57.9	21.5
Bachelor's degree	30.8	49.3
Master's degree or higher	4.2	27.8
National citizenship - %	82.1	93.3
<i>Second Generation</i>		
Second generation - %		
born in an EU country	60.4	87.1
arrived by age 6	39.6	12.9
Parents' country of origin		
Father		
	Morocco (75.4)	Morocco (50.7)
	Egypt (9.2)	Algeria (12.7)
	Tunisia (7.9)	Belgium (11.5)
	Italy (2.9)	Turkey (6.7)
	Other (4.6)	Other (18.4)
Mother		
	Morocco (77.5)	Morocco (46.9)
	Egypt (7.9)	Belgium (22.0)
	Tunisia (5.8)	Algeria (7.7)
	Italy (3.3)	Turkey (6.2)

	Other (5.4)	Other (17.2)
Same country of origin	Morocco (72.0)	Morocco (35.4)
	Egypt (7.9)	Algeria (7.2)
	Tunisia (5.9)	Turkey (5.7)
Mixed origin ^a		
	Italy/Morocco (5.4)	Belgium/Morocco (22.5)
	Italy/Tunisia (0.8)	Belgium/Algeria (2.4)

Note. ^a = Percentage of respondents with one parent of immigrant origin.

Table 2*Means, standard deviation (SD), mean difference between the samples.*

	Min	Max	Mean Italy (SD)	Mean Belgium (SD)	t-test Italy/Belgium	effect size (d)
Existential Quest	1.00	7.00	4.83 (0.94)	4.11 (1.31)	t(447) = -6.69, p < .001	.06
Believing	1.00	7.00	5.78 (1.42)	6.23 (1.32)	t(447) = 3.50, p < .001	.04
Bonding	1.00	7.00	5.67 (1.30)	5.90 (1.28)	t(447) = 1.87, p > .05	.01
Behaving	1.00	7.00	5.85 (1.40)	6.42 (1.07)	t(447) = 4.81, p < .001	.04
Belonging	1.00	7.00	5.66 (1.46)	5.51 (1.68)	t(447) = -0.96, p > .05	.01
Perceived discrimination	1.00	5.00	2.36 (1.11)	2.96 (1.27)	t(447) = 5.37, p < .001	.19
Heritage	1.00	5.00	3.82 (0.58)	3.68 (0.59)	t(447) = -2.60, p < .05	.02
Mainstream	1.00	5.00	3.78 (0.45)	3.45 (0.52)	t(447) = -7.16, p < .001	.67

Appendix A

Bivariate correlations of scale scores and sociodemographic variables

	1	2	3	4	5	6	7	8	9	10
1.Existential Quest	-	-.35**	-.31**	-.27**	-.29**	-.35**	.04	-.15*	.20*	.07
2.Religiosity	-.25**	-	.92**	.84**	.92**	.83**	.08	.33**	-.01	-.03
3.Believing	-.23**	.86**	-	.74**	.84**	.66**	.13	.24**	.02	-.05
4.Bonding	-.16*	.86**	.63**	-	.70**	.53**	.09	.32**	.05	.06
5.Behaving	-.20*	.84**	.76**	.70**	-	.69**	.06	.28**	-.06	-.08
6.Belonging	-.25**	.83**	.56**	.62**	.51**	-	-.002	.31**	-.05	-.02
7.Perceived discrimination	-.06	.11	.01	.13	.08	.13	-	.09	-.02	.14*
8.Heritage	-.05	.36**	.27**	.32**	.30**	.33**	.07	-	.12	.03
9.Mainstream	.05	-.08	-.04	-.09	-.02	-.08	-.21*	.32**	-	-.05
10.Gender	.01	.01	.03	-.05	.06	-.001	.04	-.09	.01	-
11.Age	-.18*	-.20*	-.09	-.24**	-.15*	-.19*	-.10	-.06	.01	-
12.Education	.19*	-.05	-.11	-.03	-.03	-.02	-.07	-.003	.24**	-

Note. Italian sample (upper triangle); Belgian sample (lower triangle); Italy N = 240; Belgium N = 209. * $p < .05$; ** $p < .001$

Appendix B

CFA and measurement invariance of existential quest scale in the Italian and the Belgian sample

Factor loadings were freely estimated, and the variance of the latent variable was fixed at 1.0. The test of the 8-item model had an unsatisfactory fit to the data for Italy ($\chi^2(20) = 67.7, p < .001$; RMSEA = .100 (90% CI = .074, .126); CFI = .816; SRMR = .068) and for Belgium ($\chi^2(20) = 68.2, p < .001$; RMSEA = .107 (90% CI = .080, .136); CFI = .864; SRMR = .062). The Italian and the Belgian models were re-tested with the support of the modification indexes (MIs), and the residuals of one pair of items was correlated (“Being able to doubt about one’s convictions and to reappraise them is a good quality” with “In my opinion, doubt is important in existential questions”). The fit of these models was satisfactory for the Italian ($\chi^2(19) = 37.9, p < .05$; RMSEA = .064 (90% CI = .034, .094); CFI = .927; SRMR = .054), and the Belgian sample ($\chi^2(19) = 30.8, p < .05$; RMSEA = .054 (90% CI = .010, .088); CFI = .967; SRMR = .047). The standardized loadings in the Italian sample ranged from .33 to .76 and from .42 to .81 in the Belgian sample. The ω coefficient for the reliability of the existential quest scale was .65 for the Italian and .79 for the Belgian sample.

Table 1 presents the fit of the models for testing measurement invariance across the Italian and the Belgian sample. Comparison between the scalar model, which imposed equality of the intercepts, and the less restricted metric model returned several unsatisfactory results. Inspection of the MIs revealed that the equality constrained on the intercepts of the item “In my opinion, doubt is important in existential questions” was removed. The intercept of the item relaxed for the reach of a partial invariance was higher in the Italian than in the Belgian sample. It is plausible that such a difference on the intercepts may stem from the composition of the two groups: the Italian sample was younger, and most were university students, whereas the Belgian sample was older and already in employment. It is plausible that with advancing age and greater social responsibilities people will seek more certainties in their life. Conversely, being young and attending university may imply acceptance of doubt as part of this phase of life, in which identity and social role are being shaped. These results

are in line with the Italian study that highlighted how a readiness to engage in existential questions might have more implications for the young than for the old (Rizzo et al., 2019).

Table 1

	χ^2	df	RMSEA	CFI	SRMR	$\Delta \chi^2$	Δ df	Δ RMSEA	Δ CFI	Δ SRMR
Configural invariance _a	67.497*	38	.059	.952	.051	-	-	-	-	-
Metric invariance _a	71.300*	45	.051	.958	.052	2.270	7	-.008	.006	.001
Scalar invariance _a	92.497*	52	.059	.935	.063	26.374*	7	.008	-.023	.011
Scalar Invariance _{ab}	79.383*	51	.050	.954	.057	8.827	6	-.001	-.004	.005
Invariant uniquenesses _{ab}	92.461*	58	.051	.944	.064	15.461*	7	.001	-.010	.007

Measurement Invariance of Existential Quest Scale

Note. RMSEA, root mean square error of approximation; CFI, comparative fit index; SRMR, standardized root mean square residual.

a= The error covariance between items 3 and 4 was constrained to be equal across groups;

b = Free intercept on Item 4: “In my opinion, doubt is important in existential questions”

**p* < .05

Appendix C

CFA and measurement invariance of the Four Basic Dimensions of Religiousness Scale (4BDRS) in the Italian and the Belgian sample

A first model with four-factors was estimated to measure the four basic religious dimensions (believing, behaving, bonding, belonging). The fit of the model was excellent in the Italian ($\chi^2(48) = 58.0, p > .05$; RMSEA = .029 (90% CI = .000, .054); CFI = .990; SRMR = .028.) and the Belgian sample ($\chi^2(48) = 71.2, p < .05$; RMSEA = .048 (90% CI = .021, .070); CFI = .956; SRMR = .049.) sample. However, the standardized values of the covariances between the four latent factors showed a very high relationship between the factors of believing and behaving (.92 for the Italian and .89 for the Belgian sample). A second model was specified in which the twelve items loaded on a single latent factor. The fit of the model was unsatisfactory in the Italian ($\chi^2(54) = 180.0, p < .001$; RMSEA = .099 (90% CI = .083, .115); CFI = .874; SRMR = .062) and the Belgian sample ($\chi^2(54) = 151.6, p < .001$; RMSEA = .093 (90% CI = .076, .111); CFI = .813; SRMR = .079). The third model, in which the four factors loaded on a second-order factor, showed problematic functioning on the first-order factor of believing in the Italian sample, as demonstrated by its negative residual variance on the second-order factor of religiosity. In the Belgium sample the fit of the model was good ($\chi^2(50) = 79.7, p < .05$; RMSEA = .053 (90% CI = .030, .075); CFI = .943; SRMR = .060), but the factor loadings of the first-order latent factors showed very high values for the dimensions believing (.92) and the behaving (.94) on the main factor of religiosity.

For these reasons, a bi-factor model was evaluated with two group factors corresponding to the bonding and belonging dimensions and a general religiosity factor. In this model, the items of the behaving and believing subscales loaded only on the general factor because of their very high loadings in the second order factor in the previous model. The fit of the bi-factor model was excellent in the Italian sample ($\chi^2(48) = 65.6, p < .05$; RMSEA = .039 (90% CI = .006, .061); CFI = .982; SRMR = .028) and good in the Belgian sample ($\chi^2(48) = 79.3, p < .05$; RMSEA = .056 (90% CI = .033, .077); CFI = .940; SRMR = .056.). The standardized loadings of the items were all acceptable, though one

item of the bonding subscale reported a lower, albeit acceptable, value compared to the other loadings (.25 in the Italian and .19 in the Belgian sample). The lack of behaving and believing as group factors could be due to the meaning that second generation Muslims give to religion. They follow the five pillars of Islam and have moral behaviours that guide their daily lives (Hodge, 2002). In this sense, it is likely that their way of being Muslim includes both moral and cognitive religious dimensions. Full measurement invariance was obtained between the two samples. The ω coefficient of the general factor of religiosity was .96 for the Italian and .94 for the Belgian sample, while the ω for belonging was .88 in the Italian and .87 in the Belgian sample, and for bonding .82 in the Italian and .79 in the Belgian sample.

Table 2 presents the fit of the models for testing the measurement invariance across the Italian and the Belgian sample. The fit of all the models from the least constrained (the configural model) to the most restricted (the uniqueness model) was excellent.

Table 2

Measurement Invariance of Four Basic Dimensions of Religiosity Scale

	χ^2	df	RMSEA	CFI	SRMR	$\Delta \chi^2$	Δ df	Δ RMSEA	Δ CFI	Δ SRMR
Configural invariance	146.543*	96	.048	.965	.043	-	-	-	-	-
Metric invariance	166.268*	111	.047	.961	.074	23.806	15	-.001	-.004	.031
Scalar invariance	177.873*	120	.046	.959	.076	14.122	9	-.001	-.002	.002
Invariant uniquenesses	189.384*	132	.044	.960	.080	16.755	12	-.002	.001	.004

Note. RMSEA, root mean square error of approximation; CFI, comparative fit index; SRMR, standardized root mean square residual. * $p < .05$

Appendix D

CFA and measurement invariance of Vancouver Index of Acculturation (VIA) in the Italian and the Belgian sample

The loading of one item for each latent factor was set to 1.0 to fix the scale of the latent variables. The fit of the model was unsatisfactory in the Italian ($\chi^2 (169) = 917.5, p < .05$; RMSEA = .136 (90% CI = .127, .145); CFI = .717; WRMR = 2.00) and the Belgian sample ($\chi^2 (169) = 829.0, p < .05$; RMSEA = .137 (90% CI = .127, .146); CFI = .713; WRMR = 1.96). Although the standardized loadings were all acceptable on the two latent dimensions of heritage and mainstream, the badness of fit signalled the need for modification. Regarding the MIs and item formulation, the model was re-tested with several new parameters. By means of a step-by-step process, the following items of the mainstream subscale were allowed to load also on the heritage orientation factor in the Italian and the Belgian sample: “I often participate in mainstream Italian/*Belgian* cultural tradition”, “I would be willing to marry a typical *Italian/Belgian* person”, and “I often behave in ways that are typically *Italian/Belgian*”. Furthermore, five residual correlations in the Italian and six in the Belgian sample were estimated in accordance with the MIs and the item contents. The fit of this last model was good in the Italian ($\chi^2 (161) = 401.6, p < .05$; RMSEA = .079 (90% CI = .069, .089); CFI = .909; WRMR = 1.20) and the Belgian sample ($\chi^2 (160) = 345.1, p < .05$; RMSEA = .074 (90% CI = .064, .085); CFI = .919; WRMR = 1.12). The standardized loadings on the two acculturation orientation factors were all satisfactory and ranged from .44 to .80 in the Italian and .43 to .73 in the Belgian sample.

The positive correlation between the two latent factors of acculturation in both samples suggests that the two acculturation orientations were not completely independent (for similar results, see Jurcik et al., 2013). This could have stemmed from item content: there was a stronger correlation between the heritage and the mainstream subscales than between other domains such as cultural values and tradition for the items investigating social domains of acculturation (e.g., friendship, entertainment, humour, social activities). Since all respondents were second generation who grew up in a Western

society, they may not have clearly distinguished their social relationships since they form their relationships with others in a kind of cultural pluralism (Alvarez Valdivia et al., 2015).

The ω coefficient for the heritage subscale was .85 in the Italian and .86 in the Belgian sample, while for the mainstream subscale it was .77 in the Italian and .78 in the Belgian sample.

The test of measurement invariance with ordinal variables was estimated by comparing the least restricted model (configural) with a model that constrained both the factor loadings and the thresholds (scalar). Full measurement invariance was reached because all the fit criteria were satisfactory (Table 3).

Table 3

	χ^2	df	RMSEA	CFI	$\Delta \chi^2$	Δ df	Δ RMSEA	Δ CFI
Configural invariance	743.622*	321	0.077	0.914	-	-	-	-
Scalar invariance	870.563*	405	0.072	0.905	185.761	84	-.005	-.009

Measurement Invariance of Vancouver Index of Acculturation

Note. RMSEA, root mean square error of approximation; CFI, comparative fit index; * $p < .05$

Appendix E

CFA and measurement invariance of perceived religious discrimination in the Italian and the Belgian sample

For the three items measuring perceived personal religious discrimination in the workplace, public space, and daily life a one-factor model was estimated by fixing one loading at 1 to set the scale of the latent variables. The model was exactly identified because it contained the same number of equations (or independent data) and free parameters and so perfectly fitted the data. The standardized values of the factor loadings ranged in the Italian and the Belgian sample from .78 to .93. The ω coefficient was .92 in the Italian sample and .89 in the Belgian sample. The measurement invariance was tested from the least constrained model (configural) to the most restrained model (scalar), which constrained both the factor loadings and the thresholds. The results showed a full measurement invariance of the perceived religious discrimination scale across the Italian and the Belgian sample (Table 4).

Table 4

	χ^2	df	RMSEA	CFI	$\Delta \chi^2$	Δ df	Δ RMSEA	Δ CFI
Configural invariance	.000*	0	.000	1.000	-	-	-	-
Scalar invariance	22.275*	10	.074	.995	22.660*	10	.074	-.005

Measurement Invariance of the perceived personal religious discrimination Scale

Note. RMSEA, root mean square error of approximation; CFI, comparative fit index; * $p < .05$

References

- Alvarez Valdivia, I. M., Schneider, B. H., & Carrasco, C. V. (2015). School Adjustment and Friendship Quality of First- and Second-Generation Adolescent Immigrants to Spain as a Function of Acculturation. *Journal of Adolescent Research, 31*(6), 750–777. <https://doi.org/10.1177/0743558415592179>
- Hodge, D. R. (2002). Working with Muslim Youths: Understanding the Values and Beliefs of Islamic Discourse. *Children & Schools, 24*(1), 6–20. <https://doi.org/10.1093/cs/24.1.6>
- Jurcik, T., Ahmed, R., Yakobov, E., Solopieieva-Jurcikova, I., & Ryder, A. G. (2013). Understanding the Role of the Ethnic Density Effect: Issues of Acculturation, Discrimination and Social Support. *Journal of Community Psychology, 41*(6), 662–678. <https://doi.org/10.1002/jcop.21563>
- Rizzo, M., Testa, S., Gattino, S., & Miglietta, A. (2019). Flexibility in Existential Beliefs and Worldview: Testing Measurement Invariance and Factorial Structure of the Existential Quest Scale in an Italian Sample of Adults. *Frontiers in Psychology, 10*, 2134. <https://doi.org/10.3389/fpsyg.2019.02134>