

Mediating and moderating processes in the relationship between multicultural ideology and attitudes towards immigrants in emerging adults

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*F*ew studies examine intercultural relations in emerging adulthood. Framed from the perspective of the Mutual Intercultural Relations in Plural Societies (MIRIPS) project, the current paper examined the mediating role of tolerance and perceived consequences of immigration in the relationship between multicultural ideology and attitudes towards immigrants. Additionally, the moderating role of context was analysed. A two-group structural equation modelling was performed on data collected from 305 Italian emerging adults living both in northern and in southern Italy with different socio-political climates towards immigrants. In both groups, tolerance and perceived consequences of immigration mediated the relationship between multicultural ideology and attitudes towards immigrants. Also, this indirect relationship was significantly higher for the northern than southern Italians. These findings provide provisional evidence of mediating and moderating processes in the relationship between multicultural ideology and attitudes towards immigrants and suggest important implications for practitioners interested in promoting intercultural relations among emerging adults.

Keywords: Multicultural ideology; Tolerance; Perceived consequences of immigration; Attitudes towards immigrants; Emerging adults.

As most contemporary societies are culturally diverse, one important developmental task is to learn to live together with people of different cultures in order to become responsible and successful citizens in today's global world. Such a task requires knowledge, attitudes and skills respectful of the differences among people (Devine, Green, & McDowell, 2010). In this sense, few studies (i.e., Gerson & Neilson, 2014; King & Baxter Magolda, 2005) examined intercultural relations of emerging adults (EAs), the group of 18–29 year-olds who are between adolescence and adulthood (Arnett, 2010).

This research highlighted that emerging adulthood is an interesting life period to study and facilitate the

acceptance of culturally diverse others because is characterised by a number of developmental strides, including new cognitive abilities and corresponding improvements in moral reasoning (Arnett, 2010; Gerson & Neilson, 2014). These advances allow EAs to better address the ideological concerns about cultural diversity. Moreover, the overcoming of adolescent identity crisis (Arnett, 2010) may facilitate the EAs' ability to understand, and appreciate others' cultural view and needs. Despite these characteristics, this literature did not consider which specific factors may be influential on the attitudes towards immigrants (ATI). The present study focused on this issue by analysing the role of multicultural ideology (MCI),

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tolerance and perceived consequences of immigration (PCI) in a dominant EA group.

MCI refers to the view that cultural diversity is a resource for a society, and that all ethnocultural groups should adapt to each other in order to obtain harmonious relationships (Berry, 2006). High levels of MCI were shown to be associated with high levels of ATI and intercultural contacts (Hui, Chen, Leung, & Berry, 2015; Ward & Masgoret, 2008). However, it was found that these associations may be mediated by some variables, such as tolerance (Hui et al., 2015; Van der Noll, Poppe, & Verkuyten, 2010).

Tolerance is the tendency towards social equality supporting identical opportunities and rights between ethnocultural groups (Berry, 2006). It was shown to be associated with high MCI, ATI and intercultural contacts (Berry, 2006; Hui et al., 2015; Van der Noll et al., 2010). In a recent study in Hong Kong residents, Hui et al. (2015) have found that, although MCI predicted contact with immigrants, this link was fully mediated by tolerance. Similarly, tolerance may mediate the association between MCI and ATI.

Another mediating variable may be PCI, that was found associated in previous studies with MCI, tolerance and ATI (e.g., Berry, 2006; Dandy & Pe-Pua, 2010). PCI concerns dominant group's expectations about the consequences of immigration for themselves and the host society (Berry, 2006). Thus, we may expect that the higher the levels of MCI and tolerance, the higher the levels of positive PCI and the better ATI.

However, these mediating mechanisms have been understudied so far, especially in emerging adulthood. Hence, our study was aimed at testing the hypothesis of a mediating role of both tolerance and PCI in the relationship between MCI and ATI in Italian EAs. Italy is an interesting study context because is increasingly becoming more ethnically and culturally diverse, with the total amount of legal immigrants changed approximately from 1,000,000 to 5,000,000 in 2001–2013 (Inguglia & Musso, 2015). Among these immigrants, the most representative groups come from East Europe (i.e., Romania) and North Africa (Maghreb), while the most discriminated group is represented by Roma people (Italian National Institute of Statistics, 2011; Pew Research Center, 2014).

Moreover, we investigated the moderating role of context in these patterns of associations comparing EAs living in Veneto and Sicily. Veneto is a North-Italy region characterised by a relatively unfriendly immigration socio-political climate. It has a long tradition of right-wing government and its largest party is Lega Nord advocating closed immigration policies. Sicily is a South-Italy region characterised by a relatively friendly immigration socio-political climate. It has a left-wing government from 2012 and, however, its parties generally support rather open immigration policies. Also, previous

studies found that Sicilians report high levels of support for multiculturalism and positive attitudes towards immigration (Inguglia & Musso, 2013, 2015). With this in mind, we may expect that the role of personal variables, such as MCI, tolerance and PCI, in influencing higher levels of ATI would be more salient in more unfriendly context, like in Veneto, than in more friendly context, like Sicily, where the generally favourable socio-political climate would make less relevant the influence of personal dimensions.

METHOD

Participants and procedure

Data comes from the Italian section of the international collaborative research project MIRIPS (see <http://www.victoria.ac.nz/cacr/research/mirips>). Participants included 305 Italian EAs aged 18–29 years recruited both in northern (Veneto) and in southern (Sicily) Italy (see Table 1 for demographics). The study was performed according to the APA (2010) ethical guidelines. After securing participants' signed assent, data were collected during public university events (e.g., music festivals or exhibitions) also opened to a wide range of non-university participants. The rationale for this choice was that emerging adulthood is a period that includes the typical Italian college student age and, moreover, people frequenting such a context are mainly exposed to experiences with ethnicities, political views, values and lifestyles that differ from their own. Although this entailed that the northern and southern samples were unequal in size due to different numbers of events where data were collected, it assured their similarity in terms of contextual factors that were particularly relevant in our study. The respondents completed the MIRIPS questionnaire for majority groups (Inguglia & Musso, 2015).

Measures

MCI Scale (Berry & Kalin, 1995). It is a 10-item self-report measure used to assess individuals' support for multicultural variety as enriching the society and its individual members. Items (e.g., "We should recognise that cultural and racial diversity is a fundamental characteristic of Italian society") were rated on a 5-point Likert scale ranging from 1 (*totally disagree*) to 5 (*totally agree*). Cronbach's α was found to be .84 for northern and .68 for southern Italians.

Tolerance Scale (Berry, 2006; Berry & Kalin, 1995). It is a 11-item self-report measure used to assess both one's ethnic tolerance (6 items; e.g., "It is good to have people from different ethnic and racial groups living in the same country") and social egalitarianism (5 items; e.g., "We should promote equality among all groups, regardless of

TABLE 1
Demographic information

Variable	Northern Italians (n = 101)	Southern Italians (n = 204)
Gender (%)		
Female	49 (48.51)	119 (58.33)
Male	52 (51.49)	85 (41.67)
Age in years (SD)		
Across genders	23.04 (3.24)	23.55 (2.60)
Female	22.88 (3.25)	23.66 (2.48)
Male	23.19 (3.25)	23.41 (2.77)
Education level (%)		
Some high/secondary school or less	24 (23.76)	8 (3.92)
Completed high/secondary school	65 (64.36)	164 (80.39)
Completed university	12 (11.88)	32 (15.69)
Socio-economic status (%)		
Low	1.00 (0.99)	0 (0.00)
Medium	17.00 (16.83)	55 (26.96)
High	83.00 (82.18)	149 (73.04)

racial or ethnic origin”). Items were rated on a 5-point Likert scale ranging from 1 (*totally disagree*) to 5 (*totally agree*). Cronbach’s α was found to be .86 for northern and .78 for southern Italians.

PCI Scale (Berry, 2006; Berry & Kalin, 1995). It is a 11-item self-report measure used to assess one’s perception of positive and negative consequences of immigration. Items (e.g., “The presence of immigrants will not make wages lower”) were rated on a 5-point Likert scale ranging from 1 (*totally disagree*) to 5 (*totally agree*), with higher scores indicative of positive PCI. Cronbach’s α was found to be .63 for northern and .84 for southern Italians.

ATI Scale (Berry, 2006). It is a 100-point feeling thermometer scale used to indicate the favourability towards immigrant groups. Participants were asked: “Please provide a number between 0° and 100° to indicate your attitude toward [group]”. In this study, we evaluated Romanian, Maghrebi and Roma people since they are the most representative or discriminated immigrant groups in Italy. Scores on this scale ranged from 0 (*extremely unfavourable*) to 100 (*extremely favourable*).

RESULTS

Descriptive statistics appear in Table 2. One-sample *t* tests revealed that average scores for MCI, tolerance and PCI were significantly higher than the midpoint (3) of the scales within both EA groups (all $p < .001$). Also, average scores for attitudes towards Romanian and Roma people were significantly lower than the midpoint (50) of the scale (all $p < .005$), while those for attitudes towards Maghrebi people were not significantly different from the midpoint (both $p > .10$). Univariate analyses of variance with the context as a factor showed that southern EAs produced higher scores than the northern ones on attitudes

TABLE 2
Correlations, means and standard deviations for key study constructs

	1.	2.	3.	4.	5.	6.
1. MCI		.86	.75	.36	.53	.43
2. Tolerance	.59		.75	.42	.54	.50
3. PCI	.62	.63		.51	.61	.52
4. ATI-Romanian	.37	.43	.44		.75	.72
5. ATI-Maghrebi	.31	.43	.40	.69		.70
6. ATI-Roma	.31	.35	.35	.70	.58	
Northern Italians						
<i>M</i>	3.67	4.08	3.25	42.55	46.66	28.03
<i>SD</i>	0.67	0.69	0.63	21.14	21.21	21.11
Southern Italians						
<i>M</i>	3.65	4.06	3.34	43.87	52.61	25.10
<i>SD</i>	0.59	0.61	0.71	26.91	26.04	27.74

Note. Upper diagonal: correlation matrix for northern Italian EAs’ data. Lower diagonal: correlation matrix for southern Italian EAs’ data. MCI = multicultural ideology; PCI = perceived consequences of immigration; ATI = attitudes towards immigrants. All the correlations are significant at $p < .001$. Means in bold are statistically different by group ($p < .05$).

towards Maghrebi people, $F(1, 302) = 3.94, p = .048$. All the bivariate correlations between the study variables were significant at $p < .001$ and were moderate to high, ranging from .31 to .86 considering both EA groups.

We explored our research questions by conducting a two-group structural equation modelling comparing northern vs. southern groups. The tested model is shown in Figure 1. Consistent with our mediating hypothesis, it proposed both a direct effect of MCI on ATI as well as indirect effects of MCI mediated by tolerance and PCI. A series of hierarchically nested models was used to examine whether or not these relationships were moderated by group. We inspected multiple indices (Kline, 2011) to evaluate model fit (adopted cut-offs in parentheses): Satorra-Bentler scaled chi-square test (χ^2_{SB}) with the associated *p*-value ($p > .05$), comparative fit index ($CFI \geq .95$), and root mean square error of approximation ($RMSEA \leq .05$). Also, we used the following criteria to ascertain significant differences between the more and less constrained models: $\Delta\chi^2_{SB}$ was significant at $p < .05$, and $\Delta CFI \leq -.01$ (Kline, 2011).

As shown in Table 3, the initial equal factor loading model had good fit. Constraining the direct effect of MCI on ATI to be invariant across groups did not lead to a significant deterioration in model fit, $\Delta\chi^2_{SB}(1) = 0.89, p > .05, \Delta CFI = .00$. While keeping this constraint, we imposed equality constraints for the mediating effect of MCI on ATI via PCI. This model was adequately supported, $\Delta\chi^2_{SB}(2) = 0.99, p > .05, \Delta CFI = .00$. Keeping the prior constraints in the model, we constrained also the paths for the mediating effects of MCI on ATI via tolerance. The resulting model showed a decrement in model fit, $\Delta\chi^2_{SB}(3) = 14.69, p < .01, \Delta CFI = -.02$. Modification indices indicated to release the constraint on

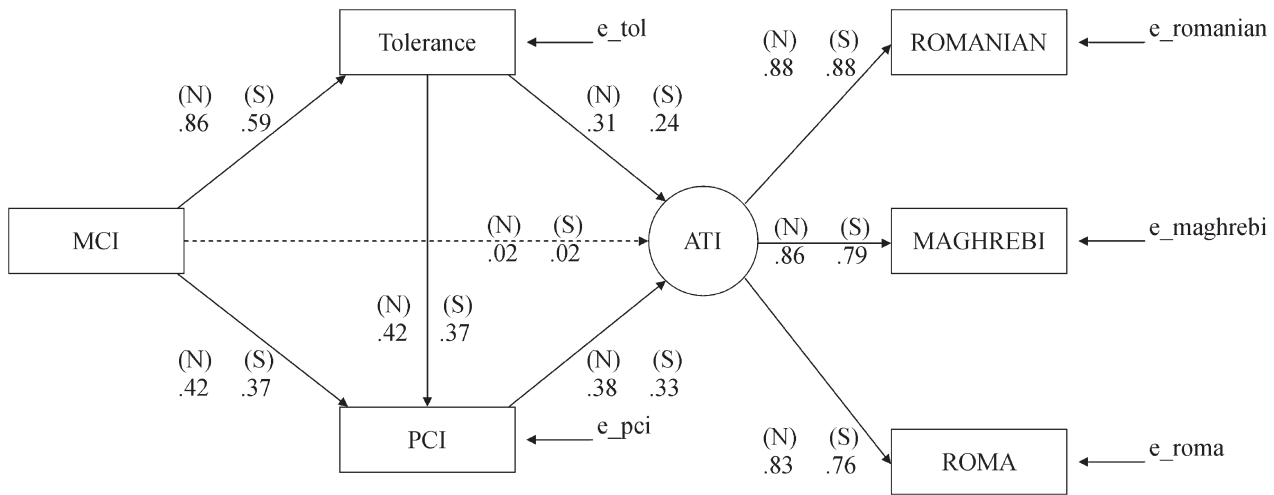


Figure 1. Structural equation model for the relationships between MCI, tolerance, PCI, and ATI moderated by context. Standardized coefficients are shown. MCI=multicultural ideology, PCI=perceived consequences of immigration, ATI=attitudes towards immigrants, ROMANIAN=attitude towards Romanian people, MAGHREBI=attitude towards Maghrebi people, ROMA=attitude towards Roma people, S=southern Italians, N=northern Italians. Dashed line represent non-significant pathways and solid lines represent significant pathways ($p < .001$).

TABLE 3

Fit indices of the multigroup tested models for northern and southern Italian emerging adults

Model	χ^2_{SB}	df	p	CFI	RMSEA
1. Equal Factor Loading model	14.21	14	.43	1.00	.01
2. Equal Direct Effect model	15.12	15	.44	1.00	.01
3. Equal Indirect Effect model (via PCI)	16.16	17	.51	1.00	.00
4. Equal Indirect Effect model (via PCI and tolerance)	30.19	20	.07	.98	.06
5. Partial Equal Indirect Effect model	20.67	19	.36	1.00	.02

Note. χ^2_{SB} = Satorra-Bentler scaled chi-square; CFI= comparative fit index; RMSEA= root mean squared error of approximation; PCI= perceived consequences of immigration.

the path linking MCI to tolerance. As a result, the final model provided a sufficient fit, $\Delta\chi^2_{SB}(2) = 4.70, p > .05, \Delta CFI = .00$.

These findings suggested that our mediating hypothesis was sustained. Indeed, the examination of parameter estimates revealed that for both groups direct effect of MCI on ATI was not significant ($\beta = .02, p > .05$), while there was evidence of significant mediating effects of tolerance and PCI. Specifically, within northern and southern EAs MCI was indirectly and positively related to ATI via the mediating roles of tolerance (respectively, $\beta = .27, p < .005$, and $\beta = .14, p < .005$), PCI (respectively, $\beta = .16, p < .001$, and $\beta = .12, p < .001$), and tolerance via PCI ($\beta = .14, p < .001$, and $\beta = .07, p < .001$).

Also, the results partially supported our moderating hypothesis. For the northern EAs the direct impact of MCI

on tolerance ($\beta = .86, p < .001$) was significantly higher than the southern ones ($\beta = .59, p < .001$). Accordingly, the previously reported indirect effects of MCI on ATI via tolerance were higher.

DISCUSSION

We investigated the processes facilitating ATI in emerging adulthood, a time of life with pronounced implications on openness to diversity. We hypothesised that the relationship between MCI and ATI may be mediated by tolerance and PCI. Moreover, we examined the role of two different socio-political contexts in moderating these associations.

Generally, EAs showed positive mean levels of MCI, tolerance and PCI in both contexts. This confirms that emerging adulthood may be a particularly fruitful time to facilitate the acceptance of others (Gerson & Neilson, 2014). Nevertheless, the attitudes towards the specific immigrant groups selected in this study were in line with the common views of these groups in Italy, where the highest anti-Roma attitudes in Europe are registered (Pew Research Center, 2014) and Romanian and Maghrebi people are viewed unfavourably by a substantial part of population (Italian National Institute of Statistics, 2011).

Focusing on expectations, in both northern and southern EA groups MCI did not directly link to ATI, but there was a flow mediated by tolerance and PCI. In line with and in addition to Hui et al. (2015), in our sample EAs' perception of cultural diversity as a resource for a society was related to both support for equal opportunities and rights between ethnocultural groups and perceived positive consequences of immigration which, in turn, were

predictive of higher ATI (Berry, 2006; Dandy & Pe-Pua, 2010; Van der Noll et al., 2010; Ward & Masgoret, 2008). Maybe, beyond EAs' cognitive advances (Arnett, 2010), perceiving a direct association between MCI and ATI is in any case difficult due to the different levels of thought required. MCI is more abstract, but forms the foundation for the more concrete variables of tolerance and PCI, which then show up in specific ATI.

However, the context was found to partially moderate these relationships. Both the direct effect of MCI on tolerance and the related indirect effects on ATI were stronger in northern than in southern Italian EAs. Although the only significant difference in mean values of study variables was a more favourable attitude towards Maghrebi people of southern Italy EAs, it may be that MCI is more salient in influencing higher levels of ATI in relatively unfriendly contexts towards immigration, like Veneto, through its effect on tolerance. We may also assume that levels of ATI in more friendly contexts, like Sicily, are affected in a greater extent by general receptive socio-political perspectives, making less relevant the effect of specific personal variables, such as MCI.

These findings suggest important implications. Practitioners should promote MCI, tolerance and positive PCI, for instance, by providing EAs with opportunities of intercultural contacts in a collaborative environment that may support EAs to be appreciative of other culturally different people, especially in contexts with unfriendly climate. Such an approach may be helpful for developing effective educational programmes on cultural diversity with positive potential in the civic arena (Berry, 2006; Devine et al., 2010).

The study has four major limitations. First, the sample was selected from EAs at the university setting. The homogeneous population might limit the generalisability of results. Second, due to limited space we did not control for gender, socio-economic status and other demographics that may affect the relationships among the study variables. Third, we focused on three possible predictors of ATI: MCI, tolerance and PCI. These three key factors as well as the socio-political context are important but there might be additional factors that deserve further investigation, such as perceived security and national identity (Berry, 2006). Finally, a further limitation was to focus the study on only three immigrant groups. Nevertheless, our findings may be extended with some confidence to other groups that are equally salient or discriminated in the Italian context.

In terms of suggestions for future research, longitudinal studies are encouraged to better develop causal models to explicate the relationships among the variables affecting ATI. Additionally, other research methods including focus group and personal interviews should be explored. This is important because qualitative data can provide additional information about the view of the mainstream

people about immigrants. Moreover, they can be particularly useful in contributing to a deep understanding of complex patterns of survey responses. Finally, concurrent mixed method data collection strategies would be beneficial to validate the different forms of data.

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REFERENCES

- American Psychological Association. (2010). *Ethical principles of psychologists and code of conduct*. Retrieved from <http://www.apa.org/ethics/code/principles.pdf>
- Arnett, J. J. (2010). *Adolescence and emerging adulthood: A cultural approach* (4th ed.). Upper Saddle River, NJ: Pearson Prentice Hall.
- Berry, J. W. (2006). Mutual attitudes among immigrants and ethnocultural groups in Canada. *International Journal of Intercultural Relations*, 30, 719–734. doi:10.1016/j.ijintrel.2006.06.004.
- Berry, J. W., & Kalin, R. (1995). Multicultural and ethnic attitudes in Canada. *Canadian Journal of Behavioural Science*, 27, 310–320. doi:10.1037/0008-400X.27.3.301.
- Dandy, J., & Pe-Pua, R. (2010). Attitudes to multiculturalism, immigration and cultural diversity: Comparison of dominant and non-dominant groups in three Australian states. *International Journal of Intercultural Relations*, 34, 34–46. doi:10.1016/j.ijintrel.2009.10.003.
- Devine, J., Green, C., & McDowell, S. (2010). The global pathways initiative: Florida State University's interdisciplinary efforts to become interculturally competent. *Making Connections: Interdisciplinary Approaches to Cultural Diversity*, 11, 1–13. doi:10.5555/maco.11.2.a3w4378g972t7568.
- Gerson, M. W., & Neilson, L. (2014). The importance of identity development, principled moral reasoning, and empathy as predictors of openness to diversity in emerging adults. *SAGE Open*, 4, 1–11. doi:10.1177/2158244014553584.
- Hui, B. P. H., Chen, C. X., Leung, C. M., & Berry, J. W. (2015). Facilitating adaptation and intercultural contact: The role of bicultural integration and multicultural ideology in dominant and non-dominant groups. *International Journal of Intercultural Relations*, 45, 70–84. doi:10.1016/j.ijintrel.2015.01.002.
- 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.
- Italian National Institute of Statistics. (2011). *I migranti visti dai cittadini* [Immigrants viewed by the citizens]. Retrieved from <http://www.istat.it/it/files/2012/07/migranti2011.pdf?title=I+migranti+visti+dai+cittadini+-+11%2Fflug%2F2012+-+Testo+integrale.pdf>

- King, P. M., & Baxter Magolda, M. (2005). A developmental model of intercultural maturity. *Journal of College Student Development, 46*, 571–592. doi:10.1353/csd.2005.0060.
- Kline, R. B. (2011). *Principles and practice of structural equation modeling* (3rd ed.). New York, NY: The Guilford Press.
- MIRIPS. Mutual intercultural relations in plural societies [Research presentation]. (n.d.). Available from <http://www.victoria.ac.nz/cacr/research/mirips>
- Pew Research Center. (2014). *A fragile rebound for EU Image on eve of European parliament elections*. Retrieved from http://www.pewglobal.org/files/2014/05/2014-05-12_Pew-Global-Attitudes-European-Union.pdf
- Van der Noll, J., Poppe, E., & Verkuyten, M. (2010). Political tolerance and prejudice: Differential reactions toward Muslims in the Netherlands. *Basic and Applied Social Psychology, 32*, 46–56. doi:10.1080/01973530903540067.
- Ward, C., & Masgoret, A. M. (2008). Attitudes toward immigrants, immigration, and multiculturalism in New Zealand: A social psychological analysis. *International Migration Review, 42*(1), 227–248. doi:10.1111/j.1747-7379.2007.00119.x.