#### INVITED LEAD ARTICLE





# How shall we all live together?: Meta-analytical review of the mutual intercultural relations in plural societies project

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#### **Abstract**

Living together in culturally plural societies poses numerous challenges for members of ethnocultural groups and for the larger society. An important goal of these societies is to achieve positive intercultural relations among all their peoples. Successful management of these relations depends on many factors including a research-based understanding of the historical, political, economic, religious and psychological features of the groups that are in contact. The core question is 'how we shall we all live together?' In the project reported in this paper (Mutual Intercultural Relations in Plural Societies; MIRIPS), we seek to provide such research by reviewing three core psychological hypotheses of intercultural relations (multiculturalism, contact and integration) in 21 culturally plural societies. The main goal of the project is to evaluate these hypotheses across societies within the MIRIPS project in order to identify if there are some basic psychological principles that underlie intercultural relations panculturally. If there are, the eventual goal is to employ the findings to propose some policies and programmes that may improve the quality of intercultural relationship globally. An internal metaanalysis using the MIRIPS project data showed that the empirical findings from these societies generally support the validity of the three hypotheses. Implications for the

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development of policies and programmes to enhance the quality of intercultural relations are discussed.

#### KEYWORDS

acculturation, adaptation, cultural diversity, integration, intercultural relations, intergroup contact, multiculturalism

#### INTRODUCTION

Achieving mutual accommodation among cultural groups is a goal that citizens and policy-makers in most culturally diverse societies are now seeking to achieve (Berry & Sam, 2013). The presence of many immigrants, ethnocultural groups, national minorities, and Indigenous Peoples presents situations and challenges that everyone must now seek to understand and navigate in order to achieve a harmonious society. The core question of 'how shall we all live together?' may be answered by examining what policies and practices have been attempted in different countries, and by carrying out research to discover whether these policies and practice are working elsewhere. Indeed, such an international examination may well lead to evidence of some general principles of how best to engage in intercultural relations. If there are such general principles to be found, it is possible to share them with policy makers in the domains of immigration and settlement, and with social and psychological service providers who work with both the non-dominant and dominant members of these larger societies.

Previous research on this question has provided some leads, but gaps remain. We know that intergroup contact may lead to more positive relations (e.g. Paluck et al., 2019; Pettigrew & Tropp, 2011), and that discrimination leads to negative relations and poor wellbeing (e.g. Carter et al., 2019; Paradies, 2006; Paradies et al., 2015). We also know that when individuals are able to engage in the integration strategy (Berry, 1997), and identify with more than one culture, they achieve more harmonious intercultural relations and have better personal wellbeing (e.g. Berry et al., 2006). Although some of these findings have been drawn from a number of different areas of the world, they represent only a small fraction of the evidence needed to respond to the need for some general principles that might be applicable in many other societies. Moreover, much of this evidence is drawn from samples that are non-dominant (minorities) in their societies, and much less is known about the ways that dominant groups (majorities) may be adapting to these complex intercultural arenas. In an attempt to remedy these problems, we have designed a project that is international in scope and that includes both non-dominant and dominant samples. The expectation is that we may uncover some general principles of intercultural relations that may be mutual and apply to both kinds of groups.

This paper begins with a presentation of the goal of a project 'Mutual Intercultural Relations in Plural Societies' (MIRIPS; see Berry, 2017, and http://www.victoria.ac.nz/cacr/research/mirips), including a statement of the guiding hypotheses. It then provides an overview of some previous psychological approaches and research on the issues, set within the joint fields of cross-cultural and intercultural psychology. A research framework is used to show the main concepts and components of the research, including the background factors that are considered to be antecedent to three main outcomes: sociocultural, psychological and intercultural adaptation. The method and results follow, including a short summary of some previous analyses of the MIRIPS data, and a new meta-analysis of them. The paper concludes with a discussion of these findings, and with some thoughts about their implications for policy and practice.

This paper reports on a meta-analytical review of the MIRIPS project. We propose and empirically examine three core psychological hypotheses of intercultural relations: multiculturalism; contact; and integration. This research was carried out across 21 culturally plural societies: Azerbaijan, Belgium,

Canada, Estonia, Finland, Georgia, Germany, Greece, Hong Kong, India, Italy, Kyrgyzstan, Latvia, Lithuania, Malta, Norway, Portugal, Russia, Spain, Switzerland and Tajikistan. The first goal of the project is to evaluate these three hypotheses of intercultural relations across these societies. The second goal is to examine the findings to see whether they constitute some 'universal' principles of intercultural relations that may be applied in many societies. If they are, it may be possible to propose some policies and programmes to improve the quality of intercultural relationships globally.

The design of the project is an exercise in replication across contexts in order to discern what may be culturally universal and what may be culturally specific in how diverse groups of peoples engage in their intercultural relations. Across the whole project, these replications were carried out with a shared conceptualisation and a common research instrument. However, the project employed culturally appropriate operationalisations of the concepts and methods with the highly varied samples.

The three hypotheses that are evaluated in the MIRIPS project are:

- Multiculturalism hypothesis: When individuals feel secure in their place in a society, they
  will be able to better accept those who are different from themselves; conversely when individuals feel threatened, they will reject those who are different.
- 2. **Contact hypothesis:** When individuals have contact with, and engage with those who are culturally different from themselves, under certain conditions, they will achieve greater mutual acceptance.
- 3. **Integration hypothesis:** When individuals identify with and are socially connected to, both their heritage culture and to the larger society in which they live, they will achieve higher levels of mutual adaptation than if they relate to only one or the other culture, or to neither culture.

# Psychological approaches to intercultural relations

The MIRIPS project focuses on the psychological aspects of intercultural relations, but takes into account some of the social and political contextual features of the larger societies and of the interacting groups within them. The study is situated within the broad field of cross-cultural psychology, which seeks to discover whether individual human behaviours are shaped by the cultural contexts in which they develop (Berry et al., 2011). The eventual goal is to achieve a set of universal psychological principles that underlie human behaviour globally. By universal, we mean: (i) a phenomenon that shares a common, species-wide substrate of psychological processes and functioning and also (ii) a phenomenon that exhibits behavioural variations across cultures as a result of this substrate being differentially developed and expressed in daily life in the society.

The project is also situated in the field of intercultural psychology (Sam & Berry, 2016). This field deals with the question: If individual behaviours are shaped in particular cultural contexts, what happens when individuals who have developed in different cultural contexts meet and interact within another society? There are two domains of psychological interest here: (i) *ethnocultural group relations* and (ii) *acculturation*.

In both these domains, there has been a bias in the focus of research. In the first domain, studies have usually examined the views and behaviours of the dominant group toward the non-dominant group, with little examination of the attitudes of the non-dominant groups toward the dominant group. In the second domain, the usual interest has been in the ways that non-dominant groups acculturate the following contact, with almost no interest in the changes taking place among the dominant group. That is, in both domains, there has been a 'one-way' examination of these phenomena, with almost no examination of the *mutual* relationships, thereby providing an incomplete view of the complexity of



these intercultural phenomena. This bias has been noted by Berry (2006) and by Ward et al. (2017), who argued that these two domains are intimately entwined, and that they require research in both directions in order to provide a complete view of these intercultural phenomena. To remedy this bias and lack, the MIRIPS study has examined the intercultural views of both kinds of groups in contact, using the same concepts and measures with both dominant and non-dominant groups.

# General framework for the MIRIPS project

The MIRIPS project is guided by a framework that identifies the main concepts and variables, and suggests their inter-relationships (see Figure 1). This figure shows five kinds of acculturation and intercultural relations phenomena: (1) the characteristics of the two or more cultural groups (A and B) prior to contact; (ii) the nature of the contact between them; (iii) the cultural changes that are taking place in both groups (iv) the psychological changes experienced by individuals in both groups in contact, and (v) the longer-term adaptations that may be achieved.

At the cultural group level (on the left of Figure 1), we seek to understand crucial features of the two (or more) original cultural groups prior to their major contact, the nature of their initial and continuing contact relationships, and the resulting dynamic cultural changes in the groups as they emerge as ethnocultural groups during the process of acculturation. These cultural changes can range from being rather easily accomplished (such as evolving a new economic base), through to being a source of major cultural disruption (as a result of becoming colonised or enslaved).

At the individual level (in the middle), we consider the psychological acculturation that individuals in all groups in contact undergo. Identifying these changes requires sampling a population and studying individuals who are variably involved in the process of acculturation. The figure shows three kinds of psychological changes resulting from contact: behavioural; stress; and strategies. Behavioural changes can be a set of rather easily accomplished changes (e.g. in ways of speaking, dressing, and eating) or they can be more difficult to accomplish (e.g. changes in identities, self-concept and values). Second are changes that are due to acculturation experiences that are challenging, even problematic, in which acculturative stress becomes manifest. Third, individuals also develop and engage in acculturation strategies and expectations (Berry, 1980) as their preferred way to acculturate and relate to each other.

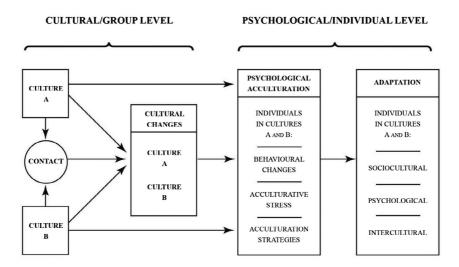


FIGURE 1 General framework for the MIRIPS Project

Following these three kinds of psychological changes are some longer-term outcomes, referred to as *adaptations* (on the right). Three kinds of adaptations have been discerned: psychological, sociocultural and intercultural. Ward (1996) distinguished between *psychological adaptation* and *sociocultural adaptation*. The first refers to adaptations that are primarily internal or psychological (e.g. sense of personal well-being and self-esteem, sometimes referred to as 'feeling well'). The second are sociocultural and are sometimes called 'doing well'. This form of adaptation is manifested by competence in carrying out the activities of daily intercultural living (such as in the community, at work and in school). A third is *intercultural adaptation* (Berry, 2005), which refers to the extent to which individuals are able to establish harmonious intercultural relations, with low levels of prejudice and discrimination ('relating well').

# Intercultural strategies and expectations

One concept that is central to, and underlies all aspects of acculturation and intercultural relations phenomena is the way in which people seek to relate to each other in culturally plural societies. As noted above, these are the *strategies* and *expectations* that all groups and their individual members have and use, whether acknowledged explicitly or just implicitly, when they acculturate and engage in intercultural relations. These strategies and expectations can be held by both the dominant and non-dominant individuals and groups that are in contact.

They are based on three underlying issues: (i) the degree to which there is a desire to maintain the group's culture and identity; (ii) the degree to which there is a desire to engage in daily interactions with other groups in the larger society, including both dominant and non-dominant one(s); and (iii) the relative power of the groups in contact to choose their preferred way of engaging each other (Berry, 1980).

Four ways of living together have been derived from the first two issues facing all peoples living in plural societies (see Figure 2). There are two sets of concepts, one for the *strategies* of non-dominant groups and their individual members (on the left); how do they wish to live interculturally? The other is the *expectations* of dominant groups in the larger society and of their individual members (on the right); how do they think that non-dominant groups and individuals should live interculturally? The power relations between these two sectors of the population in a plural society are present in the differences between these strategies and expectations. Typically, the dominant group has more power than the non-dominant group to decide on the policies and practices that are operating in the plural society.

This framework may be used to conceptualise and assess the various preferences of both the non-dominant and dominant groups with respect to how they want to live together. These two components of the society may respond to these two issues by being positive through to being negative to them. When combined, their responses give rise to four sectors, carrying different names for the two kinds of groups. From the point of view of the non-dominant ethnocultural groups, they can prefer one or the other option (by seeking assimilation or separation), neither (marginalisation) or both (by integration). From the point of view of members of the dominant larger society, they can also seek one way (melting pot or segregation), neither (by exclusion) or by seeking both (multiculturalism). Studies that examine both kinds of groups at the same time, can observe the similarities and differences between them. These strategies and expectations are not fixed, but change over time; individuals and groups explore the most satisfactory way to live together, and develop programmes and policies by which to pursue them.

However, in most studies, no assessment is made of the acculturation strategies of members of dominant groups. To remedy this lack, recent work has gone beyond the study of the expectations that members of dominant groups have about how they prefer non-dominant group members to acculturate



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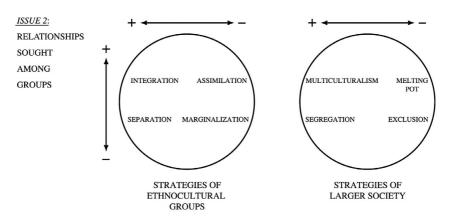


FIGURE 2 Acculturation strategies and expectations among ethnocultural groups and the larger society

to examine their views about how they, themselves, prefer to acculturate in their increasingly diverse societies (Haugen & Kunst, 2017; Kunst et al., 2021; Lefringhausen et al., 2021). The question in these studies is the extent to which dominant group members wish to have contact with, and adopt aspects of, the non-dominant cultures. With this approach, comparisons can be made between the acculturation strategies of the two groups in contact. Erten et al. (2018) have developed a dynamic model based on a process analogous to genetic evolution to investigate the dynamics of cultural change that result from migration. Considering the acculturation orientations that are present in the society, the results of their dynamic modelling showed that a stable coexistence of multicultural societies is more likely when their members establish interactions with the larger society, but host society members simultaneously maintain their culture more strongly than immigrants do (see also Mesoudi, 2018).

Since these two kinds of groups in the plural society do not have equal power (Berry, 1980), the third element of the framework considers the impact on intercultural relations of the similarities and differences between their strategies and expectations. The expectations of the dominant group usually constrain or promote the adoption of the strategies of the non-dominant groups. This interaction between strategies and expectations gives rise to relationships that can vary from being harmonious to conflictual between the various groups (Berry, 1990; Bourhis et al., 1997).

The development of these concepts and their measurement has taken place over the past 40 years (starting with Berry [1974, 1980]). The terms used and the measurements employed have evolved, such that there is now a vast research literature that seeks to expand the core issues in this research area (e.g. van de Vijver et al., 2016; Ward & Kus, 2012). One important issue is that the national intercultural policy needs to be taken into account when examining variations in both acculturation strategies and expectations (Bourhis et al., 1997). Some other authors have raised questions about the domain specificity of the concept, proposing that the preferred ways of acculturating may vary according to the life domains (such as private/public, personal/institutional) being examined (e.g. Navas et al., 2005; Salo & Birman, 2015; Snauwaert et al., 2003). There have also been criticisms of the psychometric properties of the scales, particularly whether the four scales and two dimensions are independent of each other (e.g. Birman & Trickett, 2001; Demes & Geeraert, 2014; Rudmin, 2009; Ryder et al., 2000). However, given the degree to which researchers have paid attention to these concepts (e.g. Sam & Berry, 2016), they can be seen as having substantial face validity and practical utility.

# **Hypotheses**

Three hypotheses are evaluated in this project: the *multiculturalism hypothesis*; the *contact hypothesis*; and the *integration hypothesis*. These hypotheses have been derived from the multiculturalism policy advanced by the Federal Government of Canada (1971). This policy promotes both the (i) maintenance of groups' cultural heritages, as well as (ii) social interaction and cultural sharing among all groups. These two planks of the policy resemble the first two issues in the strategies framework.

The *multiculturalism hypothesis* stems from a statement in the policy that asserts that when individuals are confident in their cultural identity and their place in society, this will lead to the acceptance of others who differ from themselves. This confidence is rooted in the cultural maintenance plank of the policy. That is, the maintenance of heritage culture and identity by individuals and groups serves to provide a secure place from which to accept others in the larger society (Berry et al., 1977, p. 192), and to achieve mutual accommodation to each other. In contrast, when the cultural place of a person or group in society is challenged or threatened, then negative attitudes are likely to result (see intergroup threat theory, Stephan & Stephan, 2018).

The concept of security has been expanded over the years, and now involves the three phenomena of cultural, economic and personal security. The first concerns issues such as language and identity; the second includes a person's status in society such as employment and income; the third examines individuals' sense of safety to move around in their neighbourhood and society.

In sum, the multiculturalism hypothesis proposes that having a sense of security is a necessary basis for the acceptance of those of other backgrounds whom individuals encounter in the daily life of their plural society.

The *contact hypothesis* is one of the most enduring ideas in the field of intergroup relations (Christ & Kauff, 2019; Dovidio et al., 2017; Pauluck et al., 2019; Pettigrew & Tropp, 2011). This hypothesis derives from the second link in the policy framework, which proposes that intercultural contact and sharing will promote mutual acceptance.

The contact hypothesis was advanced by Allport (1954) who asserted that contact between members of minority and majority groups would reduce prejudice between them. However, this was likely to be the case only in some circumstances: when the groups are of social and economic equal status; when contact is voluntary; and when there are norms in the society that promote intergroup contact. Much research has been carried out over the years that provides support for the positive effects of contact (see meta-analysis by Pettigrew & Tropp, 2011).

In sum, the contact hypothesis proposes that under certain conditions, more intercultural contact will be associated with more mutual acceptance. Specifically, more contact will predict higher multicultural ideology and a preference for integration.

The *integration hypothesis* proposes that when individuals and groups seek integration (by being doubly or multiply engaged in both their heritage cultures and with other groups in the larger society) they will be more successful in achieving a higher level of adaptation than if they engage only one or the other of the cultural groups. This hypothesis derives from the intersection between the two planks of the policy (maintenance and participation). Much research has demonstrated that the integration strategy is usually associated with better psychological wellbeing (e.g. Berry & Hou, 2016; Berry et al., 2006). Based on a review of numerous studies, Berry (1997) made the generalisation that integration was the most successful strategy for both psychological wellbeing and sociocultural adaptation. This generalisation has been examined in a meta-analysis by Nguyen and Benet-Martinez (2013) who concluded that integration ('biculturalism' in their terms) was associated with the most positive outcomes for migrants' wellbeing; an updated meta-analysis also supported the findings (see Stogianni et al., 2021).



In sum, the integration hypothesis proposes that when individuals prefer the integration strategy or have the multiculturalism expectation (i.e. when they are doubly or multiply engaged), they will achieve higher scores on psychological and sociocultural adaptation.

To operationalise these three hypotheses, we selected the following core variables:

- 1. Multiculturalism Hypothesis. Security is positively associated with multicultural ideology and tolerance; discrimination is negatively associated with multicultural ideology and tolerance. The three kinds of feelings of security (cultural, economic and personal) are considered to constitute the positive conditions under which individuals will be able to accept and interact with those of other cultural backgrounds; in contrast, the experience of discrimination against ones group and oneself will undermine this confidence and lead to the rejection of others.
- **2.** Contact Hypothesis. Contact is positively associated with integration and multicultural ideology. Having friends from other cultural groups, and experiencing frequent interactions with others, will provide the social basis for seeking integration into the society and being positive with respect to the value of cultural diversity for the society as a whole.
- **3. Integration Hypothesis.** Integration strategy of non-dominant groups/expectation of dominant groups is positively associated with sociocultural adaptation (among non-dominant groups) and psychological (among both groups). The double intercultural strategy of integration (seeking to identify with and participate in ones own cultural group and in the larger society) will serve as the basis for ones positive adaptation in the culturally diverse society.

## **METHOD**

# **Samples**

The MIRIPS project was carried out in a wide range of plural societies in order to provide a basis for possibly finding some universal principles of intercultural relations. 53 samples included societies that were migrant-receiving (both long-standing and more recently), those with established ethnocultural groups and with communities of returning co-nationals, and those with national groups that have resulted from their incorporation into larger nation states. The samples are also diverse, including adults and school children, community groups, online forums, and both snowball and random samples. The total numbers of participants were 6993 members in 25 samples of the dominant group in a society, and 7619 members in 28 samples of the various non-dominant groups. The multiculturalism hypothesis was tested on 20 societies (Azerbaijan, Canada, Estonia, Finland, Georgia, Germany, Greece, Hong Kong, India, Italy, Kyrgyzstan, Latvia, Lithuania, Malta, Norway, Portugal, Russia, Spain, Switzerland, Tajikistan). The contact hypothesis was tested on 19 societies (Azerbaijan, Canada, Estonia, Finland, Georgia, Germany, Greece, Hong Kong, India, Italy, Kyrgyzstan, Latvia, Lithuania, Malta, Norway, Portugal, Russia, Spain, Tajikistan). The integration hypothesis was tested on 18 societies (Azerbaijan, Belgium, Canada, Estonia, Georgia, Germany, Greece, Hong Kong, India, Italy, Kyrgyzstan, Latvia, Lithuania, Malta, Portugal, Russia, Spain, Tajikistan). See Table 1 for the sample details.

# Variables

There are two categories of variables assessed in the study: Intercultural and Adaptation. Different sets of items were used in some studies within the MIRIPS project. See MIRIPS project questionnaire (Berry, 2017, and http://www.victoria.ac.nz/cacr/research/mirips):



**TABLE 1** A list of bivariate correlations between focal variables for 21 societies (N = 14,612)

Hypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Antecedent
Multiculturalism	Lebedeva,	Azerbaijan	Ethnic Russians	.84	307	46	Non-dominant	Tolerance	Security
	Tatarko, et al. (2017)			.11				Multicultural ideology	
			Azerbaijanis	.40	300	47	Dominant	Tolerance	
				.42				Multicultural ideology	
	Safdar et al. (2017)	7) Canada	Chinese International Students	37	57	26	Non-dominant	Tolerance	Discrimination
			Canadian Students	.76 .58	68	22	Dominant	Multicultural ideology Tolerance	Security
			Canadian Long	.08	138	49		Multicultural ideology	Discrimination
			Term Resident	09				Tolerance	
				.53				Multicultural ideology	Security
				.25					
				.41				Tolerance	
				.28					
			Chinese New	41	96	33	Non-dominant	Multicultural ideology	Discrimination
			Resident	45				Tolerance	
				.17				Multicultural ideology	Security
				.20					
				.11				Tolerance	
				.37					
			Latin American	15	93	34	Non-dominant	Multicultural ideology	Discrimination
			New Resident	09				Tolerance	
				.08				Multicultural ideology	Security
				01					
				.04				Tolerance	
				.04					
	Lebedeva (2020)	Estonia	Ethnic Russians	.02	213	31	Non-dominant	Multicultural ideology	
				.06				Tolerance	
			Estonians	11	332	33	Dominant	Multicultural ideology	
				06				Tolerance	
	Brylka et al. (2017)	Finland	Finnish-speaking Finns born in Finland	48	334	46		Multicultural ideology	Discrimination
	Berry et al. (2019)	Georgia	Ethnic Russians	04	312	31	Non-dominant	Multicultural ideology	Security
				.19				Tolerance	
			Georgians	.23	298	34	Dominant	Multicultural ideology	
				.03				Tolerance	
	Hanke et al. (2017)	Germany	Germans	.35	603	28		Multicultural ideology	
			Bicultural sample	.13	241		Non-dominant		
	Pavlopoulos and Motti- Stefanidi (2017)	Greece	Greeks	.52	449	38	Dominant		
	Au et al. (2017)	Hong Kong	Mainland Chinese Immigrant	.24	182	42	Non-dominant		
				.17					



Hypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Antecedent
				27					Discriminatio
				25				Tolerance	
				.46					Security
				.10					
			Hong Kong Chinese	.19	181	45	Dominant		
			Residents	.20				Multicultural ideology	
				.08					
				.02				Tolerance	
	Mishra et al.	India	Muslims	.04	107	34	Non-dominant	Multicultural ideology	
	(2017)			.08					
			Hindu	.16	107		Dominant		
				.19					
	Inguglia et al.	Italy	Italians	.23	256	16			
	(2017)			.23				Tolerance	
	Lebedeva (2020)	Kyrgyzstan	Ethnic Russians	09	300	36	Non-dominant	Multicultural ideology	
				.07				Tolerance	
			Kyrgyz	.33	300		Dominant	Multicultural ideology	
				.08				Tolerance	
	Lebedeva,	Latvia	Ethnic Russians	06	336	43	Non-dominant		
	Tatarko, et al (2017)			.05				Multicultural ideology	
	(2017)		Latvians	.32	363		Dominant	Tolerance	
				.19				Multicultural ideology	
	Ryabichenko	Lithuania	Ethnic Russians	.07	290	27	Non-dominant		
	(2017)			11				Tolerance	
	Sammut and Lauri	Malta	Ethnocultural	03	250	38		Multicultural ideology	
	(2017)		groups	.04				Tolerance	
				.07				Multicultural ideology	
				.01				Tolerance	
			Maltese	.16	193		Dominant	Multicultural ideology	
				.17				Tolerance	
				.04				Multicultural ideology	
				.11				Tolerance	
	Sam et al. (2017)	Norway	Russians	.26	252	49	Non-dominant	Multicultural ideology	
				.08					
									Discrimination
			Norwegians	24	500	52	Dominant		
									Security
				.68					
	Neto and Neto	Portugal	Portuguese	30	348	30		Tolerance	Discrimination
	(2017)			25				Multicultural ideology	
			Ethnic Minorities	.04	1505	37	Non-dominant		
				14				Tolerance	
	Lebedeva,	Russia	Migrants from	02	227	32			Security
	Galyapina,		Central Asia						
	et al. (2017)			20				Multicultural	
				.28				Multicultural ideology	



Hypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Antecedent
			Migrants from South Caucasus	.11 .16	274	34		Tolerance Multicultural ideology	
			Ethnic Russians	02 .45	261	36	Dominant	Tolerance Multicultural ideology	
			Ethnic Russians	.15	344	43	Non-dominant	Tolerance Multicultural ideology	
			Ossetians	.14	340	43	Dominant	Tolerance	
			Ethnic Russians	.33	335	41	Non-dominant	Multicultural ideology Tolerance	
			Kabardians,	.39	351	43	Dominant	Multicultural ideology Tolerance	
	Grad (2017)	Spain	Balkars Ecuadorean	.10 21	205	20-50	Non-dominant	Multicultural ideology  Multicultural ideology	Discrimination
				21 23				Tolerance	Security
			Spanish	29 50	200		Dominant	Multicultural ideology Multicultural ideology	Discrimination
			Spanish	49	200		Dominant	Tolerance	
				.32				Multicultural ideology Tolerance	Security
	Haenni Hoti et al. (2017)	Switzerland	Swiss	.07	364	14		Multicultural ideology	
	Berry et al. (2019)	Tajikistan	Ethnic Russians	.02	277	32	Non-dominant	Tolerance Multicultural ideology	
			Tajiks	.01	317	36	Dominant	Tolerance Multicultural ideology	
Contact	Lebedeva, Tatarko, et al. (2017)	Azerbaijan	Ethnic Russians	.15 .24	307	46	Non-dominant	Integration strategy Multicultural ideology	
	(2017)		Azerbaijanis	27	300	47	Dominant	Integration expectation	
	Safdar et al. (2017)	Canada	Chinese International Students	.25	57	26	Non-dominant	Integration strategy	
			Canadian Students	.15	68	22	Dominant	Multicultural ideology	
	Lebedeva (2020)	Estonia	Ethnic Russians	.01	213	31	Non-dominant	Multicultural ideology Integration strategy	
			Estonians	05 .07	332	33	Dominant	Multicultural ideology  Integration expectation	
	Brylka et al. (2017)	Finland	Russian-speaking immigrants from the former Soviet Union or the Russian	.46	313	45	Non-dominant	Multicultural ideology	
	Berry et al. (2019)	Georgia	Ethnic Russians	.06 .17	312	31		Integration strategy	
			Georgians	.04 01	298	34	Dominant	Multicultural ideology Integration expectation	



TABLE 1 (Continued)

I ADLL I	(Continued)								
Hypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Antecedent
	Hanke et al. (2017)	Germany	Bicultural sample	.28	241	28	Non-dominant	Multicultural ideology	
	Pavlopoulos and	Greece	Immigrants	.01	147	36		Integration strategy	
	Motti- Stefanidi		Greeks	.03	449	38	Dominant	Integration expectation	
	(2017)			.21				Multicultural ideology	
	Au et al. (2017)	Hong Kong	Mainland Chinese	.16	182	42	Non-dominant	Integration strategy	
			Immigrant	.17				Multicultural ideology	
				.20	181	45	Dominant	Integration expectation	
			Residents	.16				Multicultural ideology	
	Mishra et al.		Muslims	.28	107	34	Non-dominant	Multicultural ideology	
	(2017)			.05				Integration strategy	
			Hindu	.31	107		Dominant	Multicultural ideology	
				.41				Integration expectation	
	Inguglia et al.	Italy	Tunisians	.16	188	16	Non-dominant	Integration strategy	
	(2017)			.23	127				
				.28	348				
			Italians	.10	129	16	Dominant	Multicultural ideology	
				.22	256				
	Lebedeva (2020)	Kyrgyzstan	Ethnic Russians	03	300	36	Non-dominant		
				.15				Integration strategy	
			Kyrgyz	.17	300		Dominant	Multicultural ideology	
				.18				Integration expectation	
	Lebedeva, Tatarko, et al.	Latvia	Ethnic Russians	.25	336	43	Non-dominant	Integration strategy	
	(2017)	Lithuania	Lateriana	02	262		Danis	Multicultural ideology	
			Latvians	.06	363		Dominant	Integration expectation	
	Drychichaulro		Ethnia Dussiana	10	200	27	Non dominant	Multicultural ideology	
	Ryabichenko (2017)	Litnuania	Ethnic Russians	.03	290	27	Non-dominant	Multicultural ideology	
	Sammut and Lauri	Malta	Ethnocultural	16	250	38		Integration strategy  Multicultural ideology	
	(2017)	Maita	groups	10	230	30		Multicultural Ideology	
			Maltese	.25	193		Dominant		
	Sam et al. (2017)	Norway	Russians	.06	252	41	Non-dominant		
			Norwegians	.15	500	52	Dominant		
	Neto and Neto	Portugal	Ethnic Minorities	.18	1505	37	Non-dominant	Integration strategy	
	(2017)			.16				Multicultural ideology	
			Portuguese	.05	348	30	Dominant	Integration expectation	
				.17				Multicultural ideology	
	Lebedeva, Galyapina, et al. (2017)	Russia	Migrants from Central Asia	.09	227	32	Non-dominant		
				.17				Integration strategy	
			Migrants from	.09	274	34		Multicultural ideology	
			South Caucasus	.06				Integration strategy	
			Ethnic Russians	.01	261	36	Dominant	Multicultural ideology	
				.19				Integration expectation	
			Ethnic Russians	.37	344	43	Non-dominant	Integration strategy	
				.38				Multicultural ideology	



Hypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Antecedent
			Ossetians	.15	340	43	Dominant	Integration expectation	
				.10				Multicultural ideology	
			Ethnic Russians	04	335	41	Non-dominant	Integration strategy	
			Kabardians,	.14	351	43	Dominant	Integration expectation	
			Balkars	03				Multicultural ideology	
	Tsydendambaeva and Grigoryev		Buryats	.29 .27	161	30	Non-dominant	Integration strategy	
	(2015) Grad (2017)	Spain	Spanish	04	200	20.50	Dominant	Integration expectation	
	Grad (2017)	Spain	Spanish	18	200	20-30	Dominant	Multicultural ideology	
			Ecuadorean	.17	205		Non-dominant	Muticultural Ideology	
			Ecuadorean	.06	203		Non-dominant	Integration strategy	
	Berry et al. (2019)	Tajikistan	Ethnic Russians	.00	277	32		imogration strategy	
	2011, 51 41. (2017)	24314151411		.02	2//			Multicultural ideology	
			Tajiks	.16	317	36	Dominant	Integration expectation	
			,	.04				Multicultural ideology	
Integration	Lebedeva,	Azerbaijan	Ethnic Russians	.13	307	46	Non-dominant	Psychological Psychological	
	Tatarko, et al.	,		.16				adaptation	
	(2017)		Azerbaijanis	.27	300	47	Dominant		
				10					
	Grigoryev and Berry (2017)	Belgium	Russian-speaking Immigrants	.42	132	36	Non-dominant	Sociocultural adaptation	
	Safdar et al. (2017)	Canada	Chinese	05	57	26		Psychological	
			International Students	.25				adaptation	
			Students	.40				Sociocultural adaptation	
			Canadian Long	.20	138	49	Dominant	Psychological	
			Term Resident	.15				adaptation	
				.05				Sociocultural adaptation	
			Chinese New	.23	96	33	Non-dominant	Psychological	
			Resident	20				adaptation	
				.32				Conic cultural - deservi	
			Lotin American	.27	02	2.1		Sociocultural adaptation	
			Latin American New Resident	.23	93	34		Psychological adaptation	
				.38					
				.13				Sociocultural adaptation	
	Lebedeva (2020)	Estonia	Ethnic Russians	.20	213	31		Psychological	
								adaptation	
				.29					
			Estonians	.12	332	33	Dominant		
				02					
	Berry et al. (2019)	Georgia	Ethnic Russians	.22	312	31	Non-dominant		
				.21					
			Georgians	03	298	34	Dominant		
				.09					



lypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Anteceden
	Hanke et al. (2017)	Germany	Germans	.10	603	28			
				.08					
			Bicultural sample	.23	241		Non-dominant		
				.26					
	Pavlopoulos and	Greece	Immigrants	.10	147	36			
	Motti- Stefanidi			.23					
	(2017)			.21				Sociocultural adaptation	
			Greeks	01	449	37	Dominant	Psychological adaptation	
				.04					
	Au et al. (2017)	Hong Kong	Mainland Chinese	.44	182	42	Non-dominant		
			Immigrant	.23				Sociocultural adaptation	
			Hong Kong Chinese Residents	.23	181	45	Dominant	Psychological adaptation	
	Mishra et al.	India	Muslims	.22	107	34	Non-dominant		
	(2017)			.04					
			Hindu	01	107		Dominant		
				09					
	Inguglia et al.	Italy	Italians	.05	256	16			
	(2017)			.12					
				.24	129				
				.19					
			Tunisians	.30	188		Non-dominant		
				.19					
				.22	127				
				.24					
				.20				Sociocultural adaptation	
				.17	348			Psychological adaptation	
				.17				Sociocultural adaptation	
	Lebedeva (2020)	Kyrgyzstan	Ethnic Russians	.09	300	36		Psychological adaptation	
				.27					
			Kyrgyz	.09	300		Dominant		
			Ed. i B.	.01	22.5	42	N. I.		
	Lebedeva, Tatarko, et al. (2017)	Latvia	Ethnic Russians	.15 04	336	43	Non-dominant		
	(==+/)		Latvians	.18	363		Dominant		
				.01					
	Ryabichenko (2017)	Lithuania	Ethnic Russians	.03	290	27	Non-dominant		
	Sammut and Lauri (2017)	Malta	Ethnocultural groups	05 .07	250	38			
			Maltese		193		Dominant		
				.23	1)5		Dominant		

Hypothesis	Authors	Society	Ethnicity	r	N	Age	Status	Outcome	Anteceden
	Neto and Neto	Portugal	Ethnic Minorities	.11	1505	37	Non-dominant	Sociocultural adaptation	
	(2017)			.22				Psychological	
				.42				adaptation	
				.16					
			Portuguese	.08	348	30	Dominant		
				.20					
				.05					
	Lebedeva, Galyapina, et al. (2017)	Russia	Migrants from Central Asia	01	227	32	Non-dominant		
				.20					
				06				Sociocultural adaptation	
			Migrants from	.30	274	34		Psychological	
			South	.12				adaptation	
			Caucasus	.28				Sociocultural adaptation	
			Ethnic Russians	.16	261	36	Dominant	Psychological	
				.05				adaptation	
				.27	344	43	Non-dominant		
				.17					
				.21				Sociocultural adaptation	
			Ossetians	.30	340	43	Dominant	Psychological adaptation	
				.23					
			Ethnic Russians	24	335	41	Non-dominant		
				.04					
				.25				Sociocultural adaptation	
			Kabardians,	.09	351	43	Dominant	Psychological	
			Balkars	.24				adaptation	
	Lepshokova (2012)		Ethnic Russians	.31	121	30			
				.19					
				.55					
			Host society of	.28	140	37			
			the North Caucasus	.37					
				.31					
				.24					
	Grad (2017)	Spain	Ecuadorean	.02	205	20-50	Non-dominant		
				.02					
				.03				Sociocultural adaptation	
			Spanish	03 03	200		Dominant	Psychological adaptation	
	Berry et al. (2019)	Tajikistan	Ethnic Russians	.08	277	32	Non-dominant		
				.29					
				.14				Sociocultural adaptation	
			Tajiks	.19	317	36	Dominant	Psychological	
				.25				adaptation	

*Note:* When analysing the relationship of Discrimination with Multicultural Ideology and Tolerance the sign of coefficients was changed to the opposite.



# Intercultural variables

Security (cultural, economic, personal) (Berry, 2006; Berry & Kalin, 1995)

This scale includes 13 items answered on a Likert-type scale ranging from 1 = totally disagree to 5 = totally agree. An example item is 'This country is prosperous and wealthy enough for everyone to feel secure'. Cronbach's alpha coefficient ranged in MIRIPS studies from .47 to .63.

# Discrimination (Berry et al., 2006)

The Perceived Discrimination scale includes 5 items on a Likert-type scale ranging from 1 = *strongly disagree* to 5 = *strongly agree*. An example item is 'I have been threatened or attacked because of my [ethnic/national] background'. Cronbach's alpha coefficient ranged in MIRIPS studies from .73 to .86.

# Contact (Berry et al., 2006)

The Intercultural Contacts were measured by questions about the number of close interethnic friends ('How many close [co-ethnic/national/other ethnic] friends do you have?' from 1 = none to 5 = many) and frequency of contacts to them ('How often you meet with close [co-ethnic/national/other ethnic] friends?' from 1 = never to 5 = daily). Cronbach's alpha coefficient ranged in MIRIPS studies from .70 to .91.

# Acculturation strategies/expectations (Berry et al., 1989)

The Integration Acculturation Strategy/Expectation scales includes 4 items on a Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. An example of the Integration Acculturation Strategy item is 'I prefer social activities which involve both [national] members and [ethnic] members'. An example of the Integration Acculturation Expectation item is 'Immigrants/ethnics should engage in social activities that involve both [national members] and their own group'. Cronbach's alpha coefficient ranged in MIRIPS studies from .48 to .74.

# Adaptation variables

# Psychological adaptation

Self-esteem (Rosenberg, 1965)

The Self-esteem scale includes 10 items on a Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. An example item is 'On the whole, I am satisfied with myself'. Cronbach's alpha coefficient ranged in MIRIPS studies from .57 to .85.

Life satisfaction (Diener et al., 1985)

The Life satisfaction scale includes 5 items on a Likert-type scale ranging from 1 = strongly disagree to 5 = strongly agree. An example item is 'In most ways my life is close to my ideal'. Cronbach's alpha coefficient ranged in MIRIPS studies from .74 to .90.

Psychological problems (Beiser & Flemming, 1986; Kinzie et al., 1982; Kovacs, 1981; Mollica et al., 1987; Reynolds & Richmond, 1985; Robinson et al., 1991)

The Psychological problems scale from MIRIPS questionnaire includes 15 items on a Likert-type scale ranging from 1 = never to 5 = all the time. A sample item is 'I feel tired'. Cronbach's alpha coefficient ranged in MIRIPS studies from .84 to .93.

Sociocultural adaptation (Bendixen & Olweus, 1999; Olweus, 1989, 1994; Ward, 1999)

The Sociocultural Competence scale from MIRIPS questionnaire indicates how much difficulties experienced person living in a new society in different areas and includes 20 items on a Likert-type scale ranging from 1 = no difficulty to 5 = extreme difficulty. A sample item is 'Following rules and regulations'. Cronbach's alpha coefficient ranged in MIRIPS studies from .81 to .97.

# Intercultural adaptation

Multicultural ideology (Berry et al., 1977)

The *Multicultural ideology* scale includes 10 items on a Likert-type scale ranging from 1 = totally disagree to 5 = totally agree. A sample item is 'We should recognize that cultural and racial diversity is a fundamental characteristic of [national] society'. Cronbach's alpha coefficient ranged in MIRIPS studies from .49 to .83.

Tolerance (Berry et al., 1977)

The Tolerance scale includes 11 items on a Likert-type scale ranging from 1 = totally disagree to 5 = totally agree. A sample reverse item is 'It makes me angry when I hear immigrants/ethnics demanding the same rights as [national] citizens' (reverse). Cronbach's alpha coefficient ranged in MIRIPS studies from .52 to .71.

# Data collection and analysis

Each MIRIPS team used the instrument, and chose to collect and analyses their data in a way that met their particular requirements, by selecting and operationalising the variables and taking into account their local research issues and the requirements of their funding sources. In some cases, simple mean differences, and bivariate correlations were used to evaluate the three hypotheses. In other cases, multivariate statistics, such as factor analysis, profile analysis and path analyses were carried out. And in some cases, a combination of these methods was used to gain multiple perspectives on the validity of the three hypotheses. These analyses (see Berry, 2017, table 18.2) provided an overview of the findings. Using the .05 probability criterion for evaluating the three hypotheses, support was found in 92%, 85% and 86% of these evaluations for the multiculturalism, contact and integration hypotheses, respectively.

The main findings presented in this paper go beyond this earlier evaluation and are the result of conducting an internal multilevel meta-analysis to summarise the results within the MIRIPS project. We used raw bivariate correlations between the focal variables, which allows for correlated sampling errors and true effects. The three-level meta-analytic models (i.e. participants were 'nested' within studies, while studies—within societies) were estimated by *metafor* R package (Viechtbauer, 2010) using REML estimation for the amount of heterogeneity and a random-effects model is then automatically fitted (Assink & Wibbelink, 2016). Thus, in a three-level meta-analysis, variance at three



different levels is analysed: (1) sample variance (*Level 1*), (2) variance between effect sizes within studies (*Level 2*), and (3) variance among effect sizes between studies (*Level 3*). Hence, the multilevel technique permits not only to estimate overall effect size but if a strong variance is present at Level 2 and/or Level 3, moderation by sample, methodological and/or study features can be explored. This is a substantial enhancement because commonly used meta-analytic methods suppose independency of effect sizes, whereas this normally is not the case. The technique also permits the employ of multiple effect sizes (within studies) from the same sample.

#### RESULTS

The studies were conducted between 2012 and 2020; the median year was 2013. The majority of the studies were conducted in western societies, with only some studies in other types of society.

The present analyses use internal multilevel meta-analysis to examine the relationships that were predicted in the three MIRIPS hypotheses. The results for the three hypotheses are presented in Table 2 including the number of studies (k), the number of effect sizes, combined sample sizes, individual correlations (r) and their 95% confidence intervals (95% CI; i.e. the error around these corrected mean correlations), standard errors (SE) and 95% prediction intervals (95% PI; i.e. the variability in these correlations across studies), and the  $I^2$  values (i.e. percentages of the total variability in outcomes that is due to heterogeneity on the different levels). In general, all of the hypotheses were supported: Multiculturalism hypothesis (k = 20), r = .18 [.13, .23]; Contact hypothesis (k = 19), r = .12 [.09, .16]; Integration hypothesis (k = 18), r = .15 [.11, .18].

However, the variation in the strength of the effects had a quite large variability. As mentioned, our modelling had the sampling variation for each effect size (*Level 1*), variation within a society (*Level* 

TABLE 2 Results of the internal meta-analysis for the three hypotheses

	Overall effect		
	Multiculturalism hypothesis	Contact hypothesis	Integration hypothesis
N of studies	20	19	18
n of ESs	106	72	107
Total N of subjects	12,806	12,591	12,620
ES(r) [95% CI]	.18 [.13, .23]	.12 [.09, .16]	.15 [.11, .18]
SE	.026	.017	.019
t	6.911*	7.355*	7.547*
95% PI	[21, .57]	[13, .37]	[10, .39]
$Q\left(df\right)$	2773.16 (105)*	410.95 (71)*	635.41 (106)*
$\sigma^2_{\text{Study}}(n)$	.01 (20)	.01 (19)	.01 (18)
$\sigma^2_{\text{Study/ES}}(n)$	.03 (106)	.02 (72)	.01 (107)
% of total variance—Level 1	7.3	17.1	17.2
% of total variance—Level 2	81.3	81.4	66.2
% of total variance—Level 3	11.4	1.5	16.6
Total $I^2$	92.7	82.9	82.8

<sup>\*</sup>p < .001.

2), and variation over societies (*Level 3*). Heterogeneity analyses showed significant *Level 2* and *Level 3* variance for all of the three hypotheses. These values mean that there is more variability in effect sizes than may be expected based on sampling variance alone (i.e. on 'participant' level). The *PIs* showed the expected range of true effects included negative effects as well for 95% of similar (exchangeable) studies that might be conducted in the future (i.e. values are possible on both sides of the null). This means that there will be contexts where estimates based on these *CIs* will not hold. Indeed, the MIRIPS data set also has some negative correlations that are opposite to our hypotheses (see Table 1): (i) between Security and Multicultural Ideology/Tolerance among the non-dominant group in Spain (-.29/-.23) and in Lithuania (-.11; Tolerance) and among the dominant group in Estonia (-.11; Multicultural Ideology); (ii) among the dominant groups between Contact and Multicultural Ideology in Spain (-.18) and between Contact and Integration Expectation in Azerbaijan (-.27), and among the non-dominant group in Malta between Contact and Multicultural Ideology (-.16); (iii) among the dominant groups between Integration and Psychological Adaptation in Malta (-.25) and between Integration and Psychological Adaptation in Russia (-.24). Next, we tested several moderators to attempt to understand these patterns.

More than half of the total variance could be explained by within-society differences in effect sizes (Level 2 in Table 2) so type of the focal variables (e.g. Multicultural Ideology or Tolerance), dominant/non-dominant group status and their interaction were used as main moderators (see Table 3). There was no evidence of the effects of the type of the focal variables and the interaction on the estimated effect sizes. It means that these estimates can be considered for all the types of outcomes/antecedents as the same. Only the dominant/non-dominant group status showed significant effects for the Multiculturalism hypothesis and marginal, non-significant results for the other two hypotheses (p = .063 and p = .077 for Contact and Integration, respectively); we will also discuss the tendencies for the possible effects of this asymmetry in status in light of additional evidence from the literature later.

The variance related to societies (*Level 3* in Table 2) varied: 17% for Integration hypothesis, 11% for Multiculturalism hypothesis, 2% for Contact hypothesis. This could indicate that integration policy and multicultural practices matter, but we could not test it directly because there are no relevant indexes for most of the countries that could be used as moderators. Stogianni et al. (2021) reported that they faced the same problem for testing country-level moderators for the relationship between biculturalism and adjustment; their attempts on a limited number of cases were unsuccessful. Their findings revealed no evidence for moderation effects of MIPEX scores, Human Development Index, and a rough indication of cultural distance on this relationship.

#### DISCUSSION

A summary of evaluations provides general support for the three hypotheses when examined over samples within the MIRIPS project. First, the earlier analyses (Berry, 2017) showed that the hypotheses were substantially supported using the conventional .05 probability criterion. The present meta-analysis provides further support. The estimated effect sizes obtained correspond to the median effect size from pre-registered psychological research, which is r = .16 (Schäfer & Schwarz, 2019). The estimated effect sizes can also be compared with other similar meta-analyses: between multicultural ideology and prejudice, r = -.13 [-.16, -.10] (Whitley & Webster, 2018); between integration and adaptation, r = .10 [.09, .12] (Nguyen & Benet-Martinez, 2013) and r = .12 [.08, .16] (Stogianni et al., 2021); and between contact and prejudice, r = -.20 [-.21, -.20] (Pettigrew & Tropp, 2006) and r = -.21 (Kende et al., 2017). On the basis of the pattern found in this study, we may suggest that there



TABLE 3 Results of the moderation analysis for the internal meta-analysis for the three hypotheses

Hypothesis	Moderator variable	B [95% CI]	F(df1, df2)	p	ES(r) [95% CI]	95% PI
Multiculturalism						
	Group status	.113 [.041, .185]	9.59 (1, 104)	.003		
	Non-dominant				.12 [.06, .19]	[26, .50]
	Dominant				.24 [.17, .30]	[14, .61]
	Outcome	026 [103, .051]	.44 (1, 104)	.507		
	Multicultural ideology				.19 [.13, .25]	[20, .58]
	Tolerance				.17 [.10, .23]	[23, .56]
	Antecedent	.048 [057, .152]	.81 (1, 104)	.371		
	Security				.17 [.12, .23]	[22, .56]
	Discrimination				.22 [.12, .32]	[18, .62]
Contact						
	Group status	061 [124, .003]	3.56 (1, 70)	.063		
	Non-dominant				.15 [.11, .20]	[09, .40]
	Dominant				.09 [.04, .14]	[15, .34]
	Outcome	.020 [045, .085]	.38 (1, 70)	.541		
	Multicultural ideology				.12 [.07, .16]	[14, .37]
	Integration				.14 [.09, .18]	[12, .39]
	strategy/ expectation					
Integration						
	Group status	045 [095, .005]	3.20 (1, 105)	.077		
	Non-dominant				.16 [.12, .21]	[08, .41]
	Dominant				.12 [.07, .17]	[13, .37]
	Outcome	027 [101, .047]	.52 (1, 105)	.472		
	Sociocultural adaptation				.17 [.09, .24]	[09, .43]
	Psychological adaptation				.14 [.10, .18]	[11, .39]

*Note:* When analysing the relationship of Discrimination with Multicultural Ideology and Tolerance the sign of coefficients was changed to the opposite. This means that the estimate of a true effect for Discrimination is  $r[95\% \ CI; 95\% \ PI] = -.22 \ [-.32, -.12; -.62, .18].$ 

is support for these hypotheses. However, is this level of support sufficient to advance them as bases for developing policies and programmes that seek to promote more positive intercultural relations? To answer this question, we need to consider a few issues.

First, and most important, is the *degree of support* for these hypotheses in both kinds of samples. We found that there is substantial support for them, with very few contrary findings. In two societies (Spain and Malta) there are some cases of no support; these societies have been experiencing substantial difficulties due to migrant flows from Africa, which challenge the intercultural climate. In a few

other cases, there were also some contrary findings in post-Soviet societies: these cases were found in Azerbaijan, Estonia, Lithuania and Russia. Again, these are societies where there are continuing challenges in the relations between the dominant and non-dominant groups (see Lebedeva et al., 2018).

Second is the question regarding *similarity in the support* in the results of the dominant and non-dominant samples. The results show that there is a generally common level of support in these two types of samples across the countries in the study. This degree of agreement between dominant and non-dominant people living in the same society is not inevitable; it could have been otherwise. This agreement may be taken as evidence for the presence of commonality in the consistency of intercultural relations in most of these societies This is the core of the question of *mutual* intercultural relations; is there support (or not) for the hypotheses in *both* dominant and non-dominant groups within a society? We found a level of mutuality that does not vary much across the three hypotheses, supporting the mutuality of intercultural relations in these societies.

We found some evidence of the effects of the type of group as a moderator; hence it is important to note what are the variations between the two kinds of samples. First, for the Multiculturalism Hypothesis, the relationship between Security and Multicultural Ideology was stronger for dominant groups. This hypothesis and these two scales were created for the situation in Canada in the 1970s (Berry et al., 1977), and may be less appropriate for non-dominant groups in other societies, and at the present time. A revision of the Multicultural Ideology scale is currently underway to make it more relevant to present-day issues by adding the need for social inclusion to diversity and contact. In general, future research needs to pay more attention to issues of measurement: reliability, and convergent and discriminant validity. More focus towards a person-oriented approach can be also considered promising (see Berry et al., 2006; Grigoryev & van de Vijver, 2018; Inguglia & Musso, 2015; Schwartz & Zamboanga, 2008).

Second, there is a tendency for the relationship between Contact and Integration to be stronger for non-dominant groups than for dominant groups. This may be due to contact with the dominant group being more important for the integration of non-dominant people into the larger society than is contact for members of the dominant society.

Third, there is a tendency for the relationships between the Integration Expectation and the Adaptations to be lower among dominant groups than among non-dominant groups. This could be due to the limited knowledge available on the acculturation preferences of dominant groups on which to base a prediction. As noted, this lack is currently being rectified (see Haugen & Kunst, 2017); this ongoing research may provide some clarification to this issue.

On the basis of these findings, we believe that there is some possibility of developing policies and programmes to improve intercultural relations in those societies. This is most likely to be successful where there is both support for the hypotheses and mutual agreement between groups in their support. However, in those societies where there is limited support for a hypothesis, there is still a possibility of developing programmes to promote them by working with that sector of the society where such limited support was found. In these cases, working directly with the cultural communities, as well as with those in the immigrant and settlement service sectors, can provide information and motivation to promote change in the direction of more positive intercultural relations.

In addition, we suggest that support for the hypotheses may depend on the different contexts in which they are examined: national states (e.g. Germany, Denmark); immigrant/settler countries (e.g. Canada, the US); conglomerate countries (e.g. Russia, Indonesia); newly independent states (e.g. Azerbaijan, Georgia); or post-colonial states (e.g. Republic of South African, Morocco). These contextual variations need to be taken into account in future research (see also van Oudenhoven & Ward, 2013; Ward & Geeraert, 2016).



# Policy and programme implications of the findings

The evidence produced on the validity of these three hypotheses by the research teams working in these 21 societies, while there is some variability, has provided a large degree of general support for them. This pattern of findings raises three questions. First, do they qualify as universal principles of intercultural relations? Second, does this level of support provide a basis for claiming that these three hypotheses are likely to be global in their validity? And third, if so, can they provide a basis for advancing policies and programmes that will improve the quality of intercultural relations elsewhere in the world? In our view, the empirical findings do allow us to promote them as candidates for being universal psychological principles of intercultural relations.

As noted above, we consider that psychological universality is a concept that incorporates both pan-human commonality in the underlying process, and variability in the development and expression of the process under differing cultural conditions. Despite the variability in support for these three hypotheses across the 21 societies in the MIRIPS study, we believe that the test for this concept of universality has largely been met. This is because not only is there is widespread support for them, there is very little support for their converse. In only three societies (Estonia, Lithuania, Spain) did we find evidence that a lack of security or the presence of discrimination is associated with positive intercultural relations. In only three societies (Azerbaijan, Malta, Spain) did we find that a low level of contact was associated with positive intercultural adaptation. And in only two societies (Malta and Russia) did we find that a preference for integration was associated with low psychological or sociocultural adaptation. All of these relationship anomalies may be explained by specific to these national contexts. Future research should examine these variations systematically, and suggest mechanisms for this contextual moderation.

If the claim for some universality is accepted, we can ask the fundamental question: is such universality sufficient to serve as a basis for promoting these three principles as a valid basis for developing intercultural policy and programme in many societies? Although the three principles were drawn from extant intercultural policy (in Canada, Australia and the European Union), and have been largely supported by empirical research in Euroamerican psychology and in the present study in a variety of societies, do they provide a relevant basis for policy development in other plural societies outside this limited range of societies?

In some of the societies just mentioned, there have been a policy transition over the past decades from attempts to assimilate non-dominant (indigenous, ethnocultural and migrant) peoples into a homogeneous society, to one that is more integrationist and multicultural (Berry & Kalin, 2000). This policy transition has moved towards the ways in which intercultural relations have been shown in the present research to lead to more mutual acceptance: a more secure place for all, with limited discrimination; more contact among groups, rather than exclusion; and more multiple identities, rather than a single national identity. In contrast, although some societies appear to have transitioned away from multiculturalism, the reality of this transition has been questioned (Banting & Kymlicka, 2013; Kymlicka, 2010).

Is it possible to emulate this transition towards multiculturalism in other plural societies? The lesson here is that change in intercultural policy and practice has taken place in some societies, showing that it is possible. If this has been the case in these societies, what conditions may be required in other societies in order to move toward this more pluralist vision?

One possible answer is that the kind of evidence provided by the MIRIPS project may be useful to persuade other culturally diverse societies to move away from continuing to pursue assimilation policies that are designed to achieve a culturally homogeneous society, or from policies that exclude those that are culturally different, toward a more multicultural one. In our view, policies that are

evidence-based are more likely to be successful than those based only on pre-conceptions or political expediency. However, evidence alone (such as that provided in this project) is unlikely to shift public policy towards more pluralist ways of living together. Other factors are also important, particularly public opinion, political ideology, and the availability of resources.

Public education to change public opinion is required in order to bring about any policy change from assimilation (or exclusion) toward a multicultural way of living together. The benefits of the multicultural vision need to be articulated and advocated widely in ways that the general public can understand and accept. Particularly important is the claim that life for everyone is enriched culturally, economically and personally in multicultural societies (Berry, 1998; Berry & Sam, 2013). Access to politicians and policy makers is also required in order to ensure that the evidence is presented and understood (and hopefully accepted) by them. Both private and public advocacy will be essential to provide not only the evidence but also the motivation for social change.

#### **Conclusions**

In this project, we have followed a research path starting with some ideas proposed in public policy, converted them to psychological and social concepts and measures, and then subjected them to empirical evaluations. We have ended this journey by returning to the domain of public policy and practice in order to improve mutual intercultural relations by using these findings.

By combining the approaches of cross-cultural and intercultural psychology in this project, we have been able to approach an answer to the core question of whether there are some universal principles of how individuals of different backgrounds may relate to each other positively, and live together successfully, in plural societies. The first approach provides an understanding of variations in behaviours in different cultures; the second approach provides a basis for examining how these different behaviours may achieve some mutual accommodation when they come into contact. Using both approaches, we are able to arrive at some understanding of the ways in which people may relate to each other on the basis of three possibly universal or pan-cultural principles of intercultural relations. Despite the obvious difficulties that are present in many contemporary societies, the three psychological principles of intercultural relations examined in this project would be a good place to start.

In a sense, the project is an example of extended replication. Current controversies about the reproducibility of psychological findings, even within the same society, suggest that our knowledge base is not as secure as previously thought (e.g. Lilienfeld & Strother, 2020). So, it will be useful to attempt to repeat the empirical examination of the same three MIRIPS hypotheses in a number of different societies, beyond these mainly Western ones, in order to broaden our knowledge base. In this project, despite highly variable conditions (demographic, cultural, historical and policy), there has been a modest degree of replication of psychological findings across contexts. However, more needs to be done to expand the conceptual and empirical basis for appropriate policy development.

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#### **AUTHOR CONTRIBUTIONS**

JB initiated the project and coordinated all the stages. ZL dealt with data management and prepared the dataset for the meta-analysis. MC provided data for the meta-analysis. DG conducted the meta-analysis. JB, DG and ZL were involved in the conceptualisation of the study, drafting of the manuscript, and revised it critically.

#### CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

#### DATA AVAILABILITY STATEMENT

The dataset is available on request.

#### ETHICS STATEMENT

Data were collected in line with the guidelines of the Ethics Committee of our universities.

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#### REFERENCES

Allport, G. W. (1954). The nature of prejudice. Addison-Wesley.

- Assink, M., & Wibbelink, C. J. M. (2016). Fitting three-level meta-analytic models in R: A step-by-step tutorial. *The Quantitative Methods for Psychology*, 12(3), 154–174. https://doi.org/10.20982/tqmp.12.3.p154
- \*Au, A. K. Y., Hui, B. P. H., & Chen, S. X. (2017). Intercultural relations in Hong Kong. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 311–332). Cambridge University Press.
- Banting, K., & Kymlicka, W. (2013). Is there really a retreat from multiculturalism policies? New evidence from the multiculturalism policy index. *Comparative European Politics*, 11(5), 577–598. https://doi.org/10.1057/cep.2013.12
- Beiser, M., & Fleming, J. A. (1986). Measuring psychiatric disorder among Southeast Asian refugees. Psychological Medicine, 16(3), 627–639. https://doi.org/10.1017/S0033291700010382
- Bendixen, M., & Olweus, D. (1999). Measurement of antisocial behaviour in early adolescence and adolescence: psychometric properties and substantive findings. *Criminal Behaviour and Mental Health*, 9(4), 323–354. https://doi.org/10.1002/cbm.330
- Berry, J. W. (1974). Psychological aspects of cultural pluralism. *Topics in Culture Learning*, 2, 17–22.
- Berry, J. W. (1980). Acculturation as varieties of adaptation. In A. Padilla (Ed.), *Acculturation: Theory, models and some new findings* (pp. 9–25). Westview Press.
- Berry, J. W. (1990). Psychology of acculturation. In J. Berman (Ed.), Cross-cultural perspectives: Nebraska symposium on motivation (Vol. 37, pp. 201–234). University of Nebraska Press.
- Berry, J. W. (1997). Immigration, acculturation and adaptation. *Applied Psychology: An International Review*, 46, 5–68. https://doi.org/10.1111/j.1464-0597.1997.tb01087.x
- Berry, J. W. (1998). Social psychological costs and benefits of multiculturalism. *Trames: Estonian Journal of Social Sciences*, 2, 209–233.
- Berry, J. W. (2005). Acculturation: Living successfully in two cultures. *International Journal of Intercultural Relations*, 29, 697–712. https://doi.org/10.1016/j.ijintrel.2005.07.013
- Berry, J. W. (Ed.). (2017). Mutual intercultural relations. Cambridge University Press.
- Berry, J. W. (2006). Attitudes towards immigrants and ethnocultural groups in Canada. *International Journal of Intercultural Relations*, 30, 719–734.
- \*Berry, J. W., Galyapina, V. N., Lebedeva, N., Lepshokova, Z., & Ryabichenko, T. (2019). Intercultural relations in Georgia and Tajikistan: A post-conflict model. *Psychology, Journal of the Higher School of Economics*, 16(2), 232–249.
- Berry, J. W., & Hou, F. (2016). Acculturation and wellbeing among immigrants to Canada. *Canadian Psychology*, 57, 254–264.
- Berry, J. W., & Kalin, R. (1995). Multicultural and ethnic attitudes in Canada: Overview of the 1991 survey. *Canadian Journal of Behavioural Science*, 27, 301–320.
- Berry, J. W., & Kalin, R. (2000). Muliticultural policy and social psychology: The Canadian experience. In S. Renshon & Duckitt, (Eds.), *Political psychology: Cultural and cross-cultural foundations* (pp. 263–284). MacMillan.
- Berry, J. W., Kalin, R., & Taylor, D. (1977). *Multiculturalism and ethnic attitudes in Canada*. Ministry of Supply and Services.
- Berry, J. W., Kim, U., Power, S., Young, M., & Bujaki, M. (1989). Acculturation attitudes in plural societies. *Applied Psychology: An International Review*, 38(2), 185–206. https://doi.org/10.1111/j.1464-0597.1989.tb01208.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, 303–332. https://doi.org/10.1111/j.1464-0597.2006.00256.x
- Berry, J. W., Poortinga, Y. H., Breugelmans, S. M., Chasiotis, A., & Sam, D. L. (2011). *Cross-cultural psychology: Research and applications* (3rd ed.). Cambridge University Press.
- Berry, J. W., & Sam, D. L. (2013). Accommodating cultural diversity and achieving equity: Psychological dimensions of multiculturalism. *European Psychologist*, 18(3), 151–157. https://doi.org/10.1027/1016-9040/a000167
- Birman, D., & Trickett, E. J. (2001). Cultural transitions in first-generation immigrants. *Journal of Cross-Cultural Psychology*, 32(4), 456–477. https://doi.org/10.1177/0022022101032004006
- Bourhis, R. Y., Moise, L. C., Perreault, S., & Senecal, S. (1997). Towards an interactive acculturation model: A social psychological approach. *International Journal of Psychology*, 32(6), 369–386. https://doi.org/10.1080/00207 5997400629
- \*Brylka, A., Jasinskaja-Lahti, I., & Renvik, T. A. (2017). Intercultural relations in Finland. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 81–104). Cambridge University Press.
- Carter, R. T., Johnson, V. E., Kirkinis, K., Roberson, K., Muchow, C., & Galgay, C. (2019). A meta-analytic review of racial discrimination: Relationships to health and culture. *Race and Social Problems*, 11(1), 15–32. https://doi. org/10.1007/s12552-018-9256-y



- Christ, O., & Kauff, M. (2019). Intergroup contact theory. In K. Sassenberg & M. Vliek (Eds.), Social psychology in action (pp. 145–161). Springer. https://doi.org/10.1007/978-3-030-13788-5\_10
- Demes, K. A., & Geeraert, N. (2014). Measures matter: Scales for adaptation, cultural distance, and acculturation orientation revisited. *Journal of Cross-Cultural Psychology*, 45(1), 91–109. https://doi.org/10.1177/0022022113 487590
- Diener, E., Emmons, R. A., Larsen, R. J., & Griffin, S. (1985). The satisfaction with life scale. *Journal of Personality Assessment*, 49(1), 71–75. https://doi.org/10.1207/s15327752jpa4901\_13
- Dovidio, J. F., Love, A., Schellhaas, F. M. H., & Hewstone, M. (2017). Reducing intergroup bias through intergroup contact: Twenty years of progress and future directions. *Group Processes & Intergroup Relations*, 20(5), 606–620. https://doi.org/10.1177/1368430217712052
- Erten, E. Y., van den Berg, P., & Weissing, F. J. (2018). Acculturation orientations affect the evolution of a multicultural society. *Nature Communications*, 9(1), 1–8. https://doi.org/10.1038/s41467-017-02513-0
- Government of Canada. (1971). Multicultural policy: Statement to House of Commons.
- \*Grad, H. (2017). Intercultural relations in Spain. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 249–267). Cambridge University Press.
- \*Grigoryev, D., & Berry, J. W. (2017). Acculturation preferences, ethnic and religious identification and the socioeconomic adaptation of Russian-speaking immigrants in Belgium. *Journal of Intercultural Communication Research*, 46(6), 537–557. https://doi.org/10.1080/17475759.2017.1386122
- Grigoryev, D., & van de Vijver, F. (2018). Acculturation expectation profiles of Russian majority group members and their intergroup attitudes. *International Journal of Intercultural Relations*, 64(3), 90–99. https://doi.org/10.1016/j. iiintrel.2018.03.001
- \*Haenni Hoti, A., Heinzmann, S., Muller, M., Buholzer, A., & Kunzle, R. (2017). Intercultural relations in Switzerland. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 145–166). Cambridge University Press.
- \*Hanke, K., vanEgmond, M., Rohmann, A., & Boehnke, K. (2017). Intercultural relations in Germany. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 145–166). Cambridge University Press.
- Haugen, I., & Kunst, J. R. (2017). A two-way process? A qualitative and quantitative investigation of majority members' acculturation. *International Journal of Intercultural Relations*, 60, 67–82. https://doi.org/10.1016/j.ijintrel.2017.07.004
- Inguglia, C., & Musso, P. (2015). Intercultural profiles and adaptation among immigrant and autochthonous adolescents. *Europe's Journal of Psychology*, 11(1), 79–99. https://doi.org/10.5964/ejop.v11i1.872
- \*Inguglia, C., Musso, P., & Lo Coco, A. (2017). Intercultural relations in Italy. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 187–209). Cambridge University Press.
- Kende, J., Phalet, K., Van den Noortgate, W., Kara, A., & Fischer, R. (2017). Equality revisited: A cultural meta-analysis of intergroup contact and prejudice. Social Psychological and Personality Science, 9(8), 887–895. https://doi. org/10.1177/1948550617728993
- Kinzie, J. D., Manson, S. M., Vinh, D. T., Tolan, N. T., Anh, B., & Pho, T. N. (1982). Development and validation of a Vietnamese-language depression rating scale. *The American Journal of Psychiatry*, 139(10), 1276–1281. https://doi.org/10.1176/ajp.139.10.1276
- Kovacs, M. (1981). Rating scales to assess depression in school-aged children. Acta Paedopsychiatry, 46, 305–315.
- Kunst, J. R., Lefringhausen, K., Skaar, S., & Obaidi, M. (2021). Who adopts the culture of ethnic minority groups? A personality perspective on majority-group members' acculturation. *International Journal of Intercultural Relations*, 81, 20–28. https://doi.org/10.1016/j.ijintrel.2021.01.001
- Kymlicka, W. (2010). The rise and fall of multiculturalism? New debates on inclusion and accommodation in diverse societies. *International Social Science Journal*, 61, 97–112. https://doi.org/10.1111/issj.12188
- \*Lebedeva, N. (Ed.). (2020). Interim Report of the Center for Sociocultural Research, National Research University Higher School of Economics. Unpublished.
- Lebedeva, N., Dimitrova, R., & Berry, J. W. (Eds.). (2018). Changing values and identities in the post-communist world. Springer.
- \*Lebedeva, N., Galyapina, V., Lepshokova, Z., & Ryabichenko, T. (2017). Intercultural relations in Russia. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 1–33). Cambridge University Press.
- \*Lebedeva, N., Tatarko, A., & Galyapina, V. (2017). Intercultural relations in Latvia and Azerbaijan. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 34–58). Cambridge University Press.

- Lefringhausen, K., Ferenczi, N., Marshall, T. C., & Kunst, J. R. (2021). A new route towards more harmonious intergroup relationships in England? Majority members' proximal-acculturation. *International Journal of Intercultural Relations*, 82, 56–73. https://doi.org/10.1016/j.ijintrel.2021.03.006
- \*Lepshokova, Z. (2012). Adaptation strategies of migrants and their psychological well-being: On the example of Moscow and the North Caucasus. Grifon.
- Lilienfeld, S., & Strother, A. (2020). Psychological measurement and the replication crisis. Canadian Psychology, 61, 281–288.
- Mesoudi, A. (2018). Migration, acculturation, and the maintenance of between-group cultural variation. *PLoS One*, 13(10), e0205573. https://doi.org/10.1371/journal.pone.0205573
- \*Mishra, R. C., Bano, S. H., & Tripathi, R. C. (2017). Intercultural relations in India. In J. W. Berry (Ed.), *Mutual inter- cultural relations* (pp. 268–290). Cambridge University Press.
- Mollica, R., Wyshak, G., DeMarneffe, D., Khuon, F., & Lavelle, J. (1987). Indochinese versions of the Hopkins Symptom Checklist-25: A screening instrument for the psychiatric care of refugees. *American Journal of Psychiatry*, 144, 497–500.
- Navas, M., García, M. C., Sánchez, J., Rojas, A. J., Pumares, P., & Fernandez, J. S. (2005). Relative acculturation extended model (RAEM). *International Journal of Intercultural Relations*, 29, 21–37. https://doi.org/10.1016/j.ijintrel.2005.04.001
- \*Neto, F., & Neto, J. (2017). Intercultural relations in Portugal. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 231–248). Cambridge University Press.
- Nguyen, A.-M.-D., & Benet-Martinez, V. (2013). Biculturalism and adjustment: A meta-analysis. *Journal of Cross-cultural Psychology*, 44, 122–159. https://doi.org/10.1177/0022022111435097
- Olweus, D. (1989). Prevalence and incidence in the study of antisocial behavior: Definitions and measurement. In M. Klein (Ed.), Cross-national research in self-reported crime and delinquency (pp. 187–201). Kluwer.
- Olweus, D. (1994). Bullying at school. In L.R. Huesmann (Ed.), Aggressive behavior. The plenum series in social/clinical psychology. Springer. https://doi.org/10.1007/978-1-4757-9116-7\_5
- Paluck, E. L., Green, S. A., & Green, D. P. (2019). The contact hypothesis re-evaluated. *Behavioural Public Policy*, 3(2), 129–158. https://doi.org/10.1017/bpp.2018.25
- Paradies, Y. (2006). Ethnicity and health: A systematic review of empirical research on self-reported racism and health. International Journal of Epidemiology, 35, 888–901. https://doi.org/10.1093/ije/dyl056
- Paradies, Y., Ben, J., Denson, N., Elias, A., Priest, N., Pieterse, A., Gupta, A., Kelaher, M., & Gee, G. (2015). Racism as a determinant of health: A systematic review and meta-analysis. *PLoS ONE*, *10*(9), e0138511. https://doi.org/10.1371/journal.pone.0138511
- \*Pavlopoulos, V., & Motti-Stefanidi, F. (2017). Intercultural relations in Greece. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 167–186). Cambridge University Press.
- Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, 90(5), 751–783. https://doi.org/10.1037/0022-3514.90.5.751
- Pettigrew, T. F., & Tropp, L. M. (2011). When groups meet: The dynamics of intergroup contact. Psychology Press.
- Reynolds, C. R., & Richmond, B. O. (1985). Revised Children's Manifest Anxiety Scale (RCMAS): Manual. Western Psychological Services.
- Robinson, J. P., Shaver, P. R., & Wrightsman, L. S. (Eds.). (1991). *Measures of personality and social psychological attitudes* (Vol. 1). Academic Press.
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton University Press.
- Rudmin, F. (2009). Constructs, measurements and models of acculturation and acculturative stress. *International Journal of Intercultural Relations*, 33, 106–123. https://doi.org/10.1016/j.ijintrel.2008.12.001
- \*Ryabichenko, T. (2017). Russians in a Lithuanian context: Testing three hypotheses of intercultural relations. In N. Lebedeva (Ed.), *Intercultural relations in the post-soviet space* (pp. 324–341). Menedjer.
- Ryder, A., Alden, L., & Paulhus, D. (2000). Is acculturation unidimensional or bidimensional? *Journal of Personality and Social Psychology*, 79, 49–65.
- \*Safdar, S., Gui, Y., Annis, R. C., Gibson, R., & Berry, J. W. (2017). Intercultural relations in Canada. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 333–352). Cambridge University Press.
- Salo, C. D., & Birman, D. (2015). Acculturation and psychological adjustment of Vietnamese refugees: An ecological acculturation framework. American Journal of Community Psychology, 56(3–4), 395–407. https://doi.org/10.1007/ s10464-015-9760-9



- Sam, D. L., & Berry, J. W. (Eds.). (2016). Cambridge handbook of acculturation psychology (2nd ed.). Cambridge University Press.
- \*Sam, D., Vetik, R., Makarova, M., & Raudsepp, M. (2017). Intercultural relations in Norway. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 105–124). Cambridge University Press.
- \*Sammut, G., & Lauri, M. A. (2017). Intercultural relations in Malta. In J. W. Berry (Ed.), *Mutual intercultural relations* (pp. 210–230). Cambridge University Press.
- Schäfer, T., & Schwarz, M. A. (2019). The meaningfulness of effect sizes in psychological research: Differences between sub-disciplines and the impact of potential biases. *Frontiers in Psychology*, 10, 1–13. https://doi.org/10.3389/fpsyg.2019.00813
- Schwartz, S. J., & Zamboanga, B. L. (2008). Testing Berry's model of acculturation: A confirmatory latent class approach. Cultural Diversity and Ethnic Minority Psychology, 14(4), 275–285. https://doi.org/10.1037/a0012818
- Snauwaert, B., Soenens, B., Vanbeselaere, N., & Boen, F. (2003). When integration does not necessarily imply integration: Different conceptualizations of acculturation orientations lead to different classifications. *Journal of Cross-Cultural Psychology*, 34(2), 231–239. https://doi.org/10.1177/0022022102250250
- Stephan, W., & Stephan, C. (2018). Intergroup threat theory. In Y. Y. Kim (Ed.), *International encyclopedia of intercultural communication* (pp. 1–12). Wiley. https://doi.org/10.1002/9781118783665.ieicc0162
- Stogianni, M., Bender, M., Sleegers, W., Benet-Martínez, V., & Nguyen, A.-M. (2021). Sample characteristics and country level indicators influencing the relationship between biculturalism and adjustment: An updated meta-analysis. *Center for Open Science*, 1–45. https://doi.org/10.31234/osf.io/8qymv
- \*Tsydendambaeva, E., & Grigoryev, D. (2015). Mutual acculturation of Buryats and Russians in Ulan-Ude and in Moscow. In V. Tishkov & A. Golovnev (Eds.), XI Congress of Anthropologists and Ethnologists of Russia, July 2–5: Collection of Articles. Institute for Research and Development of the Ural Branch of the Russian Academy of Sciences.
- van de Vijver, F., Celenk, O., & Berry, J. W. (2016). Research design and assessment of acculturation. In D. L. Sam & J. W. Berry (Eds.), Cambridge handbook of acculturation psychology (2nd ed., pp. 71–92). Cambridge University Press.
- van Oudenhoven, J. P., & Ward, C. (2013). Fading majority cultures: The implications of transnationalism and demographic changes for immigrant acculturation. *Journal of Community & Applied Social Psychology*, 23, 81–97. https://doi.org/10.1002/casp.2132
- Viechtbauer, W. (2010). Conducting meta-analyses in R with the metafor package. *Journal of Statistical Software*, 36(3), 1–48. https://doi.org/10.18637/jss.v036.i03
- Ward, C. (1996). Acculturation. In D. Landis & R. Bhagat (Eds.), *Handbook of intercultural training* (2nd ed., pp. 124–147). Sage.
- 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
- Ward, C., & Kennedy, A. (1999). The measurement of sociocultural adaptation. *International Journal of Intercultural Relations*, 56, 1–19. https://doi.org/10.1016/S0147-1767(99)00014-0
- Ward, C., & Kus, L. (2012). Back to and beyond Berry's basics: The conceptualization, operationalization and classification of acculturation. *International Journal of Intercultural Relations*, 36(4), 472–485. https://doi.org/10.1016/j.ijintrel.2012.02.002
- Ward, C., Szabo, A., & Stuart, J. (2017). Prejudice against immigrants in multicultural societies. In C. G. Sibley & F. K. Barlow (Eds.), *The Cambridge handbook of the psychology of prejudice* (pp. 413–437). Cambridge University Press. https://doi.org/10.1017/9781316161579.018
- Whitley, B. E., Jr., & Webster, G. D. (2018). The relationships of intergroup ideologies to ethnic prejudice: A metaanalysis. *Personality and Social Psychology Review*, 23(3), 207–237. https://doi.org/10.1177/1088868318761423

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