This article was downloaded by: [Harwood, Jake]

On: 1 June 2011

Access details: *Access Details:* [subscription number 938270429]

Publisher Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-

41 Mortimer Street, London W1T 3JH, UK



# Journal of Multilingual and Multicultural Development

Publication details, including instructions for authors and subscription information: http://www.informaworld.com/smpp/title~content=t794297829

# Mediating second language learning and intergroup contact in a bilingual setting

Jake Harwood<sup>a</sup>; Laszlo Vincze<sup>b</sup>

<sup>a</sup> Department of Communication, University of Arizona, Tucson, AZ, USA <sup>b</sup> Swedish School of Social Science, University of Helsinki, Helsinki, Finland

First published on: 01 June 2011

To cite this Article Harwood, Jake and Vincze, Laszlo(2011) 'Mediating second language learning and intergroup contact in a bilingual setting', Journal of Multilingual and Multicultural Development,, First published on: 01 June 2011 (iFirst)

**To link to this Article: DOI:** 10.1080/01434632.2011.574701

URL: http://dx.doi.org/10.1080/01434632.2011.574701

# PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: http://www.informaworld.com/terms-and-conditions-of-access.pdf

This article may be used for research, teaching and private study purposes. Any substantial or systematic reproduction, re-distribution, re-selling, loan or sub-licensing, systematic supply or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings, demand or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.



# Mediating second language learning and intergroup contact in a bilingual setting

Jake Harwooda\* and Laszlo Vinczeb

<sup>a</sup>Department of Communication, University of Arizona, 1103 E. University Blvd., PO Box 210025, Tucson 85704, AZ, USA; <sup>b</sup>Swedish School of Social Science, University of Helsinki, Helsinki, Finland

(Received 9 February 2011; final version received 20 March 2011)

This article examines Swedish language television viewing among Finnish speakers in Finland. Finnish speakers who watch some Swedish language television are found to have more positive attitudes towards Swedish speakers and the Swedish language. Mediated models suggest that instrumental and integrative language learning motivations differentially mediate the association between Swedish language television viewing and attitudes.

Keywords: intergroup contact; Swedish; Finland; television; language learning

Decades of research show support for intergroup contact theory (Allport 1954) in different groups, contexts and societies (Pettigrew 1998; Pettigrew and Tropp 2006). Studies continue to provide evidence that optimal intergroup contact can contribute to reducing intergroup prejudice and promoting positive intergroup attitudes. In recent years, the theory has advanced in various new directions. One such development is a focus on mediated intergroup contact – mass communication as a site for contact between groups. According to the parasocial contact hypothesis (Schiappa, Gregg, and Hewes 2005), parasocial interaction via television can result in the positive functions of 'real' intergroup contact in a similar way as interpersonal interaction (Ortiz and Harwood 2007). One benefit of mediated contact is its ability to provide contact in a setting that is less likely to feature negative components of face-to-face intergroup interaction such as anxiety (Harwood 2010; Stephan and Stephan 1985).

Outgroup-related attitudes and goals can jointly influence media consumption. We are particularly interested in media consumption's role in influencing variables related to language learning in multilingual contexts. In monolingual settings, the ethnolinguistic aspects of television use receive (understandably) relatively little attention. In bilingual settings, however, where people are divided into groups by their language, the language-conveying role of TV may be of great consequence. The above-mentioned point concerning anxiety gains prominence in this context: the anxiety of attempting to communicate in a second language can be quite daunting, and media offer a route for experiencing and practicing language without such negative affect. Hence, we draw a distinction between *mediated language contact* and

<sup>\*</sup>Corresponding author. Email: jharwood@u.arizona.edu

mediated intergroup contact. The first term can refer to contact with a language via television, including the intentional seeking out of media messages in a particular language. The second term refers to the traditional role of television in influencing group-related attitudes. These two processes can work either simultaneously or not, and can have, accordingly, different outcomes. This paper examines television as a platform for intergroup contact between two ethnolinguistic groups in Finland: the Finnish-speaking majority group and the Swedish-speaking minority group. Specifically, the study focuses on mediated contact that the Finnish-speaking majority experience when watching Finland Swedish Television (FST) – a state run Swedish language television station.

#### Swedish in Finland

With respect to the ethnolinguistic vitality (Giles, Bourhis, and Taylor 1977; Harwood, Giles, and Bourhis 1994) of Swedish in Finland, the Swedish-speaking minority can be regarded as being high in status and institutional support, but lower in demographic capital. The Swedish-speaking population has decreased from the time of Finland's independence in 1917 (Tandefelt and Finnäs 2007). Swedish speakers made up approximately 13% of the population in 1917, but today they are only 5.4%. In absolute numbers, Swedish speakers exceeded 340,000 in 1940, but today they are about 284,000 (Finnäs 2010). Being one of Finland's two national languages, Swedish has high status. The rights of the languages are ensured by the language act (Ministry of Justice 2004), according to which Finnish or Swedish can be used in municipalities where the speakers of the language make up 8% of the local population or 3000 persons. The high status of Swedish is accompanied by a broad institutional network at both formal and informal level, comprising among others different educational institutions, political parties, a Swedish Lutheran diocese and a military unit where the training is provided in Swedish.

A vital element of the Swedish institutional system in Finland is the Swedish department of the Finnish Broadcasting Company (YLE), which provides two radio channels and one TV channel in Swedish. The digital public service TV channel, FST, was launched in 2001. Primarily, FST offers news, children's and youth programmes, documentaries, talk shows, sport and cultural programmes and some movies. As the home-made productions of FST focus mainly on the Finnish society, which necessarily involves a Finland-Swedish approach to the different issues, the role of the channel is decisive in contextualising and interpreting the reality for its audience from a Finland-Swedish point of view. Although the target audience of the channel is the Swedish-speaking population of Finland, most of the programming is subtitled in Finnish in order to reach out to the Finnish language group. The majority of viewing in Finland is of the YLE broadcasts or one of three commercial channels (MTV3, the TV Nelonen and the Sub-TV); however, a wide variety of cable and satellite channels are available, including Swedish language content from Sweden.

A central part of Finland's bilingualism is that both language groups learn the language of the other group as part of formal education; Swedish is taught in elementary and secondary schools wherever the language of instruction is Finnish. This, among other things, facilitates the use of Swedish language media for Finnish speakers.

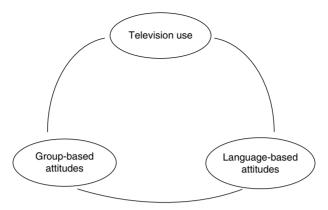


Figure 1. The associations between television use, language-based attitudes and group-based attitudes.

The aim of this study is thus threefold, as illustrated in Figure 1. *First*, from the point of view of mediated language contact, we examine how the use of TV in Swedish is related to the interest of Finnish-speaking youngsters in the Swedish language. *Second*, from the point of view of mediated intergroup contact, the study explores the relationship between watching FST and attitudes towards minority Swedish speakers in Finland. *Third*, the triadic relationship between the use of FST, language-based attitudes and group-based attitudes is investigated. Specifically, we expect that group and language attitudes are non-independent, and that each may mediate the association of television use with the other.

### Method

The empirical research was conducted among 16- to 18-year-old students in two secondary schools in Tampere, where the language of instruction was Finnish. As the city is located in the monolingual Finnish region of Pirkanmaa, the participants have almost no contact with the Swedish language in their everyday life, except during Swedish classes at school. The database contained a sample of 712 participants. We were specifically interested in the majority (Finnish speakers) use of widely available minority (Swedish language) media. Hence, non-Finnish speakers were excluded. We also excluded people who accessed Swedish language television from Sweden because such channels are only available to a minority of people through pay systems, and hence we could not disentangle socio-economic issues from socio-cultural motivations among this group. An additional relevant point here is that the Swedish-speaking minority in Finland tends to identify as Swedish Finns rather than as Swedes (Finnäs 2010). As a result, including viewing of Swedish television (from Sweden) complicates the picture by including a meaningfully distinct third identification group (Swedish-speaking Swedes).

### Measures

Family language

Family language was measured by a five-point scale, asking 'what language does your family speak at home' (1 = only Finnish to 5 = only Swedish); participants

whose family spoke a language different from Finnish were removed from the database (N = 29; < 5% of the sample, validating the notion that this region is very close to monolingual).

## Relative language of TV use

Television use was measured by two variables. Respondents were asked whether they watched TV channels from Sweden. Subjects who watched these channels were excluded from the research (N = 43; see above). Participants were also asked 'in what language do you watch TV on a daily basis' (1 = only Finnish to 5 = only Swedish). Of the remaining 640 subjects, 476 (74.4%) reported watching only the Finnish TV channels, while 164 (25.6%) also watched Finland-Swedish TV regularly. These two groups of people were the focus of most of our analysis, with comparisons between them informing our examination of whether majority group members who view only majority language television differ from those who sometimes view minority language television. Ideally, this variable would have been retained as a continuous variable. However, almost all responses were in one of the first two categories - 'only Finnish' or 'mostly Finnish (but also Swedish)'. A final four respondents indicated that they watched television equally in Swedish and Finnish; these four were collapsed with the 'mostly Finnish' group. According to official data (Lehtinen 2010), Finnish secondary school students watch an average of 93 minutes of TV a day. Hence, while we do not have data concerning absolute amount of TV use, we are confident that it is a major leisure time activity for our respondents, and that the 'relative' measure of television use serves its purpose.

#### Interest in Swedish

Interest in the Swedish language was measured by four constructs from the Motivation/Attitude Test Battery developed by Gardner (2010): Instrumental orientation (learning Swedish for practical purposes), Integrative orientation (learning Swedish for social and cultural purposes), Attitudes towards learning Swedish and Desire to learn Swedish. Generalised attitudes and attitudes towards the learning situation (teacher and class) were excluded. The students were asked three questions (answers ranged between 1 = fully disagree to 5 = fully agree) for each of the four constructs (12 items total); individual items were averaged (Instrumental orientation, Cronbach's  $\alpha = 0.76$ , Integrative orientation  $\alpha = 0.85$ , Attitudes towards learning Swedish  $\alpha = 0.95$  and Desire to learn Swedish  $\alpha = 0.83$ ).

### Intergroup relationship

Participants' attitudes towards the Swedish language group were measured by four constructs (Stephan 2006): Intergroup anxiety, Intergroup attitude, Intergroup understanding and Desire for intergroup contact. The students were asked four questions on each construct (answers ranged from 1 = fully disagree to 5 = fully agree). Where necessary, items were reversed, so high scores indicated a positive stance towards Swedish speakers, and then averaged. Reliability analysis indicated high consistency in all four scales (Intergroup anxiety  $\alpha = 0.73$ , Intergroup attitude  $\alpha = 0.79$ , Intergroup understanding  $\alpha = 0.71$  and Intergroup contact  $\alpha = 0.88$ ).

Language learning and intergroup attitude

At the next step, all eight compound scales were subjected to principal components factor analysis with Varimax rotation, resulting in two components explaining 69.6% of the variance. The first compound variable is called *Language learning* as it included four scales of the Attitude/Motivation Test Battery ( $\alpha = 0.90$ ), whereas the second compound variable is called *Intergroup attitude* and contained the four *Intergroup relationship* scales ( $\alpha = 0.75$ ).

# Analysis

Differences in attitudes between the two groups were assessed with independent samples *t*-tests. Mediated models were tested using bootstrapped tests of indirect effects (Preacher and Hayes 2008). MacKinnon et al. (2002), among others, have demonstrated that bootstrapping techniques are preferable to other methods for examining indirect paths (Baron and Kenny 1986) because they (1) increase power while not increasing type 1 error and (2) do not rely on tests of unnecessary effects (e.g. the significance of the overall IV-DV effect; Bollen and Stine 1990). The models used 5000 bootstrapped resamples that generated 95% bias corrected and adjusted confidence intervals (Bca CI); CIs not including zero demonstrate a statistically significant indirect effect.

#### Results

Table 1 shows the average ratings of students regarding the four scales on *Interest in Swedish*. As can be seen, users of FST are more attached to the Swedish language than those who watch only Finnish TV channels. Moreover, the results indicate that the average ratings across the two TV watching groups are predictable: most means fall below the midpoint for students who watch TV only in Finnish, while all fall above the midpoint for FST users. The differences are relatively large in absolute terms – greater than 0.7 on a 1–5 scale – and all are statistically significant (all df = 638, all p < .01: Integrative orientation, t = 9.34, d = 0.52; Instrumental orientation, t = 8.24, t = 0.46; Attitudes towards learning Swedish, t = 10.92, t = 0.61; and Desire to learn Swedish, t = 9.61, t = 0.54.

Table 1 illustrates the mean ratings on the four scales of *Intergroup relationship*. The results indicate that the users of the FST tend to have a significantly more positive attitude towards the Swedish language group than those who watch only Finnish TV channels (all df = 638, all p < .01: Intergroup attitude t = 7.19, d = 0.40; Intergroup interaction t = 5.60, d = 0.31; Intergroup understanding t = 3.95, d = 0.22; Intergroup anxiety t = 4.25, d = 0.24).

The effect size here is somewhat greater regarding the *Interest in Swedish* than *Intergroup relationship*, which suggests that the use of FST is perhaps more closely and directly tied to Swedish language-related attitudes rather than group attitudes. To further explore the relationships of interest, we tested a number of mediated models involving television viewing, language-related attitudes and group attitudes. The results of these models are displayed in Table 2, in order of effect size (MacKinnon 2008). The strongest model indicates that television's effect on attitudes about the Swedish minority is mediated by attitudes about the language. That is, for our subjects, television affects their attitudes about the language, which in turn

Table 1. Means and standard deviations of language learning and intergroup attitudes measures.

	Language of Television Viewing			
	Only Finnish	Mostly Finnish (but also Swedish)		
Integrative motivation	2.63 (1.08)	3.50 (0.87)		
Instrumental motivation	3.01 (1.04)	3.72 (0.67)		
Attitude to Swedish language	2.05 (1.09)	3.11 (1.06)		
Desire to learn Swedish language	2.40(1.10)	3.33 (1.00)		
Intergroup understanding	2.69(0.75)	2.95 (0.66)		
Attitudes towards Swedish speakers	2.69(0.85)	3.30 (0.79)		
Intergroup anxiety (reversed)	2.80 (0.72)	3.07 (0.66)		
Desire for intergroup contact	3.01 (0.89)	3.45 (0.78)		

Note: All items are measured on 1-5 scales.

affects their prejudice concerning the group. This supports our mediated contact model, and suggests that attitudes about language are an important mediator of that model. The inverse of this model is also fairly strong, indicating that language mediates the effects of group attitudes on television use. This latter model offers support for our mediated language pathway, suggesting that seeking specific linguistic media messages may be driven by language learning motivations.

The two models with language as the outcome variable are also significant, indicating that television's influence on language learning motivations is carried through attitudes, and that the effect of attitudes on language learning motivations is partially mediated by television. The latter model reinforces the idea that seeking television messages may have consequences for language learning outcomes. The models suggest that in a bilingual society, language learning motivations are separable from group-based attitudes, and that both interact with television viewing in interesting ways. Finally, we further clarified the difference between the first two models as they were the clearest illustrations of our original hypotheses and also emerged as the strongest. To further explore these models, we ran the bootstrapped indirect effects with both integrative and instrumental language learning motivations as simultaneous mediators. As shown in Figure 2a, the effect of television consumption on attitudes towards Swedish speakers is mediated only through integrative orientation. To the extent that attitudes about language learning mediate contact effects of viewing second language television; it occurs through integrative

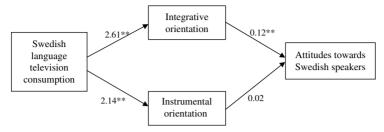
Table 2. Mediated models of associations between minority language television use, language attitudes and group attitudes.

Independent variable	Mediator	Dependent variable	Effect size <sup>a</sup>	95% Bias corrected and adjusted confidence interval
TV Attitude TV Attitude Language Language	Language Language Attitude TV Attitude	Attitude TV Language Language TV Attitude	0.05 0.03 0.02 0.01 0.00 0.00	0.31, 0.47* 0.57, 1.02* 0.21, 0.37* 0.05, 0.11* -0.06, 0.30 -0.01, 0.04

<sup>&</sup>lt;sup>a</sup>pseudo  $R^2$  from MacKinnon (2008, 84), equation 4.6.

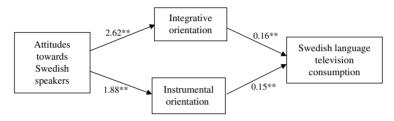
\*p < .05.

#### a) $Television \rightarrow Attitudes$



Note: Indirect effect for integrative orientation = 0.31 [95% Bca CI: 0.23, 0.40], indirect effect for instrumental orientation = 0.05 [95% Bca CI: -0.01, 0.11]. Contrast between the two mediated pathways is significant [95% Bca CI: 0.15, 0.38].

#### b) Attitudes $\rightarrow$ Television



Note: Indirect effect for integrative orientation = 0.41 [95% Bca CI: 0.17, 0.65], indirect effect for instrumental orientation = 0.11 [95% Bca CI: 0.11, 0.48]. Contrast between the two mediated pathways is nonsignificant [95% Bca CI: -0.25, 0.48].

Figure 2. Mediated paths between television and attitudes through integrative vs. instrumental language learning motivations.

and not instrumental orientation. The contrast between the two mediated pathways is significant. On the other hand, Figure 2b shows that the effects of attitudes on television consumption are mediated through both orientations simultaneously, and there is no significant difference between the two mediated pathways in this model.

#### Discussion

The results of this study clearly show that television viewing is associated with attitudes concerning language learning and group-based attitudes in a bilingual society. Individuals who watch minority language media also demonstrate more positive attitudes towards the minority language group and the language itself, including a desire to learn the language. The analysis of indirect effects reinforces the interrelated nature of these constructs and also provides some clearer direction on which processes appear to be operating and which do not.

Television's effect on intergroup attitudes has been established in previous studies (Mastro 2010); however, this study demonstrates such effects in a bilingual context for the first time. In bilingual contexts, the second language can of course be a barrier to comprehension and render media literally incomprehensible for language learners with limited skills; hence, effects on attitudes are presumably restricted to those with at least minimal competence. In addition, the media's language could intrinsically

motivate consumption for language learners, who seek out such content for instrumental and integrative reasons. As noted earlier, for language learners the media offer a site for experiencing and practicing a second language with minimal anxiety. As noted in previous research (Harwood 1999), traditional uses and gratifications theory research focuses upon rather individualistic motivations for television viewing. Taking a more collectivist approach, we suggest here that television offers exposure to other languages and cultures, and that there are critical connections between flipping channels and linguistic and cultural mobility. Just as someone who is lonely might seek social contact on television, someone who is culturally isolated or simply curious can access cultural and linguistic richness through television.

The mediated models provide insight into these processes. In particular, our strongest model indicates that television sparks an interest in learning the language, which subsequently reduces prejudice (specifically via an effect on integrative orientation). Also, positive attitudes towards the outgroup predict more positive attitudes about learning the language, which in turn stimulate more desire for minority language media exposure. The effect of television consumption on integrative orientation should be interesting for language teachers. It suggests that media exposure may serve to enhance intrinsic motivations for learning a language, which are associated with positive learning outcomes (Noels, Clément, and Pelletier 2001). Hence, educators might consider using media exposure in the classroom as a motivational strategy.

The current data suggest some sensible pathways for future research, most notably examinations of the interplay of integrative and instrumental motivations in the television-attitudes association. Our data suggest that television enhances integrative language learning orientation, which subsequently improves intergroup attitudes. Attitudes, on the other hand, influence TV viewing through both instrumental and integrative pathways simultaneously and independently. In the former case, instrumental language learning motivations do not stimulate more positive attitudes – perhaps intuitively, this makes sense given that such language learning motivations reflect self-interest rather than a genuine and allophilic response (allophilic refers to an inherent love of, or interest in, the 'other': Pittinsky, Rosenthal, and Montoya 2011). At the same time, positive attitudes do manifest in both types of language learning orientation, and each subsequently leads independently to television viewing. We interpret this as reflecting two different approaches to the minority language media. On the one hand, people may approach the media as a useful tool in the language learning process; on the other, the media may offer a window into a cultural milieu that is attractive to those with integrative aspirations.

More data are needed to support some of the claims in this paper – we see at least three areas where elaborations on our method are important. First, future research in this area should use more sophisticated measures of television use so as to access more information on absolute amount of use (vs. just ratio of one language to another), and to ensure that even occasional (less than once a day) viewing of programming in either language is captured. Second, it will be useful in the future to examine broader representative samples. Our sample of teenagers is interesting in that they are probably still in the process of developing attitudes about their social world and intergroup relations, and their media use may be dynamic and changing as a function of peer groups and lifestyle. Students are also required to have contact with the minority language for at least a few hours a week in school. A contrast with

older populations whose media habits and intergroup attitudes are perhaps a little more stable and who may be able to avoid almost any contact with the minority language would be very interesting. Third, longitudinal or experimental data will provide more definitive information about processes suggested here. Our crosssectional data provide only suggestive evidence concerning causal relationships, and we should be careful not to over-infer from the mediated models in particular. The models usefully distinguish where variance is carried through one variable to another. and thus can be very helpful in distinguishing which are the more plausible causal relationships. Definitive evidence of causality requires gathering longitudinal data or using experimental techniques (e.g. explicitly manipulating exposure to minority language media). Nonetheless, our initial foray suggests interesting directions for examining intergroup contact and language learning in the context of bilingual media. We hope to continue expanding this work and integrating it with research on mediated intergroup contact (e.g. Ortiz and Harwood 2007) and the effects of exposure to minority media portrayals (e.g. Mastro 2010). Both are vibrant literatures, but rather focused on mainstream (monolingual) US media. They would both benefit from increased consideration of language issues in multilingual contexts.

# Acknowledgements

The authors acknowledge the contribution of three anonymous reviewers in improving the manuscript. The research of Laszlo Vincze has been supported by the project 'Bilingualism, Identity and the Media in Inter- and Intra-cultural Comparisons' (BIM), which has received financing from the Academy of Finland (1123686).

# References

- Allport, G.W. 1954. The nature of prejudice. Cambridge/Reading, MA: Addison-Wesley.
- Baron, R.M., and D.A. Kenny. 1986. The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology* 51: 1173–82.
- Bollen, K.A., and R. Stine. 1990. Direct and indirect effects: Classical and bootstrap estimates of variability. *Sociological Methodology* 20: 115–40.
- Finnäs, F. 2010. Finlandssvenskarna 2009. En statistisk rapport [Swedish-speaking Finns 2009. A statistical report]. Helsingfors: Finlands svenska folkting.
- Gardner, R.C. 2010. Motivation and second language acquisition. The socio-educational model. New York: Peter Lang.
- Giles, H., R.Y. Bourhis, and D. Taylor. 1977. Towards a theory of language in ethnic group relations. In *Language*, ethnicity and intergroup relations, ed. H. Giles, 307–48. New York: Academic Press.
- Harwood, J. 1999. Age identification, social identity gratifications, and television viewing. *Journal of Broadcasting and Electronic Media* 43: 123–36.
- Harwood, J. 2010. The contact space: A novel framework for intergroup contact research. Journal of Language and Social Psychology 29: 147–77.
- Harwood, J., H. Giles, and R.Y. Bourhis. 1994. The genesis of vitality theory: Historical patterns and discoursal dimensions. *International Journal of the Sociology of Language* 108: 167–206.
- Lehtinen, P. 2010. Finnish television programming 2009. Helsinki: Ministry of Transport and Communications of Finland.
- MacKinnon, D.P. 2008. *Introduction to statistical mediation analysis*. New York: Lawrence Erlbaum.
- MacKinnon, D.P., C.M. Lockwood, J.M. Hoffman, S.G. West, and V. Sheets. 2002. A comparison of methods to test mediation and other intervening variable effects. *Psychological Methods* 7: 83–104.

- Mastro, D. 2010. Intergroup communication in the context of traditional media. In *The dynamics of intergroup communication*, ed. H. Giles, S. Reid and J. Harwood, 195–208. New York: Peter Lang.
- Ministry of Justice. 2004. Language act (423/2003). http://www.om.fi/20802.htm (accessed February 4, 2011).
- Noels, K.A., R. Clément, and L.G. Pelletier. 2001. Intrinsic, extrinsic, and integrative orientations of French Canadian learners of English. *Canadian Modern Language Review* 57: 424–42.
- Ortiz, M., and J. Harwood. 2007. A social cognitive theory approach to the effects of mediated intergroup contact on intergroup attitudes. *Journal of Broadcasting and Electronic Media* 51: 615–31.
- Pettigrew, T.F. 1998. Intergroup contact theory. Annual Review of Psychology 49: 65-85.
- Pettigrew, T.F., and L.R. Tropp. 2006. A meta-analytic test of intergroup contact theory. Journal of Personality and Social Psychology 90, no. 5: 751–83.
- Pittinsky, T.L., S.A. Rosenthal, and R.M. Montoya. 2011. Measuring positive attitudes toward outgroups: Development and validation of the Allophilia Scale. In *Moving beyond prejudice reduction*, ed. L. Tropp and R. Mallett, 41–60. Washington, DC: APA.
- Preacher, K.J., and A.F. Hayes. 2008. Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior Research Methods* 40: 879–91.
- Schiappa, E., P.B. Gregg, and D.B. Hewes. 2005. The parasocial contact hypothesis. Communication Monographs 72: 92–115.
- Stephan, G.W. 2006. Evaluation of dialogue programs. http://www-psych.nmsu.edu/faculty/wstephan.html (accessed April 20, 2011).
- Stephan, W.G., and C.W. Stephan. 1985. Intergroup anxiety. *Journal of Social Issues* 41: 157–75.
- Tandefelt, M., and F. Finnäs. 2007. Language and demography: Historical development. *International Journal of the Sociology of Language* 187–188: 35–54.