ARTICLES

Meta-stereotypes: Intergroup anxiety in interracial contact among students

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Abstract

Previous research postulates that meta-stereotypes (i.e., one's own perceptions of another group's stereotypes of the group that one belongs to) affect interracial interaction and causes intergroup anxiety. The present study aimed to examine whether meta-stereotypes affects anxiety experienced in interracial interaction. The sample consisted of 120 students from the University of Witwatersrand. A computer generated experiment with a hypothetical internet chat room was set up. Participants were made to believe that they were interacting with students from different universities. This experiment was used to measure the domains of intergroup anxiety, meta-stereotypes, and attitudes. Various types of scales were used, including a meta-stereotype scale and an inter-group anxiety scale. Findings indicated that white individuals felt more anxious interacting with members who were not from their own racial group, while black participants showed no significant anxiety in their interactions.

Keywords: anxiety; contact; inter-racial; interaction; meta-stereotypes; racial

South Africa has been liberated from the apartheid regime for over a decade. However, 'the tentacles of the apartheid past still run deep in contemporary South Africa' (Finchilescu, Tredoux, Mynhardt, Pillay, & Muianga, 2007, p. 721). Even though apartheid has been abolished, the lack of interaction between white and black South Africans still seems to be prevalent, especially in relation to South African students. Observation in and around campuses and schools suggests that the youth's preferences in terms of friendships and social groups lie with their own racial group.

One of the possible reasons for this is intergroup anxiety. Intergroup anxiety is defined as anxiety felt by one racial group toward interacting with another (Blair, Park, & Bachelor, 2003). Anxiety as a factor which influences intergroup relations has been documented in various texts as conclusive (Gaertner & Dovido, 1986; Islam & Hewstone, 1993). Stephan and Stephan (1985) believed that intergroup anxiety stems from the expectation of negative consequences during interaction. These negative consequences may manifest in the form of rejection, degradation, and even hostility.

Furthermore, anxiety may result from anticipating that the out-group will ridicule, take advantage of or dominate one's own group (Smith, 1999; Stephan & Stephan, 1985). The expectation of being negatively appraised by an out-group can cause anxiety that may lead the individuals involved in the interaction to resort to known 'scripts' of behaviour (Finchilescu et al., 2007). Status differences such as being the minority group in the interaction may augment intergroup anxiety as well as prompt the individual not to partake in an interaction where s/he may feel uncomfortable or feel as though their beliefs and values are being attacked (Lazarus, 1991).

Intergroup anxiety is frequently experienced when there is interaction between different ethnic groups (Islam & Hewstone, 1993) and among differing cultural groups (Jacobson, 1977; Stephan & Stephan, 1992). According to Gudykunst and Shapiro (1996), the prevalence of intergroup anxiety is higher in intergroup interactions than in encounters of an interpersonal nature. Plant and Devine's (2003) study explored interactions between black participants interacting with black- and white individuals. Their findings indicated that, 'across both studies interracial anxiety predicted the desire to avoid interactions with out-group members' (Plant, 2004, p. 1458).

To address intergroup anxiety, the *contact hypothesis* suggests that if you bring people together under optimal conditions (Allport, 1954; Hewstone & Brown, 1986; Pettigrew, 1986; Pettigrew & Tropp, 2000) this can reduce prejudice and improve intergroup relations. Even though Allport was one of the main contributors to the contact hypothesis he acknowledged that 'the case was not so simple' (1954, p. 261). Allport (1954) knew that it was a difficult task to bring people together and expect contact to occur. The intergroup contact situation has the ability to make relations better or even worse, as the 'nature of contact' depends on the kinds of people and situations involved (Hewstone & Brown, 1986, p. 2). Allport (1954) believed that varying types of people may not necessarily interact with each other, unless they are comfortable with the other person in the group. Or rather that they share similarities with the other person (Allport, 1954).

According to Amir (1969), 'opportunities for contact may be seen as a prerequisite for interaction' (p. 322). These opportunities for interaction are defined by Cook (1984) and Allport (1954) as factors such as equal group status, common goals, intergroup cooperation; and the support of authorities, law or custom (as cited in

Pettigrew, 1998). These, they postulate, could influence whether a contact situation is successful in improving intergroup relations and reducing prejudice. Yet it should be cautioned that any other type of interaction could yield negative results.

The contact situation is highly dependent on the actual contact in which interaction takes place (Finchilescu, 2005). Even though optimal conditions were set up, Amir and Ben-Ari's (1985) findings on contact between Israelis and Egyptians indicated that the contact situation did not necessarily yield positive attitude change. Yet another study by Barnea and Amir (1981) on religious and non-religious groups did not yield positive results. In a similar vein, the present study attempted to set up optimal conditions for interaction.

Assigning labels or categories to people is a common feature throughout the world. This type of assignment is known as stereotyping. According to Brown (1995) a stereotype may be defined as 'some characteristic which are seen to be shared by all or most of his or her fellow group members' (p. 82). Stereotypes are most commonly negative in content and are used mostly as generalisations.

Consequently we may introduce the term meta-stereotypes. 'Meta-stereotypes' is a concept which has been introduced into academia fairly recently. Meta-stereotypes may be defined as, 'a person's beliefs regarding the stereotypes that out-group members hold about his or her own group' (Vorauer, Main, & O' Connell, 1998, p. 917). In other words meta-stereotypes may be defined as one's own perceptions of another group's stereotypes of the group to which one belongs. Negative meta-stereotypes are argued to be one of the many reasons why people may avoid contact situations as individuals perceive that they are being judged on the basis of negative stereotypes.

Sigelman and Tuch (1997) who are amongst the foremost writers on meta-stereotypes, established how African Americans perceived their group to be viewed by white Americans. They established that black respondents, 'view whites as endorsing every one of the negative images of blacks they were asked about' (Sigelman &Tuch, 1997, p. 99). This may prove negative in the broader social context as 'whites' images of blacks have shown that these images shape whites' attitudes toward various ameliorative social policies targeted at blacks, … housing, education, employment' (Sigelman & Tuch, 1997, p. 100). This finding was further verified by Vorauer et al. (1998) in their study on how white Canadians believe they are viewed by the Aboriginal Canadians.

Vorauer et al. (1998) also noted that if a person believes that s/he is being negatively appraised; s/he may exhibit negative attitudes toward that person in return. In general people are concerned about how others perceive them (Baumeister, 1982; Schlenker, 1980). Traits such as *poor, foolish, dirty, proud, cheery, etcetera* are just some of the many nuances used to describe an out-group (Vorauer et al., 1998). Vorauer, Hunter, Main, and Roy (2000) argued that people think more commonly about the impressions others are forming of them than actually forming impressions

of others. Similarly, both Sigelman and Tuch (1997) and Vorauer et al. (1998) found that meta-stereotypes play an integral role in interracial interaction when they are predominantly negatively based.

Therefore we can see the importance of measuring such beliefs and attitudes especially in the context of South African life and interactions.

Much research has been conducted on meta-stereotypes and on how dominant groups view the minority. In contrast it is rather interesting to note that Vorauer et al. (1998) focused on how the dominant group feels when they are perceived by lower status groups. The current research focuses on the dominant group's perceptions of being appraised by the minority group as well as the converse. Previous research conducted at the University of Cape Town (Finchilescu, Hunt, Mankge, & Nunez, 2002) yielded results that demonstrated that meta-stereotypes are related to intergroup anxiety for both black and white individuals in South Africa.

AIM

The aim of the study was to establish whether meta-stereotypes affect the anxiety experienced in interracial contact. It was hypothesised that individuals who believe that the out-group holds strong negative views of their group will feel more anxiety in an interracial interaction than individuals who do not have negative meta-stereotypes.

RESEARCH DESIGN

A 2-way Analysis of Variance (ANOVA) was utilised. The study was cross-sectional as the participants were compared on variables at the same time.

Sample

The study consisted of 120 students from the University of the Witwatersrand (WITS) (60 white & 60 black South African participants). Two hundred letters explaining the purpose of the study were placed under the doors of randomly selected rooms at students' residence halls (two male and two female residence halls), inviting them to participate in the research. A probability sampling method was utilised, this is a form of *random selection*, where a process was set up that insured that the different residences in the sample had an equal probability of being chosen. After completion of the written consent form, willing participants were asked to place their forms in a box placed at the foyer of the residence hall. In addition to the letters, pamphlets were randomly distributed to students during various times of the day. Announcements were also made in various lecture halls inviting individuals to partake in the research.

Ethics

Participants entered the study on a purely voluntary basis and no coercion in any form took place. Permission for this study was obtained from the Non-Medical Ethics Committee at the University of the Witwatersrand. The social, psychological, and physical welfare of participants were of top priority at all times. Participants were debriefed by e-mail at the end of the study. All information was regarded as strictly confidential. If required the participants were given the researchers' contact details in the event they wished to gain copies of the final research findings.

Research Procedure

The study was undertaken in a computer laboratory and was operationalised in the form of a computer generated experiment. Upon entering the computer laboratory participants were briefed on the procedure of the experiment. Thereafter participants had their photographs taken (written informed consent was obtained); these photographs were assigned numbers randomly. The photographs were taken to make students believe that their photograph was being sent to the other person in their interaction process. This was to make the interaction seem more realistic. Participants then chose a computer and were instructed to begin. Instructions were explicitly stated on the computer screen.

First, their biographical details were requested. These details were needed so that the programme could direct participants to one of two tasks; either intragroup or intergroup interaction. This task included assigning an individual of the same gender to the one chosen in the biographical section (gender was not a factor in this study). The computer generated a photo of two participants which were of the same sex as the participant (See Table 1).

Table 1: Type of contact that took place during interaction

Contact		
Race	**INTRAGROUP**	**INTERGROUP**
White	*Interaction Partner: White (Same Gender)*	*Interaction Partner: Black South African (Same Gender)*
Black	*Interaction Partner: Black South African (Same Gender)*	*Interaction Partner: White (Same Gender)*

The programme was constructed in such a way as to make the interaction seem as if it was actually taking place online at that moment in time. Participants had to enter their photo number as an identifying component of the process. A number of scales needed to be completed at this stage that included a meta-stereotypes and anxiety scale.

Participants were then informed by the computer that they were about to participate in an interactive exercise with students from other universities. Opinions on affirmative action formed the basis on which these participants believed they were partaking in the study. Photographs as well as the names and short biographical details of the two group members were displayed on screen (computers were set up each day in either the inter or intra phase). This was done so that participants were continuously aware of with whom they were supposedly in conversation with. Participants had to introduce themselves to the other participants; this manifested in the form of an internet chat room.

Thereafter participants had to give their opinions in the form of a paragraph (10 lines) on affirmative action. In return participants received a paragraph (which was stored in the computer and randomly generated) from the *so-called* other participants and were asked to evaluate it. For example, participants may have rated the paragraph as *realistic, racially biased, logical, knowledgeable* along with other such connotations.

Their (participants) paragraph on affirmative action also had to be evaluated by the simulated other person, which instead was randomly selected by the computer. Before these evaluations the participants were prompted to answer an anxiety scale (Stephan & Stephan, 1985). The experiment took twenty-five to thirty minutes to execute.

MEASURES

Meta-stereotypes scale (blacks and whites)

The meta-stereotype concept was measured using a semantic differential. A semantic differential is used to rate a concept or respond to a question (Finchilescu et al., 2002). The scales are anchored on the extreme ends by bipolar adjectives, steps in between indicate different levels of agreement, the anchors on each side represented extreme poles in relation to the question (Hunt, 2001).

The logic of a semantic differential is reasoned by Nunnally's (1978) belief that adjectives communicate meaning in language. It therefore became reasonable to assume that these adjectives could be used to measure various facets of meaning also. The evaluative factor of a differential is important, as bipolar adjectives almost always have negative and positive connotations (Nunnally, 1978).

The traits were drawn from those used by Finchilescu et al. (2002). The traits that were used in the scales were selected for their statistical significance and were considered to have the most insight in its description. The questions of each semantic differential differed. The items were measured on a seven point Likert scale. The adjective which was closer to a trait indicated that the participant agreed with the relevance of the question concerned. The choice of steps 1 or 7 were clear

indications of highest agreement with one or the other of the bipolar traits, for example, *Unreliable, untrustworthy (1) and Reliable, trustworthy (7)*.

INTERGROUP ANXIETY SCALE

Stephan and Stephan's (1985, 1989b), anxiety scale was used as a basis for this scale. Emotional states were assessed in relation to how the participant felt about the interactive chatroom. The rating system included *not at all . . . and extremely . . .* Ten traits made up the scale; these were all adapted from Stephan and Stephan (1985, 1989b). A rating scale of 1 to 7 was again utilised.

RESULTS

Data for white and black participants were analysed separately. The exploration of the existence of anxiety as a result of negative *meta-stereotypes* formed the basis of the analysis. A 2-way ANOVA was used to analyse the results. There are two independent variables, the first being meta-stereotypes and the second; *type of contact*. The latter had two levels; *inter- and intra group contact*. A median split for *meta-stereotypes* was performed in order to accurately execute the 2-way ANOVA (see table 2 below).

Table 2: Descriptive statistics, anxiety means and standard deviations

	Condition	Valid N	Mean	Std Deviation
White(Anxiety)	0 Intra	14	24.357149	10.8882939
	1 Inter	16	27.1875000	8.0267781
	0 Intra	16	21.3750000	7.4732858
	1 Inter	13	41.1538462	13.1583063
Black (Anxiety)	0 Intra	14	21.4285714	5.5707241
	1 Inter	18	20.7222222	7.0527888
	0 Intra	17	21.2941176	8.6223888
	1 Inter	12	25.0833333	11.0573573

Note: (0 = intra; 1 = inter)

The 2-way ANOVA revealed that there was a significant difference in the anxiety experienced by white participants in interaction with other whites as opposed to that experienced in interaction with black participants. For example, white individuals felt anxious interacting with members who were not from their own racial group $F(1, 55) = 10.66$, $p > 0.002$. The 2-way ANOVA also revealed that there was no

significant anxiety experienced by black participants towards interacting with their white counterparts F(1,57), p < 0.29 (See table 3 and 4).

Table 3: Test of significance (Type III decomposition) white South Africans

Effect	Df	MS	F	p
MedSplit	1	441.38	4.4764	0.038908
Condition	1	1870.03	18.9655	0.000058
MedSplit*Condition	1	1050.85	10.6575	**0.001889**
Error	55	98.60		

Table 4: Test of significance (Type III decomposition) black South Africans

Effect	df	MS	F	p
MedSplit	1	66.38	1.0000	0.321539
Condition	1	35.31	0.5320	0.468754
MedSplit*Condition	1	75.09	1.1313	**0.291987**
Error	57	66.38		

Simple effects for white participants

The main effect for meta-stereotypes and intergroup contact was significant for white participants; (F1, 55) = 14.89, p> 0.000. The main effect for intergroup contact as a function of meta-stereotypes was also significant; (F1, 55) = 28.46, p> 0.000 (See table 5).

Table 5: Simple effects: Meta-stereotypes/ Type of condition

	ms	f	p-value
Meta-stereotypes / Intra 0	66.40	0.67344	0.41541
Meta-stereotypes / Inter 1	1399.04	14.18883	0.000405
Intra 0 / Meta-stereotypes	59.81	0.606631	0.43942
Inter 1 / Meta-stereotypes	2805.87	28.45669	0.000002

The above comparisons were carried out to establish whether anxiety of white participants was different when interaction took place between members of the same race group in comparison to interacting with members of a differing group (black participants). From the above table, it is evident that white participants felt anxious when they interacted with black South African participants. The interaction of these findings will be illustrated below (See figure 1).
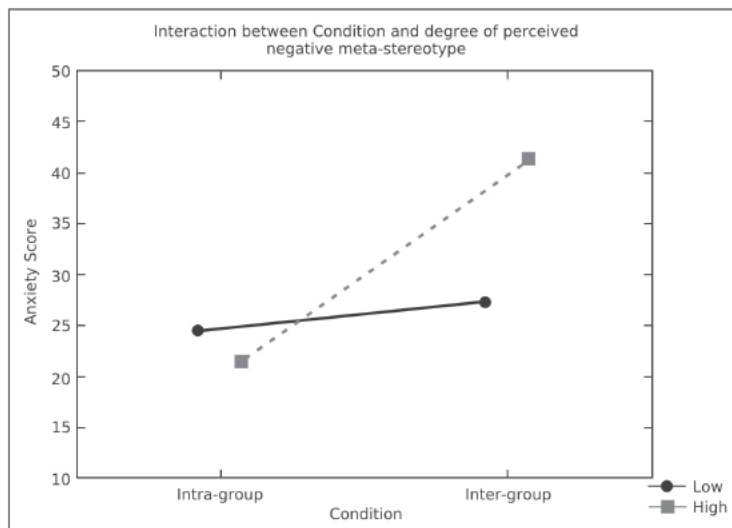
Figure 1: Interaction between Anxiety and Type of Condition and Meta-stereotypes (whites)

The above interaction graph shows the relationship between type of condition and perceived negative meta-stereotypes of white participants. Significance measured was $F(1, 55) = 10.66$, $p > 0.002$. From the graph it is evident that intergroup anxiety is higher when interaction takes place with the out-group (black South African) participants. High perceived negative meta-stereotypes yielded greater intergroup anxiety. Respectively, low negative meta-stereotypes yielded lesser anxiety. The above figure illustrates the changes in anxiety for type of contact when meta-stereotypes are high and low. Simple interaction effects that have been measured showed that the greatest anxiety was felt by white respondents who scored high on the meta-stereotype scale. These participants believed that black South African participants had strong negative meta-stereotypes of whites.

The interaction graph for black participants can be seen in Figure 2. There was no significant interaction for black respondents, $F (1, 57)$, $p < 0.29$.

DISCUSSION AND CONCLUSION

Previous research has shown that the influence of meta-stereotypes on anxiety among students is prevalent in the South African context (University of Cape Town, Finchilescu et al., 2002; current research at University of the Witwatersrand). The reasons for such anxiety are many. Focus was placed on meta-stereotypes in relation to anxiety in the current research paper.
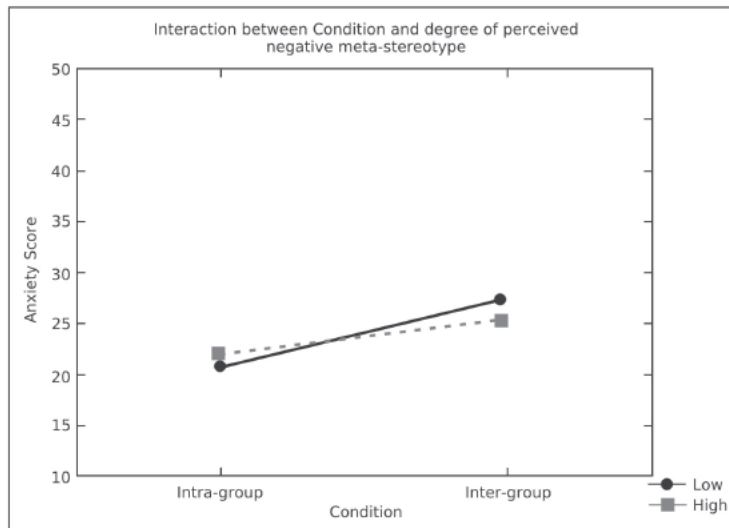
Figure 2: Interaction between Anxiety and Type of Condition and Meta-stereotypes (black)

Strong negative meta-stereotypes increased anxiety to some extent in certain individuals. The significant results from the 2-way ANOVA of meta-stereotypes, type of contact and anxiety demonstrated that the anxiety levels of white individuals were significantly different (higher) when the participants were interacting with members of the other racial group (Inter - Black South Africans). Furthermore these factors point to the existence of a relationship between negative meta-stereotypes and intergroup anxiety in interracial interactions (Hunt, 2001).

On the other hand, for black participants it was found that they did not feel anxious in interacting with white individuals. The 2-way ANOVA for black participants did not elicit significant results. The reason could be that the anxiety elicited by the computer programme was insufficient as the interaction was largely virtual in nature.

Due to the nature of the sample, it may be said that black South African individuals have greater interaction with whites as they probably socialise for academic reasons on campus and vice versa. As such, they could have adapted to interracial interactions with their white colleagues, to the point that these interactions are no longer anxiety provoking experiences for them (Hunt, 2001). This reason has also been stated by Stephan and Stephan (1985, 1989a, 1989b), who argued that anxiety would be greater if interaction with a particular group was less. Furthermore, they postulated that increased anxiety would be more prevalent with the out-group if contact was insignificant.

Second, there could have been a flaw in the experimental design. Language issues in terms of the type of words that were used in the questions may have elicited different meanings/interpretations from black and white individuals. If further

research on meta-stereotypes elicits significant responses for intergroup anxiety this could be a significant contribution towards understanding and reducing social distance.

BIOGRAPHICAL NOTES

Hawabibi Laher is a research psychologist employed by the University of South Africa's Institute for Social and Health Sciences. Her research interests include intergroup interactions, xenophobia, religion, spirituality, and violence. Apart from her academic work she is actively involved in community based volunteer work.

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REFERENCES

Allport, G. (1954). *The nature of prejudice*. Cambridge: Addison-Wesley.

Amir, Y. (1969). Contact hypothesis in ethnic relations. *Psychological Bulletin, 71*, 319–342.

Amir, Y., & Ben-Ari, R. (1985). International tourism, ethnic contact, and attitude change. *Journal of Social Issues, 41*, 105–115.

Barnea, M., & Amir, Y. (1981). Attitudes and attitude change following intergroup contact of religious and nonreligious students in Israel. *Journal of Social Psychology, 115*, 65–71.

Baumeister, R. F. (1982). Self-esteem self-presentation, and future interaction: A dilemma of reputation. *Journal of Personality, 50*, 29–45.

Blair, I. V., Park, B., & Bachelor, J. (2003). Understanding intergroup anxiety: Are some people more anxious then others? *Group processes and intergroup relations, 6*, 151–169.

Brown, R. (1995). *Prejudice: It's social psychology*. London: Wiley-Blackwell.

Cook, S. W. (1984). Cooperative interaction in multi-ethnic contexts. In N. Miller & M. B. Brewer (Eds.), *Groups in contact* (pp. 156–186). New York: Academic Press.

Finchilescu, G., Hunt, K., Mankge, K., & Nunez, D. T. (2002, June). Meta-stereotypes, attitudes

and anxiety in a situation of inter-racial interaction. Paper presented at the 13th Meeting of the European Association of Experimental Social Psychology, San Sebastian, Spain.

Finchilescu, G. (2005). Meta-stereotypes may hinder inter-racial contact. *South African Journal of Psychology, 35*(3), 460–472.

Finchilescu, G., Tredoux, C., Mynhardt, J., Pillay, J., & Muianga, L. (2007). Accounting for lack of interracial mixing amongst South African university students. *South African Journal of Psychology, 34*, 720–737.

Gaertner, S. L., & Dovido, J. F. (1986). The aversive form of racism. In J. F. Dovido & S. L. Gaertner (Eds.*), Prejudice, discrimination and racism* (pp. 61–89). Orlando, Florida: Academic Press.

Gudykunst, W. B., & Shapiro, R. (1996). Communication in everyday interpersonal and intergroup encounters. *International Journal of Intercultural Relations, 20*, 19–45.

Hewstone, M., & Brown, R. (1986). Contact is not enough: An intergroup perspective on the 'Contact Hypothesis'. In M. Hewstone & R. Brown (Eds.), *Contact, conflict and intergroup relations* (pp. 1–44). Oxford, UK: Basil Blackwell.

Hunt, K. (2001). Meta-stereotypes and intergroup anxiety in interracial relations. Unpublished Honours research project, Department of Psychology, University of Cape Town.

Islam, R., & Hewstone, M. (1993). Dimensions of contact as predictors of intergroup anxiety, perceived out-group variability, and out group attitude: An integrative model. *Personality and Social Psychology Bulletin, 19*, 700–710.

Jacobson, C. K. (1977). Separatism, intergrationism, and avoidance among black, white & Latin Adolescents. *Social Forces, 55*, 1011–1027.

Lazarus, R. S. (1991). *Emotion and adaptation*. New York: Oxford University Press.

Nunnally, J. C. (1978). *Psychometric theory*. New York: McGraw- Hill Book Company.

Pettigrew, T. F. (1986). The contact hypothesis revisited. In H. Hewstone & R. Brown (Eds.), *Contact and conflict in intergroup encounters* (pp. 169–195). Oxford, England: Basil Blackwell.

Pettigrew, T. F., & Tropp, L. R. (2000). Does intergroup contact reduce prejudice? Recent meta-analytic findings. In S. Oskamp (Ed.), *Reducing prejudice and discrimination: Social psychological perspectives* (pp. 93–114). Mahwah, NJ: Erlbaum.

Plant, A. E. (2004). Responses to interracial interactions over time. *Society for personality and social psychology, 30*, 1458–1471.

Plant, A. E., & Devine, P. G. (2003). The antecedents and implications of interracial anxiety. *Personality and Social Psychology Bulletin, 29*, 790–801.

Schlenker, B. R. (1980). *Impresston management*. Monterev: GA Brooks/Gole.

Sigelman, L., & Tuch, S. A. (1997). Metastereotypes. Blacks' perceptions of whites' stereotypes of blacks. *Public Opinion Quarterly, 61*, 87–101.

Smith, E. R. (1999). Affective and cognitive implications of a group becoming part of the self: New models of prejudice and of the self-concept. In D. Abrahams, & M. A. Hogg (Eds.), *Social identity and social cognition* (pp.183–196). Oxford: Blackwell.

Stephan, W. G., & Stephan, C. W. (1985). Intergroup anxiety. *Journal of Social Issues, 41*, 157–166.

Stephan, W. G., & Stephan, C. W. (1989a). Emotional reactions to interracial achievement

outcomes. *Journal of Applied Social Psychology, 19*, 608–621.

Stephan, W. G., & Stephan, C. W. (1989b). Antecedents to intergroup anxiety in Asian-Americans and Hispanic-Americans. *International Journal of Intercultural Relations, 13*, 203–219.

Stephan, W. G., & Stephan, C. W. (1992). Reducing intercultural anxiety through intercultural contact. *International Journal of Intercultural Relations, 16*, 89–106.

Vorauer, J. D., Hunter, A., Main, K. J., & Roy, S. A. (2000). Meta-stereotype activation: Evidence from indirect measures of dominant groups in intergroup interaction. *Journal of Personality and Social Psychology, 78*, 690–707.

Vorauer, J. D., Main, K. J., & O'Connell, G. B. (1998). How do individuals expect to be viewed by members of low status groups? Content and implications of meta-stereotypes. *Journal of Personality and Social Psychology, 75*, 917–937.