

Display of Empathy and Perception of Out-Group Members

Yanelia Yabar

Open Polytechnic of New Zealand

Ursula Hess

University of Quebec at Montreal

The goal of the present study was to examine whether empathy, when shown by a member of a stigmatized out-group, increases liking and rapport, and whether this effect generalizes to the out-group as a whole. Eighty-nine participants were asked to narrate a sad autobiographical event in the presence of a confederate who was either an in-group or an out-group member. During the interaction, the confederate either kept a neutral demeanour throughout or showed facial expressions congruent with the story content. Overall, participants rated both the in-group and the out-group confederate more positively when they displayed a congruent facial expression. However, this increase in liking did not generalize to the out-group to which the confederate belonged. Results are discussed in terms of their implications for multicultural countries, including New Zealand.

Research on the effect of self-disclosure in interpersonal interactions has shown that self-disclosure causes people to like their interaction partners better when they display empathy, because it provides people with the feeling of being understood (for a review, see Collins & Miller, 1994). In that context, the display of facial expression (e.g., facial expression of sadness) congruent with the content of the partner's self-disclosed event (e.g., sad autobiographical event) can be considered as a way to communicate understanding to the interaction partner. Since emotional knowledge and rapport depend on the degree of synchrony between the perceiver and the target (Levenson & Ruef, 1992), one may also argue that the display of a facial expression congruent with the content of the partner's self-disclosure is a form of primary empathy (Levenson & Ruef, 1992) or a communicative signal that serves to "show how you feel"

because of the existence of interpersonal display rules (Bavelas, Black, Lemery, & Mullett, 1986; Bavelas, Black, Chovil, Lemery, & Mullett, 1988). Those interpersonal display rules are cultural norms that determine what kind of facial expressions can be displayed, by whom and under which circumstances (Kupperbusch, Matsumoto, Kookan, Loewinger, Uchida, Wilson-Cohn, & Yrizarry, 1999).

The display of empathy through a facial expression congruent with the content of the partner's self-disclosed event (i.e., facial congruence) is closely related to facial mimicry since mimicry corresponds to the imitation of the facial expressions of others (for a review, see Hess, Philippot, & Blairy, 1999) and has been long understood as a form of primary empathy (Levenson & Ruef, 1992). Adults typically imitate emotional and non-emotional facial expressions of models shown in photos (e.g., Blairy, Herrera, & Hess, 1999) or

videos (Hess & Blairy, 2001). Mimicry is not restricted to facial expressions, but has also been found for mannerism (Chartrand & Bargh, 1999), posture (Berger & Hadley, 1975) and speech characteristics (Giles & Smith, 1979).

Chartrand and Bargh (1999), who studied non-emotional mimicry, consider mimicry to be an automatic process quite independent of the existing relationship between the interaction partners. Dimberg, Thunberg, and Grunedal (2002) present evidence that facial mimicry occurs spontaneously and outside the conscious control of the participant. Also, funnel debriefing of participants in past studies has revealed a lack of awareness of mimicry and even of the existence of the mimicked behaviours (Chartrand, Maddux, & Lakin, 2005). Thus, mimicry may be both unintentional and uncontrollable and may generally occur without conscious awareness.

However, some data suggests that interpersonal factors can have an important influence on mimicry. Firstly, under certain circumstances, the type of relationship between observer and observed seems to matter. For example, Lanzetta and Englis (1989) found that participants mimicked the facial expressions of individuals with whom they cooperated, but not of those with whom they competed. Similarly, McHugo, Lanzetta, Sullivan, Masters, and Englis (1985) found that people tend to mimic the emotional expressions of political leaders only when they share their political attitude. Also, Gump and

Kulik (1997) found that participants were more likely to mimic a confederate who was supposedly in the same situation as them (i.e., waiting for a potentially unpleasant experimental manipulation) than of one who was in a different situation (i.e., waiting for an exam). Secondly, mimicry is generally assumed to increase the feeling of similarity between the interaction partners. Indeed, mimicry has consistently been shown to correlate with affiliation (e.g., Bernieri, 1988). Moreover, Chartrand and Bargh (1999, study 2) present evidence that mimicry creates greater rapport and liking between people. Similarly, Bavelas, Black, Lemery, and Mullett (1986) and Bavelas, Black, Chovil, Lemery, and Mullett (1988) found that individuals who showed postural congruence were perceived as friends, whereas those who did not were perceived as strangers. Thus, mimicry is more likely to be shown by a person with whom we already share attitudes or to whom we feel similar in a number of ways.

In a self-disclosure setting, the display of facial congruence may be based on interpersonal display rules rather than on spontaneous and uncontrollable imitation readiness. In other words, the display of facial congruence may be motivated by the desire of the individual to display empathy and understanding. Indeed, research shows that a typical response in a self-disclosure context is the expression of interest or the expression of empathy through mimicry (Christophe & Rime, 1997). Therefore, even if recipients of self-disclosure are most often intimate acquaintances, such as parents and close family members or best friends (Rime, Philippot, Boca, & Mesquita, 1992), self-disclosure may be a key component in the development of intimacy between strangers most of all when the interaction partners display empathy (Zech, Rime, & Nils, 2004).

Thus, facial congruence as a marker of empathy in a self-disclosure context can be expected to increase liking for the person who displays empathy and is more likely among people who are similar to each other in a number of ways. However, the question of whether the display of empathy can serve this function for individuals who are initially

perceived as dissimilar or are disliked remains open. More specifically, can the display of empathy serve to increase liking of a member from a stigmatized out-group?

Such an effect is plausible because positive interactions that provide opportunity for self-disclosure should reduce inter-group bias according to the contact hypothesis (Hewstone & Brown, 1986). The contact hypothesis states that under certain conditions (e.g., participants of equal status, cooperative relations with acquaintance potential), contacts with members of an out-group leads to more positive attitudes (Hewstone & Brown, 1986). The contact hypothesis is consistent with the mere exposure hypothesis (Zajonc, 1968), which states that repeated exposure to a given object results in familiarity with the object, which consequently leads to a more positive attitude. According to both the contact and mere exposure hypotheses, positive inter-group contact should lead to more positive attitudes toward the group because of the potential for acquaintance with members of the group.

Such an effect is also plausible because van Baaren, Holland, Kawakami, and van Knippenberg (2004) have shown that the beneficial consequences of mimicry were not restricted to the mimicker, but generalized to people not directly involved in the mimicry situation. More specifically, individuals were more likely to help somebody pick up dropped items if they had been mimicked in a previous encounter, regardless of whether the person who had dropped the items was their previous interaction partner or a stranger (van Baaren, Holland, Kawakami, & van Knippenberg, 2004).

The present study aimed to explicitly assess whether the display of empathy through facial congruence generates liking, even when shown by a stigmatized out-group member. A second question was whether the display of empathy through facial congruence increases liking for the group to which the out-group member belongs. To address these questions, participants were asked to talk about a sad autobiographical event in a self-disclosure setting (i.e., social sharing paradigm; Rime et al., 1992). Participants were instructed to recall

a recent personal emotional episode corresponding to a specified basic emotion (i.e., sadness). A confederate played the role of the listener. The confederate's nonverbal behaviour during the interaction was scripted. The confederate always signalled understanding by back channelling: the confederate was nodding their head and saying "hmm" at prescribed times. However, in the "display of empathy through facial congruence" condition, the confederate also showed a sad facial expression congruent with the content of the participant's narrative. Confederates were introduced as fellow students, but one confederate belonged to an out-group that is generally perceived negatively among French Canadian students: North Africans. North Africans represent an important Arab immigrant community in the province of Quebec in Canada and are generally perceived as aggressive and threatening.¹

Only female participants were included in the present experiment. This choice was made because a context of self-disclosure was used in which a female confederate displayed empathy through facial congruence. When listening to someone describing personal problems, people who are sex-typed as masculine have been shown to be less empathic than people who are sex-typed as feminine (Bem, Martyna, & Watson, 1976). Thus, the manipulation was cut down to female confederates and to a sample of same sex participants to avoid any interference.

Method

Participants

Eighty-nine French Canadian women with a mean age of 24 years participated individually. Data from 3 participants were excluded because they were suspicious of the confederate, or guessed the research hypotheses during debriefing. All participants were French-speaking Canadians and residents of the province of Quebec in Canada.

Design

A between-subject design was used in this Experiment. Depending on the condition, participants interacted with either an in-group or an out-group confederate and the confederate either kept a neutral demeanour throughout or

displayed a facial expression congruent with the story content.

Procedure

Participants were greeted by the experimenter and introduced to the confederate, who was presented as a fellow participant. It was explained that the study aimed to investigate emotional communication in dyads. Participants were asked to narrate a sad autobiographical event from their life. For this, they were given a list of moderately intense events (e.g., death of a pet, loss of a cherished object, etc.) and asked to choose one event that had happened to them. The confederate was either French Canadian (i.e., member of the in-group) or North African (i.e., member of a stigmatized out-group). During the interaction, the confederate either kept a neutral display throughout (i.e., a facial display incongruent with the nature of the shared event - no display of empathy) or showed frequent facial congruence (i.e., a sad facial display congruent with the nature of the shared event - display of empathy). Following the interaction, participants were taken to a separate room. They were asked to fill out a questionnaire assessing their socio-demographic background, their evaluation of the interaction and of their interaction partner, as well as an evaluation of the interaction partner's cultural group. Following the experiment, participants were debriefed. Participants were not compensated.

Dependent Measures

Quality of interaction. Participants were asked to complete a French version of the "Interaction Pleasantness Scale" (Ickes, 1984) to assess the perceived quality of the interaction depending on the manipulation. A series of questions assessed whether participants found the interaction pleasant or unpleasant on a 7-point Likert type scale going from 0-(not at all) to 6-(extremely). The perceived partner's reaction to the interaction was also assessed on the same kind of scale. Pleasant affects and unpleasant affects were treated as separate constructs because many studies have revealed discriminant validity for pleasant and unpleasant affects (for a review, see Schimmack, Bockenholt, & Reisenzein, 2002).

Higher scores on these scales indicate a higher perception of pleasantness versus unpleasantness of interaction.

Closeness/similarity. To assess how close or similar to the interaction partner they felt, participants had to respond to an adaptation of the "Inclusion of Others in Self Scale" (Aron, Aron, & Smollan, 1992). This scale consists of a series of increasingly overlapping pairs of circles, which are labelled "I" and "The other person." These series of circles assess how close participants feel to the interaction partner on a 7-point scale, anchored with 0-(two non-overlapping circles) and 6-(two almost overlapping circles). Higher scores on this scale indicate higher feelings of closeness/similarity.

Perception of the partner. Increased liking should result in a more positive perception of the interaction partner. To assess the perception of the interaction partner depending on the condition, participants were asked to rate their interaction partner on a series of adjectives generated to cover specific personality traits (i.e., friendly, outgoing, approving and pleasant) on a 7-point Likert type scale ranging from 0-(not at all) to 6-(extremely). The personality traits were treated separately rather than as a unidimensional construct. Higher scores on each item indicate higher attribution of positive personality traits.

Approach/avoidance. Increased liking should result in a greater desire to approach the interaction partner and in a reduction of avoidance tendencies. To assess this notion, a French version of the "Action Tendency Questionnaire" (Frijda, Kuipers, & Ter Schure, 1989) was employed. This version of the questionnaire consisted of 16 questions that probed action tendencies, such as "I wanted to approach the other person" or "I wanted to keep my distance from the other person", on a 7-point Likert type scale ranging from 0-(not at all) to 6-(extremely). Higher scores indicate higher levels of approach versus avoidance tendencies.

Emotional reactions to the interaction partner. To assess how participants felt about their interaction partner, they were asked to complete the "Differential Emotions Scale" (i.e., DES; Izard, Dougherty, Bloxom,

& Kotsch, 1974), including the items "admiration", "interest" and "attraction", which were retained to assess whether displays of empathy lead to a more positive feeling toward the interaction partner. Participants rated their feelings regarding their interaction partner using a 7-point Likert type scale, anchored with 0-(not at all) and 6-(extremely). Higher scores on each item indicate higher levels of emotional reaction toward the interaction partner.

Inter-group relations. To assess whether attitudes towards the interaction partner generalize to attitudes towards their ethnic group, participants were asked to complete a French translation of the "Out-Group Contact Scale" (Tzeng & Jackson, 1993). Specifically, they were asked to describe potential contacts with members of the ethnic group of the interaction partner (i.e., other French Canadian women or other North African women) in terms of frequency, pleasantness, constructiveness, desirability, equality of status, level to which they are encouraged by others to have contacts with out-group members, and intimacy. Participants were asked to rate inter-group contacts on 7-point Likert type scale anchored with 0-(not at all) and 6-(extremely). Higher scores on this scale indicate higher quality of out-group contacts.

In addition, participants were asked to give a global evaluation of their attitude towards the out-group on an "Attitude Thermometer" (Abelson, Kinder, Peters, & Fiske, 1982). The attitude thermometer ranges from 0 (extremely unfavourable) to 100 (extremely favourable). Higher scores on this scale indicate a higher positive attitude toward the out-group.

Results

Manipulation Checks

Appreciation of the confederate. The confederates were videotaped during the interaction. A first manipulation check was conducted to ensure that the two confederates were judged as similar on two relevant dimensions: physical attractiveness and general attitude toward them. Fourteen individuals (i.e., different from the 89 participants involved in the experiment) were

asked to judge the confederates on the basis of a 15-second video of the two confederates displaying a neutral demeanour. Participants were asked to judge the level of physical attractiveness for each confederate on a 7-point Likert type scale ranging from 0 (not attractive) to 6 (really attractive), and to give a global evaluation of each confederate on the "Attitude Thermometer" (Abelson, Kinder, Peters, & Fiske, 1982). No significant differences on those two dimensions were observed between the two confederates, $t(1, 13) = .67$, $p = .518$ and $t(1, 13) = .57$, $p = .542$, respectively.

Facial expressions of the confederate. A second manipulation check verified whether the confederates showed the intended facial expressions. During the interaction the confederates were videotaped, and two coders who were unaware of the experimental conditions evaluated their facial expressions. Coders were asked to look at the videotapes and to determine if the confederate was displaying a sad or

neutral facial expression. The two raters coded respectively 86% and 97% of the interactions as correctly executed when compared with the instructions given to the confederate by the experimenter ($\kappa = .78$). There was no significant difference in adherence to the instructions between the two confederates, $F(1, 74) = .83$, $p = .366$ and $F(1, 74) = 2.29$, $p = .134$, for raters 1 and 2 respectively.

Emotional reaction to the story. To assess participants' compliance with the instructions to report a sad event, all participants in the main experiment were asked to complete the "Differential Emotions Scale" (i.e., DES; Izard, Dougherty, Bloxom, & Kotsch, 1974). Congruent with the experimental context, participants reported significantly higher levels of sadness ($M = 3.59$, $SD = 1.62$) than of any other emotion, $F(10, 65) = 26.01$, $p = .001$. Participants' emotional reactions during the narrative did not vary as a function of either group membership or the behaviour of the confederate.

Quality of Interaction

The quality of the interaction was assessed by the degree of pleasantness and the degree of unpleasantness perceived by the participant. Pleasant affects and unpleasant affects were treated as separate constructs. No significant effects emerged for the rated pleasantness, $F(1, 76) = 2.81$, $p = .098$, and unpleasantness of the interaction, $F(1, 76) = 2.87$, $p = .094$. Participants rated interactions where the confederate displayed a sad facial expression as equally pleasant ($M = 2.95$, $SD = 1.74$ and $M = 2.35$, $SD = 1.48$, respectively), as well as equally unpleasant ($M = 2.40$, $SD = 1.60$ and $M = 3.03$, $SD = 1.72$, respectively), as those where the confederate remained neutral. No significant effects emerged for ratings of the interaction partners' perceived reaction to the interaction.

Closeness/Similarity

A significant main effect for the display of empathy emerged, $F(1, 76) = 9.71$, $p = .003$, such that participants felt closer to the confederate who displayed a sad facial expression ($M = 1.58$, $SD = 1.17$) than to the confederate who did not ($M = 0.79$, $SD = 1.17$).

Perception of the Partner

The personality traits were treated separately rather than as a uni-dimensional construct. A multivariate analysis of variance was conducted on the series of personality traits. The means and standard deviations for each item treated separately are shown in Table 1.

Overall, confederates who displayed a sad facial expression were rated as more friendly and outgoing, $F(4, 72) = 2.55$, $p = .047$, as well as more approving and warm, $F(4, 72) = 3.66$, $p = .009$. In addition, the out-group confederate was rated as more friendly and outgoing than the in-group confederate, $F(4, 72) = 2.50$, $p = .050$.

Approach/Avoidance

A multivariate analysis of variance was conducted on the items related to approach versus avoidance of the "Action Tendency Questionnaire". The means and standard deviations for those items are shown in Table 2.

Table 1. Means and Standard Deviations for Personality Trait Attribution to the Interaction Partner as a Function of Group Membership and Display of Empathy

Traits	No display of empathy			
	In-group		Out-group	
	Mean	SD	Mean	SD
Outgoing	4.17	1.20	4.30	1.59
Friendly	3.83	1.25	4.55	1.70
Extraverted	2.67	1.14	2.75	1.12
Cheerful	2.67	1.03	3.05	1.10
Approving	3.67	0.97	4.10	1.59
Positive	3.72	1.13	4.10	1.07
Warm	3.22	1.80	3.70	1.72
Tender	3.39	1.20	3.60	1.10
Traits	Display of empathy			
	In-group		Out-group	
	Mean	SD	Mean	SD
Outgoing	4.55	1.19	4.80	0.89
Friendly	4.65	1.04	5.05	0.95
Extraverted	3.25	1.12	3.35	1.27
Cheerful	3.30	1.34	3.65	1.14
Approving	4.75	1.12	4.80	1.20
Positive	4.50	1.24	4.80	1.01
Warm	4.15	1.50	4.55	1.15
Tender	4.30	1.08	4.35	1.09

Note. The higher the score, the greater the attribution of the personality trait.

Overall, a greater tendency to approach the confederate was found for confederates who displayed a sad facial expression compared to those who did not, $F(4, 71) = 3.28, p = .016$. An ethnic group x display of empathy interaction, $F(4, 71) = 3.27, p = .016$, suggests that although the same pattern of results emerged for both groups, the effect of the display of empathy was stronger for the out-group confederate. No effect of group membership or display of empathy emerged for the tendency to withdraw.

Emotional Reaction to the Interaction Partner

In line with the prediction that the display of empathy increases liking and rapport, three items of the DES were retained to assess participants' reactions to the interaction partner: admiration, interest and attraction. Participants reported significantly more admiration towards the confederate who displayed a sad facial expression ($M = .72, SD = 1.20$) than toward the confederate who did not ($M = .18, SD = .78$), $F(1, 76) = 5.07, p = .027$, however no more interest or attraction. The absolute values for admiration were rather low for both groups.

Inter-Group Relations

A multivariate analysis of variance on the items describing the quality and quantity of interactions with members of the same ethnic group as the confederate (i.e., French Canadian versus North African women) revealed a main effect of ethnic group only, $F(7, 66) = 13.47, p = .001$. Overall, participants reported fewer, and potentially less positive, interactions with North African women than with French Canadian women. The means and standard deviations are shown in Table 3.

Similarly, for the overall perception of the ethnic group of the confederate only a main effect of ethnic group emerged, $F(1, 72) = 6.72, p = .012$, with participants reporting a more favourable attitude towards French Canadian women ($M = 8.56, SD = 1.09$) than towards North African women ($M = 7.54, SD = 2.22$).²

Table 2. Means and Standards Deviations for the Action Tendencies toward the Interaction Partner as a Function of Group Membership and Display of Empathy

	No display of empathy			
	In-group		Out-group	
Action tendencies	Mean	SD	Mean	SD
Approach	1.25	1.16	1.47	1.71
Search contact	2.45	1.85	2.32	2.00
Be interested	2.25	1.94	1.63	1.74
Be close to the other	1.10	1.17	1.00	1.00
Withdraw	0.90	1.33	1.53	2.04
Want the other to go away	0.60	1.31	0.89	1.79
Reject the other	0.60	1.19	0.84	1.74
Keep the distance	0.75	1.07	1.42	1.77

	Display of empathy			
	In-group		Out-group	
Action tendencies	Mean	SD	Mean	SD
Approach	2.85	1.69	2.05	1.75
Search contact	2.4	1.73	3.37	1.38
Be interested	2.6	2.01	2.68	1.77
Be close to the other	1.95	1.85	2.21	1.47
Withdraw	0.95	1.64	1.11	1.59
Want the other to go away	0.65	1.35	0.53	1.07
Reject the other	0.65	1.18	0.42	0.96
Keep the distance	1.0	1.34	1.05	1.35

Note. The higher the score, the greater the action tendency.

Table 3. Frequency and Quality of Inter-Group Contacts as a Function of Group Membership and Display of Empathy

	No display of empathy			
	In-group		Out-group	
Contacts are ...	Mean	SD	Mean	SD
Frequent	5.78	0.55	2.85	1.95
Pleasant	5.22	1.40	4.45	1.50
Constructive	5.00	0.91	4.55	1.70
Desired	4.67	1.50	4.40	1.47
Intimate	4.67	1.28	2.90	1.41
Encouraged by others	4.33	2.17	3.10	1.52
With equal status	5.11	1.53	4.90	1.89

	Display of empathy			
	In-group		Out-group	
Contacts are...	Mean	SD	Mean	SD
Frequent	5.68	0.95	2.42	2.06
Pleasant	5.42	0.61	3.84	1.30
Constructive	5.05	0.85	3.58	1.17
Desired	5.26	1.05	3.63	1.38
Intimate	4.84	1.12	2.32	1.34
Encouraged by others	4.42	2.04	2.74	1.28
With equal status	5.32	1.00	4.58	1.64

Note. The higher the score, the greater contacts are characterized by the sentence.

Discussion

The aim of the present research was to investigate the effects of the display of empathy during a self-disclosure event (i.e., social sharing interaction) on the perception of the interaction partner. Specifically, this experiment aimed at investigating whether the display of empathy increases liking and approach tendencies towards an interaction partner from an out-group that is generally disliked. Ethnic identity was chosen to manipulate in-group and out-group status, as ethnic characteristics are automatically perceived and acted upon (Brewer, 1988). In addition, this experiment aimed at assessing whether liking would generalize to the group of which the interaction partner belonged. Such an effect is plausible because positive interactions that provide opportunity for self-disclosure can reduce inter-group bias according to the contact hypothesis (Hewstone & Brown, 1986). Such generalization is also plausible because van Baaren, Holland, Kawakami, and van Knippenberg (2004) have shown that the beneficial consequences of mimicry were not restricted to the mimicker, but also generalized to people not directly involved in the mimicry situation.

Results demonstrate that individuals who display empathic behaviour when listening to a sad autobiographical event are perceived more positively, and elicit more pronounced approach tendencies, than individuals who display a neutral demeanour. This finding supports the notion that the display of empathic behaviour through facial congruence can serve to increase liking and to help people to establish positive rapport (Chartrand & Bargh, 1999; Hess et al., 1999). Results also confirm the notion that the display of empathy increases the feeling of closeness at an interpersonal level.

More importantly, although the display of empathy tends to be spontaneously shown towards individuals who are liked or perceived as similar, the present results show that the display of empathy increases liking for initially disliked others. As such, the display of empathy can serve a positive function in inter-group interactions between members of groups that dislike each

other. This pattern of results is congruent with the contact hypothesis, which states that under certain conditions, contacts with members of an out-group lead to positive attitudes because of the potential for acquaintance with members of the out-group (Hewstone & Brown, 1986). Therefore, the display of empathy from an out-group member could represent a key component in the development of intimacy between strangers from different ethnic groups and lead, in the long run, to a better understanding and feeling of rapport and similarity at an inter-group level.

However, results failed to show that the positive attitude towards the specific interaction partner generalized towards her group as a whole. With regard to the perception of interactions with members of the ethnic group of the interaction partner, potential interactions with North African women were perceived as overall less frequent and less pleasant. No overall differences emerged as a function of the display of empathy. The same pattern was found for the favourableness of the general attitude towards both groups. That is, no support was found for the notion that a positive attitude towards an out-group interaction partner who shows empathy through facial congruence generalizes towards the group as a whole.

Two explanations can be advanced for this latter finding. Firstly, participants experienced moderate levels of sadness during the interaction. Stroessner and Mackie (1992) note that both negative and positive moods during contacts with out-group members may increase the likelihood of stereotyping out-group members, and of perceiving them as more homogenous. That is, affect experienced during inter-group contacts may undermine the otherwise beneficial effects of such contacts on out-group perception. Secondly, experiencing increased closeness and approach tendencies towards the mimicking out-group member may have induced some apprehension in the participants. Specifically, as Gump and Kulik (1997) note, mimicry may serve to increase the perception of similarity between interaction partners. However, increased similarity can be perceived as a threat to group distinctiveness. This, in turn, may lead to the need to

reaffirm dissimilarities and to reject the group along the lines suggested by the similarity threat hypothesis (Jetten, Spears, & Manstead, 1996).

The results of the present study are restricted in two ways. Firstly, only women were included as participants and confederates, limiting the ability to generalize the results to men. This choice was made because when listening to people describing personal problems, people who are sex-typed as masculine have been shown to display less empathy than people who are sex-typed as feminine (Bem, Martyna, & Watson, 1976). Also, women have been found to be clearer encoders of non-verbal information, as well as better decoders of non-verbal information (Argyle & Colman, 1999). Cloninger (2000) suggested that women might be better decoders of non-verbal information because they are more empathic than men. They might better understand other persons' feelings and emotions because of a higher degree of empathy. Indeed, when empathy is defined as emotional responsiveness, women have been shown to score higher than men (Davis, 1994).

Secondly, this experiment was conducted in Canada with a specific multicultural background, which may limit its implications for other countries. However, other countries, including New Zealand, can be described as a multicultural society. Multiculturalism is defined as the situation where multiple cultures exist within a country and where the number of inhabitants representing minority cultures is significant (Batorowicz, 1999). In 2001, 80 percent of the population in New Zealand identified as being of European descent, 14.7 percent as being of Māori descent, and 6.6 percent as being of Pacific descent (Statistics New Zealand, 2002). In 2003, 100 000 international students were enrolled in New Zealand Tertiary Institutions with the largest proportion coming from China (New Zealand Ministry of Education, 2004). Waldegrave (1993) identified four important differences between Māori culture and European descent culture in New Zealand. Māori culture was shown to be more communal (i.e., shared group identity), spiritual (i.e., belief in sacredness of spirit and religion),

ecological (i.e., focus on relationship between people and environment) and consensual (i.e., values and symbols derived from reasoned consensus among community members) than the European descent culture, which was shown to be more individualist (i.e., focus on personal identity), secular (i.e., belief that process evolves slowly in time), consumer-oriented (i.e., user and recipient of goods and services) and conflictual (i.e., motives and behaviours directed towards achievement of individuals' goals). These cultural differences may be important in terms of respective communication style, since cultural differences have been shown to impact all components of the communication process and to cause misunderstandings between ethnic groups (Poyatos, 1988). Differences in language are the most obvious barrier to cross-cultural communication, but differences in kinetics (i.e., gesture, movement and facial expressions) can be a major obstacle too. Since different cultures generally involve different nonverbal behaviours, people from the same culture in New Zealand may understand the nonverbal behaviours that accompany the words of each other better than the nonverbal behaviours that accompany the words of people from other cultures (Poyatos, 1988). In that context, promoting empathy between the different cultural backgrounds can be helpful in New Zealand. Indeed, according to the contact hypothesis, the more positive interactions there are between people from different groups, the more they will have opportunities to break down barriers and prejudice when these interactions imply mutual cooperation and common goals through the promotion of positive cross-cultural interactions (Islam & Hewstone, 1993). Increased empathy may promote increased cultural competence in the long term, which in turn may promote a more inclusive social identity in multicultural countries and reduce prejudice by helping people change their definition of in-versus out-group membership and to include cultural groups previously excluded (Gomersall, Davidson, & Ho, 2000).

In summary, this research showed that people rate both the in-group and the out-group partners more positively

when they display a congruent facial expression but this increase in liking does not generalize to the out-group to which the confederate belongs. Nevertheless, one can advocate that mimicry may serve to increase the perception of similarity at the inter-group level in the long term, and that repeated positive intergroup contacts are actually necessary to overcome stereotyping, prejudice and discrimination.

References

- Abelson, R. P., Kinder, D. R., Peters, M. D., & Fiske, S. T. (1982). Affective and semantic components in political person perception. *Journal of Personality and Social Psychology*, 42, 619-630.
- Argyle, M., & Colman, A. M. (1999). *Social Psychology*. London: Longman.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of other in the self-scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology*, 63, 596-612.
- Batorowicz, K. (1999). Multiculturalism and immigration: The Australian case. In O. Koivukangas, & C. Westin (Eds.). *Scandinavian and European migration to Australia and New Zealand* (pp. 11-21). Vammala, Finland: Institute of migration.
- Bavelas, J. B., Black, A., Chovil, N., & Lemery, C. R., & Mullett, J. (1988). Form and function in motor mimicry: Topographic evidence that the primary function is communicative. *Human Communication Research*, 14, 275-299.
- Bavelas, J. B., Black, A., Lemery, C. R., & Mullett, J. (1986). "I show how you feel": Motor mimicry as a communicative act. *Journal of Personality and Social Psychology*, 50, 322-329.
- Bem, S. L., Martyna, W., & Watson, C. (1976). Sex-typing and androgyny: Further exploration of the expressive domain. *Journal of Personality and Social Psychology*, 34, 1016-1023.
- Berger, M. S., & Hadley, S. W. (1975). Some effects of a model's performance on an observer's electromyographic activity. *American Journal of Psychology*, 88, 263-276.
- Bernieri, F. J. (1988). Coordinated movement and rapport in teacher-students interactions. *Journal of Nonverbal Behavior*, 12, 120-138.
- Blairy, S., Herrera, P., & Hess, U. (1999). Mimicry and the judgment of emotional facial expressions. *Journal of Nonverbal Behavior*, 23, 5-41.
- Brewer, M. B. (1988). A Dual process model of impression formation. In T.K. Srull, & R.S. Wyer, Jr. (Eds.), *Advances in social cognition* (Vol. 1, pp. 1-36). Hillsdale, NJ: Erlbaum.
- Chartrand, T. L., & Bargh, J.A. (1999). The chameleon effect: The perception-behavior link and social interaction. *Journal of Personality and Social Psychology*, 76, 893-910.
- Chartrand, T. L., Maddux, W. W., & Lakin, J. L. (2005). Beyond the perception-behaviour link: The Ubiquitous utility and motivational moderators of non conscious Mimicry. In R. Hassin, J. S. Uleman, & J. A. Bargh (Eds.), *Unintended though 2: The new unconscious*. New York: Oxford University Press.
- Christophe, V., & Rime, B. (1997). Exposure to the social sharing of emotion: Emotional impact, listener responses and secondary social sharing. *European Journal of Social Psychology*, 27, 37-54.
- Cloninger, S.C. (2000). *Personality, description, dynamics, and development*. New York: W.H. Freeman and Company.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin*, 116, 457-475.
- Davis, M. H. (1994). *Empathy: A social psychological approach*. Boulder, Colorado: Westview Press.
- Dimberg, U., Thunberg, M., & Grunedal, S. (2002). Facial reactions to emotional stimuli: Automatically controlled emotional responses. *Cognition and Emotion*, 16(4), 449-471.
- Frijda, N. H., Kuipers, P., & Ter Schure, E. (1989). Relations among emotion, appraisal and emotional action readiness. *Journal of Personality and Social Psychology*, 57, 212-228.
- Giles, H., & Smith, P.M. (1979). Accommodation theory: Optimal levels of convergence. In H. Giles, & R. St Clair (Eds.), *Language and social psychology* (pp.45-65). Oxford: Blackwell.
- Gump, B., & Kulik, J. A. (1997). Stress, affiliation, and emotional contagion. *Journal of Personality and Social Psychology*, 72, 305-319.
- Gomersall, A. M., Davidson, G., & Ho, R. (2000). Factors affecting acceptance of Aboriginal reconciliation amongst non-Indigenous Australians. *Australian Psychologist*, 35(2), 118-127.
- Hess, U., & Blairy, S. (2001). Mimicry and emotional contagion to dynamic emotional facial expressions and their influence on decoding accuracy. *International Journal of Psychophysiology*, 40, 129-141.

- Hess, U., Philippot, P., & Blairy, S. (1999). Mimicry: Facts and fiction. In P. Philippot, R. S. Feldman, & E. J. Coats (Eds.), *The social context of nonverbal behavior* (pp. 213-241). Cambridge: Cambridge University Press.
- Hewstone, M., & Brown, R. (1986). *Contact and conflict in intergroup encounters*. Oxford: Basil Blackwell.
- Ickes, W. (1984). Personality. In A. S. Bellack, & M. Hersen (Eds.), *Research methods in clinical psychology* (pp. 157-178). New York: Pergamon.
- Izard, C. E., Dougherty, F. E., Bloxom, B. M., & Kotsch, N. E. (1974). *The Differential Emotions Scale: A method of measuring the meaning of subjective experience of discrete emotions*. Nashville: Vanderbilt University, Department of Psychology.
- Jetten, J., Spears, R., & Manstead, A. S. R. (1996). Intergroup norms and intergroup discrimination: Distinctive self-categorization and social identity effects. *Journal of Personality and Social Psychology*, 71, 1222-1233.
- Kupperbusch, C., Matsumoto, D., Kookan, K., Loewinger, S., Uchida, H., Wilson-Cohn, C., & Yrizarry, N. (1999). Cultural influences on nonverbal expressions of emotion. In P. Philippot, R. S. Feldman, & E. J. Coats (Eds.), *The social context of nonverbal behavior* (pp. 17-44). Cambridge, UK: Cambridge University Press.
- Lanzetta, J. T., & Englis, B. G. (1989). Expectation of cooperation and competition and their effects on observer's vicarious emotional responses. *Journal of Personality and Social Psychology*, 56, 543-554.
- Levenson, R. W., & Ruef, A. M. (1992). Empathy: A physiological substrate. *Journal of Personality and Social Psychology*, 63, 234-246.
- McHugo, G. J., Lanzetta, J. T., Sullivan, D. G., Masters, R. D., & Englis, B. G., (1985). Emotional reactions to a political leader's expressive displays. *Journal of Personality and Social Psychology*, 49, 1513-1529.
- Miller, N., & Brewer, M. B. (1984). *Groups in Contact: The psychology of desegregation*. New York: Academic Press.
- New Zealand Ministry of Education (2004). Moving forward in international education. Retrieved October 26, 2004, from <http://www.minedu.govt.nz/>
- Poyatos, F. (1988). New research perspectives in cross-cultural psychology through non-verbal communication studies. In F. Poyatos (Ed.), *Cross-cultural perspectives in non-verbal communication* (pp. 35-69). Toronto: CJ Hogrefe.
- Rimé, B., Philippot, P., Boca, S., & Mesquita, B. (1992). Long-lasting cognitive and social consequences of emotion: Social sharing and rumination. In W. Stroebe, & M. Hewstone (Eds.), *European review of social psychology* (Vol. 3, pp. 225-258). Chichester: Wiley.
- Shimmack, U., Bockenholt, U., & Reizenzein, R. (2002). Response styles in affect ratings: Making a mountain out of a molehill. *Journal of Personality Assessment*, 78(3), 461-483.
- Statistics New Zealand (2002). *2001 Census of population and dwellings: Ethnic groups*. Wellington, New Zealand: Statistic New Zealand.
- Stroessner, S. J., & Mackie, D. M. (1992). The impact of induced affect on the perception of variability in social groups. *Personality and Social Psychology Bulletin*, 18, 546-554.
- Tzeng, O. C. S., & Jackson, J. W. (1993). Effect of contact, conflict, and social identity on interethnic group hostilities. *International Journal of Intercultural Relations*, 18, 259-276.
- van Baaren, R. B., Holland, R. W., Kawakami, K., & van Knippenberg, A. (2004). Mimicry and pro-social behavior. *Psychological Science*, 15(1), 71-74.
- Waldegrave, C. (1993). The challenges of culture to psychology and post-modern thinking. In L. M. Nikora (Ed.) *Proceedings of a symposium held at the Annual Conference of the New Zealand Psychological Society, University of Victoria, Wellington, New Zealand, 23-24 August 1993*.
- Zajonc, R.B. (1968). Attitudinal effects of mere exposure. *Journal of Personality and Social Psychology Monograph*, 9 (2, Part 2), 1-28.
- Zech, E., Rimé, B., & Nils, F. (2004). Social sharing of emotion, emotional recovery, and interpersonal aspects. In P. Philippot, & R. Feldman (Eds.), *The regulation of emotion* (pp. 157-185). New York: Lawrence Erlbaum Associates.
- = 4.77, $p = .000$. Further, 36 French-Canadian participants were asked to rate the emotions they habitually expected to be displayed by members of different ethnic groups represented in the province of Quebec, including North-Africans, using a French translation of the DES (Izard, Dougherty, Bloxom, & Kotsch, 1974). Participants expected North Africans to display significantly less joy ($M = 4.46$, $SD = 1.05$) and more anger ($M = 5.22$, $SD = 1.77$) than French Canadians ($M = 5.39$, $SD = 1.52$ and $M = 4.56$, $SD = 1.53$), $t(35) = 3.24$, $p = .003$ and $t(35) = -1.94$, $p = .051$, respectively.
- ² When comparing the means for the "Attitude thermometer" in the experiment and the means on the same measure in the pre-test, the positive impact of the self-disclosure situation seem to generalize to the perception of the group as a whole. Indeed, since the same method of scoring was used in both the pre-test and the experiment, one can compare the means of the pre-test to the means in the experiment. In the experiment, the attitude toward the in-group ($M = 8.56$, $SD = 1.09$) is superior to the attitude toward the out-group ($M = 7.54$, $SD = 2.22$). The same pattern is observed in the pre-test with the attitude toward the in-group ($M = 6.06$, $SD = 1.01$) being superior to the attitude toward the out-group ($M = 3.54$, $SD = 2.01$), nevertheless the attitude toward the out-group member seems to be more positive after the manipulation $M = 7.54$, $SD = 2.22$) than in the pre-test ($M = 3.54$, $SD = 2.01$).

Keywords: Empathy, interaction, in-group/out-group relations

Author note

Yanelia Yabar and Ursula Hess, Department of Psychology, University of Quebec at Montreal, Canada. Yanelia Yabar is now at the Open Polytechnic of New Zealand, New Zealand. This research was supported by a grant from the FCAR attributed to Ursula Hess.

Acknowledgement

We are grateful to Lucy Johnston, Aaron Jarden, Lynden Miles, Nicole Cheung, Marie-Pier Lemay, Marianne Ebeid and Isabelle Tremblay for their useful help and comments.

Address for correspondence:

Yanelia Yabar
The Open Polytechnic of New Zealand
Private Bag 31914
Lower Hutt.

Email:
Yanelia.Yabar@openpolytechnic.ac.nz