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Empathy and intergroup relations:
Do people empathize less with outgroup members?

by

Gillian Macdonald

Bachelor of Arts, University of Windsor, 2003

THESIS

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Abstract

The present studies were designed to examine if people empathize with a member of a different ethnicity as readily as a member of their own ethnicity. In Study 1, participants read a mock radio program about a target who was either of the same or different ethnicity. It was predicted that participants would empathize less with an ethnic outgroup member due to feelings of dissimilarity based on group membership. Results from Study 1 indicate no significant differences in levels of empathy and perspective taking based on target ethnicity. Study 2 sought to increase the salience of ethnicity and also included measures of perspective taking and self-other overlap. However, no significant differences based on ethnicity or perspective taking instructions were found suggesting that people may take the perspective of an ethnic outgroup member as readily as an ethnic ingroup member.

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Empathy and Intergroup Relations:

Do people empathize less with outgroup members?

Perspective taking and empathy have been shown to have many pro-social benefits (Batson, Chang, Orr, & Rowland, 2002; Batson et al., 1996, 2003; Batson, Sager, Garst, Kang, Rubchinsky, & Dawson, 1997; Finlay & Stephan, 2000; Galinsky & Moskowitz, 2004; Stephan & Finlay, 1999; Vescio, Sechrist, & Paolucci, 2003). Empathy is in many ways essential in our everyday social interactions. It allows us to sympathize with others' experiences and also allows us to step outside of our egocentric perspectives in order to tailor our behaviours to other people's expectations, which results in smoother interactions (Davis, 1994). However, there may be limitations to our ability to empathize. Empathizing across social group boundaries may be one area where the empathic process is hindered. The present studies will explore that possibility dealing specifically with ethnic groups and will examine whether empathy is less likely to occur toward members of ethnic outgroups.

Research on empathy has found negative relationships between empathy and aggression and antisocial behaviour (Miller & Eisenberg, 1988). As well, many training programs utilize empathy. Research on rape prevention programs has found that these programs lead to increased empathy which serves to reduce victim blame (Pinzone-Glover, Gidycz, & Jacobs, 1998). Empathy is also an important aspect for improving intergroup relations. Multicultural education programs which attempt to improve understanding about ethnic outgroup members make use of empathy and perspective taking by having participants read about outgroups and participate in role-playing exercises (Stephan & Finlay, 1999). The ability to take the perspective of

another is also important in the reduction of prejudice. In a study of White children's racial prejudice, children's attitudes were measured at ages 6 and 9. Children who engaged in more perspective taking at age nine had lower levels of prejudice than they did at age 6 (Doyle & Aboud, 1995). Empathy is also an important aspect of counseling psychology. Being able to empathize with a client is important in order to gain understanding (Duan & Hill, 1996). There has also been much research examining the impact of empathy on the judicial system (Archer, Foushee, Davis, & Aderman, 1979; Johnson et al., 2002; Weir & Wrightsman, 1990). Specifically, feelings of empathy towards the defendant or victim may serve to impact judgments of guilt or innocence by a jury. For example, during a trial, a White juror may find it easier to take the perspective of a White defendant. By empathizing more with a White defendant, the juror may, in turn, be more likely to give a lenient sentence to another White individual than to a defendant of a different ethnicity. Research indicates that when participants are instructed to take the perspective of the defendant, they reported greater empathy with the defendant and assigned a more lenient punishment (Johnson et al., 2002). Also, when participants reported more empathy with a rape victim, they were more confident in their assessments of the guilt of the accused rapist (Weir & Wrightsman, 1990).

Research in the area of social psychology has focused on the empathy-altruism hypothesis which suggests that feeling empathy may cause altruistic motivations (for a review, see Batson, 1991). These motivations may then lead one to help a person for whom empathy is felt. In addition, feeling empathy towards outgroup members can result in improved attitudes towards those outgroups (Batson,

Polycarpou, et al., 1997; Finlay & Stephan, 2000; Vescio et al., 2003). Thus, research inducing people to feel empathy for members of stigmatized groups such as people with AIDS and even murderers has shown that empathy leads to an increase in positive attitudes (or reduction in negative attitudes) towards those stigmatized groups. These improved attitudes were also evident up to two weeks after the experiment (Batson, Polycarpou, et al., 1997). Students induced to feel empathy for a member of a stigmatized group also display increased levels of helping behaviour; participants induced to feel empathy for drug addicts allocated more Student Senate funding to an agency that would help drug addicts (Batson et al., 2002).

The impact of empathy is thus far reaching and affects a wide variety of our social interactions. Empathy is therefore important in order to understand and make sense of other people; it is a valuable social tool that may lead to increased helping behaviour and improved social interactions. Although research has indicated that there are many benefits to empathizing with others, it may be that in some circumstances being able to place ourselves in another person's situation and empathize with them is difficult. Therefore, questions remain concerning the empathic process and whether there may be barriers to empathy in some situations. Specifically these barriers may exist with members of different social groups.

Barriers to empathy may exist when people are dealing with outgroup members. Lower empathy toward outgroup members may therefore lead to a number of problems such as more difficult social interactions and also may impact such areas as the judicial system, educational institutions and the workplace. Therefore, the examination of how people empathize with outgroups members relative to ingroup

members is an area of importance for research. The present paper explores the possibility that empathy may not occur as readily toward a member of an ethnic outgroup as it does towards a member of an ethnic ingroup.

There has been little systematic research examining how people empathize with outgroups. Although a few studies have examined the effect of ethnicity on empathy, these studies have mainly examined empathy by using directed perspective taking instructions which asked participants either to try to take the perspective of an individual or remain objective, thus directly manipulating empathy (Johnson et al., 2002; Vescio et al., 2003). To date, there has been little research examining how empathy between groups occurs without instruction in a more naturalistic manner. Although it appears that empathy has many benefits, it is still unclear whether people are likely to spontaneously empathize with an outgroup member. The present research will therefore investigate the type of empathic reactions that occur in everyday interactions and attempt to answer the question of how people spontaneously empathize with members of different ethnic groups.

Representing social groups

Recent research has indicated that empathy may affect perceptions of similarity between an observer and a target person (Batson, Sager, et al., 1997; Cialdini, Brown, Lewis, Luce, & Neuberg, 1997; Davis, 1996). However, the opposite may also be true as feelings of similarity may lead to increased levels of empathy. It is hypothesized that perceptions of similarity among ingroup members may lead to stronger empathic reactions as ingroup members may feel as though they have a greater ability to feel what another ingroup member feels. Through the process

of social categorization, members of social groups may see themselves as being more similar to one another than they actually are (Gaertner, Dovidio, Nier, Ward, & Banker, 1999), as the categorization process enhances perceptions of similarity within groups and differences between groups. For example, outgroup members may be seen as being relatively homogeneous. This effect involves judging outgroup members as more similar to each other than members of an ingroup and also exemplifying the central tendency of their group (Ostrom & Sedikides, 1992). Further, the concept of meta-contrast in the self-categorization theory posits that differences between groups will be seen as larger than differences within groups (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Thus people may see outgroup members as more extreme in their opinions and may view them as largely homogeneous.

As well, reduced perceptions of similarity may block social projection. In order to make sense of the social world, people may use information about themselves as a means to understand others. Thus, projection involves making judgments about others that are anchored on the self (Krueger, 2000). Several studies in the area of social projection have found reduced social projection onto an outgroup member (Jordan & Kunda, 2003; Mullen, Dovidio, Johnson, & Copper, 1992; Smith & Henry, 1996). Even when placed in a minimal group paradigm, people feel more similar to ingroup members than to outgroup members. Participants placed in arbitrary groups based on their performance on nonverbal perceptual tasks projected more to ingroup members than outgroup members by believing they could predict responses of an ingroup member better than responses of an outgroup member based on their own performances (Krueger & Clement, 2002). Similarly, people may feel as

though there is greater similarity in opinions among ingroup members than between ingroup and outgroup members. When participants were asked to divide money between their university and a rival university, they demonstrated the false consensus effect by believing their own responses would be more common among ingroup members but this tendency was attenuated toward outgroup members (Ross, Greene, & House, 1997).

Also, research by Jordan and Kunda (2003) examined social projection across ethnic groups. When White participants expected to meet a White partner who shared some of their own attributes, they projected their characteristics onto that partner, illustrated by incorrectly remembering greater similarity between themselves and their partner than actually existed. They also reported an increased sense of knowing their partner and greater confidence in predicting their partner's novel behaviour. These effects, however, did not occur when the partner was Asian. Social projection was therefore stronger for ingroup members, as participants saw more of themselves in ingroup members than outgroup members. As Krueger (2000) points out, "It is as if people treat members of out-groups as members of different species." It seems as though social categorization has a powerful moderating effect on projection. It may have a similar effect on empathic responses.

Furthermore, people may develop theories concerning similarities within groups. Surface similarity such as ethnicity or gender may be thought of as representative of an unalterable shared essence. People from different social groups may therefore be thought of as having different underlying essences that are largely unalterable (Hamilton & Sherman, 1996; Martin & Parker, 1995; Miller & Prentice,

1999; Rothbart & Taylor, 1992; Yzerbyt, Corneille, & Estrada, 2001; Yzerbyt, Rocher, & Schadron, 1997). A belief in shared essences may hinder the process of identification and empathy with outgroup members as people may feel as though outgroup members are inherently different than themselves, as they have a different defining essence. In addition, according to Rokeach's belief incongruence theory (1979), people from different cultures may hold values and beliefs that are assumed to be different from one another. This assumption of cultural differences may then impede contact between social groups. If outgroup members are assumed to hold different attitudes and beliefs, people may see fewer similarities between themselves and outgroup members therefore hindering the empathic process.

Thus because people may view outgroups as being different from themselves, the ability to identify with and empathize with an outgroup member may be blocked. Also, ingroup members may be seen as more similar than outgroup members which may allow for easier identification and empathy with members of the same ethnicity as opposed to someone of a different ethnicity.

Empathy

Although empathy has been characterized by a number of theoretical positions, most researchers would agree that empathy involves both a cognitive and affective component. The cognitive component typically involves what would be considered role taking or perspective taking. It is the attempt of a person to understand another by imagining the other's perspective (Davis, 1994). The affective component involves emotional reactions experienced by an observer in response to the observed experiences of the target (Davis, 1994). These responses are a direct

response to a target's experience (Davis, 1994) and typically involve feelings such as sympathy and compassion (Batson, 1991). In addition to empathic concern, participants may also feel some amount of personal distress in response to a distressed target. This response is characterized by feelings of unease and anxiety due to a distressed target (Davis, 1994). Feelings in this category may include being upset or worried.

In some cases, the ability to take another's perspective and utilize past experiences as a comparison may be more straightforward than others. Surface similarity between people in the form of shared backgrounds or attributes may be an important contributor to the coherence of analogies between people which may be used during the empathic process (Thagard & Kunda, 1997). For example, people may see their shared ethnicity as an indicator of other commonalities such as similar life experiences. During the process of empathy, the self is used as a source in order to understand the target. Analogies depend upon similarities between the source and the target. As a result, it is hypothesized that surface similarities in the form of ethnicity cues may impact the effectiveness of the empathic process.

Research in the area of empathy and intergroup relations has largely focused on the prosocial benefits of empathy and the positive effects it may have on intergroup attitudes. A recent study by Batson (1997), found that encouraging empathy led to more positive attitudes towards members of stigmatized groups. Participants listened to a radio program where a young woman with AIDS described her life and how she contracted the disease. Some participants were encouraged to "imagine how the woman in the tape is feeling and how what has happened to her has

affected her” (Batson, Polycarpou, et al., 1997). As a result, participants in the empathy condition showed an increase in positive attitudes towards people with AIDS as opposed to participants who were encouraged to remain objective while listening to the radio program. Similarly, in a study by Vescio, et al. (2003), participants listened to a broadcast by an African American male describing the difficulties he encountered as a result of his group membership. Participants encouraged to take the perspective of the African American demonstrated improved intergroup attitudes. Clearly the benefits of empathic induction involve improved attitudes towards both stereotyped social groups as well as highly stigmatized social groups. Relatedly, the present study plans to explore non-directed measures of perspective taking and empathy. This area of study is important because it is unclear whether people are likely to empathize spontaneously with an ethnic outgroup member.

Little systematic research has examined the role of differing ethnicities in empathic reactions. However, a study by Batson, Polycarpou, et al. (1997) manipulated group membership by having participants listen to a radio broadcast of a student in need who was either from their university or an arch rival university. Their results indicated that group membership did not affect empathy levels. Perhaps a reason for why this effect was not found is because the manipulation of group membership may not have been salient enough to produce a difference in empathic reactions. The manipulation of group membership by Batson, Polycarpou, et al. (1997) may also not have used groups who were thought of as possessing unalterable memberships, as university students are more likely to be seen as a social group that

can change membership quite easily. University groups may not be thought of as having widespread underlying differences in the same way that ethnic groups may. As well, the shared group status of being students might cause participants to see members of a rival university as part of their ingroup as they are all university students. Also, ethnic group membership is more likely to be seen as a type of unchangeable lifelong group membership; hence, this type of group membership may be more salient. Ethnicity may also be associated with a belief that people of different ethnicities have a different set of values and beliefs based on cultural differences (Rokeach, 1979). This belief in differing values would not occur to the same extent for a social group such as university membership.

A recent study examining the role of ethnicity in empathic reactions did find that participants report higher empathy levels for members of their own ethnic group (Johnson et al., 2002). When White participants read a passage about either a White or Black defendant in a mock criminal trial, they reported greater empathy for a White target, made more situational attributions for a White target's misbehaviour, and assigned a White target a more lenient punishment than a Black target. In this study, participants were given instructions to either remain objective, take the perspective of the actor (high empathy condition) or were not given any instructions. Results also indicated that participants had higher levels of empathy, made more situational attributions for the defendant's crime, and recommended lower levels of punishment when instructed to take the perspective of the defendant. Interactions between ethnicity and perspective taking instructions did not reach significance.

Thus, regardless of the instructions given, overall, participants empathized more with an ethnic ingroup member than an outgroup member.

However, the findings of Johnson et al. (2002) are difficult to interpret as the target's ethnicity was confounded with the negative stereotypicality of his behaviour. The passage that participants read involved a larceny case in which a Black or White defendant was accused of stealing a watch from a jewelry store. In the case of the Black defendant, this is clearly consistent with the negative stereotype of Black people that is prevalent in North America and it is thus difficult to ascertain whether the results were due to the Black defendant's ethnicity, or his ethnicity in light of the negative stereotypic behaviour. In other words, it's unclear whether people would empathize less with an outgroup member who did not behave in a negatively stereotyped way. People may distance themselves from a Black person only when the negative Black stereotype seems applicable. In contrast, we expected that people would empathize less with an ethnic outgroup member even when no stereotype is clearly relevant. The present research attempted to deconfound these two factors in order to provide a clearer test of the role of ethnic differences on empathy. It was hypothesized that even in non-directed perspective taking situations, individuals would empathize more readily with members of their own ethnic group. An examination of spontaneous empathic reactions provided a means to test this hypothesis.

Study 1

The focus of Study 1 was to explore people's spontaneous empathic reactions to members of different social groups. Most research examining empathy and group

membership has focused almost solely on directed perspective taking manipulations. Although empathy has been shown to improve intergroup attitudes (e.g., Batson, Polycarpou, et al., 1997; Vescio et al., 1999), participants are asked explicitly to take the perspective of the outgroup member. Thus, it is unclear whether people will spontaneously empathize with an outgroup member. The present research sought to examine spontaneous empathic reactions in order to get a closer approximation of the types of empathic reactions that naturally occur.

The present study examined both empathic concern and personal distress. These measures of empathy provided a more in-depth examination of the types of spontaneous empathic reactions felt by participants. Based on feelings of dissimilarity concerning an outgroup member, it was predicted that participants would report greater levels of empathic concern, personal distress, and perspective taking when reading about an ingroup member as opposed to an outgroup member.

Participants began by reading a scenario in which a target commits a transgression. A scenario involving a transgression was used in order to examine attributional responses as well as levels of empathy. Further, due to the potential applicability of the results for legal decision making, a scenario involving a transgression was thought to provide a similar situation in order to examine participants' responses. The target's ethnicity was manipulated and was either White (ingroup) or Asian (outgroup). Participants then completed questionnaires examining their levels of empathy, the types of attributions they make regarding the targets behaviour, as well as a perspective taking measure and their attitudes towards the target.

With respect to attributions, research has revealed that being empathic can cause an observer to make attributions typically made by an actor (Brehm & Adelman, 1977; Gould & Sigall, 1977; Regan & Totten, 1975). That is, when empathy is induced, people tend to see the behaviour of another person as more situational and less dispositional, possibly due to an increased awareness of the situational constraints faced by the person (Regan & Totten, 1975). Also, recent research has examined the mediational role of attributions in improving attitudes towards outgroup members. In one study, the relationship between perspective taking and pro-Black attitudes was significantly mediated by situational attributions for criminal behaviour (Vescio et al., 2003). The present research also looked at attributions in order to examine their relationship with empathy. It was expected that due to an increased level of empathy for a member of their own ethnic group, participants would attribute a target's misdeeds to more situational causes for an ethnic ingroup member than they would for an ethnic outgroup member (Hewston, 1990; Pettigrew, 1979). This is consistent with the ultimate attribution error (Pettigrew, 1979) however, it was also expected that empathy would play a role in attributional judgments. Increased levels of empathy were hypothesized to cause even greater endorsement of situational attributions for an ingroup member based on empathy and attribution literature which suggests that the actor-observer difference is minimized due to feelings of empathy (e.g., Gould & Sigall, 1977; Regan & Totten, 1975). However, this result was not expected with an ethnic outgroup member.

As part of an exploratory investigation, the present study also included a measure of subtle discrimination towards Asian students. A budget allocation

exercise which was used originally by Haddock, Zanna, and Esses, (1993) was given to participants in order to detect subtle discrimination against Asians. In this exercise, the students' union purportedly must cut funding to campus clubs for the following year. Participants were asked to cut a total of \$1000 from a list of 10 university clubs in any way they choose. The Asian Students Association is one of the clubs listed and greater cuts to funding for the Asian Students Association is indicative of greater levels of discrimination. If, in fact, participants feel less empathy for the Asian student, compared to the White student, it was hypothesized that they would see the Asian student's behaviour as more dispositional in nature which may generalize the target's negative behaviours to Asians as a whole. This may have caused White students to cut more funding from the Asian Students Association.

Overview

Participants read a transcript of a radio program in which a student described some family difficulties he encountered during school, which caused him a great deal of stress and ultimately led him to plagiarize an assignment. Half of the participants read about a White student and the other half read about an Asian student. After they finished reading the radio script, participants completed measures of empathic concern, personal distress, perspective taking, attribution, and attitudes towards the plagiarizing student. Following these measures, participants completed a budget allocation exercise as an implicit measure of prejudice. It was hypothesized that participants would show increased empathic concern, personal distress, and perspective taking when reading about an ingroup member as opposed to an outgroup member. Participants were expected to attribute more situational causes and fewer

dispositional causes for a misdeed committed by a White student, as compared to the same misdeed committed by an Asian student. Moreover, it was hypothesized that there would be less positive attitudes, and hence a more severe punishment, towards an outgroup target than towards an ingroup target. It was also tentatively predicted that after reading about an Asian student who committed academic misconduct, participants would cut more funds to the Asian Students Association than would participants who read about a White student who committed the same transgression.

Method

Participants. Ninety-eight White students (46 males and 52 females) from Wilfrid Laurier University participated in the experiment in exchange for course credit in their introductory psychology class. No significant effects of gender were found, consequently gender is not discussed further.

Design and procedures. Upon arriving at the laboratory, participants in groups ranging from 1 to 10 were seated at individual work areas. They were asked to read and sign consent forms. Participants were then given a radio script for a program that would purportedly air on Radio Laurier near the end of the semester. They were instructed to read it thoroughly as they would be providing feedback on the radio program after reading it. The experimenter explained that some students would be listening to the radio program and others, like themselves, would be reading it in order to examine the effect of medium on participants' reactions. The radio program was a cover story in order to provide students with information regarding a situation in which an individual has plagiarized. They were also told that their feedback may be used by the university's senate when examining disciplinary matters.

Manipulation of target race. Participants were randomly assigned to one of two conditions. Half read about a target named Jin Chu; the remaining half read about a target named Jim Ross. This was done in order to convey that the target person was either Asian or White. The scripts were in the form of a question and answer interview involving a student who has plagiarized a past student's work on an assignment. The script also involved a description of the events in the actor's life leading up to and including the plagiarism (see Appendix A). The script consisted mainly of the target describing details in his life that lead to a significant amount of stress. He described a situation at home where his brother was experiencing significant difficulties with school and also having some trouble with the law. These issues caused considerable stress for the target as he was consistently worried about his home life. As well, the weekend before his paper was due there was a family wedding with which he was expected to help. The stress in his life coupled with family responsibilities left him unable to complete the assignment and he then handed in another person's assignment as his own. The script was designed to create a situation in which people could empathize with the target despite his transgression. The scripts were identical except for three differences. First, the target's name in the program was either Jin Chu (Asian condition) or Jim Ross (White condition). Second, the script depicted the target as either born in Hong Kong (Asian condition) or Detroit (White condition). Last, for the family wedding, the reception for the wedding was either held in Chinatown (Asian condition) or at the Ramada hotel (White condition). After participants read the script, they were asked to fill out a questionnaire regarding their views of the program. Consistent with the cover story, the first section of the

questionnaire contained questions asking participants how much they enjoyed the radio program. (e.g., “I found the radio program interesting,” “I would listen to this radio program again in the near future”).

Measuring empathic feelings and personal distress. The next section dealt with subjects’ empathic reactions to the target’s situation. This measure was based on previous work by Batson (e.g., 1991). A list of 24 emotions was provided for which participants rated the degree to which they felt each, with endpoints labeled 1 (not at all) and 7 (extremely). If participants were feeling a high amount of empathy for the target it was expected that they would respond with higher scores on the empathic concern and personal distress items. Some of the adjectives reflect empathic reactions (*sympathetic, compassionate, soft-hearted, warm, tender, and moved*) whereas others reflect distress (*alarmed, grieved, troubled, upset, disturbed, worried, and perturbed*) (Batson, 1991). See Appendix B for the complete measure.

Perspective taking. Participants then completed a measure of perspective taking. The questionnaire was presented in the form of a 7-point Likert scale with endpoints labeled 1 (not at all) and 7 (very much). Examples of items on this scale include, “rate the degree to which you imagined yourself in Jim’s [Jin’s] situation” and “how easy or difficult was it for you to identify with Jim [Jin]”. See Appendix C for the complete measure.

Attributional judgments. The fourth section of the questionnaire was designed to assess participants’ judgments of the degree to which they felt that dispositional and situational factors played a role in the target’s cheating behaviour. The attributional items were developed in order to cover plausible internal and external

attributions. This section was also on a 7-point scale with endpoints labeled 1 (strongly disagree) to 7 (strongly agree). Examples of questions include, “Jim [Jin] is likely to cheat again in the future” and, “Outside circumstances were a major cause of Jim’s [Jin’s] behaviour”. See appendix D for the complete questionnaire.

Attitudes towards cheaters. This section contained six question that examined participants’ attitudes toward students who cheat (e.g., “Any student who cheats must be truly corrupt”). Questions were rated on a 7-point scale with endpoints labeled 1 (strongly disagree) to 7 (strongly agree). See Appendix E for the complete questionnaire.

Punishment. The final section contained two questions for which participants indicated the punishment level that they felt was appropriate for the target. The first question asked participants: “how severe of a punishment should Jim [Jin] receive?” Responses were given on a 7-point scale with endpoints labeled 1 (very severe) to 7 (very mild). Participants then completed the second question: “I feel that Jim [Jin] should receive the following punishment”. The choices of disciplinary actions were based on the university’s policy on plagiarism. Choices ranged from “no punishment” to “Expulsion from the program or from the university”.

Measure of subtle discrimination. After participants had completed the questionnaire, they were asked to participate in a budget allocation exercise. The experimenter explained that the students’ union would like to get students’ opinions regarding the allocation of funds for the following year. Participants were told that the university must cut funding for campus clubs and that they would like the participants’ opinion about how the money should be distributed amongst the clubs.

They were told that next year, given cuts of 20%, these clubs will probably receive only \$4000 combined and that by completing the ballot on the following page, they would be providing a vote as to the amount of funding each of these groups should receive next year (see Appendix F). Participants then listed the amount of money they felt each of the groups listed should receive, without exceeding the \$4000 limit. The amount of money cut from the Asian Students Association was taken as a measure of subtle discrimination (Haddock et al., 1993).

Following the budget reduction exercise, participants were thoroughly debriefed and thanked for their participation.

Results

Results were analyzed using a series of one way ANOVA's with the independent variable of target ethnicity (White or Asian). See Table 1 for a summary of the results.

Affective empathy. Responses to the six empathic concern items ($\alpha = .87$) (*sympathetic, compassionate, soft-hearted, warm, tender, and moved*) and eight distress items ($\alpha = .88$) (*alarmed, grieved, troubled, upset, disturbed, worried, and perturbed*) were averaged together into separate scales. Correlational analysis revealed that empathic concern and personal distress were positively correlated ($r = .63, p < .01$). No significant differences were found for either empathic concern or personal distress, contrary to our predictions. Levels of empathic concern were not higher in the White condition ($M = 3.14, SD = 1.15$) than in the Asian condition ($M = 3.39, SD = 1.13$), $F(1,96) = 1.21, ns$. Results from the distress index also indicated no differences, $F(1,96) = .18, ns$, as levels of personal distress were not higher in the

White ($M = 2.35$, $SD = .97$) than in the Asian condition ($M = 2.44$, $SD = 1.15$). Thus, participants were as likely to empathize and feel distress for an Asian student as for a fellow White student.

Perspective taking. Responses to the perspective taking items were averaged together to form an index of perspective taking ($\alpha = .84$). Results indicated no significant difference between the White ($M = 2.35$, $SD = 1.04$) and Asian ($M = 2.44$, $SD = 1.04$) conditions with regards to perspective taking $F(1,96) = .25$, contrary to our predictions.

Attributional judgments. Responses to attributional items were averaged together to form an index of attribution, with higher scores indicating more situational attributions ($\alpha = .81$). Participants did not differ in their amount of situational attribution when reading about another White student ($M = 4.32$, $SD = .96$) than an Asian student ($M = 4.42$, $SD = .78$), $F(1,96) = .02$.

Attitudes. Results concerning attitudes revealed no significant differences. Participants did not differ in their attitudes towards students who plagiarized ($M = 3.62$, $SD = .67$) after reading about an Asian student who had plagiarized than after reading about a White student who plagiarized ($M = 3.77$, $SD = .54$), $F(1,96) = 1.53$, *ns*. Higher scores on this measure indicated more negative attitudes towards students who cheat.

Punishment. The first punishment question, asking participants to indicate how severe a punishment they felt the target should receive, resulted in no significant differences between the White ($M = 4.95$, $SD = 1.07$) or Asian ($M = 4.75$, $SD = 1.12$) ethnicity conditions, $F(1,96) = .87$. The second punishment question however

revealed a pattern contrary to our predictions. Participants felt that a member of their own ethnic group ($M = 4.54$, $SD = .75$) who committed academic misconduct should receive harsher disciplinary action than an Asian student ($M = 4.15$, $SD = .80$), $F(1,96) = 6.11$, $p < .05$.

Budget reduction. A significant difference was found in the amount of money participants cut to the Asian Students Association. When participants read about another white student who plagiarized, they cut the Asian Students Association's budget by 35%. However, after reading about an Asian student who plagiarized, participants cut 26% of the Asian Students Association's budget. Thus participants who read about a White student who plagiarized cut significantly more funding to the Asian Students Association ($M = 202.61$, $SD = 115.76$) than participants who read about an Asian student ($M = 150.10$, $SD = 98.79$), $F(1,96) = 5.87$, $p < .05$.

Discussion

The results from Study 1 did not confirm the original hypotheses. Participants seemed to empathize and take the perspective of the target to the same extent whether they read about an Asian student or a White student. Results from the personal distress index also indicated that participants did not feel more distress after reading about a member of their own ethnic group who was experiencing some problems. The results of the attributional questionnaire were also non-significant which is contrary to what would be predicted based on intergroup causal attribution (for a review, see Hewstone, 1990). Normally, people give situational attributions for negative acts by ingroup members and more dispositional explanation for negative acts by outgroup

members (e.g. Pettigrew, 1979). The present findings are contrary to our predictions. There are, however, some possible reasons why our predictions were not borne out.

The mean levels of empathy in the present study were lower than mean empathy levels observed in other recent studies (e.g., Batson, Early & Salvarani, 1997; Batson, Polycarpou, et al., 1997; Johnson et al., 2002; Vescio et al., 2003). Participants in the present study empathized at a mean level of 3.27 whereas previous studies have found mean empathy levels around 5 or 6 using the same measure. Perhaps the scenario used in the present study did not evoke the same empathic response as previous studies because the target committed a transgression. The fact that the target plagiarized an assignment, a clear misdeed, may have caused participants to put more blame on the target for his misfortune and therefore resulted in lower levels of empathy for him. The low levels of empathy may be a reason why significant differences due to ethnicity were not found. People may have been unwilling to endorse very low levels of empathy on the scale (1 or 2) and may have therefore been reporting levels of empathy around 3 when in fact they may have been feeling little or no empathy towards either the White or Asian target.

Another reason for our null finding might be the salience of group membership. We attempted to make race salient by using a question and answer format for the broadcast so that when participants read the radio program the target's name would appear every time he answered a question. Participants either saw the name Jim Ross or Jin Chu appear frequently throughout the broadcast. However, simply reading the name may not have provided enough of a salient representation of group membership. As well, the radio script entailed a student describing his

university experience and the major event that occurred was a behaviour that was school related. The fact that the majority of the story focused around student activities may have caused participants to categorize the target based on shared student status and not ethnic background. Possibly by increasing the salience of ethnicity and reducing the salience of a shared group membership, a more direct test of our prediction could be achieved.

Another interesting result was that participants felt that a White student who plagiarized should receive a harsher punishment than an Asian student and also tended to be more generous to Asians in general, after reading about an Asian student who had plagiarized by allocating more money to the Asian Students Association. These results are contrary to our predictions, but there are some possible explanations for these findings. Although while writing the radio script every attempt was made to limit the amount of stereotypical content that might cause participants to respond to stereotypes and not simply differing group membership, there was likely some information that could be construed as stereotypic of Asians. When the target was explaining the background leading up to his plagiarism, one of the main problems dealt with a difficult family situation. He describes family as being very important to him. This may have elicited a stereotype of Asians as being family-oriented which may have affected student responding. Thus stereotypes may have mitigated the behaviour of the Asian target and as a result, participants may have endorsed more lenient punishments toward the Asian target. Another possibility may be that participants demonstrated the black sheep effect, meaning they were more punitive toward an ingroup member who misbehaved than they were towards an outgroup

member (Marques & Yzerbyt, 1988). Research on the black sheep effect has revealed that it seems to occur only when judgment cues are relevant to the subjects' social identity. In Study 1, participants may have thus been more severe in their judgment towards the White student because their ethnic identity was made relevant and salient. As a result, they may have thought more negatively of the White student for plagiarizing than they did of the Asian student.

Study 2

In light of these considerations, Study 2 attempted to build and improve upon the methods of Study 1, in order to provide a stronger test of our hypotheses. First, Study 2 attempted to make ethnicity more salient. In order for the categorization process to occur, people must be able to clearly recognize different social groups. By highlighting student group membership in Study 1, participants may have focused their attention on shared group status with the target and not on their group memberships based on differing ethnicities. Participants, therefore, may not have been categorizing the Asian student as being Asian, causing the ethnicity manipulation to be unsuccessful. Consequently, in Study 2 the ethnicity of the Asian individual in the scenario was made more salient by including a picture of the target. Also, the shared university student status was eliminated.

In order to focus solely on the effects of ethnicity on empathic reactions, Study 2 exclusively used female participants. In Study 1 a male target was used. Although there were no significant effects due to gender in Study 1, only female participants and a female target were used in Study 2 in order to reduce variability. Having the scenario matched for gender allowed us to focus specifically on ethnic

differences, removing any confounding effects due to gender. This permitted a finer grained test of the effect of ethnicity as participants were responding only to perceived similarities or differences with reference to ethnicity and not gender.

Furthermore, Study 2 aimed at providing participants with a more engaging experience by changing the presentation mode of the scenario; participants listened to a mock radio broadcast instead of reading a script.

In Study 1, the target was responsible for the problems he experienced; as a result, participants may have blamed him for his situation and were therefore less inclined to empathize with him. In order to reduce the amount of blame participants may have placed on the target for her misfortune, Study 2 used a scenario in which the target does not commit a misdeed.

Furthermore, in the literature on empathy there is a distinction between two types of affective empathy. Davis (1994) refers to these types as reactive and parallel empathy. As was previously mentioned, reactive empathy involves reactions to the experiences of others that differ from the observed affect of those others. These responses typically involve feelings such as sympathy and compassion (Batson, 1991). Parallel empathy, in contrast, involves a matching or a reproduction of a target's feelings in an observer (Davis, 1994). Research examining parallel and reactive empathy has found that when participants read about discrimination towards an African American their empathic reactions were most strongly related to parallel reactions (anger, annoyance, disgust) which led to a more favorable evaluation of African Americans (Finlay & Stephan, 2000). In order to get a more complete picture of possible empathic reactions, Study 2 examined both parallel and reactive empathy.

Although past research has examined empathy and intergroup relations, there are several differences between Study 2 and past research. As was previously mentioned, Johnson et al. (2002) examined the effect of ethnicity on empathy by having participants read about either a White or Black defendant who committed a robbery in a mock criminal trial. Participants were directed either to take the perspective of the defendant, to remain objective, or were not given any instructions. However, their results are difficult to interpret due to a confound between group membership and stereotype applicability, because the Black individual in the scenario performed a negatively stereotyped action. In Study 1 we attempted to deconfound ethnicity and stereotype applicability by making the scenario free of information that may be construed as stereotypical of Asians. However, this may not have been achieved and as a result, we attempted to more clearly deconfound these factors in Study 2. We theorized that a lack of empathy does not depend on stereotyping, simply on the perception of differences between ingroup and outgroup members. In this case, the inability to empathize with an outgroup member should occur independently of stereotypes. Thus, Study 2 attempted to further deconfound group membership with stereotypicality of behaviour in order to improve upon the design used by Johnson et al. (2002).

As was mentioned earlier, much research in the area of empathic reactions has focused on directed perspective taking (e.g., Batson, Early et al., 1997; Batson et al., 2003; Batson, Polycarpou, et al., 1997; Vescio et al., 2003) and the effects of directed perspective taking on prosocial motivations. Although the focus of the present study was on how people spontaneously empathize with members of different ethnic

groups, conditions involving directed perspective taking were also included for exploratory purposes.

If people are less able to spontaneously empathize with members of an outgroup, will they be able to overcome this barrier and empathize if they are directed to take the perspective of an outgroup member? Barnes and Thagard (1997) theorize that the analogical process involved in empathy may require more effort when attempting to empathize with someone who is seen as highly dissimilar. In this case, people may be able to successfully empathize with an ethnic outgroup member if they are explicitly directed to take another's perspective. However, if people also feel highly dissimilar from an outgroup member they may not be able to take an outgroup member's perspective, even when explicitly directed to do so. Participants may, therefore, not be able to empathize as much with her. In other words, although they are directed to take the perspective of an outgroup member, they may still show more empathy to a member of their own group. It is important to note that empathy towards an ethnic outgroup member is possible, however, the main purpose of this research was to examine whether levels of empathy will be higher with an ethnic ingroup member compared to an ethnic outgroup member, both spontaneously and due to the influence of perspective taking instructions.

Recently, there has been some controversy concerning the exact processes that occur during perspective taking; it has been theorized that self-other overlap may occur during perspective taking and account for the underlying process of perspective taking (Batson, Sager, et al., 1997; Cialdini et al., 1997; Neuberg, Cialdini, Brown, Luce, & Sagarin, 1997). Cialdini et al. (1997) suggest that a process of self-other

overlap may occur during empathy, thereby undermining the unselfish motivations that were theorized to be a product of empathy in the empathy-altruism hypothesis. They maintain that motivations to help resulting from empathy may be somewhat selfish in nature as a person may feel a sense of oneness with the target with whom they are empathizing. However, Batson (1997) contends that the empathy-helping relationship cannot be accounted for through self-other overlap.

The process of self-other overlap may occur through a shift of cognitive representations of a target, such that the act of perspective taking causes a merging of the self and other (Davis, Conklin, Smith, & Luce, 1996). Results by Davis et al. (1996) indicate that when participants are directed to take the perspective of a target they attribute more of their own traits to the target. This may be due to the analogical processes involved in perspective taking and empathic reactions. When people use analogies in order to understand others, they typically utilize their own past experiences and feelings. When people map the self onto the other, peoples' own self-concept may be more accessible, creating cognitive overlap (Davis et al., 1996). Consequently, self-traits may become more likely to be ascribed to the target when the participant is asked to make a trait judgment (Davis et al., 1996). In other words, individuals may feel as though they share more characteristics with a target when they take the perspective of that target.

However, perceptions of differences between groups may undermine the analogical process for members of ethnic outgroups thereby reducing or even eliminating the amount of self-other overlap that occurs between members of different social groups. Although self-other overlap has been examined with respect

to altruism (Batson, 1997; Batson, Sager, et al., 1997; Cialdini et al., 1997; Neuberg et al., 1997), it has yet to be considered when participants are taking the perspective of a member of a different ethnicity. The present research also included a measure of self-other overlap in order to examine whether participants map themselves onto the target.

As well as a measure of self-other overlap, Study 2 included a measure of a sense of knowing the target. Research by Jordan and Kunda (2003) found that White participants project more to a fellow White ingroup member and also feel as though they know and can predict the behaviour of an ingroup member better than Asian students. Participants may see themselves as being similar to a member of their own race, leading them to believe that they know an individual who is of the same ethnicity better than someone of a different ethnicity. Also, if through the processes of self-other overlap participants ascribe the same characteristics to a target as they do to themselves, they may also feel as though they have a sense of knowing the target. Participants may therefore feel as though they have a better understanding of the other person and know what he or she is “all about” (Jordan & Kunda, 2003).

Design

Participants were randomly assigned to one of three conditions. The first was the *perspective taking* condition, in which participants were explicitly asked to take the perspective of a target. Second is the *objective* condition, in which participants were asked to remain objective when listening to the target on the tape. Last is the *no instructions* group, in which participants did not receive any specific instructions regarding perspective taking. Participants were also randomly assigned to listen to a

radio broadcast involving either a White or Asian individual. Thus it was a 2 (target ethnicity: White or Asian) X 3 (Perspective taking instructions: perspective taking, objective, or no instructions) design.

Results from the *no instructions* condition were the most theoretically important because this condition examined the effect of ethnicity on empathic reactions in a more naturalistic way. In this condition, it was expected that empathy levels, personal distress, and perspective taking will be higher in the White condition as participants are expected to spontaneously empathize more with a member of their own ethnic ingroup. Several predictions were made for the directed perspective taking conditions. If it is simply a matter of more effortful processing that is needed in order to create the appropriate analogy between oneself and another person, then participants in the *perspective taking* condition who are asked to take the perspective of an actor of a different ethnicity should have reported levels of empathy, personal distress, and perspective taking which are equivalent to those of participants in the same ethnicity condition. However, a strong sense of dissimilarity might have undermined the ability to map oneself onto another, thus resulting in lower levels of empathy for outgroup members even in the *perspective taking* condition. Levels of empathy, personal distress, and perspective taking were expected to be uniformly low in the *objective* condition with no significant differences based on ethnicity.

The results for the self-other overlap measures based on past research in this area were expected to be parallel to those of empathy, personal distress, and perspective taking.

Method

Participants. Eighty-nine female university students at Wilfrid Laurier University participated in exchange for course credit in their introductory psychology class.

Procedure. Once the participants arrived for their session they were greeted by the experimenter and escorted into the laboratory. Upon arrival in the laboratory, participants were asked to read and sign consent forms. As part of a cover story, participants were then told that the experiment involves student reactions to a service announcement that was made by the Young Worker Awareness Program. Participants were told that we were interested in their thoughts, feelings and reactions regarding the announcement. Participants were also told that their feedback will be a deciding factor in whether the announcement will possibly air on television or on the radio in the future.

To begin, participants were told that we were interested in how people form first impressions and that we would like to know how they see themselves because that can affect how they form first impressions. A list of 38 adjectives was then completed by participants in reference to themselves. They were then told that we were also interested in how different mediums affect responses; as a result, participants were told that there are various formats (e.g., video, audio only, audio with picture) and that they had been randomly assigned to the audio with picture condition. The tape lasted approximately 3 minutes and participants were told that

they will be answering questions concerning the broadcast once they have listened to it.

Empathy manipulation. After the experimenter explained the procedures, all participants were given an instruction sheet as well as a picture of the target in an envelope. Because there were up to eight participants in each experimental session, instructions were given in written form so that participants were unaware of the perspective taking conditions that other participants received. The perspective taking manipulation was modeled on the procedures outlined by Batson, Polycarpou, et al. (1997). Participants were randomly assigned to one of three conditions: *perspective taking* condition, *objective* condition and *no instructions* condition. Participants assigned to the *objective* condition were asked to “*take an objective perspective towards what is being described. Try not to get caught up in how the woman feels about what has happened and how it has affected her life*”. Instructions for the *perspective taking* condition asked participants to “*imagine how the woman who is interviewed feels about what has happened and how it has affected her life. Try to feel the full impact of what this woman has been through and how she feels as a result*”. Participants were asked to make sure they kept these instructions in mind while listening to the radio broadcast. Finally, the *no instructions* group were given the following instructions: “*Please listen to the following radio announcement*”.

Ethnicity manipulation. In each of the conditions, participants received a picture of the target in the radio program. Again, in order to reduce suspicion, participants were told that they had been randomly assigned to the audio with picture condition. Half of the participants received a picture of an Asian woman and half

received a picture of a White woman. The picture was given in the envelope with the perspective taking instructions for the objective, perspective taking, no instructions condition. The picture was an 8 1/2 x 11 inch photograph of the individuals' head and shoulders.

Audiotape. Once the participants finished reading the instructions, they then listened to the audiotape. Two different tapes were prepared. The tape consisted of two parts: the introduction by the announcer and the description of an accident by the target. The announcer was an employee from the Young Worker Awareness Program and explained that he was trying to raise awareness about young workers' rights by having a worker who was injured on the job tell her story. He then introduced the target by name (Jane Walker or Ling Ye), which indicated whether the target was a White or Asian female. The second halves of the tapes were identical. A young female confederate gave a brief background of herself and described how a work-related accident has affected her life. The target describes some of her hobbies and her life growing up and then describes falling from a ladder while working a summer job for a window washing company. She explains that she is still in a great deal of pain from the accident and is still significantly injured. Following the story, she explains feeling distressed and sad after the accident (for the complete radio program, see Appendix I).

Attitudes towards the announcement. After listening to the audiotape, participants were given a series of questionnaires. Consistent with the cover story, the first questionnaire contained five questions dealing with participants' general attitudes towards the program. These statements were presented on a 7-point scale

ranging from 1 (strongly disagree) to 7 (strongly agree), including items such as, “I believe that this announcement could help students realize the importance of knowing their rights as young workers,” and “I believe that many other students could benefit from this announcement”. See Appendix J for the complete questionnaire.

Empathy measures. The second questionnaire was the same 24-item emotion list used in Study 1, which contained a measure of both empathic concern and personal distress. For each adjective, participants rated the degree to which they felt an emotion from 1 (not at all) to 7 (extremely). See Appendix K for the modified empathy scale. As well, participants received another 5 items embedded in the emotion list that would be considered emotions that the target would feel based on her story (“frustrated”, “sad”, “angry”, “worried”, and, “overwhelmed”). These items were emotions that the target described feeling directly or were emotions that could have been presumed based on the target’s story. As well, another 7 adjectives were added as filler items. Again, for each adjective, participants rated the degree to which they felt an emotion after listening to the announcement from 1 (not at all) to 7 (extremely). Also, participants completed the same emotion list in reference to how they felt the target would react.

Perspective taking. As well, participants completed a measure of perspective taking similar to the one used in Study 1. The questionnaire consisted of four items and was presented in the form of a 7-point Likert scale with end points labeled from 1 (not at all) to 7 (very much), including two manipulation check items: “While listening to the broadcast, to what extent did you concentrate on the feelings of the

person in the program?” and “While listening to the broadcast, to what extent did you concentrate on being objective?” See Appendix L for the complete questionnaire.

Self-other overlap. The next questionnaire assessed participants’ cognitive representations of the target in the radio program. They were given the same 38 adjective checklist that they completed in the beginning of the testing session but were asked to complete the checklist by checking off which adjectives they thought would be descriptive of the target (e.g. ambitious, dependable, mature). See Appendix G for the complete checklist. This measure provided a means to test self-other overlap by examining the number of adjectives ascribed to the self that were also ascribed to the target thereby examining how similar participants feel the target is to them.

Although there are many ways to examine cognitive overlap, a self percentage measure was used; this measure involves calculating an individual percentage for each participant by dividing the number of common traits ascribed by the number of total self traits ascribed. This was used in order to examine the amount of traits that a participant originally ascribed to the self and later ascribed to the target.

Sense of knowing measure. The sense of knowing measure involved questions designed to indicate how well participants felt they knew the target in the radio program. This measure was adapted from measures used by Jordan and Kunda (2003). Participants responded to 18 questions using a 9-point scale ranging from 1 (not at all) to 9 (quite well). (e.g. “How well do you feel you know what [target’s name] is like as a person?” and “How well do you feel you know (target’s name) personality?”) See Appendix M for the complete questionnaire.

Debriefing. Participants were asked to indicate if they felt the ethnicity of the target was White, Asian, Black, Hispanic or Other. The experimenter then conducted a careful probing for suspicion and participants were fully debriefed.

Results

The results were analyzed using a series of 2 (Ethnicity: Asian or White) X 3 (Instruction types: perspective taking condition, objective condition, or no instruction condition) ANOVA's.

Manipulation checks. Included in the perspective taking scale were two items commonly used as manipulation checks (Batson et al., 1991). The first question asked participants "While listening to the broadcast, to what extent did you concentrate on Ling's [Jane's] feelings during the program?" Results from this question reveal that participants did not differ in their concentration on the target's feelings as a result of the instruction manipulation, $F(2,83) = 1.15, ns$. Participants in the perspective taking condition ($M = 5.20, SD = 1.21$), objective ($M = 4.90, SD = 1.21$), and no instruction condition ($M = 5.34, SD = 1.08$) did not differ in the extent of concentration on the target's feelings while listening to the broadcast. Similarly, participants did not significantly differ in their responses to the second question: "While listening to the broadcast, to what extent did you concentrate on being objective?" as a result of instruction type, $F(2,83) = 2.03, ns$. Again, participants in the perspective taking ($M = 3.17, SD = .83$), objective ($M = 2.80, SD = .96$), and no instructions condition ($M = 3.24, SD = .87$) did not significantly differ in the extent to which they concentrated on being objective while listening to the broadcast. Based on the results of the

manipulation check questions, it appears as though the perspective taking manipulation did not have its intended effect.

Empathic concern and Personal distress. Responses to the six empathic concern ($\alpha = .87$) and eight distress items ($\alpha = .87$) were averaged together into separate scales. Contrary to our predictions, results for empathic concern revealed no significant main effects due to ethnicity (see table 3). Individuals who listened to a White woman ($M = 4.23$, $SD = 1.08$) did not differ significantly from individuals who listened to an Asian woman ($M = 4.33$, $SD = 1.20$) in the amount of empathic concern they reported, $F(1,83) = .14$, *ns*. Participants, therefore, who heard about the misfortune experienced by another White woman, did not differ in the amount of empathic concern they felt for an Asian woman in the same situation. Also, contrary to our predictions, participants reported empathic concern did not differ as a result of instruction type. Participants in the perspective taking condition ($M = 4.16$, $SD = 1.29$), objective condition ($M = 4.10$, $SD = 1.04$) and no instructions condition ($M = 4.60$, $SD = 1.01$) did not differ significantly in their levels of empathic concern, $F(2,83) = 1.80$, *ns*. As well, the interaction of ethnicity and instruction type did not reach significance, $F(2,83) = .35$. Thus, instructing participants to remain objective or take the perspective of the target did not influence levels of empathic concern. These results support findings from the manipulation check questions that the perspective taking instructions were not effective.

The distress index also revealed no significant main effects of ethnicity, $F(1,83) = 1.49$, *ns*. Again, participants reported approximately equal levels of personal distress when listening to an Asian ($M = 3.64$, $SD = 1.32$) and White woman

($M = 3.32$, $SD = 1.06$) in the radio announcement. Distress levels were also not significantly affected by instruction type. Participants in the perspective taking condition ($M = 3.45$, $SD = 1.35$), and no instruction condition ($M = 3.82$, $SD = 1.11$) reported slightly higher levels of distress than the objective condition ($M = 3.19$, $SD = 1.17$). This difference, however, was not significant, $F(2,83) = 1.92$, *ns*. The ethnicity by instruction interaction also did not reach significance, $F(2,83) = .28$.

Parallel empathy. Included in the 24-item adjective checklist scale were five parallel empathy items. In order to examine parallel empathy, participants completed the emotion checklist regarding their own emotional reactions and also completed the same emotion checklist in reference to how they thought the target in the radio announcement would react. Within-person correlations were conducted using the five parallel empathy items in the 24-item adjective checklist. Items from the self checklist were correlated with the corresponding items on the checklist for the target for each participant. Following these individual correlations, a Fisher's r to z transformation was used for each score. Each within-person z score was then entered into a 2-way ANOVA with ethnicity and instruction type as independent variables. Parallel empathy levels were slightly higher in the White ($M = .40$, $SD = .59$) as opposed to Asian condition ($M = .15$, $SD = .79$), however this effect did not reach significance, $F(1,55) = 1.97$, *ns*. Parallel empathy levels were also higher in the White no instruction group ($M = .49$, $SD = .54$) than the Asian no instruction group ($M = .03$, $SD = .87$) revealing that participants who did not receive any instructions to empathize or remain objective seem to feel more parallel empathy, or feel the same emotions that they believe the target is feeling, when listening to another White

woman as opposed to an Asian woman; this effect, however, did not reach significance, $F(2,55) = .53$, *ns*. No main effects were found for instruction type, $F(2,55) = 1.11$, *ns*. Participants' parallel empathy was, therefore, not affected by being placed in perspective taking ($M = .43$, $SD = .68$), objective ($M = .11$, $SD = .71$), or no instruction ($M = .26$, $SD = .74$) conditions. The six empathic concern items were also subjected to within-person correlations using the self ratings and expectations about how the target would feel. Again, a Fisher's r to z transformation was used. Results reveal no significant main effects due to ethnicity or instruction type, $F(1,75) = .58$, *ns*, and, $F(2,75) = .03$, respectively. The interaction between ethnicity and instruction type was not significant $F(2,75) = .13$. Eight distress items were also used to create within-person correlations. Again, no significant results were found for either ethnicity, $F(1,71) = .24$, or instruction type, $F(2,71) = .25$. As well, the interaction of ethnicity and instruction type was not significant, $F(2,71) = .77$.

Also, another method was used to examine parallel empathy. The absolute difference between what participants thought the target's emotional reactions would be and what their own emotional reactions were on a particular item was calculated. Lower scores on this measure indicated higher levels of parallel empathy. No significant main effects for ethnicity, $F(1,83) = .21$, were found using the five parallel empathy items. Therefore, participants did not report more parallel empathy as a result of listening to another White woman ($M = 3.19$, $SD = 1.42$) as opposed to an Asian woman ($M = 3.04$, $SD = 1.56$). However, slightly more parallel empathy in the no instructions ($M = 2.98$, $SD = 1.48$) and the perspective taking condition ($M = 2.94$, $SD = 1.45$) were reported when compared to the objective condition ($M = 3.43$, $SD =$

1.52), however this effect did not reach significance, $F(2,83) = .95$. The same analysis was also conducted using the six empathic concern items. Results indicate no main effects for ethnicity, $F(1,83) = 1.44$, *ns*, or instruction type, $F(2,83) = .27$. As well, the interaction between ethnicity and instruction type was not significant $F(2,83) = .54$.

Perspective taking. Responses to the perspective taking items ($\alpha = .73$) were averaged together. Results indicate no main effects for ethnicity, $F(1,83) = .43$. Therefore, participants seem to be taking the perspective of the Asian woman ($M = 4.52$, $SD = .86$) to the same extent as the White woman ($M = 4.64$, $SD = .85$). There was however, a marginal main effect of instruction type, $F(2, 83) = 2.75$, $p = .070$. Post-hoc analysis using Fischer's Least Significant Difference (LSD) procedure ($LSD = 3.63$) reveal that participants instructed to remain objective seem to be taking the perspective of the actor slightly less ($M = 4.43$, $SD = .88$) than participants in the no instructions condition ($M = 4.88$, $SD = .71$) although this result was not significant ($p = .10$). Post-hoc analyses using Fischer's LSD test also revealed that responses from participants in the perspective taking condition ($M = 4.45$, $SD = .89$) did not differ from those in the no instruction or objective condition. Therefore, although there is a marginal effect of instruction type, as participants in the no instruction condition reported taking the perspective of the target more than participants in the objective condition, it is inconsistent with the findings of the manipulation check items which reveal no significant differences between perspective taking conditions.

Sense of knowing. Response to items on the sense of knowing scale ($\alpha = .88$) were averaged together. Results indicate a marginal main effect for ethnicity, $F(1,83)$

$= 3.57, p = .06$. Participants seem to feel as though they know the White woman ($M = 4.41, SD = 1.22$) better than they know the Asian woman ($M = 3.94, SD = 1.21$). No main effects were found for instruction type, $F(2,83) = 2.18, p = .12$, although it does appear to be approaching significance. Post hoc analysis using Fischer's LSD ($LSD = 3.32$) revealed that participants in the control condition ($M = 4.54, SD = 1.08$) reported knowing the target better than participants in the perspective taking condition ($M = 3.96, SD = 1.30$). However, this effect is in the opposite direction to what was predicted. Results from the instruction type by ethnicity interaction was not significant $F(2,83) = .64$.

Self-other overlap. There are several ways to conceptualize the degree of self-other overlap. However, the present study will examine percentage measure in the form of self percentage.

Self-percentage. Self-percentage is the percentage of self-traits that are ascribed to the target. In other words, what proportion of the traits that a participant earlier ascribed to the self did she later ascribe to the target as well (Davis, et al., 1996)? Analyses reveal no significant main effect due to ethnicity, $F(1,83) = 2.22, ns$, or a significant interaction of instruction type by ethnicity, $F(2,83) = .50$. However, there was a significant main effect of instruction type, $F(2,83) = 4.14, p < .05$. Post-hoc analysis using Fischer's LSD test ($LSD = 4.48$) revealed that participants in the no instructions condition ($M = .59, SD = .16$) showed more self-other overlap with the target than participants in the objective condition ($M = .46, SD = .17, p = .02$). The degree of self-other overlap of participants in the perspective taking condition ($M = .54, SD = .21$) did not differ significantly from participants in either the objective

condition or the no instructions condition. Hence, participants reported less self-other overlap when they were instructed to remain objective during the radio announcement and more self-other overlap when they were not given specific instructions.

Correlations. Correlational analyses (see Table 2) reveal that empathic concern is positively correlated with personal distress ($r = .77, p < .01$), perspective taking ($r = .49, p < .01$), sense of knowing ($r = .21, p < .01$) and parallel empathy ($r = .39, p < .01$).

As well, results reveal that sense of knowing is positively correlated with empathic concern ($r = .21, p = .048$), personal distress ($r = .23, p = .03$), self-other overlap ($r = .29, p = .005$), and parallel empathy ($r = .25, p = .017$).

Further, parallel empathy is positively correlated with empathic concern ($r = .39, p < .01$), personal distress ($r = .57, p < .01$), sense of knowing ($r = .25, p = .017$), and self-other overlap ($r = .22, p = .038$). These correlations suggest that, as expected, empathic concern, personal distress, and parallel empathy items all seem to tap a common underlying construct of empathy. Empathy is also related to sense of knowing, although somewhat less strongly.

Mediational analysis. In order to further test the possibility of self-other overlap during the empathic process as was suggested by recent research (e.g., Cialdini et al., 1997; Davis et al., 1996) a mediational analysis was conducted examining the possibility of self-other overlap mediating the relationship between parallel empathy (IV) and sense of knowing (the outcome). The mediational analysis was conducted using the procedures outlined by Baron and Kenny (1986). An analysis was conducted with parallel empathy predicting sense of knowing (see

Figure 1). This relationship was significant, $t(89) = 2.44$, $\beta = .25$, $p < .05$, indicating that parallel empathy is related to participants' sense of knowing the target. Next, a regression was conducted with parallel empathy predicting self-other overlap. This relationship was also significant $t(89) = 2.11$, $\beta = .22$, $p < .05$, indicating that parallel empathy is related to self-other overlap. Another regression was conducted with self-other overlap predicting sense of knowing, controlling for parallel empathy. This relationship was also significant $t(89) = 2.43$, $\beta = .25$, $p < .05$ (step 1). Finally, when self-other overlap was controlled for with parallel empathy predicting sense of knowing, the relationship dropped to being non-significant, $t(89) = 1.92$, $\beta = .20$, *ns* (step 2). However, due to the somewhat small drop in significance, these results reveal only a partial mediation. A Sobel test was also conducted in order to determine if the drop in beta value of parallel empathy was significant when self-other overlap was controlled for. However, the results reveal that the Sobel test was non-significant, ($Z = 1.61$, $p = .107$) which further indicates a trend toward mediation.

Discussion

None of the original hypotheses were supported. Past experiments utilizing the perspective taking manipulation (e.g., Batson, Polycarpou, et al., 1997; Vescio et al., 2003) indicated that participants who are instructed to take the perspective of the target report greater levels of empathy, perspective taking and increased positive attitudes towards a stigmatized target. It was, therefore, predicted that for the White target there would be elevated levels of empathy in the form of empathic concern, parallel empathy, and personal distress as well as high levels of perspective taking in the perspective taking condition, relative to the objective condition. No significant

differences emerged for the perspective taking conditions. Results from the manipulation check items, which asked participants to indicate the degree to which they concentrated on being objective and the degree to which they concentrated on the feelings of the target, indicated that the intended manipulation of perspective taking was not effective. Participants instructed to take the perspective of the actor did not differ in their responses from participants instructed to be objective or those not given any specific instructions. As well, the failure of the manipulation did not allow for a comparison between mean levels of spontaneous empathy compared with the other perspective taking conditions. This would have allowed for an interesting comparison, broken down by ethnicity, to examine if participants' levels of spontaneous empathy would approximate those directed to take the perspective of the target or those directed to remain objective.

One possible explanation for the discrepancy in the present results compared to past studies may be that typically participants in past experiments (e.g., Batson, Polycarpou, et al., 1997) were run individually which may have impacted the degree to which participants felt that it was important for them to keep in mind the instructions and pay attention while listening to the experiment. Participants in Study 2 were run in groups of up to eight and did not have as much individual attention and may therefore not have paid as much attention to the instructions. As well, participants in Batson, Polycarpou, et al.'s (1997) study were also told that a professor had found listening perspective especially important in determining reactions, and as a result they would be asked to take a certain listening perspective. Although instructions were clearly given and participants were reminded to keep the

instructions in mind while listening to the radio broadcast, they may not have focused as intently on the instructions given. However, the perspective taking manipulation has been successful in other studies that did not inform participants that a professor was interested in listening perspectives (e.g., Davis et al., 1996; Vescio et al., 2003). Therefore, although there are several empirical limitations which may have affected the results, for the most part the instructions were very similar if not identical to those used by Batson as well as other researchers (e.g., Davis et al., 1996; Vescio et al., 2003). As well, the manipulation checks were identical to those used by Batson et al. (1997).

Ethnicity. In addition, no significant differences emerged for the ethnicity manipulation other than a marginal difference in people's sense of knowing the target. The sense of knowing measure produced marginal results which were consistent with the hypotheses for Study 2. We had predicted that participants would feel as though they know another White individual better than an Asian individual. These results are also consistent with past research which has found that ethnicity can undermine projection to outgroup members and participants feel a greater sense of knowing an ingroup member (Jordan & Kunda, 2003). When asked to indicate whether they felt that they had a good knowledge about what kind of person the target is, participants felt as though they knew another White student better than an Asian student. This may therefore indicate that participants felt some sense of otherness with the Asian target. However, participants reported approximately equal levels of empathy for both an ethnic outgroup and ethnic ingroup member. These results are contrary to our predictions based on past research which indicates that similarities are

perceived to be greater among ingroup members and differences are seen as greater between members of different groups (Jordan & Kunda, 2003; Krueger & Clement, 2002; Mullen et al., 1992; Smith & Henry, 1996). The results therefore may indicate that empathy is just as likely to occur spontaneously with an ethnic outgroup member as with an ethnic ingroup member. There are, however, several limitations and methodological issues which may have impacted the results for the empathy measures.

Even though Study 2 attempted to highlight ethnicity it may not have had the intended impact. Participants may have failed to notice ethnicity or may have not paid attention to the ethnicity of the target. The main premise of the story was an announcement from the Young Worker Awareness Program which specializes in educating students about their health and safety rights as young workers. It is possible that students have heard of this program quite often in high school as the Young Worker Awareness Program reaches over seventy thousand secondary students each year in the province of Ontario and also campaigns using public radio announcements (C. Carr, personal communication, March 10, 2005). Participants may have therefore been uninterested while listening to the program and may have not paid close attention to the information presented.

As well, something more may have been needed in order to increase the salience of group memberships or the perception of differences based on group membership. Perhaps a behaviour of an outgroup member that may be considered odd or unusual would highlight possible differences between the groups and thus indicate deeper underlying cultural differences. For example, if an ethnic outgroup member

were to wear a strange article of clothing, it may shock people or make them take notice; as a result they may interpret this difference in behaviour as perhaps due to differing ethnicities. This may signify that ethnic outgroup members have a different set of values and beliefs (Rokeach, 1979). As well, it may also be indicative of deeper underlying differences. People may think of ethnicity as signifying a difference in essence, such that social groups have different underlying essences that are largely unchangeable (Miller & Prentice, 1999). As a result, people may assume that they are less similar to the outgroup member based on these underlying differences and have a more difficult time relating to and empathizing with an ethnic outgroup member.

The radio program in Study 2 attempted to improve upon a similar methodology used in Study 1. The scenario in Study 1 used a university student from Wilfrid Laurier University as the target. It was hypothesized that the shared status as a university student may have undermined the results as students were empathizing with both the ethnic ingroup member and outgroup member equally. In order to deemphasize the shared student status in Study 2, a young worker injured on the job was used as the target. However, in Study 2 we also wanted to make the scenario something that students would be able to relate to, which is why the target was a young woman. Although the scenario that was used described a situation at a work site and attempted to deemphasize shared student status, the fact that the target was recently in high school and was working in a summer job may have allowed students to draw on their past experiences of recently being high school students themselves. As well, most students probably held a summer job before entering university in the fall, and thus the announcement may have highlighted a shared group status of a

young worker which may have been more salient than differences in ethnicity. Therefore, the shared status of being a student or young worker may have overshadowed the differences in ethnicity. The pictures shown to participants were also of women who were close in age to participants (both targets in the pictures were 21 years old) which may have reinforced the shared status of young workers. If, in fact, this is the reason for the null results it would be an encouraging finding as it suggests that people were easily able to find a common identity with an ethnic outgroup member. As a result, people may be able to do so in more real world contexts as well.

Also, the population that was used for this study was comprised of university students whose responses may have been affected by social desirability and feelings of appropriateness. Participants may have been motivated to avoid appearing prejudiced (Fazio & Dunton, 1997). Consequently they may have felt greater empathy for the Asian woman causing empathy levels for the White and Asian woman to be quite similar. Also, participants may have simply reported feeling more empathy than they actually did, making it look as though there were not any differences in empathy when in fact there were.

Several results concerning empathy indicate an expected pattern of results. A positive relationship was found between empathic concern, personal distress, parallel empathy, and perspective taking. The empathy variables were also positively correlated with sense of knowing. This indicates an interesting relationship, as people feeling empathy also feel as though they know the target. Again, this may be indicative of the empathic process causing thoughts of the self to be more accessible

leading to greater cognitive overlap. This may then lead the observer to feel as though she has a sense of what the target is all about. As well, further analyses reveal that self-other overlap mediates the relationship between parallel empathy and sense of knowing. Thus experiencing self-other overlap through the process of empathy may lead to a greater sense of knowing a target. As a result, some evidence regarding correlations and mediational analyses reveal a reasonable pattern of results for empathy.

Although past research by Johnson et al. (2002) found an overall greater level of empathy for a White defendant when compared to a Black defendant, as noted earlier, the stereotypical nature of the overall scenario may have caused racial biases which confounded the issue of empathic reactions. The target in this study was a Black man in the United States who had committed larceny. This would be considered a strongly stereotypical behaviour, as Black people have been associated with crime and violence (Devine, 1989). This negatively stereotyped behaviour may have caused an overall negative perception of the outgroup in general and participants may have also distanced themselves from the Black target. This, in turn, may have caused a lower level of empathy and greater dispositional attributions for the Black target when compared to the White target. The present study however, attempted to be free of any materials that could be considered stereotypical of an Asian person. By deconfounding this issue in the present study it may have allowed for the possibility that people are as likely to spontaneously empathize with an outgroup member when no stereotypes are made salient. The implications from this conclusion are therefore promising to the field of intergroup relations. Although empathy may be less likely to

occur towards an outgroup member who has behaved in a stereotypical manner (Johnson et al., 2002), it may be as likely for outgroup members for whom no negative stereotypes are revealed. If this interpretation holds, simply having a different social group membership is not sufficient to impede the process of empathy.

The results of self-other overlap did not confirm the original hypothesis that greater self-other overlap would be reported in the White condition when compared to the Asian condition. Additionally, self-other overlap was not related to measures of empathic concern and personal distress, indicating that feeling self overlap with the target was not related to feelings of empathy. Self-other overlap was, however, positively correlated with parallel empathy indicating that participants who felt the same emotions as they believed the target was feeling also reported more cognitive overlap with the target. Also, the results revealed that self-other overlap mediates the relationship between parallel empathy and sense of knowing. This result would therefore be in line with current research suggesting that perspective taking may impact the cognitive process as imagining another's feelings produces more self-related thoughts causing representations of the self to be primed. This may, in turn, create a cognitive merging of mental representations of the self and target which results in a perception of more shared elements (Cialdini et al., 1997; Davis et al., 1996). As a result participants may then feel as though they have a better sense of knowing the target.

To conclude, several improvements could be made to Study 2. Ethnicity could be highlighted in some way in order to make the ethnic differences more apparent. Also, when participants were given the perspective taking instructions during the

experiment, perhaps more emphasis should have been placed on the importance of following instructions.

General discussion

Results from the present studies did not support the original hypothesis that empathy would be less likely to occur with a member of an ethnic outgroup. Taken together, results suggest that empathy between ethnic groups may occur as readily as within ethnic groups. It was hypothesized that a perceived lack of similarity and a sense of otherness with an ethnic outgroup member would result in less identification with an outgroup member and hence lower levels of empathy. After the results of Study 1 indicated that participants were empathizing with outgroup members as readily as ingroup members, Study 2 attempted to make ethnicity more salient by providing a visual reference which clearly portrayed the ethnicity of either a White or Asian woman. Nonetheless, participants in Study 2 showed no difference in empathy levels as a result of target ethnicity. These results therefore seem to indicate that although group membership may block social projection and identification (e.g. Jordan & Kunda, 2003; Krueger, 2000), there may not be a corresponding bias with respect to empathy.

Is empathy a natural spontaneous reaction? Research in the area of empathy has been mainly concerned with the outcomes of empathy, specifically improved intergroup attitudes and helping behaviours (Batson et al., 1997; Batson, Polycarpou et al., 1997; Vescio et al., 2003); however little research has examined empathy from a spontaneous or naturalistic approach. As well, much of this research has asked participants to be either objective or take the perspective of the target while listening

to a distressing situation (e.g., Batson, Polycarpou, et al., 1997). Obviously these instructions would not be present in everyday situations during which people might empathize with others. Due to the fact that little empirical research has examined these natural reactions, the present research attempted to examine spontaneous empathy. Study 2 used perspective taking instructions similar to those used by Batson, Polycarpou, et al. (1997) which, in principle, should have allowed us to compare across conditions to examine if levels of spontaneous empathy are similar to those in conditions where participants are explicitly asked to either take the perspective of the target or remain objective. However, the perspective taking manipulation in Study 2 did not have its intended effect. Therefore, a comparison between the control group and the other conditions was not a useful comparison.

Recent research by Davis et al. (2004) however has examined the process of natural empathy and compared these reactions to directed perspective taking instructions. Participants viewed a videotape of a woman describing what it was like to live with a serious health problem. After watching the videotape, participants were asked to recall all thoughts that had occurred to them as they watched the videotape. Their results reveal that the control group, who did not receive any instructions, had levels of empathy similar to those in the ‘imagine target’ condition, in which participants were asked to try to take the perspective of the person in the videotape. The ‘imagine target’ instructions used by Davis et al. are very similar to the perspective taking condition used in Study 2. Thus, people seem to be naturally approximating conditions in which they take the perspective of the target and imagine how she is feeling. Although this is limited to one scenario, the results by Davis et al.

provide a possible indication of how people spontaneously empathize. Thus empathy may be a somewhat naturally occurring spontaneous reaction which may also occur with ethnic outgroup members.

However, we do recognize the somewhat artificial environment of the laboratory as a means of testing natural empathic reactions. As Davis et al. (2004) acknowledged, caution is warranted, as being explicitly asked to listen to a radio program is also somewhat artificial. Nonetheless, the present experiments were designed to measure spontaneous reactions and are therefore a closer approximation to naturalistic conditions than previous experiments that have utilized directed perspective taking measures.

Due to a lack of research on spontaneous empathy, further research in this area is warranted. The degree of spontaneous empathy toward ingroup and outgroup members could be tested most clearly in the control group where no instructions were given. Future research examining empathy in more naturalistic settings is also an important consideration. Although the present study as well as a study by Davis et al. (2004) attempted to examine participant's natural or spontaneous empathic reactions, possibly observing participants in more realistic interpersonal situations would provide a better test for spontaneous empathy than specific instructions given in a laboratory.

Although much research has examined perspective taking and empathy (e.g., Batson, et al., 1996, 1997, 2002, 2003; Finlay & Stephan, 2000; Galinsky & Moskowitz, 2004; Stephan & Finlay, 1999; Vescio, et al., 2003), there is still much to be known concerning the specific cognitive processes that occur during empathy and

perspective taking. By increasing our knowledge about these processes, it may be possible to have a better idea regarding how group membership may affect empathy. There are several processes that may be involved in perspective taking. One possibility for this process may be a series of steps termed “transformation rules” proposed by Karniol (1986). These rules allow observers to make predictions about another person’s psychological experience in order to make plausible inferences about another’s feelings and behaviour. For example, a person may use a transformation rule known as “state/characteristic of the stimulus” when trying to understand how another person (target) may react. Therefore, someone might link a stimulus (seeing an old man who looks sick) to a plausible reaction by a target (sadness) by using preexisting knowledge about the category of the elderly (reminds them of their own grandfather). When examining a group of high school students, it was found that those individuals who rated highest in empathic concern and perspective taking were more likely to utilize a variety of transformation rules (Karniol & Shomroni, 1999).

However, another possibility that has gained recent attention is the idea that knowledge of the self is relied upon when empathy and perspective taking occurs. Davis et al. (2004) found greater self-related thoughts when participants were directed to take the perspective of the target. While watching a videotape of the target, the tape was interrupted and participants were instructed to complete a purportedly unrelated linguistic task. This linguistic task, however, was designed to evaluate the number of self and other pronouns participants used. Those instructed to take the perspective of the target used more self-pronouns during the linguistic task than participants

instructed to remain objective while watching the tape (Davis et al., 2004). Also, when asked to recall their thoughts after watching the videotape, participants instructed to take the perspective of the target remembered more self-related thoughts while those instructed to be objective recalled significantly fewer self-related thoughts. Greater self-other overlap is thought to be the result of the priming of self related thoughts during the perspective taking process. This causes these traits to be more accessible and therefore more often ascribed to the target.

Using self-knowledge is also an important part of the analogical processes which may be used during empathic reactions. In order to make sense of another's actions, people may engage in a type of analogical reasoning which involves making a comparison between the self and another person (Barnes & Thaggard, 1997). Empathy may entail an analogical process that involves mapping one's own past experiences onto another person in order to understand them. For example, trying to understand a friend's frustration after missing an appointment due to a traffic jam would involve making an analogy between the friend's situation and a similar situation from one's own experience. Barnes and Thagard (1997) argue that achieving empathic understanding involves making a comparison of emotions. In other words, empathy involves a type of mapping of past experiences onto another person. When someone is viewed as being different, finding a past experience to use as an analogy may be difficult and thus hinder the identification process. Although feelings of dissimilarity may hinder empathy, it is not a barrier that cannot be overcome. People may need to make a greater effort in order to find a past experience that can be used as an appropriate analogue; however, it is still possible.

The analogical process or rule-based process of perspective taking may therefore take more effort with an outgroup member, if people feel as though they are more dissimilar to that outgroup member or feel as though they are essentially different (Miller & Prentice, 1999). However, in the present studies, it may have been that participants were able to find a similar past experience or make use of transformation rules in order to overcome the potential barrier. Conditions that limit people's cognitive resources such as cognitive load or time pressure may disrupt the process of empathy toward an outgroup member, compared to an ingroup member, due to the more effortful process needed to empathize with someone who is thought of as being dissimilar. Participants engaged in many tasks may be less able to concentrate, consequently crippling the empathic process towards an outgroup member.

The present results have also shown a positive correlation between parallel empathy and sense of knowing with self-other overlap. Results from the mediational analysis suggest that self-other overlap may partially account for the relationship between parallel empathy and sense of knowing. Hence, the process of self-other overlap that occurs during empathy may be a way to bridge the gap between social groups. Empathy may be a way to allow identification with an outgroup member, even though other forms of identification such as social projection may be limited across groups. This may account for the prosocial benefits associated with empathy, specifically improved attitudes towards stereotyped and stigmatized groups. Consequently, empathy may be a powerful means of encouraging positive intergroup attitudes and relations.

However, there may be some limitations to this process. When an outgroup member's behaviour conforms to a negative stereotype (e.g. Johnson et al., 2003), empathy may be undermined as well as the potential benefits that it brings. Further investigation would aid in clarifying how stereotype and biases may impact the empathic process. By manipulating the salience of stereotypes it may be possible for future research to examine this phenomenon. Perhaps by including both a scenario in which the target's behaviour may trigger stereotypes about his or her group and also a non-stereotyped scenario, conflicting results in this area may be made clearer.

As well, further examination of self-related thoughts may contribute to our understanding of the perspective taking process. Recent research by Galinsky and Ku (2004), has found that self-esteem moderated the relationship between perspective taking and prejudice reduction. Perspective takers with high self-esteem evaluated an outgroup member more favourably than perspective takers with low self-esteem. Because perspective taking activates the self concept, it was suggested that those with high self-esteem activated positive self-concepts and then applied them to the target causing an overall positive evaluation of an outgroup member (Galinsky & Ku, 2004).

Consequently, it appears that self-esteem may have an effect on empathy and perspective taking. It would therefore be of importance to further examine how the processes of cognitive overlap and the activation of self-related thoughts impacts the empathic process when dealing with an ethnic outgroup member. Self-esteem may have thus moderated evaluations of the outgroup member, however, the effect of self-esteem on empathy may depend upon other factors.

Empathy and the outgroup member. Originally, we hypothesized that group categorization would cause a difference in empathy due to feelings of dissimilarity from outgroup members and feelings of similarity amongst ingroup members. We hypothesized that belonging to different groups may serve as an inhibitor to empathy. People may develop theories concerning similarities within groups. The theory of psychological essentialism maintains that people come to think of surface features of categories and concepts as representing deeper underlying properties (Medin & Ortony, 1989). This may be especially relevant when examining how people represent social groups. People may believe that group differences signify a deeper underlying essence (Miller & Prentice, 1999). Social categories such as race and gender may be perceived as having different underlying essences, so that disagreements between people of different ethnicities or genders may be seen as more serious and less likely to be resolved. However, combined results from Studies 1 and 2 have shown that participants are just as likely to empathize with an ethnic outgroup member. There are several possible reasons why this effect has occurred and did not support our original hypothesis and literature in the area of social categorization. It is also important to explore the possibility that people really do empathize with ethnic outgroup members as readily as ethnic ingroup members.

Research by Kunda, Davies, Adams, and Spencer, (2002) has suggested that although stereotypes may be activated automatically, as one learns about an individual, the original stereotype activation may recede and the individual may be viewed in less categorical terms. Participants viewing a videotape of a Black student describing issues that students face when they first arrive on campus, activated a

Black stereotype after viewing the tape for 15 seconds. However, after 12 minutes of exposure to the videotape, the stereotype activation was no longer present (Kunda et al., 2002). This finding may be especially relevant when considering the present experiments. Initially, ethnic categories may have been salient when reading or listening to an Asian individual but after continuing to read or hear about the target's story, this information may have dissipated or receded. Although participants in the present studies did not have a lengthy exposure time (approximately 3-5 minutes) when compared to the exposure time in the study by Kunda et al. (2002) which was 12 minutes, the type of information presented may have impacted stereotype dissipation. The information presented by the targets in our experiments was very personal and somewhat more shocking and engrossing than simply describing issues faced by incoming students. In Study 1, a male student described a stressful time in his life when he cheated on an assignment and was caught. In Study 2, a young woman described a work related injury that had significantly impacted her life and described the stress and pain she is currently experiencing. Thus this information may have led to greater individuation of the target as participants may have been engrossed by the troubling stories that they were reading or listening to. This may have then lead to the dissipation of the initial salience of ethnic categories.

There are other ways that perceptions of group boundaries can be reduced. Through the process of decategorization or personalization, taking the perspective of an outgroup member may occur more easily. The process of personalization involves receiving more self-relevant and intimate information about an outgroup member that allows him or her to differentiate the individual from other outgroup members; this

personalized process involves focusing on information about an outgroup member that is similar to the self (Gaertner, 1999). Typically, feelings of empathy for another arise from hearing personal information such as the loss of a loved one. People may thus recall a time when they themselves have lost a loved one which would thus increase the similarities between themselves and an outgroup member. This may also minimize the distance that people feel towards ethnic outgroup members as they see themselves as more similar to them. Also, individuating information such as behavioural information about a target may swamp the effects of social category information (Locksley, Brigoda, Brekke, & Hepburn, 1980). In a study by Locksley et al., participants read about a target describing difficulties encountered throughout the week. Participants relied on behavioural information to make judgments about the target instead of relying on gender stereotypes. Thus, Locksley et al. suggest that social category information may be used when little else is known about a target, but as soon as individuating information is known, stereotypes may be avoided. Participants in the present studies received very personal, individuating information about the target, which may have been used instead of social category membership as a basis for their empathic reactions. Furthermore, if self-knowledge is activated during empathy and more cognitive overlap occurs, this may enhance the personalized experience between outgroup members. Empathy may then aid in decreasing the salience of group categorization and may assist in improving intergroup relations.

As well, through the process of recategorization, members of separate groups may conceive of themselves as belonging to a common category (Nier, Gaertner,

Dovidio, Banker, Ward, & Rust, 2001). When Black and White participants worked together towards a common goal, White students rated the Black students in their groups more favourably than participants who worked individually (Nier et al., 2001). They also reported feeling more like one group when they were placed in teams, relative to when they completed the task individually. Also, there are many social groups that people may belong to that, at any given time, may be dominant over the others (Macrae, Bodenhausen, & Milne, 1995). As was previously mentioned, the shared status of young worker or student status may have been more salient than the differences in ethnicity. Thus, although participants in the present studies may have originally noticed the ethnicity of the target, other group categorizations may have become more salient thus causing participants to no longer see the target as Asian. Consequently, the possibility exists that through the processes of recategorization and decategorization that participants are no longer aware or no longer viewed the target in terms of his or her ethnic background. As a result, participants may have identified with the ethnic outgroup member on an individual level by hearing about personal information, in the case of decategorization. Or, participants may have come to view the outgroup member as an ingroup member through an alternate group identity such as young worker, in the case of recategorization. This categorization would be considered an alternate identity. If, in fact, the processes of recategorization, decategorization, or dissipation of category activation are responsible for the equal empathy levels between different ethnic group members, these processes may be useful tools to aid in increasing identification and empathy between social groups. Due to the fact that we belong to multiple social groups, future research examining

the impact of other group memberships on empathy would be an important area.

Would it be easier for a man to empathize with another man? Another area of interest may be to manipulate the salience of group membership by providing a group identity that is common to both men and women; for example, highlighting the fact that they are both French Canadians. Empathy levels and identification may thus be easier due to a common group identity. Future research in this area should also focus on specific conflicting ethnic groups in order to examine how prejudice and hostility between groups may influence levels of empathy for outgroup members.

Conclusion. The present experiments suggest that empathy is just as likely to occur with an ethnic outgroup member as with an ethnic ingroup member. It is important to acknowledge, however, that null results are open to many interpretations and as such, further research in this area is needed in order to get a better picture of the effect of ethnicity on empathy.

Empathy has been shown to have many prosocial benefits (Batson et al., 2002; Batson, Polycarpou et al., 1997; Galinsky & Moskowitz, 2004; Vescio, et al., 2003). It has lead to improved attitudes towards stigmatized groups such as convicted murderers (Batson, Polycarpou et al., 1997), and has lead to more positive attitudes towards an ethnic outgroup member (Vescio, et al., 2003). It is also an important aspect in multicultural education programs (Stephan & Finlay, 1999) and has been shown to be an important feature in the field of counseling (Duan & Hill, 1996) as well as in the judicial system (Archer et al., 1979; Johnson et al., 2002; Weir & Wrightsman, 1990). The results from the present studies suggest that although we attempted to make group categorization salient, membership in and of itself may not

be sufficient to cause a difference in empathy towards an outgroup member. This result is therefore promising for the area of intergroup relations. Training programs that focus on improving intergroup relations or tolerance between groups may therefore enhance their benefits by incorporating more perspective taking or empathy training into their programs. However, it appears that this result occurs in situations where negative stereotypes are absent.

Future research on empathy is vital for many different reasons. The effect of ethnicity and the exact processes of perspective taking and empathy are still unclear which makes it difficult to discern whether differing social group membership impacts the perspective taking process and at what point that may occur. The ramifications for real-life social interactions are indeed optimistic when it comes to the empathic process. Its pro-social benefits are well known and the present research suggests that finding common ground between people of the same and different ethnic backgrounds may be achieved somewhat spontaneously. Due to the importance of empathy as a social tool in our everyday lives, we hope that future research in this area will continue to examine the processes of empathy, especially between social groups in order to improve intergroup contact and enhance our social experiences.

Appendix A

Radio Announcer: Today as part of an ongoing series exploring the lives and experiences of university students across Canada, we are going to be talking to Jim Ross [Jin Chu] who currently lives in Waterloo, Ontario and is a third year student at Wilfrid Laurier University. He's had an experience quite different from any we've explored in the series so far, and one that might be quite informative to some listeners. So how are you doing today Jim?

Jim Ross [Jin Chu]: Not bad

Announcer: good, well why don't you start by telling us a little bit about yourself?

Jim Ross [Jin Chu]: Well I was born in Detroit [Hong Kong] and had a fairly easy and happy childhood there. When I was seven years old my parents decided to move to Canada.

Announcer: Why did they decide to move?

Jim Ross [Jin Chu]: We had a lot of family who had already moved to Canada and my parents wanted to be close to their family. I think that they also felt we would get a better overall education in Canada and have more opportunities.

Announcer: Did you move immediately to Waterloo?

Jim Ross [Jin Chu]: Yeah, pretty much. For the first couple of months we stayed with some friends of my parents in Toronto until my Dad was able to find a job and then he found one in Waterloo, so we moved here.

Announcer: Why did you decide to come to Laurier?

Jim Ross [Jin Chu]: Well I wanted to stay close to home and Laurier seemed like a good school and I really liked the small community atmosphere that it had to offer.

Announcer: How did you handle the new workload of being at University?

Jim Ross [Jin Chu]: My parents have always been pretty strict about grades and are always disappointed if I get a bad mark. I guess it's because neither of them went to University and they want me to have a good education. So I tried hard my first couple of years to make sure that my grades were good. I didn't have too many problems with the work, but I did need to stay on top of the workload otherwise I just found it too easy to fall behind. I had a pretty fun time making new friends and partying with my old friends from high school, so my first couple of years went smoothly and adjusting to university wasn't a big deal.

Announcer: So what happened in your third year?

Jim Ross [Jin Chu]: My youngest brother who is 14 started having some trouble in school; his grades had been dropping since he started high school since he was hanging around a bad group of friends. My parents were really worried about him and wanted me to talk to him and try to get him to straighten out. But my brother kept getting into more trouble and there had been a lot of tension at home as my parents and my brother were not getting along. I was also fighting with my brother over his behaviour and our relationship really suffered; it got so bad that we were barely talking to each other because he was mad at me all the time. I was also trying to stick up for my brother to my parents and wanted to help them work things out, but I usually just got caught in the middle, and both my parents and brother would be angry at me because they thought I was taking sides. Near the end of October, my brother was brought home by the cops because he was drinking underage and he was caught doing ecstasy. My parents were having a lot of trouble dealing with his

behaviour and didn't know what to do. We were all scared and concerned for my brother because we could see his bad behaviour escalating.

Announcer: Wow, that must have been a difficult time. Did it impact your schoolwork?

Jim Ross [Jin Chu]: Actually, it did. I was having a really hard time keeping up with my schoolwork and dealing with the problems at home. During this time I also had a major paper due. Because I was under so much stress, I decided to ask one of my friends who had taken the course a couple years ago to loan me his paper so I could see how I was supposed to write it up and be able to write mine up faster. But there was so much tension in our house that I was having a difficult time concentrating on my work. I would go to the library and try to get some studying done there but it seemed as though every time I tried to work on the paper I was so worried about my brother that I couldn't get much done. I also didn't have time because I had to attend my cousins wedding the weekend before my paper was due. The wedding took place at the Ramada [in Chinatown] and my parents needed me to drive relatives in from the airport and help out with other activities most of the weekend. Then at the last minute I realized that I didn't have time to write a good paper and was really worried about failing the course. I really wanted to keep up my good grades, and I thought that the professor would never remember my friend's old paper, so I handed in my friend's paper as mine.

Announcer: What happened after you handed it in?

Jim Ross [Jin Chu]: Well a week later my Professor asked to speak with me and told me that he had recognized the paper as someone else's. He said he went through his

files and found the paper from the class he had taught two years ago. He said that he was going to have to report me to the dean and then I went through disciplinary hearings from there.

Announcer: You must have realized that you had made a huge mistake.

Jim Ross [Jin Chu]: Yeah, I realize now how wrong it was to plagiarize, but at the time it just seemed so easy to do and I felt like I didn't have any other alternatives; I now know it was wrong and regret having cheated. I just wanted to get a good grade in the class and I wasn't able to get the work done on time.

Announcer: What is the main reason you decided to tell your story on the radio today?

Jim Ross [Jin Chu]: The reason I am on this radio program is because I wanted other students to avoid getting themselves in similar situations and making the same mistakes that I made. I am also doing this radio show as part of my punishment so that I can inform other students about the seriousness of cheating and plagiarism. I want other students to appreciate how severe the consequences can be when you're caught cheating.

Announcer: Thanks for sharing your story with us Jim. I'm sure it will be helpful for other students and we have all learned something from hearing your story. This story was brought to you by the disciplinary committee on campus, in order to inform students of the seriousness of academic misconduct. It is the goal of this committee to help other students in the future to avoid making the same mistakes.

Appendix B

Please indicate by circling a number the degree to which you are feeling each of these emotional reactions as a result of listening to the broadcast. Do not indicate how you think other people might respond or how you think the broadcast was supposed to make you respond; just indicate how you are feeling at this time. Please be sure to circle a response for each item.

	not at all		moderately			extremely	
1. alarmed _{pd}	1	2	3	4	5	6	7
2. grieved _{pd}	1	2	3	4	5	6	7
3. sympathetic _{ec}	1	2	3	4	5	6	7
4. softhearted _{ec}	1	2	3	4	5	6	7
5. troubled _{pd}	1	2	3	4	5	6	7
6. warm _{ec}	1	2	3	4	5	6	7
<hr/>							
7. concerned	1	2	3	4	5	6	7
8. distressed	1	2	3	4	5	6	7
9. low-spirited	1	2	3	4	5	6	7
10. compassionate _{ec}	1	2	3	4	5	6	7
11. upset _{pd}	1	2	3	4	5	6	7
12. disturbed _{pd}	1	2	3	4	5	6	7
<hr/>							
13. tender _{ec}	1	2	3	4	5	6	7
14. worried _{pd}	1	2	3	4	5	6	7
15. moved _{ec}	1	2	3	4	5	6	7
16. feeling low	1	2	3	4	5	6	7
17. perturbed _{pd}	1	2	3	4	5	6	7

18. heavy-hearted	1	2	3	4	5	6	7
-------------------	---	---	---	---	---	---	---

19. sorrowful	1	2	3	4	5	6	7
---------------	---	---	---	---	---	---	---

20. bothered	1	2	3	4	5	6	7
--------------	---	---	---	---	---	---	---

21. kind	1	2	3	4	5	6	7
----------	---	---	---	---	---	---	---

22. sad	1	2	3	4	5	6	7
---------	---	---	---	---	---	---	---

23. touched	1	2	3	4	5	6	7
-------------	---	---	---	---	---	---	---

24. uneasy	1	2	3	4	5	6	7
------------	---	---	---	---	---	---	---

*ec = empathic concern

pd = personal distress

Appendix C

Please circle the response you feel is most appropriate based on your level of agreement or disagreement with the following statements:

1. To what extent did you concentrate on Jim/Jin's feelings?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

2. To what extent did you imagine how you would feel if you were in Jim/Jin's situation?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

3. How easy or difficult is it for you to understand Jim/Jin's behaviour?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

4. How easy or difficult is it for you to imagine how Jim/Jin felt in this situation?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

5. To what extent do you sympathize with Jim/Jin?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

6. How easy or difficult is it for you to imagine yourself in Jim/Jin's shoes?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

7. How easy or difficult is it for you to identify with Jim/Jin?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

8. How easy or difficult is it for you to imagine plagiarizing an assignment?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

Appendix D

Please circle the response you feel is most appropriate based on your level of agreement or disagreement with the following statements:

1. There is no good excuse for Jin/Jim to plagiarize.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

2. Stress contributed extensively to Jin/Jim's decision to plagiarize.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

3. Jin/Jim is likely to cheat again in the future.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

4. Outside circumstances were a major cause of Jin/Jim's behaviour.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

5. This is likely the first time Jin/Jim has ever plagiarized.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

6. Most people would have acted the same way if put in the same situation as Jin/Jim.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

7. Jin/Jim probably cheats on other assignments.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

8. The situation under which Jin/Jim plagiarized was more to blame than his character.

- | | | | | | | |
|-------------------|----------|-------------------|----------------------------|----------------|-------|----------------|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 |
| Strongly Disagree | Disagree | Somewhat Disagree | Neither Agree nor Disagree | Somewhat Agree | Agree | Strongly Agree |

Appendix E

Please circle the response you feel is most appropriate based on your level of agreement or disagreement with the following statements:

1. Students who plagiarize have no one to blame but themselves.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

2. Any student who cheats must be truly corrupt.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

3. Any student caught cheating should be punished to the full limit school policy allows.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

4. No student would plagiarize unless he or she had a moral deficiency.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

5. How much do you personally care about the plight of students who are expelled for cheating?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

6. In general, what are your feelings towards students who are caught cheating?

1	2	3	4	5	6	7
Extremely Negative			Neutral			Extremely Positive

Appendix F

Students' Union Survey on Campus Club Funding

As you are probably aware, the Students' Union subsidizes academic and social clubs on campus. Unfortunately, given the current financial climate, the Students' Union has recently announced that they will be forced to cut the amount of money that is allocated to academic and social clubs by 20%. At the present time, we have been asked by the Students' Union to assist them in assessing how undergraduates enrolled in psychology classes would allocate funds. We would like your opinion on which clubs you feel should have their funding increased, decreased, or left at the same level. Listed on the ballot accompanying this letter is a small subset of the clubs that receive funding from the Students' Union. Listed beside the name of each club is the current amount of funding they receive. For instance, the Environment Club receives \$625 from the Students' Union. In addition, you will see that the subset of clubs listed below received a total of \$5000 this year. Thus, next year, given cuts of 20%, these clubs will probably receive only \$4000 combined. By completing the ballot on the following page, we would like you to provide your vote as to the amount of funding each of these groups should receive next year. That is, we want you to list the amount of money you would like each of the groups listed below to receive. When doing this, remember that your total should not exceed \$4000. When you have completed this anonymous ballot, your vote will be sent to the Students' Union to aid in their decision making concerning any budget increase, reduction or no change at all. Thank you for taking the time to complete this short survey.

Students' Union Survey on Campus Club Funding

Club	<u>2002-2003</u>	<u>2003-2004</u>
- Habitat for Humanity	\$675	
- History Club	\$275	
- Environment Club	\$625	
- Global (gays, lesbians, & bisexuals at Laurier)	\$475	
- Archaeology Club	\$350	
- Chinese Students Association	\$575	
- World Affairs Society	\$700	
- Debating Society	\$525	
- Religion and Culture Society	\$475	
- Music Association	\$325	
TOTAL	\$5000	\$4000

Appendix G

Which of the following adjectives do you consider to be descriptive of **Jane/Ling [Yourself]**? Place an X beside any adjective that you might use in describing **Jane/Ling [Yourself]** to someone else. Work rapidly, putting down your first thoughts.

- | | |
|-------------------|-------|
| 1. Aggressive | _____ |
| 2. Ambitious | _____ |
| 3. Anxious | _____ |
| 4. Assertive | _____ |
| 5. Confident | _____ |
| 6. Cooperative | _____ |
| 7. Cynical | _____ |
| 8. Defensive | _____ |
| | |
| 9. Dependable | _____ |
| 10. Disorderly | _____ |
| 11. Emotional | _____ |
| 12. Energetic | _____ |
| 13. Forgetful | _____ |
| 14. Honest | _____ |
| 15. Humorous | _____ |
| 16. Idealistic | _____ |
| 17. Imaginative | _____ |
| 18. Intelligent | _____ |
| | |
| 19. Logical | _____ |
| 20. Loyal | _____ |
| 21. Mature | _____ |
| 22. Modest | _____ |
| 23. Opinionated | _____ |
| 24. Original | _____ |
| 25. Outgoing | _____ |
| 26. Patient | _____ |
| 27. Quarrelsome | _____ |
| 28. Rebellious | _____ |
| | |
| 29. Sarcastic | _____ |
| 30. Self-centered | _____ |
| 31. Sincere | _____ |
| 32. Stubborn | _____ |
| 33. Suspicious | _____ |
| 34. Tactful | _____ |
| 35. Talkative | _____ |
| 36. Thorough | _____ |

37. Timid

38. Warm

Appendix H

Please place an X in the box to indicate the ethnicity which you most strongly identify with:

Black	<input type="checkbox"/>
White	<input type="checkbox"/>
Asian	<input type="checkbox"/>
Hispanic	<input type="checkbox"/>
Other	<input type="checkbox"/>

Appendix I

ANNOUNCER: This is an announcement from Young Workers Awareness. Many young workers are injured on the job every year, some are even killed. You should know your rights to health and safety awareness on the job, to protect yourself and your fellow workers. In order to illustrate how important safety is on the job, Jane Walker (Ling Ye) is going to tell you her story.

JANE (LING): I'm a senior in high school this year. I've never been the best student, but I'm not the worst either. When I was younger my family moved around a lot because of my parents' work, so I had a hard time making friends. But we've lived here for a quite while now, and we've finally settled down in one place. So, I got a lot more active in clubs and sports at school, so I could meet other people and make new friends. I did a lot of cross-country running, and even tried out for the varsity team. Things were going great, and I was thinking about going on a trip to Europe at the end of the summer last year with a few of my friends. So, I got a job with a window washing company. It was great. I got to work outside, and the pay was really good. But that's when I had my accident. I had only been working there two weeks when it happened. I was up on a ladder 2 stories high—about twenty feet—when I fell. I can barely even remember the accident, it all happened so quickly. I don't remember even hitting the ground. I had pretty much shattered my hipbone so I needed to get it replaced. I also broke both of my legs really badly. I didn't have any safety training. I had even mentioned to my supervisor earlier that I didn't think that being so high was very safe but he told me that I would be fine. Now it's been a year later and I'm still in physiotherapy trying to regain the full range of motion in my hip and legs but I'm not sure if I will ever regain full mobility. I'm still in a lot of pain and I can usually only sleep 4 to 6 hours every night but slowly I'm getting better. For a while I was very depressed because I used to be so active and go out with my friends all the time. I have a lot of trouble running and I really miss it. But what I really miss most is the ability to be independent because I have so much trouble moving around now. An accident like that can happen so easily, at the snap of your fingers. So if you don't feel safe, tell your boss and ask for training. I never received any proper safety training, if I had, I might not have fallen off that ladder.

Appendix J

Please circle the response you feel is most appropriate based on your level of agreement or disagreement with the following statements:

1. I found the announcement interesting.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

2. I believe that this announcement could help students realize the importance of knowing their rights as young workers.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

3. I feel I am more aware of my rights as a young worker after listening to this announcement.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

4. I believe that many other students could benefit from this announcement.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

5. I would recommend that my friends listen to this announcement.

1	2	3	4	5	6	7
Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree

Appendix K

Please indicate by circling a number the degree to which **you** are feeling each of these emotional reactions as a result of listening to the broadcast. Do not indicate how you think other people might respond or how you think the broadcast was supposed to make you respond; just indicate how you are feeling at this time. Please be sure to circle a response for each item. [Please indicate by circling a number the degree to which you think **Jane [Ling]** felt each of these emotional reactions during the events described in the announcement. Please be sure to circle a response for each item].

	not at all		moderately			extremely	
1. alarmed _{pd}	1	2	3	4	5	6	7
2. grieved _{pd}	1	2	3	4	5	6	7
3. sympathetic _{ec}	1	2	3	4	5	6	7
4. softhearted _{ec}	1	2	3	4	5	6	7
5. troubled _{pd}	1	2	3	4	5	6	7
6. warm _{ec}	1	2	3	4	5	6	7
<hr/>							
7. concerned	1	2	3	4	5	6	7
8. distressed	1	2	3	4	5	6	7
9. low-spirited	1	2	3	4	5	6	7
10. compassionate _{ec}	1	2	3	4	5	6	7
11. upset _{pd}	1	2	3	4	5	6	7
12. disturbed _{pd}	1	2	3	4	5	6	7
<hr/>							
13. tender _{ec}	1	2	3	4	5	6	7
14. worried _{pd}	1	2	3	4	5	6	7
15. moved _{ec}	1	2	3	4	5	6	7

--Continue on next page--

16. feeling low	1	2	3	4	5	6	7
17. perturbed _{pd}	1	2	3	4	5	6	7
18. heavy-hearted	1	2	3	4	5	6	7
<hr/>							
19. sorrowful	1	2	3	4	5	6	7
20. bothered	1	2	3	4	5	6	7
21. kind	1	2	3	4	5	6	7
22. sad _{pe}	1	2	3	4	5	6	7
23. touched	1	2	3	4	5	6	7
24. uneasy	1	2	3	4	5	6	7
<hr/>							
25. frustrated _{pe}	1	2	3	4	5	6	7
26. angry _{pe}	1	2	3	4	5	6	7
27. discouraged	1	2	3	4	5	6	7
28. irritable	1	2	3	4	5	6	7
29. anxious	1	2	3	4	5	6	7
30. shocked	1	2	3	4	5	6	7
<hr/>							
31. worried _{pe}	1	2	3	4	5	6	7
32. overwhelmed _{pe}	1	2	3	4	5	6	7
33. scared	1	2	3	4	5	6	7
34. devastated	1	2	3	4	5	6	7
35. burdened	1	2	3	4	5	6	7
36. tense	1	2	3	4	5	6	7

*ec = empathic concern

pe = parallel empathy
pd = personal distress

Appendix L

Please circle the response you feel is most appropriate based on your level of agreement or disagreement with the following statements:

1. While listening to the broadcast, to what extent did you concentrate on the feelings of the person in the program?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

2. While listening to the broadcast, to what extent did you concentrate on being objective?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

3. How easy or difficult was it for you to imagine how Jane [Ling] felt in this situation?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

4. How easy or difficult was it for you to identify with Jane [Ling]?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

5. How easy or difficult was it for you to imagine yourself in Jane's [Ling's] shoes?

1	2	3	4	5	6	7
Very Difficult			Neutral			Very Easy

6. To what extent did you sympathize with Jane [Ling]?

1	2	3	4	5	6	7
Not at all			Neutral			Very much

Appendix M

When we have some information about another person, we sometimes feel as though we have a pretty good idea of what this person is like. Or we may feel as though we don't have a very good sense of what this person is like. We are interested in how well you feel that you know Jane Walker [Ling Ye] based on the information you heard about her. Please use the following scale to answer the questions below.

1	2	3	4	5	6	7	8	9
not at all								very
confident								confident
that I could								that I could
make a								make a good
good guess								guess

How confident are you in your ability to make a reasonably good guess about:

1. How Jane [Ling] enjoys spending her leisure time? _____
2. What kind of person Jane [Ling] would like to have as a friend? _____
3. How dependable Jane [Ling] is? _____
4. What kind of person Jane [Ling] would be romantically attracted to? _____
5. How good a student Jane [Ling] is? _____
6. What types of movies Jane [Ling] would enjoy watching? _____
7. How important family is to Jane [Ling]? _____
8. What types of charities Jane [Ling] might volunteer for? _____
9. How materialistic Jane [Ling] is? _____
10. Whether Jane [Ling] would get along well with your best friend? _____
11. How environmentally conscious Jane [Ling] is? _____
12. What jobs or careers Jane [Ling] would be most interested in? _____
13. What sports Jane [Ling] would enjoy playing? _____
14. What types of food Jane [Ling] enjoys? _____
15. How liberal or conservative your Jane's [Ling's] political views are? _____
16. How trustworthy Jane [Ling] is? _____
17. Where Jane [Ling] would enjoy going for a vacation? _____
18. Whether Jane [Ling] would get along well with your parents? _____

Table 1.

Reported empathy, distress, perspective taking, and attribution as a function of target ethnicity.

	<u>White Target</u>		<u>Asian Target</u>	
	<u>M</u>	<u>SD</u>	<u>M</u>	<u>SD</u>
Empathic Concern	3.14	(1.15)	3.39	(1.13)
Personal Distress	2.36	(.97)	2.45	(1.15)
Perspective Taking	4.32	(1.04)	4.43	(1.04)
Attribution	4.69	(.96)	4.73	(.78)
Attitudes	3.77	(.54)	3.62	(.67)
Punishment	4.95	(1.07)	4.75	(1.12)

Table 2

Correlations between measures of empathy, personal distress, perspective taking, sense of knowing, and self-other overlap

	Composite empathy score†	Empathic concern	Personal distress	Parallel empathy	Perspective taking	Sense of knowing	Self percentage
Composite empathy	---	.852**	.921**	.775**	.433**	.273**	.191
Empathic concern		---	.774**	.402**	.485**	.211*	.104
Personal distress			---	.572**	.448**	.231*	.160
Parallel empathy				---	.170	.248*	.229*
Perspective taking					---	.208	.183
Sense of knowing						---	.295**
Self percentage							---

* Correlations significant at the .05 level (2-tailed)

* * Correlations significant at the .01 level (2-tailed)

†The Composite empathy score is the result of standardized scores of empathic concern, personal distress, and parallel empathy.

Table 3

Reported levels of empathy, distress, sense of knowing, and self percentage as a function of target ethnicity and instruction type.

Instruction Type	Empathic Concern		Personal Distress		Parallel Empathy		Sense of Knowing		Self Percentage	
	M	SD	M	SD	M	SD	M	SD	M	SD
Asian Target	4.33	1.20	3.64	1.32	3.04	1.56	3.94	1.21	.49	.21
Perspective taking	4.10	1.55	3.48	1.59	2.88	1.36	3.87	1.51	.53	.22
Objective	4.27	.99	3.45	1.23	3.46	1.67	3.73	1.13	.40	.18
No instructions	4.33	1.20	4.00	1.32	2.78	1.63	4.22	.95	.57	.18
White Target	4.23	1.07	3.32	1.10	3.19	1.42	4.41	1.22	.55	.16
Perspective taking	4.23	1.02	3.42	1.11	3.00	1.59	4.02	1.10	.55	.19
Objective	3.91	1.09	2.93	1.08	3.38	1.40	4.35	1.32	.51	.14
No instructions	3.23	1.08	3.32	1.11	3.18	1.31	4.89	1.14	.61	.14

Note: Lower numbers on the parallel empathy scale indicate higher levels of parallel empathy.

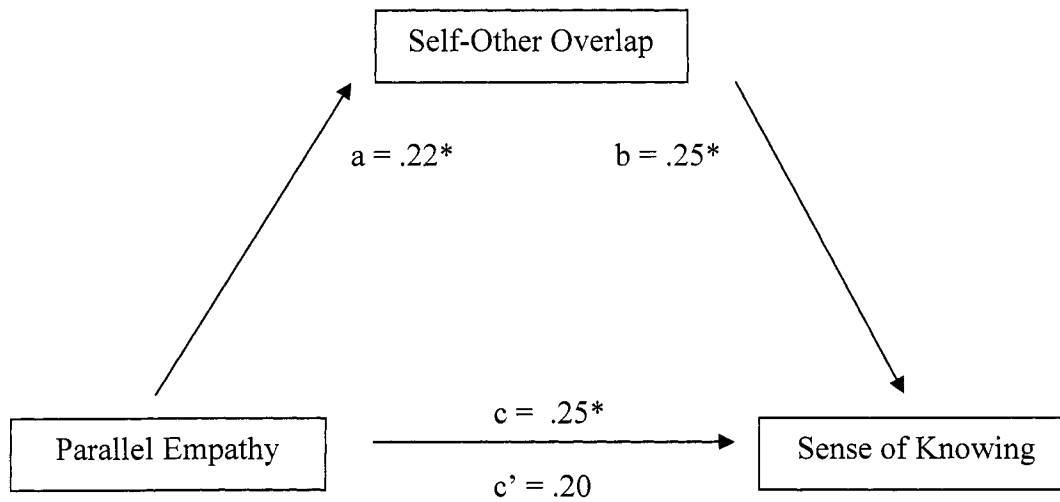
Table 4

Mediational Analysis with Parallel Empathy as the Independent Variable, Sense of knowing as the Dependent Variable, and Self-other overlap as the Mediator

Predictor	DV	Beta	t	Significance
Parallel empathy	Sense of Knowing	.25	2.44	.02
Parallel empathy	Self-other overlap	.22	2.11	.04
Self-other overlap	Sense of Knowing*	.25	2.43	.02
Parallel empathy	Sense of Knowing **	.19	1.92	.06

* Controlling for parallel empathy (Step 1)

** Controlling for self-other overlap (Step 2)



* $p < .05$

Figure 1: Beta weights illustrating the relationship of self-other overlap as a mediator of the relationship between parallel empathy and sense of knowing.

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