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Managing Intergroup Attitudes among Hong Kong Adolescents:

The Effects of Social Category Inclusiveness and Time Pressure

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#### Abstract

Previous research has shown a widespread bias among Hong Kong adolescents against Chinese Mainlanders. Based on social identity and social cognitive theories, we examined the effects of identity frame switching (situational induction of social category inclusiveness) and time pressure (environmental constraints on social information processing) on Hong Kong adolescents' attitudes toward Chinese Mainlanders. Results indicated that Hong Kong adolescents had acquired a habitual tendency to make social comparisons within an exclusive regional framework of reference. This habitual tendency might lead to negative judgment biases toward Chinese Mainlanders, particularly when the adolescents made social judgments under time pressure. In addition, switching to an inclusive national frame of reference for social comparison attenuated negative intergroup attitudes. The theoretical implications of these findings are discussed.

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Herbert Mead (1934/1964), the founder of the Chicago school of social psychology, proposed that the development of the ideal society implies continued integration of the social process and the social self. According to him, in the ideal democratic society, "the individual is not to be what he [sic] is in his specific caste or group as against other groups, but his distinctions are to be distinctions of functional difference which put him in relationship with others instead of separating him." (p. 273)

In contrast to Mead's image of the ideal society, most modern societies resemble to some degree what Mead referred to as societies of conflict, in which people belong to two or more widely separated or conflicting groups. Although Mead believed that historical intergroup conflicts often result in wider and more integrated social organization and that social evolution will ultimately lead to realization of the ideal society, his optimism is not shared by other social psychologists, who see social conflicts and intergroup tension as inevitable human conditions arising from basic human motives, including the motivation to maintain dominance over minority groups (Schmitt, Branscombe, Kappen, 2003), the need to self-enhance (Tajfel & Turner, 1986), the need to reduce uncertainty (Jetten, Hogg, & Mullin, 2000), and the need to manage existential terror (Castano, Yzerbyt, Paladino, & Sacchi, 2002).

In contemporary social psychological discourse, intergroup tension arises as individuals seek to balance competing needs *and* to optimize their limited mental resource when they respond to the social environment. For example, endorsement of

social inequality may be powered by the motivation to fulfill the need for distinctiveness (Tajfel, 1978, 1982) or triggered by the social information process that is lack of cognitive resource (Devine, 1989; Gilbert & Hixon, 1991). However, these motivational and cognitive processes are responsive to situational influences (Jost, Glaser, Kruglanski, & Sulloway, 2003). An important implication of this way of thinking is that intergroup bias can be reduced or accentuated by managing the environmental factors that regulate the relative dominance of competing social motives and the availability of cognitive resource in intergroup contexts.

Adopting a similar perspective, we examined the situational factors that would affect the motivational and cognitive bases for biased intergroup attitudes. In the two studies reported in the present article, we examined the effect of identity frame switching (situational induction of social category inclusiveness) and time pressure (environmental constraints on social information processing) on intergroup attitudes. Specifically, we used a widespread bias among Hong Kong adolescents against Chinese Mainlanders as the basis of our study. Before proceeding to the two studies, a brief review of the relevant social identity theories, social cognitive theories, and intergroup context is in order.

## Social Identity Theories

Different social identity theories converge on the importance of group inclusiveness in modulating intergroup tension. Individuals construct self-identities by categorizing themselves into various social groups. In her optimal distinctiveness theory, Brewer (1991) argues that people strive to balance the need to belong to a social group and to be different from others. Like yin and yang, if you will, the need for belongingness and the need to be distinctive are complementary social motives

that compete for expression in concrete social situations. The need for distinctiveness drives individuals to identify with relatively exclusive groups and to treat ingroup members and outgroup members differently. By contrast, the need for belongingness motivates individuals to identify with relatively inclusive social groups.

The outcome of balancing social inclusion needs has significant implication for intergroup relations. According to self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), identification with relatively inclusive social groups may moderate intergroup tension. To elaborate, self-categorization is accompanied by certain perceptual biases. Individuals who categorize the self as a member of a social group will perceive outgroup members as being similar to each other, and different from ingroup members. Such perceptions enhance the contrast between the ingroup and outgroups, and may lead to prejudice and discrimination against the outgroups. In any given society, social groups vary in their inclusiveness. When individuals categorize themselves as a member of an inclusive group, they will treat members of the subgroups within the inclusive group as ingroup members and tend not to discriminate against them. For example, an Asian American will treat an African American as an ingroup member and in a fair way when she identifies herself as an American (a relatively inclusive identity). By contrast, when individuals categorize themselves as members of an exclusive subgroup in the society, they will treat members of other subgroups as outgroup members and have a tendency to discriminate against them. For example, when the same Asian American described above identifies herself as an Asian in America (a relatively exclusive identity), she will view the same African American as an outgroup member. In short, prejudicial evaluation and differential treatment of ethnocultural subgroups in a society may be a

function of the exclusiveness of the social category people use to construct their selfidentity.

If intergroup tension arises in part from the use of exclusive social category for self-identity construction, then interventions that shift identification with exclusive subgroups to inclusive superordinate groups should reduce intergroup animosity.

This reasoning forms the basis of the Common Ingroup Identity Model, which proposes that re-categorizing members of different groups into a common group identity would improve intergroup relations. This model highlights the importance of shared membership of subgroup members in an overarching inclusive social category. Findings from several experiments have lent support to the hypothesis that more inclusive representations of groups reduce bias in intergroup contact situations (e.g., Dovidio, Gaertner, Validzic, Matoka, Johnson, & Frazier, 1997; Gaertner, Mann, Dovidio, Murrell, & Pomare, 1990).

One way to achieve identification with superordinate groups is to switch the frame of reference for social comparison so that different aspects of similarities or differences would be attended to (Fu, Lee, Chiu, & Hong, 1999). For example, using the superordinate group "Americans" as a reference would draw attention away from ethnic differences between subgroups such as Asian Americans and African Americans while using the exclusive group of "Asian Americans" would accentuate differences between ethnic subgroups. In short, it is possible to attenuate intergroup tension by switching people's frame of reference in social comparison.

# Social Cognitive Theories

Like social identity theories, social cognitive theories also shed light on the conditions that influence intergroup attitudes, although the two groups of theories

differ in their emphasis. While social identity theories focus on managing the inclusiveness of people's social categorization, social cognitive theories focus on the construction of an optimal environment for social information processing. The former is a "hot" system that primarily involves emotion and motivation, whereas the latter is a "cold" system that primarily involves thinking and knowing. However, both systems are complimentary to each other in explaining, predicting, and moderating intergroup biases.

To social cognitive theorists, a suboptimal information processing environment is like an incubator of intergroup biases. To elaborate, social cognitive psychologists view biases in intergroup attitude as a byproduct of failures in mental control. Biased representations of stereotyped groups are often well-learned mental habits, which form the dominant responses in most social judgment contexts (Lambert, Payne, Jacoby, Shaffer, Chasteen, Khan, 2003). In a civil society, blatant expressions of stereotypic views of maligned groups are negatively sanctioned. Under most situations, individuals are capable of regulating their mental habits and suppressing or moderating their stereotypic judgments of maligned groups. However, self-regulation of socially disapproved mental habits requires deliberate, effortful controlled processing, and thereby mental resources. On some occasions, when fatigue, stress, time pressure, and environmental nuisances leave an individual with little mental resource, the individual may no longer possess the presence of mind to regulate socially disapproved mental habits. When mental control fails, stereotypes find their way into people's judgments of maligned groups. Consistent with this idea, research in North America has shown that time pressure exacerbates intergroup biases in judgments, while the absence of it attenuates them (Kruglanski, 1996; Kruglanski & Freund, 1983).

In short, both social identities and social information processing resource are important for managing intergroup attitudes. Research on social cognitive and social identity influences on intergroup attitudes is of particular interest within the Asian context given the finding that groups (rather than individuals) are often the primary units of social actions in many Asian societies (Menon, Morris, Chiu, & Hong, 1999; Su, Chiu, Hong, Leung, Peng, & Morris, 1999). However, little research has been conducted in the Asian contexts to examine how changing the frame of reference in social comparison and reducing environmental strain on the cognitive system will attenuate biases in intergroup attitudes. The studies reported here are attempts at addressing this gap in research.

# Intergroup Relational Context in Hong Kong

In the present article, we reported two studies that examined the ramifications of social identity theories and social cognitive theories for managing biased attitudes toward Chinese Mainlanders among Hong Kong adolescents. Previous research has revealed that most Hong Kong adolescents (over 75%) choose to identify themselves as Hongkongers or primarily Hongkongers (versus Chinese or primarily Chinese), and believe that Hong Kong people are superior to Chinese Mainlanders (Lam, Lau, Chiu, Hong, & Peng, 1999). In addition, other studies found that many Hong Kong people have negative stereotypes of Chinese Mainlanders (Chau, Chiu, & Foo, 1988). Consistent with the predictions of self categorization theory, negative views of Chinese Mainlanders are stronger when people categorize themselves as Hongkonger (a relatively exclusive group) than when they categorize themselves as Chinese (a relatively inclusive group) (Lam, Lau, Chiu, & Hong, 1998; Tong, Hong, Lee, & Chiu, 1999).

A study reported by Fu et al. (1999) suggested that direct manipulation of the frame of reference in social comparison may moderate Hong Kong people's prejudicial perception of Chinese Mainlanders. In this study, the participants were Hong Kong University students. Half of the them were primed to adopt a regional frame of reference (Hong Kong vs. China) and the other half were primed to adopt a national frame of reference (Chinas vs. Japan). The manipulation was effective in changing the participants' intergroup orientation. When participants adopted a regional frame of reference, those who adopted a Hongkonger identity were more reluctant to assimilate into China than were those who adopted a Chinese identity. Social identification did not affect intergroup orientation when the participants adopted a national frame of reference. These findings suggest that manipulating the frame of reference in social comparison could affect intergroup relation.

Time pressure has been shown to be influential in the application of stereotypes in social judgments (Kruglanski, 1996; Kruglanski & Freund, 1983).

Although no known studies have tested the effect of time pressure on biased intergroup judgment using Asian populations, a series of recent studies conducted in Hong Kong showed that the presence of time pressure in the judgment context exacerbates the effect of dominant mental routines (such as blaming a group for negative behavior) that are learned in Chinese culture (Chiu, Morris, Hong, & Menon, 2000).

In short, the findings reviewed above suggest that activating a national versus regional frame of reference for social comparison and elimination of time pressure in the judgment context will attenuate biased evaluation of Mainland Chinese among Hong Kong adolescents. In Study 1, we adopted a design similar to the one used in the Fu et al. (1999) study to manipulate frame of reference in social comparison and

assessed the effect of this manipulation on Hong Kong adolescents' tendency to make biased evaluation of Chinese Mainlanders. In Study 2, we manipulated time pressure to examine the effect of environmental straining of mental resource on Hong Kong adolescents' biased evaluations of Chinese Mainlanders. Study 1 was based on social identity theories and addressed the motivational process that drives intergroup biases. Whereas, Study 2 was based on social cognitive theories and addressed the cognitive process that feeds intergroup biases.

## Study 1

#### Method

## **Participants**

Participants were 134 freshmen (61.9% female) at the University of Hong Kong. Their mean age was 19.64 years (SD = 1.11). They participated in the study in exchange for course requirement credits in an introductory psychology course. Design and Measures

Six to 8 participants were tested in each half-hour experimental session.

Participants were informed that they would perform two allegedly unrelated tasks.

The first task was designed to activate either a regional or national frame of reference for social comparison. The second task was constructed to measure participants' intergroup perceptions following the framing procedure.

Frame of reference manipulation. The first task was presented as a study of students' opinions on the mass media. Participants were given a newspaper article to read. At this point, they were randomly assigned to one of the three experimental conditions. In the national-frame-of-reference condition, the participants (N = 44) read a newspaper article that discussed the challenges China would face after she has

joined the World Trade Organization (WTO). The article emphasized that open competition with other countries might threaten China's economy, and that cooperation among all economic regions in China is needed to turn the threat into opportunities. This article pitted China's interests with the economic interests of foreign countries, and was expected to evoke a national frame of reference.

In the regional-frame-of-reference condition, the participants (N = 44) read a newspaper article that discussed the challenges Hong Kong would face after China has joined the WTO. It argued that because China could choose to deal directly with her international trade partners after joining the WTO, she might not need Hong Kong's broker services in international trade any more. This might pose a threat to Hong Kong's economy. The article ended with an appeal to Hong Kong to build on her strengths and to turn the impending threat into opportunities. This article pitted Hong Kong's economic interests against those of Mainland China, and should therefore evoke a regional frame of reference.

In the control condition, the participants (N = 46) read a newspaper article that discussed the health implications of calcium intake.

All participants answered six questions after reading the news article. Three of the questions were filler questions created to increase the credibility of the cover story (e.g., Which local newspaper would most likely have included the article you have just read? How often do you read newspaper?). The remaining three questions were included to measure participants' reactions to the newspaper article. Participants rated how easy it was to understand the article, how persuasive the arguments were, and how much they agreed with the arguments. All ratings were indicated on a 6-point Likert scale, ranging from 1 ("strongly disagree") to 6 ("strongly agree").

Measures of intergroup evaluation. After the framing manipulation, participants responded to a measure of intergroup evaluation adapted from Tong et al. The participants listened to an audio-tapped 1-minute causal, routine conversation between two men in a wedding party. One man spoke Cantonese and the other spoke Putonghua. Cantonese is the local dialect spoken by Hongkongers and Putonghua is the official language used in Mainland China. Thus, Cantonese is a linguistic marker of the Hongkonger identity and Putonghua is a linguistic marker of the Chinese Mainlander identity (see Giles & Johnson, 1981). After listening to the dialogue, participants evaluated their impression of both speakers on four positive traits (sincere, friendly, reliable, and amicable) and three negative traits (hypocritical, phony, and nosy). They indicated their evaluations on a 6-point Likert scale that ranged from 1 (very) to 6 (not at all). We took the mean of the ratings on the four positive traits to form a measure of positive attitude, and the mean of the ratings on the three negative traits to form a measure of negative attitudes. As shown in previous research, measures of linguistic attitudes are valid measures of intergroup attitudes (see Krauss & Chiu, 1998).

Other measures. Finally, we collected data on the participants' gender, age, place of birth and social identity. Eleven participants were not born in Hong Kong, and their data were not included in the subsequent analyses. As a result, the final set of data included 123 participants with 41 in each of the three conditions. All the participants were Hong Kong born Chinese who were fluent in Cantonese.

Participants were asked to choose from four options the one that best described them:

(a) I am a Hongkonger, (b) I am primarily a Hongkonger, secondarily a Chinese, (c) I am primarily a Chinese, secondarily Hongkonger, and (d) I am a Chinese. This measure is a well-accepted measure of Hongkonger versus Chinese identity in

previous research (Hong, Chan, Chiu, Wong, Hansen, Lee, Tong, & Fu, 2003; Hong, Chiu, Yeung, & Tong, 1999; Hong, Coleman, Chan, Chiu, Wong, Hansen, Lee, Tong, & Fu, in press; Lam et al., 1998, 1999). As in previous research, the participants who claimed the first and second identities were categorized as belonging to the "primarily Hongkonger" group, whereas those who claimed the third and fourth identity belonged to the "primarily Chinese" group. We fully debriefed the participants at the conclusion of the study.

Given we measured the participants' social identity after the priming, it was possible that their social identity choice was affected by our frame of reference manipulation. If that was the case, then relative to when there is no manipulation, more participants in the regional-frame-of-reference condition should claim primarily Hongkonger identities and more participants in the national-frame-of-reference condition should claim primarily Chinese identity. This concern was not borne out by the distribution of participants' claimed social identity. Previous research has consistently revealed that 75% of Hong Kong adolescents identify themselves as Hongkongers or primarily Hongkongers (Lam et al., 1998, 1999; Lam & Lau, 2003). In the present study, national frame of reference did not increase the percentage of participants who claimed Chinese identity. About 76% of the participants in the national-frame-of-reference identified themselves as Hongkongers or primarily Hongkongers. This percentage is comparable to that in the control condition (73%) as well as that in the past research. Furthermore, about 56% of the participants in the regional-frame-of reference identified themselves as Hongkongers, i.e., a regionalframe-of-reference did not inflate the percentage of participants claiming the Hongkonger identity.

In short, this study used a 3 (Framing: National, Regional, or Control) X 2 (Participant Social Identity: Hongkonger or Chinese) X 2 (Evaluation Target's Language: Putonghua or Cantonese) experimental design, with the first two factors as between-participants factors, and the remaining one as a within-participant factor. We expected that activating a national frame of reference would attenuate self-identified Hongkongers' negative evaluation of the Putonghua speaker, who bore the Chinese linguistic marker.

## Results and Discussion

# Article Comprehension and Evaluation

The participants agreed that the articles they read were easy to understand (M = 4.85, SD = .88 on a scale from 1 to 6) and that the arguments in the articles were convincing (M = 4.30, SD = .86). They also agreed with the arguments presented in the articles (M = 4.36, SD = .71). One-way ANOVAs performed on these three items revealed no significant differences between the three framing conditions on these measures, F(2, 120) = 1.15, P = .32, P = .02 for comprehensibility, P(2, 120) = .47, P = .63, P = .01 for persuasiveness, and P(2, 120) = .30, P = .74, P = .01 for agreement. (Insert Table 1 about here)

## Intergroup Attitudes

Table 1 shows the mean positive and negative attitudes toward the Putonghuaand Cantonese-speaking target in each framing condition. In the present study, we separate positive and negative attitudes for analyses. Exploratory factor analyses on the positive and negative traits showed that a two-factor model explained substantially more variance than a one-factor model. The variance explained by one-factor model for Putonghua speaker and Cantonese speaker was 31% and 34% respectively. However, the variance explained by two-factor model for Putonghua speaker and Cantonese speaker was 53% and 54% respectively. In addition, the three-item negative trait scale for Putonghua speaker has an alpha of .71. But when this scale was combined with the positive trait scale for Putonghua speaker, the alpha dropped to .62. A similar pattern was observed for Cantonese speaker as well. The alpha dropped from .72 to .67 when the negative and positive scales combined. Past research has demonstrated that people favor their ingroup when allocating positive resources or evaluating on positive dimensions but they did not favor their ingroup when allocating aversive stimuli or evaluating on negative dimension (Blanz, Mummendey, & Otten, 1995; Mummendey, Otten, & Blanz, 1994; Mummendey & Otten, 1998). Mummendey and her coworkers called this effect the positive-negative asymmetry in social discrimination (PNA). As PNA is a robust and reliable phenomenon (see meta-analysis by Buhl, 1999), there is a need to separate the positive and negative attitudes in analysis.

*Positive attitudes.* We performed a Framing X Participant Social Identity X Language of Target ANOVA on the positive linguistic attitude and found a significant three-way interaction, F(2, 117) = 3.09, p = .049,  $\eta^2 = .05$ . This is the only significant effect in the analysis.

Our hypothesis is best tested by examining the relation between the participants' social identity and positive attitudes separately for each framing condition. In the control condition, participants rated the Cantonese- and Putonghua-speaking targets as equally positive, and this was the case for participants who identified themselves as Hongkongers (M = 4.04 for the Putonghua speaker and M = 4.10 for the Cantonese speaker), t(29) = -0.39, p = .70, Cohen d = -.07, and for participants who identified

themselves as Chinese (M = 3.98 for the Putonghua speaker and M = 4.02 for the Cantonese speaker), t(10) = -0.14, p = .89, Cohen d = -.04.

When a regional frame of reference was introduced, a similar pattern was found: participants rated the Cantonese- and Putonghua-speaking targets as equally positive. Among those who identified themselves as Hongkongers, M = 4.13 for the Putonghua speaker and M = 3.86 for the Cantonese speaker, t(22) = 1.33, p = .20, Cohen d = .28. Among participants who identified themselves as Chinese, M = 3.69 for the Putonghua speaker and M = 3.99 for the Cantonese speaker, t(17) = -1.50, p = .15, Cohen d = -.35.

When a national frame of reference was evoked, participants holding a Chinese identity rated the Cantonese speaker less positively than they did the Putonghua speaker (M = 3.50 vs. 4.12), t(9) = 2.39, p = .04, Cohen d = .76. Participants who identified themselves as Hongkongers gave similarly positive ratings to the Putonghua-speaker (M = 4.12) and to the Cantonese-speaker (M = 4.04), t(30) = 0.50, p = .62, Cohen d = .09. In short, framing did not affect self-identified Hongkongers' positive evaluation of the Putonghua speaker. Interestingly, a national frame of reference decreased self-identified Chinese's positive evaluation of the Cantonese speaker.

Negative attitudes. We also performed a Framing X Participant Social Identity X Language of Target ANOVA on the negative linguistic attitude. The only significant effect was the three-way interaction, F(2, 117) = 4.65, p = .01,  $n^2 = .06$ .

In the control condition, self-identified Hongkongers rated the Putonghua speaker (M = 4.46) more negatively than they did the Cantonese speaker (M = 3.94), t(29) = 3.78, p = .001, Cohen d = .69. Self-identified Chinese gave similarly negative ratings to the two targets (M = 4.42 for the Putonghua speaker and 3.94 for

the Cantonese speaker), t(10) = .89, p = .12, Cohen d = .51. This pattern was consistent with the previous finding that Hong Kong adolescents who identified themselves as Hongkongers viewed Mainland Chinese more negatively than they did Hong Kong people (Lam et al., 1998, 1999).

The same pattern of means was found in the regional-frame-of-reference condition. Self-identified Hongkongers rated the Putonghua speaker more negatively than they did the Cantonese speaker (M = 4.38 vs. 3.83), t(22) = 3.35, p = .003, Cohen d = .70, whereas self-identified Chinese gave equally negative ratings to the two targets (M = 3.69 for the Putonghua speaker and 3.99 for the Cantonese speaker), t(17) = 1.29, p = .21, Cohen d = .21.

Finally, in the national-frame-of-reference condition, the ratings self-identified Hongkongers gave to the Putonghua speaker (M = 3.96) was equally negative as the ones they gave to the Cantonese speaker (M = 3.74), t(30) = 1.27, p = .22, Cohen d = .23. On the other hand, self-identified Chinese rated the Putonghua speaker (M = 4.73) more negatively than they did the Cantonese speaker (M = 3.70), t(9) = 3.82, p = .004, Cohen d = 1.21.

In short, in the control condition, when the default frame of reference was adopted, self-identified Hongkongers rated the Putonghua speaker (who represented Mainland Chinese) more negatively than they did the Cantonese speaker (who represented Hong Kong people). This pattern of results replicated previous research findings (Hong et al., 1999; Lam et al., 1999; Tong et al., 1999). When the regional frame of reference was activated, the pattern of results resembled those in the control condition on both measures of positive and negative linguistic attitudes. This finding suggests that the default frame of reference in the control condition is more regional than national in nature.

Activating the national frame of reference for social comparison altered this pattern of results. First, as predicted, among self-identified Hongkongers, the national frame of reference eliminated their negative bias against the Putonghua speaker. Second, among self-identified Chinese, they seemed to prefer a mutually accommodating strategy in intergroup communication. Thus, when both the Cantonese speaker and the Putonghua speaker maintained their subgroup linguistic identity and refused to converge in the conservation, self-identified Chinese rated the Cantonese speaker less positively and the Putonghua speaker more negatively.

#### Study 2

As social identity theories predict, switching to a national frame of reference in social comparison activates an intergroup accommodation orientation, which helps to ease intergroup tension (in this case, between Hong Kong people and Chinese Mainlanders). However, Study 1 also revealed that among Hong Kong adolescents, the default frame of reference for social comparison is a regional one, which is conducive to prejudice against Chinese Mainlanders. This finding suggests that Hong Kong adolescents have a habitual tendency to display negative attitudes towards Chinese Mainlanders. However, given that expression of prejudice is negatively sanction generally, when these adolescents are placed in an optimal social information processing environment, they may be able to regulate their negative attitudes toward Chinese Mainlanders. On the other hand, when they are placed in a suboptimal information processing environment, mental control may break down, and their negative attitudes may manifest in their social judgments. Given this possibility, one would be remiss not to also examine the environmental factors that could lead to

lapses in mental control. One such factor, as mentioned, is time pressure (Kruglanski, 1996), which was examined in the present study.

#### Method

# **Participants**

Participants were 138 9<sup>th</sup> and  $10^{th}$  graders (50.4% boys) from 3 schools in Hong Kong. Their mean age was 15.11 years (SD = 1.23). Both school and individual participation was voluntary. Parental consent was obtained before participants took part in the study.

Before the main study was carried out, a total of 1143 9<sup>th</sup> and 10<sup>th</sup> graders from the three participating schools responded to the social identity item we used in Study

1. Three hundred and twenty students self-identified as "Hongkonger," 385 as "Hongkonger, only secondarily Chinese," 256 as "Chinese, only secondarily Hongkonger," and 175 as "Chinese." The students who identified themselves as "Hongkonger" and those who identified themselves as "Chinese" were invited to participate in the main study. Eighty-seven self-identified "Hongkongers" and 51 self-identified "Chinese" accepted the invitation.

# Design and Measures

The study was conducted after school in the participants' school. The participants were randomly assigned to the time-pressure condition (N = 66) or notime-pressure condition (N = 72). The experiment was conducted in small groups of 15 to 20. All the participants in the same group were assigned to the same condition. In both conditions, participants read eight news articles, and answered two or three questions following each article. One of the questions following the first news article was our dependent measure. The remaining articles and the questions following them were included to create a relatively long questionnaire, which was

necessary to make the time pressure manipulation convincing.

The first news article reported a juvenile manslaughter case. Half of the participants learned from the report that the defendant was an immigrant from Mainland China, while the remaining half received no information on the defendant's background. Subsequent to reading the news report, the participants recommended the length of imprisonment for the defendant if he was found guilty.

In order to create time pressure, following the procedures in Chiu et al. (2000), we told the participants in the time-pressure condition that the average time it would take to complete the questionnaire was 18 minutes. However, they would be given only 15 minutes owing to the insufficient amount of time allotted to the study. They were also told that they would be reminded of the time every 5 minutes.

In the no-time-pressure condition, participants were told that the average amount of time needed to complete the questionnaire was 12 minutes. However, they would have 15 minutes to work on it and so there was no need to hurry. In addition, the news articles and the corresponding questions were printed on both sides of the survey to give the impression that the survey was short and could be completed in a short time.

Eight and a half minutes into the experiment, the experimenter surprised the participants by announcing that the study was over and collected the survey from the participants. By then, all participants had completed the critical sentencing item following the first news report. If participants in the time-pressure condition genuinely perceived that they were under time pressure to finish the survey within shorter than average time, they would have tried to answer the questions faster and therefore answered more questions within the 8.5 minutes. The number of questions the participants completed within the 8.5 minutes therefore served as a manipulation

check for the time pressure manipulation. At the end of the study, the participants were thanked and dismissed after they were fully briefed about the true purpose of the study.

## Results and Discussion

## Manipulation Check

The participants who worked under time pressure answered significantly more questions (M = 18.5, SD = 6.43) than did those in the no-time-pressure condition (M = 15.03, SD = 5.28), t(136) = 3.48, p = .001, Cohen d = .42. Thus, our manipulation was successful.

## Sentencing Decision

We performed a Time Pressure (Yes or no) X Target Background (Mainland immigrant or no background information) X Participant Social Identity (Hongkonger or Chinese) ANOVA on the recommended length of imprisonment. The main effect of time pressure was significant, F(1, 130) = 8.32, p = .001,  $\eta^2 = .02$ . Participants under time pressure recommended a longer period of imprisonment (M = 26.32, SD = 17.02) than did those who were not under time pressure (M = 18.97, SD = 12.92), t(136) = 2.87, p = .005, Cohen d = .35. The Time Pressure X Target Background interaction was also significant, F(1, 130) = 4.55, p < .05. As illustrated in Figure 1, when the target's background was unspecified, participants in the time pressure condition and those in the no time pressure condition recommended a similar length of imprisonment (M = 23.32 months and 21.32 months, respectively), t(63) = .56, p = .58, Cohen d = .10. However, when the defendant was an immigrant from Mainland China, recommended imprisonment was lengthened to 28.53 months in the time pressure condition, and shortened to 16.49 months in the no time pressure

condition. The time pressure simple main effect was significant when the defendant was known to be an immigrant from Mainland China, t(71) = 3.327, p = .001, Cohen d = .55. The effects of participants' social identity (both its main effect and the interaction) were not significant.

# (Insert Figure 1 about here)

In summary, as expected, relative to participants who were not under time pressure, participants who were under time pressure handed out a longer sentence to a defendant who was an immigrant from Mainland China. Based on previous findings concerning time pressure and stereotype use in non-Chinese samples (Kruglanski & Freund, 1983), we believe that participants under time pressure might have relied on Mainlander stereotypes when deliberating the length of the sentence for the accused, hence the harsher sentence. On the other hand, absence of time pressure weakened the strength of dominant mental habits, as social cognitive theories predict. In addition, participants might have taken into consideration the difficulties immigrants face in the process of uprooting oneself and readjusting to the new environment, and therefore handed out a more lenient sentence. Many researchers have pointed out that judgments are particularly sensitive to stereotypical expectancy biases in conditions of high cognitive loading (Dijksterhuis & van Knippenberg, 1995; Gilbert & Hixon, 1991; Macre, Hewstone & Griffiths, 1993; Stangor & Duan, 1991). However, when cognitive load is low, the perceiver may be inclined to pay relatively more attention to pieces of information that are not consistent with stereotypical expectancy. The perceiver may even allocate more weight to inconsistent information in arriving at a judgment (Dijksterhuis & van Knippenberg, 1996). This might explain why participants in the present study tended to be more lenient to the target when they knew that he was a new immigrant from mainland China. As Hamilton (1978)

argues, perceivers who have ample time to form their judgments may give undue weight to information that is not consistent with stereotypical expectancy. Over correction may take place when the perceiver has sufficient mental resources.

#### General Discussion

Two environmental factors that influence the salience of an inclusive social identity or the availability of cognitive resource were examined in two experiments. Participants in Study 1 were induced to adopt an either relatively inclusive or relatively exclusive frame of reference for social comparison. Participants in Study 2 were led to believe they were or were not under time pressure to make judgments about a target person. Findings of the two studies shed light on the management of biases in intergroup attitudes, and contribute to a growing body of intergroup research within Asian social contexts (Hong et al., 1999; Lam et al., 1999; Tong et al., 1999).

Previous studies (Gaertner, Mann, Murrell, & Dovidio, 2001; Gaertner, Rust, Dovidio, Bachman, & Anastasio, 1994; Sherif & Sherif, 1969) have shown that the presence of a common goal often results in recategorization. In Study 1, the news article in the national-frame-of-reference condition urged all economic regions in China (implying Hong Kong included) to cooperate to deal with the threat of competitions with other member countries of the WTO. The article essentially introduced a common goal for Chinese Mainlanders and Hong Kong people. In this framing condition, self-identified Hongkongers might have recategorized themselves and the former outgroup of Chinese Mainlanders within the inclusive, superordinate group of Chinese (*vis-à-viz* the people in the other countries within the WTO).

However, another categorization-based mechanism that might have been at work is that of mutual differentiation. Specifically, a common threat may lead

individuals to acknowledge the mutual distinctiveness and cooperative interdependence of the ingroup and the outgroups (Hewstone & Brown, 1986). In the face of an impending threat of open competition to China's economy, self-identified Hongkongers may not necessarily embrace Chinese Mainlanders as their ingroup. Instead, they may perceive the situation as calling for different regions of China to cooperate to compliment each other's strengths and weaknesses. Existing research suggests that the different categorization-based approaches are not necessarily conflicting and can be differentially influential in different judgment contexts (Gaertner et al., 2001).

As noted previously, language is an important marker of group membership. Not accommodating to one's conversation partner's language could be an indication of exclusiveness. Within an inclusive frame of reference, self-identified Chinese may become more rejecting of people who failed to accommodate to their interaction partner who now shares the same ingroup identity (Tong et al., 1999). For example, a Hong Kong person is expected to converse with a Putonghua-speaking Chinese Mainlander in Putonghua, and a Chinese Mainlander is expected to converse with a Cantonese-speaking Hong Kong person in Cantonese. As shown in Study 1, failure to meet this expectation may result in relatively negative evaluation.

The manipulation of both the regional and national frame of reference might have triggered anxiety or threat. Emotion, may it be anxiety or threat, is part of the reality in group identification. Citing the studies of the growth of social movements (Dubé & Guimond, 1986; Vanneman & Pittigrew, 1972), Brewer (2000) points out that group identification is most salient when there are feelings of fraternal deprivation (i.e., the perception that one's group is disadvantaged relative to other groups). It is not uncommon that group identification is fueled by intense emotional

commitment. After all, social identity theories explain intergroup biases with motivational process that is aimed at fulfillment of psychological needs.

Unlike social identity theories, social cognitive theories explain intergroup biases with cognitive process that involves mental resource. In Study 2, we adopted social cognitive theories and examined the effect of time pressure on people's use of over-learned social preconceptions in social judgment. When participants were not in a hurry to decide on the length of incarceration, knowing about the defendant's immigrant status, which implicated certain negative stereotypes, did not result in unfavorable judgment. In contrast, they tended to be more lenient to the defendant when they knew of his background. The difficulties new immigrants often encounter might have been construed as mitigating circumstances. However, when participants were under time pressure, those who were background-informed recommended longer incarceration than their uninformed counterparts. Previous research has found that people who are under time pressure tend to rely on stereotypic information in their social cognitive processing (Kruglanski, 1996; Kruglanski & Freund, 1983).

It is of theoretical interest that the effect of time pressure in the present study seems to override the effect of the participants' social identity. In previous studies of Hong Kong adolescents' social identification and intergroup perception, it was consistently found that relative to people who identify themselves as Hongkonger, people who identify themselves as Chinese are more positive in their perception and generous in their judgments of Chinese Mainlanders and Mainland immigrants (e.g., Lam et al., 1998). The observed lack of influence of social identity suggests that self-identified Chinese's generosity may pertain to only non-criminal behavior.

The findings from the present research attest to the utility of combining both the social identity approach and the social cognitive approach to understanding

intergroup attitudes. Hogg (2004) noted that both social identity theories and social cognitive theories are useful for understanding intergroup attitudes and behaviors. However, they are seldom jointly applied to understand intergroup perception. The present research provides an example of how the two major approaches to intergroup behaviors can be used together to offer a more thorough understanding of an intergroup phenomenon. Although the present study took advantage of Hong Kong adolescents' negative perception of Chinese Mainlanders, the findings can be easily extended to other social contexts in which social groups of different levels of inclusiveness coexist with specific intergroup preconceptions.

Hong Kong's unique social historical context has created a habitual tendency in the younger generations to conduct social comparison within an exclusive regional frame of reference. This habitual regional frame of reference is conducive to the development of negative attitudes toward Chinese Mainlanders, which are harmful to the social relation between Hong Kong Chinese and Chinese Mainlanders.

With the return of Hong Kong's sovereignty to China, both the frequency of interaction and the level of interdependence between the two regional groups are increasing at exponential rates. According to the social cognitive approach, if negative stereotyping of Chinese Mainlanders is a well-learned cognitive habit among Hong Kong adolescents, as shown in Study 2, regulating intergroup attitudes could be a very challenging task. It requires mental control, which may break down when the social information processing environment is not favorable. Aversive environmental factors include stress resulting from economic downturn, mortality terror resulting from the outbreak of fatal infectious illnesses (e.g., SARS), environmental nuisance such as air and noise pollution, and time pressure and cognitive busyness resulting from restructuring of people's social and economic life.

Yet, the social identity theories suggest that it is possible to short-circuit the effects of such environmental nuisances on intergroup relations by switching to a more inclusive frame of reference in social comparison. As shown in Study 1, by framing the implications of China's joining the WTO differently, it is possible to switch Hong Kong young people's identity frame from a regional one to a national one. Once a national frame of reference was adopted, our participants expected people from both regions to accommodate to each other in their social interactions. Such accommodation is beneficial to the development of harmonious intergroup relations (Cargile, Giles, Ryan, Bouchard, & Bradac, 1994). The findings from Study 1 also imply that China's participation in the WTO may have positive or negative effects on Hong Kong people's social relations with Chinese Mainlanders, depending on how the news is presented to people in Hong Kong and Mainland China.

One limitation of the present research is that we did not manipulate identity framing and time pressure in the same study. Thus, we cannot examine the interaction of these two variables directly. A future study that combines the designs of Studies 1 and 2 will allow researchers to make a more informed appraisal of the prospect of integrating social identity theories with social cognitive theories.

To conclude, should we be optimistic about the realization of the ideal society, as Mead was? Or should we be pessimistic about its prospect? The findings from the present research suggest that through their cultural experiences, people may acquire a habitual frame of mind that spontaneously excludes outgroups. Yet, we also have reasons to be optimistic, as this habitual tendency can be subjected to mental control, as the social cognitive theories predict, and be altered by a switch in identity frame, as the social identity theories predict. Moreover, both mechanisms

for managing intergroup attitudes are responsive to environmental factors that are under human control.

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Table 1

Mean Linguistic Attitude in the Three Identity Framing Conditions as a Function of Participant Social Identity and Language of Target

Participant Social Identity	Valence of Linguistic Attitude	Putonghua Speaker			Cantonese Speaker		
		M	SD	N	M	SD	N
		Control Condition					
Primarily Hongkonger	Positive	4.04	.66	30	4.10	.68	30
	Negative	$4.46^{a}$	.68	30	3.94 <sup>a</sup>	.78	30
Primarily Chinese	Positive	3.98	.96	11	4.02	.68	11
	Negative	4.42	.68	11	3.94	.59	11
	Regional Frame of Reference						
Primarily Hongkonger	Positive	4.13	.71	23	3.86	.69	23
	Negative	$4.38^{b}$	.65	23	$3.83^{b}$	.80	23
Primarily Chinese	Positive	3.69	.63	18	3.99	.59	18
	Negative	3.95	.65	18	3.76	.60	18
	National Frame of Reference						
Primarily Hongkonger	Positive	4.12	.67	31	4.04	.62	31
	Negative	3.96	.71	31	3.74	.78	31
Primarily Chinese	Positive	4.12°	.56	10	$3.50^{\rm c}$	.76	10
	Negative	4.73 <sup>d</sup>	.58	10	$3.70^{d}$	1.20	10

Notes. Means sharing the same superscript in the same row are significantly different from each other.

Figure 1. Months of imprisonment by time pressure and the social identity of the target.

