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# How Are Social Identities Linked to Self-Conception and Intergroup Orientation? The Moderating Effect of Implicit Theories

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Social identity approaches assume that social identification affects both self-conception and intergroup orientation. The authors contend that such social identification effects are accentuated when people hold a fixed view of human character and attribute immutable dispositions to social groups. To these individuals, social identities are immutable, concrete entities capable of guiding self-conception and intergroup orientation. Social identification effects are attenuated when people hold a malleable view of human character and thus do not view social identities as fixed, concrete entities. The authors tested and found support for this contention in three studies that were conducted in the context of the Hong Kong 1997 political transition, and discussed the findings in terms of their implications for self-conceptions and the meaning of social identification.

Social psychologists have devoted a great deal of research to understanding social identification and group processes (e.g., Brewer, 1979, 1991; Brown, 1984a, 1984b, 2000; Deaux, 2000; Hogg & Abrams, 1988; Tajfel, 1972, 1982; Tajfel, Flament, Billig, & Bundy, 1971; Tajfel & Turner, 1979, 1986; Turner, 1978, 1987). This research area is characterized by its diverse research foci, ranging from studies of how social identity is formed and constructed (e.g., Brewer, 1979; Brewer & Gardner, 1996; DeVos & Romanucci-Ross, 1995; Hirschfeld, 2001; Hogg & Abrams, 1988;

Tajfel et al., 1971; Turner, 1978, 1987) to studies of how social identity is related to intergroup processes, like prejudice and intergroup perceptions (e.g., Brewer, 1999, 2000; Gaertner, Dovidio, Anastasio, Bachman, & Rust, 1993; Hewstone, 1996; Jetten, Spears, & Manstead, 1997; Miller & Brewer, 1986; Tajfel & Turner, 1979; Turner, Brown, & Tajfel, 1979). However, there is yet little systematic research on the possible individual differences underlying social identification. To fill this gap, in the present research, we explored the relations between individual differences in lay theories of human character and social identification.

The idea that social categorization needs to be understood within the context of the perceiver's background theories is clearly stated in the self-categorization theory. According to the theory,

it is not only that categorizations must match in terms of the specific content dimensions of comparison; it is also true that the meaning of the salient social categorization will vary to reflect the content of the diagnostic differences between groups in specific contexts. The content of categories is selectively varied to match what is being represented in terms of our *background theories and knowledge* [italics added]. (Turner, Oakes, Haslam, & McGarty, 1994, p. 457)

Consistent with this idea, there is growing evidence to suggest that some social psychological effects of social identification might be moderated by people's implicit assumptions about the malleability of human character (see Hong, Levy, & Chiu, 2001; Levy, Plaks, Hong, Chiu, & Dweck, 2001). Specifically, a fixed view of human character may prime one to see social groups as

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immutable entities consisting of individuals with common static qualities. Social identities, under this framework, could be seen as having an enduring, real existence within the self-system that can guide other important aspects of the self and intergroup relations. In contrast, a malleable view of human character may lead one to see social groups as consisting of people who share some personal qualities (e.g., group goals) that may change with the context of categorization. Social identities, under this framework, are not seen as fixed, concrete entities that could direct behavior. Thus, the lay beliefs people hold about the malleability of human character should moderate some social psychological effects of social identification. Before we embark on the details of our investigation, it is useful to discuss the implicit theories first.

### Implicit Theories of Human Character

Implicit theories are naive or lay beliefs that people use to interpret and evaluate their social world. The roots of implicit theory research go back to the early work on lay theory-guided social perception by Kelly (1955), Heider (1958), and E. E. Jones and Thibaut (1958; see Dweck, Chiu, & Hong, 1995). Our research focuses on implicit theories of *malleability*: how much the social world and the people and institutions that compose it are capable of change (Chiu, Hong, & Dweck, 1997; Hong, Levy, & Chiu, 2001; Levy et al., 2001). The present article focuses primarily on the implicit theories of human character.

In previous research, we found that a belief in fixed human character (i.e., an entity theory of human character) is associated with a greater tendency to make static judgments (e.g., personality and other trait judgments) of people, even on the basis of sparse information (Chiu, Hong, & Dweck, 1997; Gervy, Chiu, Hong, & Dweck, 1999; Hong, 1994; Hong, Chiu, Dweck, & Sacks, 1997). Specifically, entity theorists (people who believe that human character is fixed) are more likely to believe that trait-related behaviors are consistent over time, and that behavior observed in a particular situation is a good indication of personality traits (Chiu, Hong, & Dweck, 1997; Hong, Chiu, Dweck, & Sacks, 1997). In contrast, incremental theorists, who do not believe as much in fixed traits, tend not to focus on enduring traits as organizers of behaviors, but focus rather on the more dynamic human qualities, including psychological processes (cognitive appraisals, motivation, emotional processes) that mediate individuals' responses to situations (Chiu, 1994; Hong, 1994).

### Implicit Theories and Static Versus Dynamic Approaches to Group Perceptions

If entity theorists focus on diagnosing traits in individuals, would they also focus on traits when perceiving social groups? Recent research has revealed such a tendency. In studying entity and incremental theorists' awareness and endorsement of common stereotypes, for instance, Levy, Stroessner, and Dweck (1998, Study 1) found that although both groups appeared to be equally aware of common stereotypes, entity theorists endorsed these stereotypes more than did incremental theorists. In addition, manipulating implicit theories caused those primed with an entity theory to more strongly endorse stereotypes than did those primed with an incremental theory (Study 4). Another study in the same program of research also found that entity theorists were more

likely than incremental theorists to believe that stereotypical traits are fixed from birth (Study 2), and to view limited information on group behavior as sufficient for making strong trait inferences about that group (Study 3; see also Erdley & Dweck, 1993; Hong, Chiu, Yeung, & Tong, 1999). The effects of entity theory remained, moreover, even when other variables, such as right-wing authoritarianism, the need for cognition, and the need to evaluate, were controlled for statistically (Levy et al., 1998, Study 5). In another study (Hong et al., in press), we also found that subscription to an entity theory predicted prejudice against an out-group member.

A recent special issue of *Personality and Social Psychology Review* (2001, Vol. 5, No. 2) was devoted to discussing the different bases of group perceptions. In this issue, we contended that an entity versus incremental theory might set up a *static* versus *dynamic* basis of group perception (Hong, Levy, & Chiu, 2001; Levy et al., 2001). Entity theorists, who seek to diagnose group traits, may tend to focus on identifying common traits in a social group. For them, membership in a particular group presupposes possession of the fixed dispositional essence common to the group members. Incremental theorists, in contrast, seek to understand social groups in terms of more dynamic factors (e.g., the goals of the group), and appear to rely more on group members' goal-directed behavior patterns to form group judgments. When incremental theorists perceive a collection of people as a group, they are more likely to infer common goals than common traits in the group members (Chiu, 1994). Thus, to incremental theorists, group membership does not necessarily imply possession of fixed essential qualities possessed by the group members. This analysis suggests that, like entity theorists, incremental theorists may also attribute common qualities to members of a group. However, these qualities are less likely to be fixed traits and more likely to be dynamic characteristics.

### The Present Research

The above analysis suggests that entity versus incremental theory might in a variety of ways moderate the social psychological effects of social identification. In the present research, we tested the implications of this analysis for self-categorization as a group member.

First, if a social category is seen as a real entity that possesses fixed dispositional essences or as an "entitative" group (borrowing Donald Campbell's, 1958, term), individuals who identify themselves with the group will tend to believe they also possess the dispositional essences that define the group. Thus, compared with incremental theorists, entity theorists should be more likely to describe themselves categorically (to attribute categorical attributes to the self) when their social identity is activated.

In addition, to the extent that entity theorists see themselves as members of an "entitative" group, they might also tend to use their group identity to direct their thoughts and actions. Thus, to them, the social identity they claim could be useful in guiding important aspects of their self-system, such as lifestyle and personal goals. By contrast, incremental theorists, believing less strongly in entitative groups with fixed dispositions, might instead view social groups as socially constructed categories with changing composition and nature in different time and context. Incremental theorists thereby might be less inclined than entity theorists to attribute

endurable significance to their own social identities, or to use these identities as self-guides.

Aside from moderating the effects of social identification on self-categorization, implicit theories might also accentuate or attenuate the effects of social identification on intergroup relations. For entity theorists, social identities may be linked to intergroup orientations (differentiation or integration). That is, entity theorists might favor integration with another subgroup if they hold an identity that includes the subgroup, but might favor differentiation if they hold an identity that excludes the subgroup. In contrast, incremental theorists, who do not see social identities as real, concrete entities with fixed essences, might not rely on their social identities to guide their intergroup orientation as much as entity theorists do.

### Context of Identification

One issue in social identity research is whether the social identities examined are artificial (products of experimental manipulations) or have real-life importance. Researchers have argued that although minimal groups can give a good indication of what factors might be sufficient to predict intergroup relations, studying real-world groups may be more appropriate for identifying ecologically relevant determinants of group processes (Hinkle & Brown, 1990; Tajfel & Turner, 1979). In light of this, the present study was conducted in a real-life context: the Hong Kong 1997 political transition. Specifically, we carried out the present research in Hong Kong shortly before and after the 1997 handover. During this period, the social identity of Hong Kong people was a prominent issue in public discourse.

On July 1, 1997, after 156 years of British colonial rule, the sovereignty of Hong Kong was returned to China. Although the vast majority of Hong Kong residents are ethnic Chinese, most have been accustomed to a living standard, a way of life, an official language, and a political, legal, and economic system that are different from the ones that prevail in mainland China. When Hong Kong's sovereignty was about to be returned to China in 1997, Hong Kong people needed to face an identity issue. Hong Kong people who had viewed themselves as a part of the prosperous economic network of developed Asia needed to deal with their new identity as Chinese citizens.

### Overview of the Studies

In light of this context, three studies were carried out in Hong Kong between 1997 and 2001 to test if participants' implicit theories would moderate some social psychological effects of their Hongkonger versus Chinese social identification. Specifically, Study 1 tested implicit theory's moderating effects on self-description by conducting a conceptual replication of the Rhee, Uleman, Lee, and Roman (1995) study; Study 2 tested if entity theorists would be more inclined than incremental theorists to view their claimed social identity (Hongkonger or Chinese) as a concrete causal entity that guides important aspects of the self; Study 3 tested if implicit theories would moderate the effects of social identification on intergroup orientations (differentiation or integration) toward the Chinese Mainlander group before and after the handover in 1997. In short, the three studies reported in this article

sought to integrate the implicit theories and social identity approaches to understanding social identification in a real-life context.

### Study 1

We argue that entity theorists, who tend to perceive social groups as consisting of individuals with shared fixed dispositions, may also have a tendency to perceive social groups as real entities (Chiu, 1994; Tong & Chiu, 2002). To them, belonging to a social group presupposes possession of the characteristic attributes of the group. By comparison, incremental theorists, who tend to categorize individuals into groups on the basis of relatively dynamic factors, may not perceive groups as entities possessing fixed group attributes (Chiu, 1994). Thus, when their group identity is activated, entity theorists should be more likely than incremental theorists to characterize themselves by the shared attributes associated with the group identity. We tested this hypothesis in the present study. To flesh out our hypothesis, we will briefly review past research on the effects of self-categorization on self-conception.

Previous studies have shown that social identity, when activated, might bias self-conception in terms of the identity's associated characteristics. It may temporarily shift the focus of one's self-definition from the personal self to the collective self, which "reflects internalizations of the norms and characteristics of important reference groups and consists of cognitions about the self that are consistent with that group identification" (Brewer & Gardner, 1996, p. 84). For example, research on self-stereotyping has uncovered conditions under which people would display characteristics that are typical of the social group they belong to (Hogg & Turner, 1987; Simon & Hamilton, 1994; Spears, Doosje, & Ellemers, 1997). Furthermore, when people's self-identity is made salient, the identity might also direct their thoughts and actions (Carli, 1990; Smith, 1977). For example, research has shown that women tend to speak more tentatively in mixed-sex groups than they do in all female groups, presumably because the presence of men in mixed-sex groups makes women's gender identity salient (Carli, 1990). Similarly, Chiu et al. (1998) found that exposure to gender-related environmental cues increases self-stereotyping tendencies. Specifically, female (male) high school students who were exposed to gender-typed pictures presented themselves as more feminine (masculine) than did those who were exposed to gender-unrelated pictures. In short, as self-categorization theory (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) posits, self-categorization could lead to perceiving oneself as a representative of the in-group category possessing those characteristics that distinguish the in-group from relevant out-groups.

If entity theorists are more likely than incremental theorists to consider a social category as an immutable entity defined by a set of fixed dispositions, they might form stronger association between the social identity and the core characteristics that define the identity. Thus, they should be more inclined to spontaneously express these core characteristics when speaking of themselves as

group members.<sup>1</sup> There is evidence from Chinese sociology, law, and philosophy that fulfilling one's duties, obligations, and role expectations is tied to the fundamental conception of justice in Chinese societies (Chiu, 1991; see also Chiu & Hong, 1997; Su et al., 1999). Enforcing the duties specific to one's social role was a primary function of traditional Chinese law (Chu, 1975; Ju, 1981; Zhang, 1984). The duties embodied in social roles still serve as important guides for social interactions in Chinese families (Ho, 1987; Ho & Kang, 1984). It would thus appear that the concern with fulfilling duties and obligations is a defining characteristic of the Chinese identity. Thus, we predicted that when we made the participants' Chinese identity salient, entity theorists would be more likely than incremental theorists to list their obligations and duties.

### Method

#### Participants

The participants were 62 undergraduate Hong Kong Chinese students (54 women and 8 men) from an introduction to social psychology class at a university in Hong Kong. The mean age of the Hong Kong sample was 21 years. They participated in the study to fulfill the partial requirements of the course.

#### Measures

*Modified Twenty Statements Test (TST).* To assess the participants' spontaneous self-descriptions, we used Kuhn and McPartland's (1954) Twenty Statements Test (TST). Many previous studies have used the TST to measure spontaneous self-concepts (e.g., Cousins, 1989; Hong, Ip, Chiu, Morris, & Menon, 2001; Ip & Bond, 1995; Rhee et al., 1995). The measure only requires respondents to write 20 sentences that start with "I am." We modified the original test to create two versions of the test. The individual version required participants to complete 10 sentences beginning with "I," and 10 beginning with "I being a Chinese"; the collective version required completion of 10 sentences beginning with "We," and 10 beginning with "We being Chinese." The individual and collective versions were included to examine if the predicted effects would be stronger in the collective than in the individual version. The participants were randomly assigned to fill out the individual or the collective version. Within each version, we counterbalanced the order of filling out identity sentences and the control sentences.

We developed a coding scheme based on that of Ip and Bond (1995), which was developed from the one created by Cousins (1989). We parsed each completed sentence into separate idea units. For each sentence, we coded the first idea unit only. Detailed description of the coding scheme can be found in Hong, Ip, et al. (2001). The focus of the present study was on the category "obligations."<sup>2</sup> Responses that fell into this category include attributes and behaviors that the person or the group should or ought to possess or perform. These responses usually contained auxiliary verbs such as "ought to," "need to," "must," "should," "supposed to," and "expected to." Two research assistants coded all the responses. They attended four training sessions in which Ying-yi Hong discussed with them the coding scheme and they coded a subset of responses for practice. After the training sessions, each coder coded all the responses independently. Intercoder agreement was over 90%. Disagreements between coders were resolved by discussion with Ying-yi Hong.

*Implicit theory measure.* The measure consists of three items: "A person's moral character is something very basic about them and it cannot be changed much"; "Whether a person is responsible and sincere or not is deeply ingrained in their personality. It cannot be changed very much"; and "There is not much that can be done to change a person's moral traits (e.g., conscientiousness, uprightness, and honesty)." Respondents indicate their degree of

agreement with each item on a 6-point Likert scale (1 = *strongly agree*, 2 = *agree*, 3 = *mostly agree*, 4 = *mostly disagree*, 5 = *disagree*, and 6 = *strongly disagree*). Unlike individual-difference measures that tap generalized needs or cognitive styles, our measure taps one simple, unitary belief. The items are intended to have the same meaning, and thus only three items are included. Cronbach's alpha for the three items in the present study was .74.

We are aware that our present implicit theory measure does not directly assess incremental theory. However, there is evidence that disagreement with the belief that moral character cannot be changed (entity theory of moral character) can be taken to represent agreement with the belief that moral character can be changed (incremental theory of moral character; see Dweck et al., 1995). Therefore, in the present study, we call those who disagreed with the entity items "incremental theorists" while acknowledging the semantic limitation of the term.

Previous studies (Chiu, Hong, & Dweck, 1997; Dweck et al., 1995; Gervy et al., 1999; Levy et al., 1998) have produced extensive evidence attesting to the reliability and validity of the implicit theory measure used in the present study. Specifically, previous studies (Chiu, Hong, & Dweck, 1997; Dweck et al., 1995) have shown that this measure has high internal reliability (alphas ranging from .73 to .96). Test-retest reliability for a 2-week interval is .82 ( $N = 62$ ). The measure does not correlate with respondents' scores on academic aptitude tests (Verbal and Quantitative Scholastic Aptitude Test scores), or with standard measures of impression management (Snyder, 1974, Self-Monitoring Scale). Thus, the measure is not confounded with intellectual ability or self-presentation concerns. Also, it does not correlate with a measure assessing optimism about human nature, the Coopersmith (1967) self-esteem measure, the Altemeyer (1981) Right-Wing Authoritarianism Scale, or the Kerlinger (1984) measures of conservatism and liberalism (see Dweck et al., 1995). Therefore, it is not confounded with positivity or negativity about the self and other people, or with the respondents' ideological rigidity or political stance. Moreover, the implicit theories are conceptually different from other process-oriented individual-difference variables, such as personal need for structure (Neuberg & Newson, 1993), attributional complexity (Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986), and the need for cognition (Cacioppo & Petty, 1982). Levy and Dweck (1997) found that the correlations between implicit theories and these process-oriented individual-difference variables were only between .17 and .24.

The participants who had an average score greater than the midpoint (3.5) were classified as "incremental theorists," whereas those who had an average score lower than the midpoint were classified as "entity theorists." Treating entity and incremental theorists as two distinct groups has been the norm in previous research on implicit theories of malleability (e.g., Chiu, Dweck, Tong, & Fu, 1997; Chiu, Hong, & Dweck, 1997; Levy et al., 1998; Tong & Chiu, 2002). The reasons are mainly that, in past research (Chiu, Dweck, et al., 1997; Chiu, Hong, & Dweck, 1997; Hong et al., 1999; Levy et al., 1998; Tong & Chiu, 2002), participants who agreed with an

<sup>1</sup> We ground this approach in the theory that culture and its norms are dynamically constructed. That is, people acquire a collective self-concept from a certain culture through intensive participation in the culture. This collective self-concept may be dormant most of the time, but can be activated when an environmental cue reminds people of their cultural identity. This theory has received strong empirical support (for a review, see Hong, Morris, Chiu, & Benet-Martinez, 2000). For instance, when individuals who had prolonged exposure to both Chinese and American cultures were primed with Chinese (American) cultural icons, they were more likely to make external (internal) attribution, which is a characteristic attributional style in Chinese (American) populations (Hong, Chiu, & Kung, 1997; Hong et al., 2000).

<sup>2</sup> Other categories in the coding scheme were: physical attributes, personality attributes, abilities, psychological processes, social roles and identities, behaviors, rights, and uncodable responses.

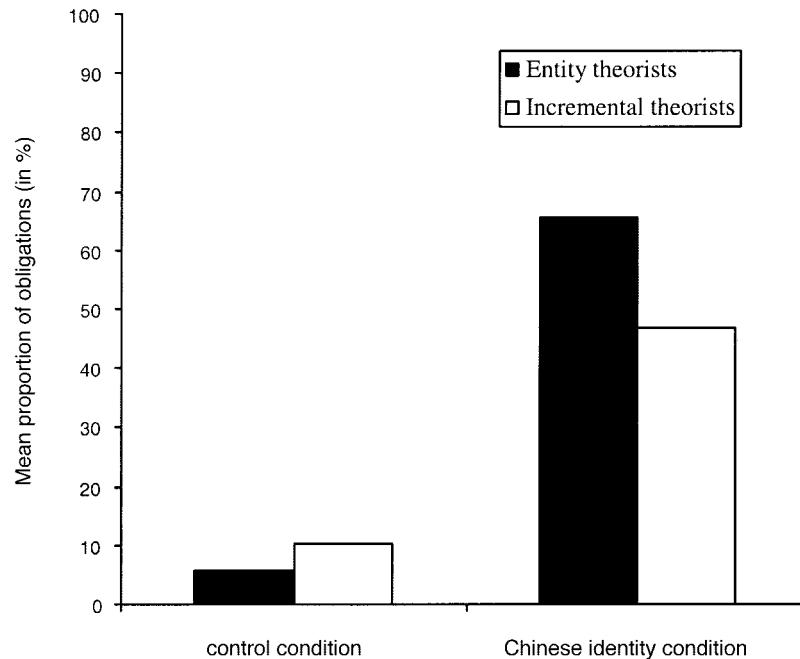


Figure 1. Mean proportion of responses that fell into the obligation category as a function of implicit theory and Chinese identity salience.

entity theory and those who disagreed with it (or those who agreed with an incremental theory) often displayed distinct patterns of social inferences and judgments. In addition, when experimentally primed with an entity or incremental theory, participants' responses looked very much the same as those who agreed or disagreed with the entity theory items. These findings have led some researchers to believe that entity and incremental theories set up different frameworks within which people understand social events (Dweck et al., 1995). Thus, it makes better theoretical sense to classify the participants into entity and incremental theorists. Accordingly, we report analyses pertaining to the two implicit theory groups in the main text. In addition, we had also treated the implicit theory measure as a continuous variable in our analyses, and report the relevant inferential statistics of these analyses in the footnotes.

### Procedures

Participants filled out the TST questionnaires in small groups. They were given the implicit theories measure in an unrelated study a week before they filled out the TST questionnaires.

### Results and Discussion

On average, only 5.5% of the responses were uncodable. We counted for each participant and for each condition the number of responses that fell into the "obligations" category. Next, we divided this number by the total number of codable responses in that condition to yield the proportion of responses that fell into the "obligations" category. These proportions were arcsin transformed to correct for the deviation from normality in the sampling distribution of proportions.

We hypothesized that entity theorists would be more inclined than incremental theorists to generate obligations in their spontaneous self-descriptions when their Chinese social identity was activated. To test this hypothesis, we performed a Theory (entity or

incremental)  $\times$  Version ("I"/individual or "we"/collective)  $\times$  Identity ("being Chinese" prime or no identity prime) analysis of variance (ANOVA) on the dependent measure, with the last factor as a within-subject factor. The version main effect was significant,  $F(1, 54) = 9.96, p < .01$ ; participants mentioned a larger proportion of obligations in their responses to the collective version ( $M = 85.2\%$ ) than in those to the individual version ( $M = 33.3\%$ ). Also, the identity main effect was significant,  $F(1, 54) = 63.88, p < .0001$ ; participants generated a larger proportion of obligations when the Chinese identity was primed ( $M = 53.7\%$ ) than when it was not ( $M = 8.7\%$ ). These two significant effects are consistent with our assumption that a concern with fulfilling obligations is a defining attribute of the Chinese collective self.

As predicted, the Theory  $\times$  Identity interaction was significant,  $F(1, 54) = 5.27, p < .05$ . As shown in Figure 1, entity theorists generated a larger proportion of obligations ( $M = 65.7\%$ ) than did incremental theorists ( $M = 46.6\%$ ) in the Chinese social identity condition but not in the control (no identity prime) condition, suggesting that entity theorists generated more obligations only when their Chinese identity was activated.<sup>3</sup> In addition, this pattern was found independent of whether the participants responded to the individual or collective version of the measure; both the Theory  $\times$  Version  $\times$  Identity,  $F(1, 54) = 0.38, ns$ , and the Theory  $\times$  Version,  $F(1, 54) = 1.75, ns$ , interactions were not significant.

In sum, these findings indicated that entity theorists were more inclined than incremental theorists to spontaneously list their ob-

<sup>3</sup> When implicit theory was treated as a continuous variable, the identity main effect was significant,  $F(1, 53) = 15.89, p < .001$ , as was the predicted Theory  $\times$  Identity interaction,  $F(1, 53) = 7.21, p < .01$ .

ligations when their Chinese social identity was made salient in the context. However, although fulfilling obligations plays a crucial role in defining the Chinese identity, it may not be central to other cultural identities. In the Hong, Ip, et al. (2001) study, when being primed with their Chinese or American cultural identity, although Chinese participants mentioned more obligations than did Americans, Americans mentioned more individual rights (such as "I being an American have the right to vote") than did Chinese. Thus, it is possible that American entity theorists, when reminded of their American identity, would mention more individual rights than would their incremental counterparts. This prediction can be tested in future research.

In the present study, we activated participants' Chinese identity in some conditions. To the extent that some Hong Kong Chinese could prefer a Hongkonger identity to a Chinese identity, we might have artificially imposed the Chinese identity on some participants who did not strongly identify with it. To address this problem, in Study 2, we sought to replicate conceptually the findings of this study in conditions where participants were free to choose between the Hongkonger identity and the Chinese identity.

## Study 2

To the extent that entity and incremental theorists view social groups in different ways, their self-acclaimed social identity might have different meanings. Specifically, as entity theorists view social groups as real entities with fixed dispositions, they may tend to infer fixed trait attributes from their social group memberships, which in turn can be used as self-guides. That is, entity theorists might believe more readily than do incremental theorists that their social identities fix them as certain kinds of people and are capable of guiding important aspects of their self (ideal self, ought self, lifestyle, beliefs, values, personal goals). We tested this idea in the present study with a novel task in which entity and incremental theorists indicated how important their "Hongkonger" and "Chinese" identities were as self-guides.

## Method

### Participants

One hundred ninety-six Hong Kong Chinese college students (85 men and 111 women, with a mean age of 21 years) took part in the study individually. In return for their participation, each participant received HK \$50 (about US \$6).

### Measures

*Implicit theory and social identity measures.* The implicit theory measure used to assess participants' implicit theories about the malleability of people's moral character was the same as the one used in Study 1.

To measure self-claimed social identity, we presented participants with a choice of five identities: (a) a Hongkonger, (b) a Hongkonger, only secondarily a Chinese, (c) a Chinese, only secondarily a Hongkonger, (d) a Chinese, and (e) other identities. The reliability and validity of this measure have been demonstrated in several previous studies (e.g., Hong et al., 1999; Lam, Lau, Chiu, Hong, & Peng, 1999). As in previous studies (e.g., Hong et al., 1999), we collapsed the self-identified "Hongkongers" and "Hongkongers, secondarily Chinese" into the Hongkonger identity group, and the self-identified "Chinese" and "Chinese, secondarily Hongkongers" into the Chinese identity group to simplify analysis.

Participants' responses on the implicit theories measure and those on the social identity measure were not correlated ( $r = .004, ns$ ). In addition, the proportions of entity and incremental theorists were comparable across the four identities. Specifically, among entity theorists, 9.6% of them endorsed a "Hongkonger" identity, 62.5% endorsed a "Hongkonger, only secondarily a Chinese" identity, 22.1% endorsed a "Chinese, only secondarily a Hongkonger" identity, and 5.8% endorsed a "Chinese" identity. The corresponding percentages among incremental theorists were 12.3%, 53.9%, 29.2%, and 4.6%,  $\chi^2(3, N = 195) = 1.70, ns$ .

*Measure of self-claimed identity as self-guides.* Participants were given eight stickers, each labeled with a social identity or an aspect of the self. The labels were "my Hongkonger identity," "my Chinese identity," "my goals in life," "my ideals," "my beliefs," "my values," "my obligations," and "my lifestyle." Participants first affixed these stickers to a piece of white paper such that the more related concepts were placed closer together. Next, they drew arrows from one sticker to another to show how each concept influenced others.

Figure 2 shows the responses from 1 participant. To measure perceived direct influence of social identities on self-aspects, for each participant, we divided the number of arrows drawn from "my Chinese identity" and that from "my Hongkonger identity" to the six self-aspects by the total number of arrows drawn. As an illustration, in Figure 2, the participant had drawn eight links. An arrow was drawn from "my Chinese identity" (to "my lifestyle"), and two were drawn from "my Hongkonger identity" (to "my lifestyle" and "my goals in life"). This participant had a score of 12.5% (1/8) for direct influence of the Chinese identity, and a score of 25% (2/8) for direct influence of the Hongkonger identity.

If this participant's self-claimed identity was "Chinese," she would score 12.5% for "direct concordant links" (direct links from her self-claimed identity) and 25% for the "direct nonconcordant links" (direct links from her less preferred identity). If her self-claimed identity was "Hongkonger," she would score 25% for direct concordant links and 12.5% for the direct nonconcordant links.

We also counted the number of indirect links from the social identity labels. In the case shown in Figure 2, an arrow was drawn from "my Chinese identity" to "my lifestyle" (level 1 or direct influence of Chinese identity). Then, from "my lifestyle," two arrows were drawn, one to "my values" and one to "my ideals" (level 2 indirect influence of Chinese identity). From "my values," an arrow was drawn to "my ideals," and from "my ideals," two arrows were drawn, one to "my beliefs" and one to "my obligations" (level 3 indirect influence of Chinese identity). Thus, for this participant, her Chinese identity had one level 1 link, two level 2 links, and three level 3 links. Following the same procedure, for each participant, we counted the number of direct and indirect links from the Chinese identity and from the Hongkonger identity.

We assumed that the extent of influence from the identity circles to other circles would diminish as the number of levels increased. Thus, we weighted the number of links at each level by an exponential function adopted from F. W. Jones, Wills, and McLaren (1998):

$$\sum_{i=1}^i [e^{-1 * t_i}],$$

where  $t$  is the number of arrows counted at level  $i$ .

Although this assessment is a novel one, its results are easy to interpret and have direct bearing on the phenomenon we wish to investigate, that is, the level of importance participants gave to the Chinese versus Hongkonger identity in guiding important aspects of the self.

## Results and Discussion

First, to examine whether the participants differed in the mean numbers of links drawn as a function of implicit theory and social identity, a 2 (theory: entity or incremental)  $\times$  2 (identity: Chinese



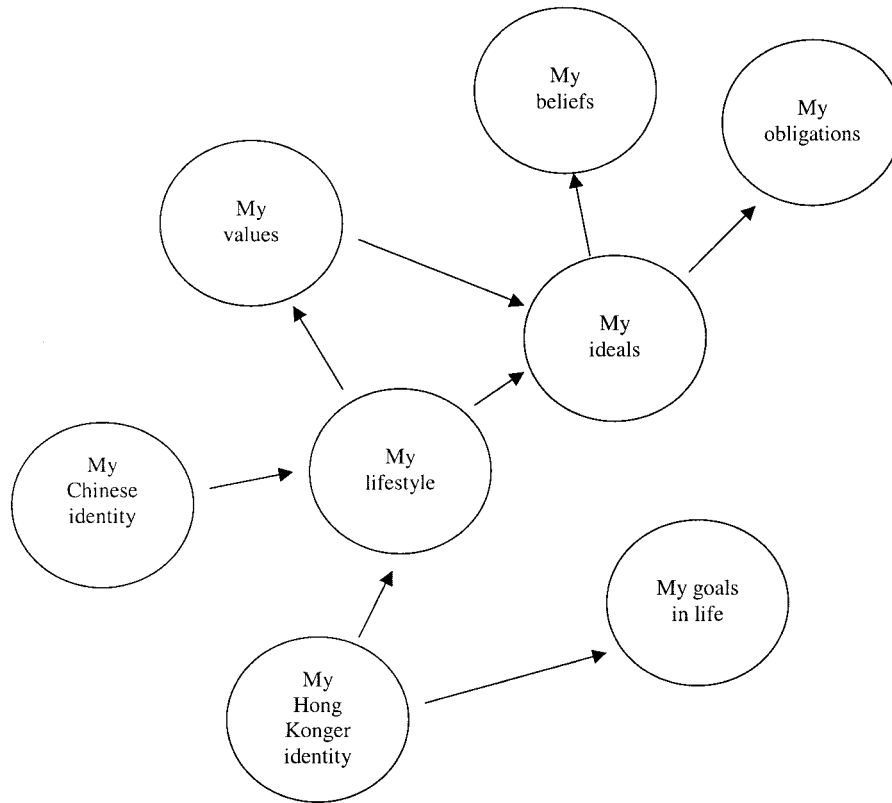


Figure 2. One participant's responses to the measure of how social identities influenced other self-aspects.

or Hongkonger) ANOVA was performed on the total number of links drawn. The theory main effect was not significant,  $F(1, 191) = 0.04, ns$ , indicating that entity and incremental theorists drew a similar number of links ( $M = 9.27$  for entity theorists, and  $M = 9.16$  for incremental theorists). However, the identity main effect was significant,  $F(1, 191) = 6.52, p < .05$ . Participants who claimed a Chinese identity in general drew more links ( $M = 9.98$ ) than did participants who claimed a Hongkonger identity ( $M = 8.89$ ).

We predicted that, compared with incremental theorists, entity theorists would be more likely to perceive their self-claimed identity as having direct influences on other self-aspects. To test this prediction, we performed a 2 (theory: entity or incremental)  $\times$  2 (identity: Chinese or Hongkonger)  $\times$  2 (link: concordant or non-concordant) ANOVA on the proportions of direct links from the identities.

The Identity  $\times$  Link interaction was significant,  $F(1, 192) = 15.11, p < .001$ . This interaction, however, was qualified by a significant Theory  $\times$  Identity  $\times$  Link interaction,  $F(1, 192) = 5.25, p < .05$ . As shown in Figure 3, consistent with our prediction, entity theorists with a Hongkonger identity drew more arrows from the "Hongkonger identity" label than from the "Chinese identity" label ( $M = 11.29\%$  vs.  $7.39\%$ ),  $F(1, 84) = 15.80, p < .001$ . In addition, entity theorists with a Chinese identity drew more arrows from the "Chinese identity" label than from the "Hongkonger identity" label ( $M = 10.72\%$  vs.  $5.79\%$ ),  $F(1, 34) = 10.58, p < .01$ .

In contrast, for incremental theorists with a Hongkonger identity, the number of arrows drawn from the "Hongkonger identity" label did not differ from the number of arrows drawn from the "Chinese identity" label,  $F(1, 50) = 0.85, ns$ . This was also the case for incremental theorists with a Chinese identity,  $F(1, 24) = 0.39, ns$ .<sup>4</sup>

We also performed the same ANOVA on the exponentially weighted links. There was a significant effect of link,  $F(1, 193) = 25.83, p < .0001$ . A larger proportion of arrows were drawn from the participants' self-claimed social identity ( $M = 8.92\%$ ) than from their less preferred identity ( $M = 6.84\%$ ). This effect was qualified by a significant Theory  $\times$  Link interaction,  $F(1, 193) = 4.33, p < .05$ . Entity theorists drew a larger proportion of links from their self-claimed identity than from their less preferred identity,  $F(1, 119) = 34.57, p < .0001$ . Incremental theorists also showed a similar pattern; the proportion of links from their self-claimed identity was significantly larger than that drawn from the less preferred identity,  $F(1, 76) = 6.23, p < .05$ . However, as predicted, entity theorists drew a significantly larger proportion of arrows from their self-claimed identity than did incremental the-

<sup>4</sup> When implicit theory was treated as a continuous variable, the predicted Theory  $\times$  Link interaction was significant,  $F(1, 186) = 3.82, p = .05$ . Endorsing an entity theory was positively related to the proportion of links from the self-claimed identity ( $r = .15, p < .05$ ) and not related to the proportion of links from the less preferred identity ( $r = -.04, ns$ ).

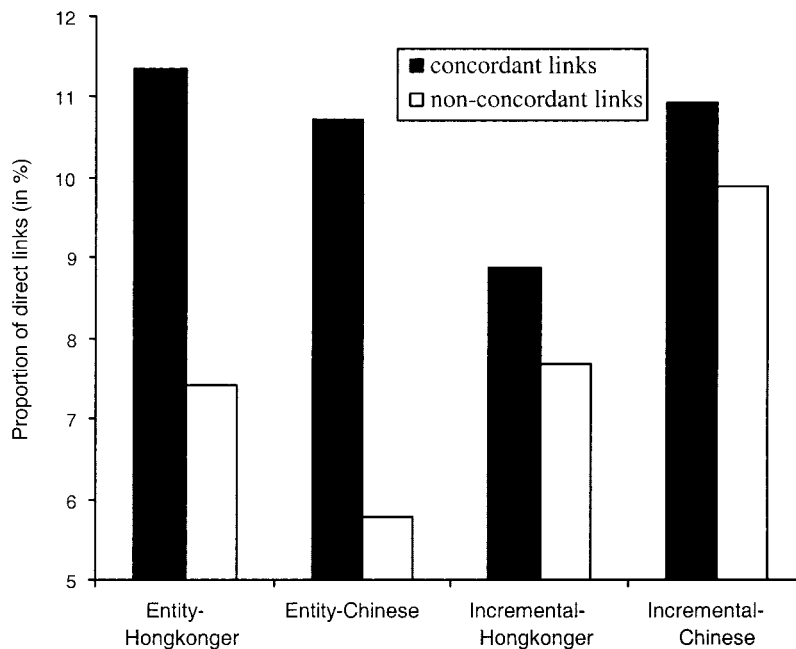


Figure 3. Perceived direct influences of social identities on self-aspects as a function of implicit theories and self-claimed versus less preferred identity.

orists,  $F(1, 195) = 4.68, p < .05$  ( $M = 9.70\%$  for entity theorists vs.  $7.71\%$  for incremental theorists). No other effects were significant.

In sum, regardless of whether we considered only the direct links or also the weighted effects of higher order links, entity theorists were more likely than incremental theorists to view their self-claimed social identity as having a significant impact on important aspects of their self. These findings are consistent with our postulation that an entity theory orients individuals to infer fixed qualities in the social groups to which they belong. In the next study, we further tested this idea by examining how entity and incremental theorists perceive intergroup relations as a function of their self-claimed identity.

### Study 3

So far, we have demonstrated that when entity theorists' social identity is activated, they are more likely than incremental theorists to describe themselves by the attributes that define the social group and are more likely to perceive their self-claimed identity as having a significant impact on their important self-aspects. Would entity theorists also be more inclined than incremental theorists to show intergroup differentiation versus integration led by their social identities?

As shown in Study 2, although some Hong Kong Chinese participants endorsed a Chinese identity primarily, others endorsed a Hongkonger identity primarily (see also Fu, Lee, Chiu, & Hong, 1999; Hong et al., 1999). The Chinese identity is more inclusive as it includes Hong Kong people, Chinese Mainlanders, and other ethnic Chinese. The Hongkonger identity is relatively more exclusive as it excludes the Chinese Mainlander group. These two identities could reflect people's motivation to be differentiated

from versus integrated with the Chinese Mainlanders. According to Brewer's (1999) optimal distinctiveness theory, people claiming a Hongkonger identity have a greater tendency to be differentiated from the Chinese Mainlanders than do people claiming a Chinese identity. Consistent with this idea, DeGolyer (1994) found in several surveys conducted before the 1997 handover that people claiming a Hongkonger identity were less likely to favor the return of Hong Kong to China, compared with people claiming a Chinese identity.

If the Hongkonger identity reflects a tendency to seek differentiation from the Chinese Mainlander group and the Chinese identity reflects a tendency to seek integration with the Chinese Mainlander group, following our arguments, entity theorists with a Hongkonger identity would show a differentiation tendency from the Mainlander group, whereas entity theorists with a Chinese identity would show an integration tendency toward the Mainlander group. In contrast, incremental theorists' intergroup differentiation versus integration tendency again might not be as strongly related to their social identities. We tested these predictions both before and after the return of Hong Kong's sovereignty to China.

### Method

#### Participants

One hundred sixty-seven college students (70 men and 97 women; mean age = 20 years,  $SD = 1.40$ ) from two universities in Hong Kong participated in the first wave of the study in March 1997 (4 months before the handover). All participants were invited to return for the second survey in October 1997 (4 months after the handover). One participant dropped out in the second wave. Consequently, 166 students participated in both waves of the study.

## Measures

*Implicit theory and social identity measures.* The measures were identical to those used in Study 2. As in Study 2, participants' responses on the implicit theories measure and on the social identity measure were not correlated ( $r = .002, ns$ ).<sup>5</sup>

*Measure of intergroup integration versus differentiation.* To assess how much the participants anticipated and preferred intergroup integration versus differentiation after 1997, questionnaire items were created on the basis of the intergroup process model proposed by Hogg and Abrams (1988, Figure 3.1, p. 55). The questionnaire used in Wave 1 (before the handover) included an *integration* subscale: "After 1997, we are Chinese citizens and thus do not need to retain the Hongkonger identity anymore" and "After 1997, Hong Kong people should use mostly Mandarin as their language of communication in their daily life." ( $\alpha = .42$ ); and a *differentiation* subscale: "Even after 1997, Hong Kong people are still Hong Kong people. Chinese Mainlanders would not consider Hong Kong people as their ingroup," "After 1997, no matter how hard Hong Kong people try, they still cannot change the mainland Chinese's perceptions of Hong Kong people," and "After 1997, mainland Chinese would create obstacles to prevent Hong Kong people from integrating into the Mainland society" ( $\alpha = .62$ ). Items used in Wave 2 were the same as those used in Wave 1, except that the phrase "after 1997" was omitted in the items in Wave 2, as Wave 2 was conducted after the handover of sovereignty. The participants indicated the extent to which they would agree with each of the items on a 6-point Likert scale (from 1 = *not at all agree* to 6 = *agree absolutely*). Participants' ratings on the integration and differentiation items were averaged separately to yield the differentiation and integration scores in the two waves.

## Results and Discussion

To test our predictions, we performed a 2 (theory: entity or incremental)  $\times$  2 (identity: Chinese or Hongkongers)  $\times$  2 (time: Wave 1 or Wave 2)  $\times$  2 (tendency: integration or differentiation) ANOVA on the participants' ratings, with the last two factors as within-subjects factors. The Identity  $\times$  Tendency interaction was significant,  $F(1, 163) = 35.89, p < .001$ . As predicted, participants with a Chinese identity versus a Hongkonger identity showed a greater integration tendency ( $M = 3.02$  and  $SD = 0.72$  vs.  $M = 2.40$  and  $SD = 0.73$ ),  $F(1, 165) = 26.40, p < .001$ , and a lesser differentiation tendency ( $M = 2.59$  and  $SD = 0.53$  vs.  $M = 3.10$  and  $SD = 0.63$ ),  $F(1, 165) = 25.00, p < .001$ . This interaction was qualified by the significant Theory  $\times$  Identity  $\times$  Tendency interaction,  $F(1, 163) = 7.89, p < .01$ . Figure 4 shows the mean integration and differentiation orientations of the four Theory  $\times$  Identity groups in Waves 1 and 2. Consistent with our predictions, entity theorists with a Chinese versus a Hongkonger identity showed a greater integration tendency ( $M = 3.04$  and  $SD = 0.84$  vs.  $M = 2.23$  and  $SD = 0.70$ ),  $F(1, 100) = 24.15, p < .001$ , and a lesser differentiation tendency ( $M = 2.43$  and  $SD = 0.44$  vs.  $M = 3.14$  and  $SD = 0.63$ ),  $F(1, 100) = 30.51, p < .001$ . By contrast, incremental theorists' intergroup orientations were not related to their social identity. Among incremental theorists, the social identity effect was not significant on both the integration tendency,  $F(1, 63) = 3.74, ns$ , and the differentiation tendency,  $F(1, 63) = 1.97, ns$ . This pattern of results was found both before and after the handover; the Theory  $\times$  Identity  $\times$  Tendency  $\times$  Time interaction was not significant,  $F(1, 163) = 0.03, ns$ .<sup>6</sup>

In sum, implicit theories and social identities interacted to predict intergroup differentiation versus integration. Specifically,

the social identities of entity theorists (who perceived social groups as immutable entities) guided their intergroup orientation. Among incremental theorists (who did not perceive social groups as entities with fixed dispositions), the effects of social identity on their intergroup orientations were considerably weaker and nonsignificant.

## General Discussion

Brown and Williams (1984) have questioned whether group identification means the same thing to all people. In particular, they argued that at least for some people, social identity is not an immutable entity. The findings from the present research supported this argument: Entity theorists are more likely than incremental theorists to treat social identities as reified, immutable entities.

Specifically, an entity theory may orient individuals to focus on the fixed attributes of people. This perceptual orientation may also enhance the likelihood of seeing social groups as real entities with fixed, immutable traits and dispositions, and defining groups by some core essences (cf. Yzerbyt, Corneille, & Estrada, 2001). Consistent with this idea, Study 1 revealed that people believing in fixed human character (entity theorists) were more inclined than people believing in malleable human character (incremental theorists) to describe themselves in terms of the core attributes of the group when a social category was activated. That is, they were more likely than incremental theorists to attribute to themselves the essential qualities of the group they belonged to.

Studies 2 and 3 showed that self-claimed social identities had a greater impact on the self and intergroup orientations among entity theorists than among incremental theorists. In Study 2, entity theorists relied more heavily on their self-claimed identities to guide important self-aspects than did incremental theorists. In Study 3, entity theorists' intergroup integration and differentiation tendencies were systematically linked to their self-claimed social identities. Entity theorists with a Hongkonger identity anticipated and favored differentiation from Chinese Mainlanders more so than did entity theorists with a Chinese identity, who in turn anticipated and favored connection with Chinese Mainlanders

<sup>5</sup> Some participants (11.38%) changed their social identity between the two waves. Specifically, 7 entity theorists (6.9%) and 4 incremental theorists (6.5%) changed from a Hongkonger identity in Wave 1 to a Chinese identity in Wave 2, and 4 entity theorists (3.9%) and 4 incremental theorists (6.2%) changed from a Chinese identity to a Hongkonger identity. The nature of these changes was unclear. They could be permanent changes in social identity or temporary changes induced by the unfolding political situation at the time. As such, it is hard to predict how these changes might be related to implicit theories. Furthermore, we did not exclude data from the participants who changed their social identities in our analyses. Instead, as a more conservative approach to testing our hypotheses, we used participants' social identity in Wave 1 as the predictor.

<sup>6</sup> When implicit theory was treated as a continuous variable, only the Identity  $\times$  Tendency interaction was reliable,  $F(1, 163) = 44.22, p < .001$ . Participants with a Chinese identity showed a greater integration tendency and a lesser differentiation tendency than did those with a Hongkonger identity. Although the predicted Theory  $\times$  Identity  $\times$  Tendency interaction was not significant,  $F(1, 163) = 2.61, ns$ , the Theory  $\times$  Identity interaction approached significance on the differentiation measure,  $F(1, 163) = 3.63, p = .06$ , and was not significant on the integration measure.

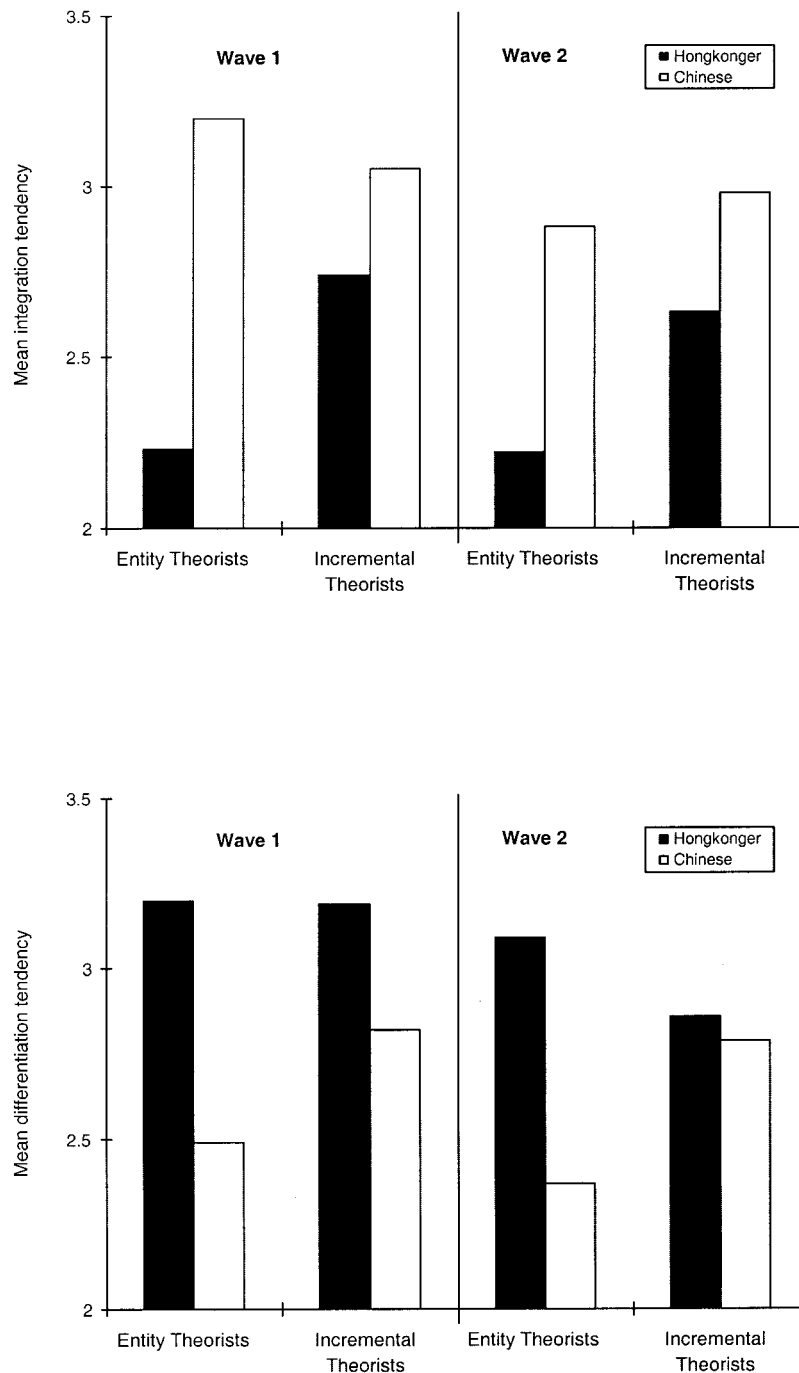


Figure 4. Intergroup integration (top panel) and differentiation (bottom panel) before and after the return of Hong Kong's sovereignty to China as a function of implicit theories and social identities.

more. In contrast, incremental theorists' intergroup integration and differentiation tendencies were less strongly linked to their social identities.

Taken together, the result patterns in the three studies are consistent with our contention that an entity theory orients individuals to represent themselves as members of an "entitative" group, and to use their social identities to guide their self-

conception and intergroup orientation. An incremental theory, in contrast, orients individuals to view social groups as dynamic, mutable social categories. Thus, incremental theorists tend not to use their social identities as much as guides for self-conception and intergroup orientation. In summary, implicit theories seem to set up frameworks within which social identities might be accorded with different meanings.

This analysis also implies that it is problematic to define social identity by group membership per se. People may belong to the same social group, but attach different meanings to the group membership, depending on their implicit theories. As a result, they may experience and react to their group membership differently. Thus, it is important for researchers to understand how people construct the meaning of their group membership and social identities (cf. Deaux & Perkins, 2001; Seller, Smith, Shelton, Rowley, & Chavous, 1998). As our findings illustrate, people who attach different meanings to their social identities place different values on their identities as guides for self-conception and intergroup orientation. Even when these identities are activated and made salient, they may or may not affect one's definition of social self or one's intergroup orientations if they do not treat these identities as proxies for fixed group dispositions. The implicit theories' effects demonstrated in the present studies illustrate how important it is for social psychologists not to treat social identities simply as subjective representations of group memberships. Instead, it is important for them to understand how individuals use their lay beliefs about personal qualities to construct different meanings of their social self.

#### *Implications for Lay Theories of Social Identification*

Numerous studies have shown that group memberships affect people's cognition, affect, and behavior (e.g., Biernat, Vescio, & Green, 1996; Brewer & Pickett, 1999; Pickett, Bonner, & Coleman, 2002; Simon & Hamilton, 1994; Spears et al., 1997). However, researchers differ in how they conceptualize social identities. For instance, some social cognitive theories (e.g. Markus & Kunda, 1986; Markus & Nurius, 1986) treat social identities as components of one's self-schema. The *preformed* social identities when activated by situational cues will find their way into the working self-concept and affect subsequent social cognitive processes. Social identities that are frequently activated will become chronically accessible in the individual's working self-concept (Higgins, 1996; Wyer & Srull, 1986). In short, according to this view, social identification results from situational activation of some preformed cognitive structures.

The self-categorization theory (Hogg & Turner, 1987; Turner et al., 1987) also emphasizes cognitive mediation. However, it posits that social identification is a result of the relative fits of a social category within a particular frame of reference. Social identification is considered to be a dynamic, flexible, online process of self-categorization. The self-categorization theory rejects the notion that social identities are preformed structures of the self. As Turner and Onorato (1999) posited, "people do not have social and personal identities in a fixed, static sense as part of their individual identity" (p. 24). There is no preformed self-structure waiting to be activated; the content and meaning of self-categories are not determined prior to their use, but rather constructed online.

There is evidence to support both the self-schema and the self-categorization theories. From our perspective, incremental theorists may think like lay self-categorization theorists. They do not believe that social identities are fixed structures. Rather, they may treat self-identities as ad hoc categories constructed online in response to changing intergroup contexts. However, unlike self-categorization theorists, incremental theorists seem to be aware of

the ad hoc nature of self-identities and do not rely very much on these identities as self-guides or action guides.

By contrast, entity theorists may treat social identities as preformed cognitive structures, which, once activated, define who they are. However, unlike self-schema theorists, who believe in alternative conceptions of the self, entity theorists view social identities as defining the kind of person they are. To them, their own social category is defined by a set of fixed dispositions that make the group they belong to distinctive. Both the dispositions and the evaluations are believed to be fixed (Tong & Chiu, 2002). Thus, entity theorists feel that they can rely on these reified identities as guides for self-conception and intergroup orientation.

The fact that entity and incremental theorists may subscribe to different lay models of social identification does not challenge the validity of scientific models of social identification. However, it does point to another exciting research direction: It may be interesting to examine how lay people subjectively experience and construct the social identification processes, and how their lay theories of human character bear on these subjective processes.

#### *Implications for Intergroup Relations in Other Sociopolitical and Cultural Contexts*

The present research was situated in a real-life context. To Hong Kong people, the anticipated sociopolitical changes in 1997 had brought about a need to rethink their Hongkonger and Chinese identities. Thus, by focusing on the Hongkonger identity and the Chinese identity, we had examined social identities that were of high social relevance and personal significance to the participants.

Although the political transition in Hong Kong was a unique historical event, political changes in other parts of the world had brought social groups in close contacts. Some examples are the East and West German groups in Germany after national unification, and the Black South Africans and Afrikaan Whites in South Africa. In our research, implicit theories of the malleability of human character moderated the social psychological effects of social identification during the political transition in Hong Kong. The psychological principles revealed in the present research may be applicable in other similar intergroup contexts as well. The Israelis and the Palestinians have been at war since they were brought together as two national-religious groups in the Middle East. Would the animosity between the two groups be reduced if the two groups cease to represent the other group as an entity with immutable moral qualities?

Hinkle and Brown (1990; Brown et al., 1992) have shown that in-group identification correlates significantly with in-group bias only among collectivists with relational orientations, but not among individualists or those with autonomous orientations. These findings suggest that social identification may have a greater impact on intergroup relations in collectivist cultures than in individualist cultures. Likewise, researchers might wonder if the implicit theory effects found in the present research are somehow specific to the collectivistic Chinese participants in the present research. However, there are ample research findings to show that the effects of implicit theories are similar among Chinese and American participants. For instance, implicit theories of the malleability of morality have been shown to predict person perceptions (e.g., Chiu, Hong, & Dweck, 1997) and group perceptions (e.g., findings in the present study, also see Levy et al., 2001) in

both Chinese and American cultures. Thus, we believe that the present findings are not specific to collectivist cultures. This contention could be tested more formally in future research.

### Concluding Remarks

We posit that the social psychological effects of social identification are most pronounced when perceivers believe that people have fixed, immutable qualities than when they subscribe to a more dynamic view of human character. By illustrating how implicit theories of malleability moderate the effects of social identification in the domains of self-conception and intergroup orientation, the present research has set the stage for exploring the integration of the implicit theories and social identity approaches to understanding the dynamics of social identification.

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Manuscript submission patterns make the precise date of completion of the 2004 volumes uncertain. Current editors, Mark B. Sobell, PhD, and James L. Dannemiller, PhD, respectively, will receive and consider manuscripts through December 31, 2003. Should 2004 volumes be completed before that date, manuscripts will be redirected to the new editors for consideration in 2005 volumes.