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# Effects of the temporary activated academic identity on retrieval and evaluation of stereotypical information of ingroup and outgroup members

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**Abstract**

The present study aims to investigate the effects of temporally activated academic identity on retrieval and evaluation of stereotypical information about academic groups. Ninety-one university students were asked to list and evaluate stereotypical characteristics of students of their own and three other universities. Before this stereotyping task, half the students completed a questionnaire evoking their academic identity (AG condition), while the other half answered a questionnaire that did not remind them of it at all (NAG condition). As a result, there was a general tendency of ingroup derogation, but this tendency was moderated in the AG relative to the NAG condition. Moreover, students in the AG condition were more likely than those in the NAG condition to derogate the university that was inferior to their own. Such effects were not found for universities that were equal or superior to their own. The results were discussed in terms of the recent developments of social identity theory.

According to the Social Identity Theory (SIT), social identity (group membership) will play a critical role in intergroup perceptions. The social identity refers, as was defined by Tajfel (1978), to a "part of an individual's self-concept which derives from his/her knowledge of his/her membership of a social group, together with the value and emotional significance attached to the membership". This theory predicts that persons high in identification with the ingroup might be more motivated to differentiate between the ingroup and outgroup and thus be more likely to stereotype outgroup members negatively and ingroup members positively for self protection than those low in identification. In other words, for persons with the same level of identification, the stereotypes of groups are expected to be equally available. However, it is often the case that one with a certain level of identification will express different stereotypes at different points in time and place. This is because availability (e.g., possession) of stereotype does not readily translate into stereotype use, as was suggested by a number of recent studies on stereotyping. Victoria Esses and Mark Zanna, for example, stated in their seminal papers that the stereotypes that come to mind for possible expression at various times may differ. Only a subset of our available pool of stereotypes may be accessible at any particular time (Esses & Zanna, 1995; Esses et al., 1993, 1994).

What factors then determine which part of the stereotype will come to mind? One may suppose that there are many, but one important factor that may account for contextual variability in stereotyping should be the malleability or instability of self-conception over time. Contemporary cognitive models of self argue that people have multiple selves (self as a college student, self as a family member, self as a Japanese, and so on.), and that specific aspects of self-concept are activated when they are currently relevant. This so called "shifting activation model of self" asserts that currently activated self-aspects are most likely to play an important role in current inferences, judgments, and evaluations (Markus & Wurf, 1987; Linville & Carlston, 1994).

Thus, it is theoretically hypothesized that the stereotypes people will express will vary depending on whether the relevant group-self (e.g., the self as a member of the relevant group) is currently activated or not. The present study was designed to examine this issue showing the effects of activation of relevant group-self or group-identity upon retrieval and evaluation of stereotypical information about ingroup and outgroup members. One might reason that people will be more likely to retrieve and evaluate information in a more

favorable manner for ingroup members and a more unfavorable manner for outgroup members when "the self as a member of the ingroup" is strongly activated or salient, that is, when they are highly aware of their own group membership.

The predictions derived from our hypothesis were as follows:

(1) People may be more likely to exhibit a tendency to retrieve more favorable information for ingroup members and more unfavorable information for outgroup members when the relevant group-self or group-identity is currently activated than otherwise.

(2) People may be more likely to exhibit a tendency to evaluate retrieved information more favorably for ingroup members and less favorably for outgroup members when the relevant group-self or group-identity is currently activated than otherwise.

## Method

### Overview

We asked university students to list and evaluate stereotypical characteristics of their own and three other universities (this will be referred as a stereotyping task below). Just before this stereotyping task, half the students answered questions so that an academic group-self might be activated (AG condition). The other half answered filler questions that did not relate to an academic group-self at all (NAG condition). The experiment was conducted by group administration. The booklets containing materials necessary for experimental tasks were distributed to students who participated in the introductory course of psychology.

### Subjects

Ninety-one male and female students from one national university located in the Tokai area of Japan served as subjects. The data of 11 subjects were deleted because of omissions or inappropriateness of responses. Accordingly, the data of 80 subjects (28 males and 52 females) were subjected to analyses.

### Procedure

*Pre-assessment of identification level*

A week before the experimental session, all the subjects were administered a questionnaire to assess their level of group identification with their own university (GIQ for abbreviation). The questionnaire consisted of 20 items asking about the attachment to or concern with their own university. The items were taken from the Evans & Jarvis's (1986) scale developed for measuring the attitude toward the group, and adapted and modified for use in the current study. Subjects rated to what extent each statement described themselves on a 7-point scale (1 indicates 'not at all' and 7 indicates 'extremely well').

*Manipulation of activation level of academic group-self*

In the experimental session, we divided subjects into two groups and randomly assigned them into one of the two experimental conditions. By so doing, we attempted to manipulate the activation level of the relevant group-self before they were engaged with stereotyping tasks. In the AG condition, subjects answered ten questions selected from the GIQ, while in the NAG condition, subjects answered ten questions taken from Rosenberg's (1965) self-esteem scale. It was assumed that in the AG condition an academic group-self would be activated, while in the NAG condition, an individual self would be activated, but a specific group-self would not be activated. In other words, subjects might be strongly aware of the relevant group membership before stereotyping tasks in the former condition, whereas those in the latter might not be so strongly aware of it.

*Stereotyping task*

In the stereotyping task, subjects were provided with the name of four universities (University A, B, C, and D) and asked to list characteristics, using single adjectives or short phrases, that they would use to describe a typical student of each university. University A was the subjects' own university. A pilot study confirmed that Universities B, C, and D could be ranked according to the relative difficulty level of their respective entrance examinations compared with University A (See Table 1). The difficulty level of University B was approximately the same as that of the subjects' own University A, so it was labeled as the 'equal group'. The level of University C was apparently higher than that of their own University A, so it was labeled as the 'superior group'. The level of University D was lower compared with their own University A, so it was labeled as the 'inferior group'.

Table 1 Mean ratings of difficulty level of entrance examination for each University in the pilot study.

| | University A (own) | University B (equal) | University C (superior) | University D (inferior) |
|---|---|---|---|---|
| Mean | 3.80 | 4.10 | 5.27 | 2.67 |
| (SD) | (.71) | (.71) | (.64) | (.71) |

Note: Thirty (15 male and 15 female) students of University A participated in the pilot study. They rated eight universities including Universities A, B, C, and D for the degree of difficulty of their respective entrance examinations on a 6-point scale (1 indicates 'very easy' and 6 indicates 'very difficult').

Subjects were instructed to list and write down on a response sheet as many characteristics as possible within two minutes for each University. Then they were asked to go back and assign a value (create a likeability rating on a 7-point scale from −3 indicating 'least likable' to +3 indicating 'most likeable') to each characteristic that they themselves had listed. This procedure was modeled after the one used in previous studies by Esses & Zanna (1995; see also Esses et al., 1993) for measuring individual or idiosyncratic stereotypes. The order in which each name of the four universities was provided was counterbalanced across the two conditions.

## Results

The data of 80 students (40 from the AG condition, 40 from the NAG condition) were submitted to analyses. The ratio of male to female for each condition was approximately the same. There were 12 males and 28 females in the AG condition and 16 males and 24 females in the NAG condition.

### Preliminary analysis

In order to see if there should be any difference in levels of group identification between the AG and NAG conditions, the mean GIQ score was calculated for each of the two conditions (AG: *Mean* = 73.80, *SD* = 15.02; NAG: *Mean* = 75.15, *SD* = 20.02). A one-way analysis revealed that the difference between the two was not significant ($F$ (1,78 ) < 1). This confirmed that the level of group identification did not differ across the AG and NAG conditions.

Moreover, it also revealed that the total number of characteristics listed did not differ between the two conditions ($t$ < 1, $df$ = 78). This indicated that the activation of an academic group-self did not influence the total amount of information retrieved. The subtotal of characteristics listed was summed up for each of the four universities. There were no condition-differences for any of the universities ($t$'s < 1, $df$ = 78), indicating that the amount of stereotypical knowledge that subjects held regarding each of the four universities did not differ between the two conditions (See Table 2).

Table 2 Mean number of characteristics listed for each university in each condition.

| Condition | University A (own) | University B (equal) | University C (superior) | University D (inferior) | Total |
|---|---|---|---|---|---|
| AG | 6.58 | 5.10 | 5.53 | 4.70 | 21.90 |
| | (2.22) | (1.68) | (1.86) | (1.79) | (7.61) |
| NAG | 7.00 | 5.15 | 6.05 | 4.75 | 22.95 |
| | (2.08) | (1.71) | (2.05) | (1.95) | (11.22) |

Note: Numerical values in parentheses indicate standard deviation.

### Analysis of Retrieval Data

Each characteristic listed was classified into one of three categories (Positive, Negative, and Neutral) according to a value assigned to each characteristic by the subjects themselves. Specifically, if the value assigned to a particular characteristic was +3, +2, or +1, it was classified as positive. If the value was −3, −

2, or −1, it was classified as negative. If the value was zero, it was classified as neutral. The number of positive and negative characteristics of each university was calculated for each subject. Then, in order to assess the positivity bias in retrieval, a positivity score was yielded by subtracting the number of negative characteristics from the number of positive ones.

Figure 1 shows the effects of an activated academic group-self on the positivity scores of the subjects' own and the equal, superior, or inferior academic groups (universities). Unexpectedly, it was shown that our subjects tended to stereotype their own university negatively and the other three universities positively. They listed far more negative characteristics for their own university than positive ones, whereas they listed more positive characteristics than negative ones for the other three universities. This ingroup derogation was moderated in the AG condition when the academic group-self was activated. A two-way ANOVA (analysis of variance) showed that a main effect due to the target group and an interaction effect between the target group and condition were significant ($F$ (3, 234) = 30.62, $p < .001$; $F$ (3, 234) = 5.40, $p < .01$, respectively). Further analysis revealed that the positivity score of one's own group was significantly improved in the AG condition when the academic group-self was activated ($F$ (1, 78) = 3.97, $p < .05$). It also revealed that the positivity score of the inferior group was significantly lowered in the AG condition when the academic group -self was activated ($F$ (1, 78) = 4.00, $p < .05$). There were no significant condition-differences on scores of either the equal or superior group. This indicated that the activated academic group-self invoked outgroup derogation only for the inferior group.

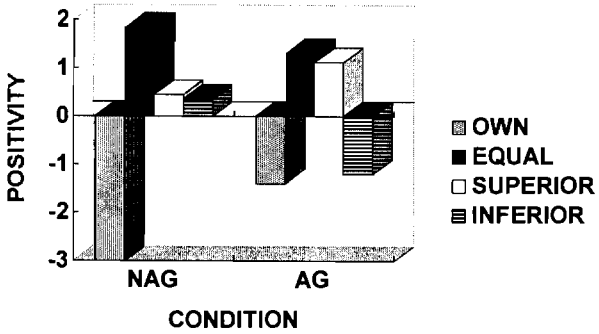


Figure 1. Effects of activated group-self on positivity scores for each of the four universities.

We then analyzed the number of positive or negative characteristics (traits) separately. Figures 2-a and 2-b show the effects of the activated academic group-self on the number of positive or negative traits, respectively. The number of positive traits did not differ between the two conditions for any of the target groups. As for the number of negative traits, there were marginally significant differences between the two conditions, but only for their own and the inferior university (own $F$ (1, 78) = 2.83, $p < .1$; inferior $F$ (1, 78) = 2.92, $p < .1$). In other words, the amount of negative information retrieved for the ingroup decreased under the condition when the academic group-self was activated. In contrast, the amount of negative information retrieved for the inferior outgroup increased under the same condition.

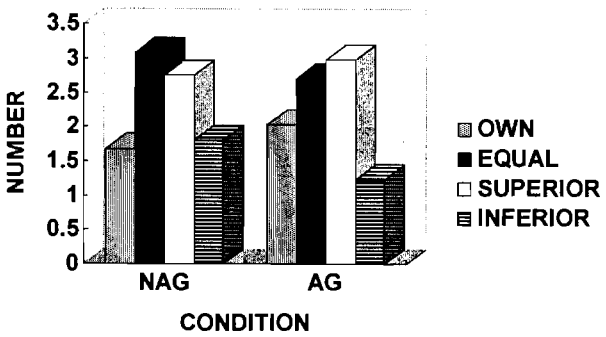


Figure 2-a. Effects of activated group-self on the number of positive traits retrieved for each of the four universities.

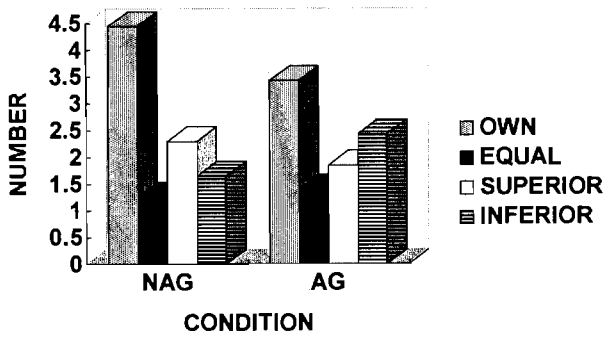


Figure 2-b. Effects of activated group-self on the number of negative traits retrieved for each of the four universities.

### Analysis of Rating Data

We analyzed to what extreme students evaluated the positive or negative aspects of students of their own and the other three universities. The evaluation scores were computed by summing up the values over the positive or negative traits separately. See below.

*EPA = Value (1) + Value (2) + ..... + Value (m)*

*ENA = Value (1) + Value (2) +..... + Value (n)*

*"EPA" indicates overall evaluation of positive aspects.*

*"ENA" indicates overall evaluation of negative aspects.*

*"m" indicates the number of positive traits listed.*

*"n" indicates the number of negative traits listed.*

*"Value" indicates the numerical value assigned to each trait in a likableness rating*

In addition, the positivity bias in the evaluation was computed by subtracting the *ENA* from the *EPA*.

*PNS = EPA - ENA*

*"PNS" indicates the magnitude of the positivity bias in the evaluation of group members.*

Figure 3 presents the effects of the activated academic group-self on the positivity bias in the evaluation (*PNS*) of the subjects' own and the other three (equal, superior, or inferior) groups. The pattern of data was basically the same as in the retrieval data. Again, ingroup derogation was observed. To be more specific, our subjects evaluated their own university far more negatively than they evaluated any of the other three universities. This ingroup derogation was attenuated in the AG condition when the academic group-self was activated. The two-way ANOVA showed that a main effect due to the target group and an interaction effect between the target and condition were significant ($F$ (3, 234) = 28.40, $p < .001$; $F$ (3, 234) = 4.68, $p < .01$, respectively). Further analysis confirmed that the evaluation scores of the subjects' own university were significantly improved in the AG condition relative to the NAG condition ($F$ (1, 78) = 4.15, $p < .05$). Furthermore, it revealed that the scores of the inferior group dropped down significantly in the AG condition relative to the NAG condition ($F$ (1, 78) = 6.06, $p < .05$). Activation of the academic group-self did not influence the evaluation of the equal and superior group members. To put it another way, activation of the group-self invoked outgroup derogation only for the inferior group.

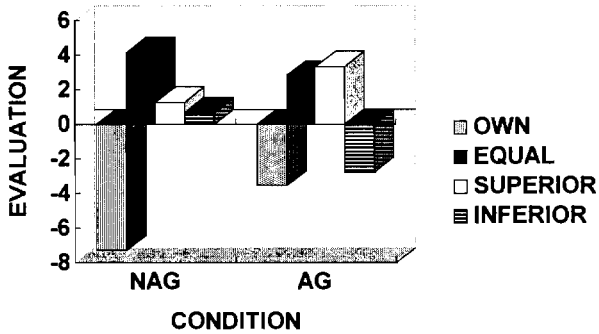


Figure 3. Effects of activated group-self on evaluation scores for each of the four universities.

Next, we analyzed the evaluation scores of the positive and negative aspects (*EPA* and *ENA*), separately. Figures 4-a and 4-b present the effects of the activated academic group-self on each evaluation score. A main effect due to the target group and an interaction effect between the target and condition were significant for both the *EPA* (evaluation of positive aspects) and *ENA* (evaluation of negative aspects) (*EPA*- $F$ (3, 234) = 10.94, $p < .001$; $F$ (3, 234) = 2.93, $p < .05$; *ENA*- $F$ (3, 234) = 35.23, $p < .001$; $F$ (3, 234) = 3.44, $p < .05$). Further analyses, however, revealed no significant effects of the activated academic group-self for any of the target groups. It was only shown in a predicted direction that the evaluation of positive aspects of the inferior outgroup lowered in the AG condition relative to the NAG condition ($F$ (1,78) = 2.78, $p < .1$).

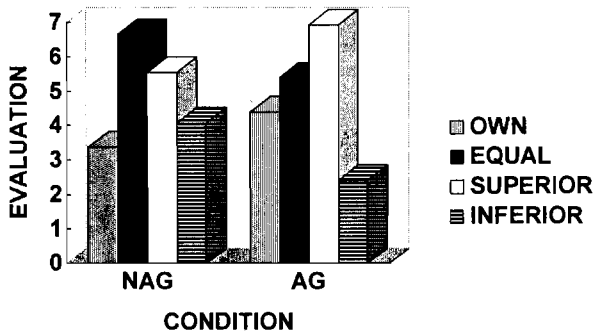


Figure 4-a. Effects of activated group-self on evaluation of positive aspects of each of the four universities.

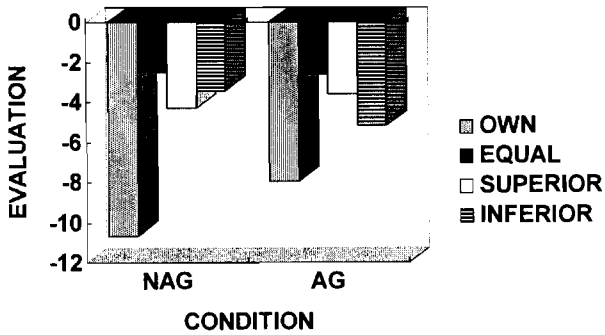


Figure 4-b. Effects of activated group-self on evaluation of negative aspects of each of the four universities.

Multiple comparison tests using Fisher's least significant difference method were performed on the EPA scores. It was shown that the significant difference at $p < .05$ between the subjects' own and equal groups observed in the NAG condition was diluted in the AG condition. In contrast, the difference between the subjects' own and inferior groups was amplified in the AG condition relative to the NAG condition. Students tended to evaluate positive aspects of the equal outgroup much better than that of their own group in the NAG condition, but in the AG condition, they appreciated them no better than that of their own group. The reverse was the case for the inferior outgroup. They estimated positive aspects of the inferior outgroup as high as those of their own group in the NAG condition, but they came to evaluate them as much worse than those of their own group at $p < .05$ in the AG condition.

Multiple comparison tests using Fisher's least significant difference method were performed on the *ENA* as well, but no such differences between the two conditions were found. Subjects evaluated negative aspects of their own academic group more harshly relative to any of the other three academic outgroups at $p < .05$ in both the AG and NAG conditions. To put it another way, the pattern of target-differences in the evaluation of negative aspects did not differ across the AG and NAG conditions.

## Discussion

Overall, the results suggest that the activated academic group-self certainly influenced the retrieval of stereotypical information about groups, but the scope of its influence was restricted. Specifically, it inhibited the retrieval of negative information for one's own academic group, and facilitated the retrieval of negative information for the inferior academic outgroup. The retrieval of positive information about these two groups, however, was not affected. No effects of the activated academic group-self were found in the retrieval of information for the equal and superior outgroups. The activated academic group-self indeed influenced the evaluation of retrieved information about groups, but its influence was also selective. To be more specific, it enhanced the evaluation of positive aspects of the subjects' own group, and degraded the evaluation of positive aspects of the inferior outgroup. The evaluation of negative aspects of these groups, however, was not affected. No influences of the activated academic group-self on the evaluation of positive or negative aspects of groups were found for either of the equal and superior outgroups. The shifting activation model of self contends that a currently activated self-aspect may play a critical role in current cognitive processing (Markus & Wurf, 1987; Linville & Carlston, 1994), and so it was predicted in the present study that the stereotype we express at a particular time may differ depending on whether the relevant group-self is currently activated or not. The present data provide partial support for this assertion.

Moreover, the present findings were basically consistent with the predictions derived from the SIT (Tajfel, 1978; Tajfel & Turner, 1986).In the present study, the subjects displayed a strong tendency of ingroup derogation, which seemingly contradicts this theory, but the activated relevant group-self moderated this tendency. In addition, it invoked outgroup derogation, although only for the inferior group, suggesting that people are likely to use a downward-comparison to maintain their social identity under a certain condition.

One should, however, speculate a bit more as to why the current subjects showed a tendency of ingroup derogation and why the scope of influences of the activated academic group-self was restricted to responses

to the ingroup and the inferior outgroup members.

First, one could say that the ingroup derogation observed in the present study stems from the current Japanese educational system and more generally the socio-structural nature of Japanese society. Japanese universities are ranked highly uni-dimensionally according to the academic standard for entry, and academic career weighs too heavily in social life in Japan (employment, promotion, marriage, and so on). Most Japanese people are therefore driven from early childhood to compete and struggle for a higher academic career. However, only a limited number of winners who are fortunate enough to enter a top-ranked school can be satisfied with their academic identity, because the rapid increase of the ratio of students who go to high schools or universities in recent years has degraded the value of merely going on to the next stage of education. One may say that the greater part of Japanese university students nowadays tend to view themselves as defeatists, and their academic identity as being imposed and unsatisfactory (Ikegami, 1999; Takeuchi, 1995). Some theorists argue that people are less committed to their own group if that group membership is forced rather than voluntarily selected (Ellemers et al., 1999). It is thus very probable that most of the present students are placed at a relatively low level of group identification in substance, leading to the overall tendency of ingroup derogation. The present results, however, suggest that the activation of academic group-self should make such students self-protective enough at least to attenuate the ingroup derogation by preventing self-threatening negative information about their own group from coming to mind and also by interpreting positive information in a favorable way.

The argument above also accounts for why the activation of academic group-self was more likely to invoke outgroup derogation for the inferior university than for the equal or superior one. Social identity theory predicts that a higher level of ingroup identification corresponds to stronger outgroup derogation in an intergroup context. This suggests that individuals at a low level of ingroup identification are less likely to manifest such tendencies because they view their group membership as unimportant to their self-esteem and are therefore less likely to be threatened by comparison with relevant other groups. There are, however, some researchers who are going to challenge this contention by arguing that people may be uncomfortable with their group membership if they are being categorized as a member of a certain group with lack of faith in that social identity (Long & Spears, 1997; Branscombe et al., 1999). Moreover, there are also some researchers attempting to demonstrate that low as well as high identifiers react to threats to group status for self-protection (Spears et al., 1997; Ikegami, 2000, 2001).

In particular, the findings reported by Ikegami (2000, 2001) are intriguing and suggestive for the present study. In these studies, it was shown that students low in identification with their own university were likely to exhibit outgroup favoritism when the target university was equal or superior to their own on the dimension of academic standard for entry, but outgroup derogation when the target was inferior to their own on this dimension. From these findings, it was inferred that students at a low level of ingroup identification are threatened by their unsatisfactory academic social identity, and consequently are motivated to move to other higher-status universities to enhance themselves, leading to a favorable view of those universities. At the same time, they need to derogate other lower-status universities to justify the status quo for their self-protection.

Taken together, it might be concluded that the current subjects are not so committed to their own university and hence are threatened by their unsatisfactory academic identity. Therefore, they are more likely to denigrate the inferior university for self-protection, but less likely to do so for the equal and superior university because they are motivated to maintain a positive illusion of them.

The present study suggests that the way of managing one's social identity by stereotyping is greatly influenced not only by the temporary state of self within an individual but also by the macro-structural nature of society that surrounds a specific group context in question.

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Note: Part of the present data was presented at the XXVI International Congress of Psychology held in Montreal in 1996.

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