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Cross-Cultural Differences in the Perception of Group Entitativity and Autonomy

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THESIS

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ACCEPTANCE

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Cross-Cultural Differences in the Perception of Group Entitativity and Autonomy

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This research examined cross-cultural differences in group perceptions. Specifically, it examined the relative importance of the properties underlying perceived entitativity and the influence of entitativity on group autonomy beliefs among American and Japanese college students. Group properties were divided into two categories: essence properties and dynamic properties. Essence properties included similarities in group members' physical characteristics, background, and personality traits. Dynamic properties included commonality in goals, outcomes, and cooperation among members. It was found that both American and Japanese people's perceptions of entitativity were higher when essence and dynamic properties were high. However, essence properties were more strongly related to entitativity in the U.S. than in Japan, whereas dynamic properties were equally related. It was also found that the relationship between perceived group entitativity and perceived group autonomy depended on culture. Group autonomy beliefs were stronger and more strongly related to entitativity in the U.S. than in Japan.

Cross-Cultural Differences in Perceptions of Group Entitativity and Autonomy

Perceived group entitativity, which concerns the ontology of groups in perceptual processes, was originally defined as the degree to which a group is perceived to have "the nature of entity, having a real existence" (Campbell, 1958, p.17) Interest in perceived group entitativity has recently reemerged, resulting in theoretical and empirical work that has facilitated a redefinition and specification of perceived group entitativity (Kashima et al., 2005; Yzerbyt, 2005). Some researchers, for example, have studied the nature of entitativity through its functions. This work indicates that higher group entitativity facilitates stereotype use (Yzerbyt, Rogier, & Fiske, 1998), attributions of collective responsibility (Lickel, Schmader, & Hamilton, 2003), and identification with the group (Castano, Yzerbyt, & Bourguinon, 2003; Castano, Yzerbyt, Paladino, & Sacchi, 2002; Crawford, Sherman, & Hamilton, 2002; Yzerbyt, et al., 1998).

Other researchers have sought to identify the properties of groups that determine perceived group entitativity. For example, Lickel et al (2000) showed that the degree of interaction among members was the best predictor among a variety of group properties. Most recently, Brewer, Hong, and Li (2004) integrated both types of work and proposed theories of groups that determine the precedence of entitativity and underline the functions of entitativity in social cognitive processes. One of the implications of this work is that meaningful cultural differences may exist. Identifying the etic (culture-general) and emic (culture-specific) aspects of perceived group entitativity should facilitate our understanding of the nature of entitativity. Cultural differences, especially those between Western and Asian cultures, seem especially important given the literature

indicating rather substantial cross-cultural differences in the roles that groups play in people's lives.

The purpose of the present study was to examine differences between American and Japanese college students in perceived group entitativity. Specifically, the study examined cross-cultural differences in the group properties that lead people to perceive groups as more or less entitative and the relationship of perceived group entitativity to beliefs about group autonomy. Group autonomy beliefs (Menon, Morris, Chiu, & Hong, 1999) concern perceptions of groups as actor-agents and the tendency to make group-level, rather than individual-level, attributions of causality.

I begin by reviewing the literature concerning cross-cultural differences in group processes. Then, the properties that determine, as well as the consequences of, perceived group entitativity are discussed. Group properties are divided into two categories, essence and dynamic, based on the implicit theories believed to underlie the association between each property and entitativity. Next, the influence of each property on perceived group entitativity in American and Japanese cultures are inferred based on existing cultural studies. I then discuss group autonomy beliefs, focusing on the roles of culture and perceived group entitativity. I conclude my introduction with an overview of present study.

Conceptual Basis of Cross-Cultural Differences between the U.S. and Japan

Studies that have found substantial differences between American and Japanese people's behaviors, motives, values, and attitudes in group contexts are not rare (e.g., Heine, & Lehaman, 1997; Heine, Lehaman, Markus, & Kitayama, 1999; Kasima, &

Triandis, 1986; Kitayama, Markus, Matsumoto, & Norasakkunkit, 1997; Lincoln, Hanada, & Olson, 1981; Murkus & Kitayama, 1991; Takaku, 2000; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988; Ulman, Rhee, Bardoliwalla, Semin, & Toyama, 2000; Yuki, 2003; Zender, 1983). Several researchers have explained differences in group contexts in terms of differences in cultural orientations. Individualism-collectivism has been one of the most widely used conceptualizations of cultures, but it is limited at least two ways.

First, in the individualism-collectivism view of culture, Americans are said to be highly individualistic and Japanese are regarded as moderately to highly collectivistic. However, contradictory results have been obtained in a variety of domains, including social identity (Yuki, 2003), and emotional and functional closeness to groups (Ulman et al., 2000). These studies indicate that Japanese are less identified with, less loyal to, and less attached to their in-groups than are Americans. Moreover, Takano and Osaka (1999) found that of the 11 survey and four behavioral studies that have examined the global tendency to be individualistic or collectivistic, only one showed a difference between American and Japanese in the expected direction; ten studies showed no difference and four studies showed a difference in the opposite direction.

Second, researchers who have adopted an individualism-collectivism view have tended to see culture as a unidimensional, domain general construct (Hong & Chiu, 2000). However, the results of many studies have indicated that culture is a multidimensional construct and its influences are highly domain specific. For example, Kasima and Triandis (1986) manipulated feedback for memory tests and found that although a lack of need for positive self-regard (Heine et al., 1999) and self- and group-serving biases

(Heine & Lehman, 1997) among Japanese compared with Americans have been well documented, this pattern held only in ability attributions. In other domains of attribution, including effort, test-difficulty, and situational attribution domains, both Americans and Japanese showed equally strong self-serving biases.

In addition, Takaku (2000) found that Japanese people's account-giving style depended upon status differences between people. He presented several scenarios in which a person committed a social transgression and different types of accounts were given to the victim. The results showed that Americans tried to avoid the acceptance of causal responsibility, whereas Japanese participants tended to accept causal responsibility without making any kind of excuses. Acceptance of responsibility was associated with lower anger, weaker attributions of causal responsibility to the person who caused the transgression, and greater sympathy. These results are consistent with the argument that Japanese people try to avoid interpersonal conflict in order to maintain interpersonal harmony (Oetzel et al., 2001; Yuki, 2003). However, Japanese also viewed justifications or excuses from the transgressor to be appropriate when transgressor's status was higher than that of the victim.

Some researchers have noted the problems with a unidimensional cultural view and have thus conceptualized culture as a domain/target specific, multidimensional construct (e.g., Triandis et al., 1988). Instead of focusing on the main effect of culture, such people tend to focus on Culture X Domain/Target interactions (Conway et al., 2001). Several researchers have adopted a constructivist approach, focusing on how people in different cultures interpret their social environments and arguing that implicit lay theories

and or shared social beliefs underlie people's cognitive, perceptive, and affective reactions to specific situations and/or objects (Hong & Chiu, 2000; Hong, Morris, Chiu, & Benet-Martinez, 2000; Takano & Osaka, 1999). Implicit theories are loosely organized knowledge structures and beliefs that describe the relationships and qualities of objects and guide the interpretation of and inferences about one's environment and social events. Individuals use these theories to understand, predict, and control their social environments, often non-consciously (Hong, Sheri, & Chiu, 2001).

Culture is assumed to play an important role in the acquisition of implicit theories. Morris et al. (2001) have argued that written, spoken, or pictorial cultural narratives are the most important sources of implicit theories. Formal and informal organizations transmit implicit theories through folktales, television commercials, and relational tracts. For example, an analysis of advertisements in the U.S. and Korea showed that whereas American advertisements emphasized personal choice and individual well-being, Korean advertisements emphasized family well-being (Han & Shavitt, 1994). Differences in culturally transmitted theories are believed to produce meaningful cultural differences in one's understanding of the environment.

Finally, each implicit theory is assumed to have a different range of applicability, accessibility, and availability for people in different cultures (Hong & Chiu, 2000; Hong et al., 2000; Morris et al., 2001; Takano & Osaka, 1999). These characteristics create domain and target specificity in the influences of implicit theories. Differences in implicit theories are assumed to be the sources of cultural differences. Thus, cultural differences should also be target and domain specific phenomena.

Implications for the present study. In the present study, I examined cultural differences in perceived group entitativity. People who adopt a domain general view of culture may hypothesize that people from one culture tend to perceive greater entitativity than the other. However, this hypothesis seems problematic because groups differ in many ways and people in different cultures do not necessarily focus on the same characteristics of groups.

Following Brewer et al. (2004), I categorized group properties into two clusters and focused on cultural differences in the importance of each property to perceived group entitativity. One cluster is called essence properties, which represent static properties of groups; the other is called dynamic properties of groups which represent malleable aspects of groups. These two clusters of properties are assumed to be the sources of perceived group entitativity. Therefore, the presence of each type of property is expected to affect the magnitude of group entitativity. In addition, people in different cultures may react differently to each type of group property because cultural differences in values, norms, and organizational systems affect the interpretation of group properties. For example, some cultures value group harmony and have strong norms that require group members to follow the group's behavioral regulations. Under such circumstance, individual traits or other internal factors may be less informative about the nature of the group.

I also assessed group autonomy beliefs (Menon et al., 1999), which are believed to underlie people's tendencies to make group-level attributions. Menon et al. found that East Asians tend to make more group-level attributions than Americans who tend to

emphasize the causal role of individual group members. However, group autonomy beliefs may not apply to all types of groups. My goal in the present research was to identify those group characteristics that influence the degree to which group autonomy beliefs apply to particular types of groups.

Perceived Group Entitativity

Perceived group entitativity is defined as the degree to which a group is perceived to have "the nature of entity, having a real existence" (Campbell, 1958, p.17). In other words, perceived entitativity refers to the extent to which a group is seen as being a meaningful, coherent, and unified entity in which the members of the group are bonded together (Carpenter & Radhakrishnan, 2002; Dasgupta, Banaji, & Abelson, 1999; Hamilton, Sherman, & Lickel, 1998; Kashima et al., 2005; Lickel, Hamilton, & Sherman, 2001; Lickel et al., 2000; Sassenber, & Postmes, 2002). Lickel et al. (2000) showed that groups could be organized into several categories based on their properties (e.g., degree of interaction among members, similarity among members, common goal, common outcome, size, etc). Groups that belong to different categories are perceived to differ in entitativity.

The majority of researchers (e.g., Dasgupta et al., 1999; Lickel et al, 2001; Lickel et al., 2000; Wellborn, 1999) have focused on properties of a group (e.g., trait similarity, behavioral consistency, physical proximity) that lead people to perceive an aggregate of individuals as an entitative social unit. A property may be an actual or perceived quality of the group. For example, a person may perceive a group to be entitative based on the similarity in members' physical appearance. A person may also

infer similarity in personality traits based on the similar appearance of the members. In this case, trait similarity is a perceived quality of the members; it is not necessarily accurate.

Brewer et al. (2004) and Kashima (2004) have argued that highly entitative groups are seen as meaningful because the properties that underlie entitativity provide a basis of predicting group behaviors and for interpreting the nature of groups. For example, members of a family tend to be similar to each other in their physical appearance because of their shared genetics. Once the family is perceived as entitative, perceivers may infer that certain personality traits, motivations, and goals are shared by the family. This process occurs because such people implicitly believe that similarity in physical appearance indicates similarity in goals, motives, and personality traits. This process is related to essentialism, which refer to people's tendencies to infer and attribute fundamental essences to individuals or groups (Kashima, 2004; Plaks, Levy, Dweck, & Stroessner, 2004; Yzerbyt, Judd, & Corneille, 2004). These essences are generally considered as static individual properties that are immutable and consistent across situation.

Brewer et al. (2004) also suggested that depending upon a perceivers' cultural background, the same properties may be seen as the basis of prediction and understanding of a group or just a meaningless quality of the group because cultures provide different bases for the interpretation of group properties. In this view, entitativity refers not only to the coherence of a group, but also to the meaningfulness of the group as a social entity, which helps to understand and predict group behavior. Pickett and Perrott (2004)

provided partial support for Brewer et al.'s assertion by showing that higher entitativity helped people to compare groups. Pickett and Perrott argued that the increased comparability was due to the increased predictability of the group's behavior.

Consequences of perceived entitativity. Perceived group entitativity has been shown to influence several social cognitive processes. For example, members of highly entitative groups tend to be depersonalized and perceived as interchangeable parts of the group, which facilitates members' identification with the group (Castano, Yzerbyt, & Bourguignon, 2003; Crawford et al., 2002; Hogg, 2001; Yzerbyt et al., 1998). In fact, Castano, Yzerbyt, Paladino, and Sacchi (2001) found that higher entitativity was associated with higher identification among group members.

Depersonalization of the members in highly entitative groups is due to the fact that high group entitativity leads to stronger expectations of consistency and coherence of members' characteristics (Yzerbyt et al., 1998). Johnson and Queller (2002) found that when entitativity was high, people tended to create abstract images of group members and engage in on-line processing of members' behaviors. This finding indicates that members in a highly entitative group are more easily summarized to create coherent images. As a result, members of the group are ascribed specific shared characteristics. In fact, Yzerbyt et al. (1998), Crawford et al. (2000), and Dasgupta et al. (1999) all found that members of highly entitative groups tended to be ascribed the same trait characteristics, which led to greater difficulty in distinguishing among individual members. According to Dasgupta et al. and Crawford et al., greater entitativity facilitates the category-based representation of group members. Presumably, individual-based

representations would also be inhibited under these conditions.

Categorization sometimes affects perceivers' attributions such that perceivers ignore situational factors, making dispositional attributions for both the members' and the group's behavior (Yzerbyt et al., 1998). According to Yzerbyt et al., people perceive surface-level characteristics of a group as reflections of deeper, true characteristics of group members, which may in turn lead to stronger stereotypes and in-group bias. That is, out-group members may be perceived as receiving what they deserve because of their dispositions; social injustice or other situational factors may be ignored.

In summary, studies have shown that higher entitativity is associated with perceptions that members share the same underlying characteristics (Crawford, et al., 2002; Dasgupta et al., 1999; Yzerbyt et al., 1998). This stereotyping occurs because entitativity facilitates category-level information processing. People expect high levels of consistency among members in the group and person-level processing is inhibited (Crawford et al., 2002; Dasgupta et al., 1999; Johnson and Queller, 2003). High group entitativity also provides a basis for group identification because high entitativity indicates the meaningfulness of groups (Castano et al., 2002). Finally, perceptions of entitativity also affect attribution processes (Yzerbyt et al., 1998).

Elements of perceived entitativity. Some researchers have tried to identify the factors that contribute to the perception of group entitativity. The degree of perceived entitativity is a product of a wide variety of group properties and other factors (Brewer et al., 2004; Campbell, 1958; Carpenter & Radhakrishnan, 2002; Castano et al., 2002; Crawford et al., 2002; Guinote, 2004; Lickel et al., 2000; Lickel et al., 2001; Reynolds,

Oakes, Haslam, Turner, & Ryan, 2004; Sassenberg & Postmes, 2002; Yzerbyt et al., 1998).

One factor is the perceivers' characteristics, including their psychological states. For example, more allocentric (collectivism in individual level) people tend to perceive greater entitativity (Carpenter & Radhakrishnan, 2002). Another factor concerns the situation in which the group is perceived. For example, when people are assigned to newly formed ad hoc experimental groups, the identifiability of group members is found to reduce perceived entitativity because identifiability prevents depersonalization of group members and, as a result, the salience of the group as a category decreases (Sassenberg & Postmes, 2002).

Probably the most commonly examined factors contributing to perceived group entitativity are the characteristics of the groups themselves. In his original paper, Campbell (1958) adapted Gestalt principles and suggested that similarity, proximity, and common fate are the criteria for group entitativity. Brewer et al. (2004) organized these and other group properties into two categories based on implicit theories of groups. Implicit theories of groups are assumed to underlie one's understanding of groups and their behavior and at the same time provide the boundary and coherence of the group as a meaningful social unit. Brewer et al. proposed two theories, which are extensions of static versus dynamic theory (Hong & Chiu, 2001) to group perceptions. These theories are discussed in the following sections.

Group properties and entitativity. Brewer et al. (2004) and Yzerbyt et al. (1998) argued that some people perceive the static properties of groups as the representation of

the groups' "core essence." They also argued that these people perceive group entitativity based on the static properties of groups. Brewer et al. called such properties essence properties of groups. In the present research, essence properties were defined as the similarity and consistency of group members in terms of personality traits, physical appearance, background, and behaviors, which facilitate the inference of a deeper, core essences (Brewer et al., 2004; Crawford et al., 2002; Kashima, 2004; Lickel et al., 2000; Lickel et al., 2001). In this view, a group is a meaningful entity because members share stable dispositions which enable them to understand and predict the group's behavior; such characteristics are thus sources of perceived group entitativity.

Brewer et al. (2004) also emphasized the importance of dynamic group properties. Dynamic properties include members' goals, motives, and needs, which determine group structure and coordinated actions among members. All of these factors are dynamic, temporal, and affected by the situation surrounding the groups. Unlike the essence view of groups, the dynamic view defines group properties as malleable; they can be changed depending on the group's goals and environment. Groups are not defined as distinct and independent units in the society. Rather, an aggregate of people becomes a group in order to achieve a shared purpose which organizes and coordinates members' behaviors. The members' similarity is perceived to stem from shared goals, needs, motives, and the temporal dynamics and coordination of, rather than similarity of, behavior. In short, groups are perceived as meaningful units because their behaviors provide information about the commonalities in dynamic psychological processes (goals, needs, motives) among members.

There is a distinction between the objective perception of each type of group property and the subjective inferences drawn from these. For example, people may perceive a group as having high levels of essence properties, but not perceive the group as highly entitative unless they associate these properties with a deeper, core "essence" of the group. Similarly, people may perceive a group to have dynamic properties, but not perceive the group as highly entitative if such properties do not facilitate their understanding of the group.

The results of several studies indicate that both essence and dynamic properties are associated with perceived group entitativity. For example, static properties, including members' similarity in physical appearance (Dasgupta et al., 1999), opinion, background (Crawford et al., 2002; Yzerbyt et al., 1988), beliefs (Crawford et al.2002), and personality traits (Crawford et al., 2002; Lickel et al., 2000) have all been found to be positively associated with group entitativity. In addition, Yzerbyt et al. and Dasgupta et al. showed that trivial commonality in the static properties of groups can be a source of trait inferences. Consistent with Brewer et al.'s (2004) arguments, these results indicate that essence properties are actually seen as reflections of members' deeper qualities.

Although fewer studies have examined dynamic properties of group entitativity, dynamic factors have been found to be important determinants of perceived group entitativity (Crawford et al., 2002; Lickel et al., 2000). For example, Lickel et al. found that shared goals and common outcomes were unique predictors of perceived entitativity. They also found that the degree of interaction among members was the best predictor of perceived entitativity. Lickel et al. (2001) argued that interaction is important because it

indicates the nature and purpose of groups, including the degree of interdependence among members. Deutsch (1975) argued that people regulate their interactions differently depending on their goals. Vegt, Emans, and Vliert (1998) and Wildschut, Lodewijkx, and Insko (2001) partly support Deutsch's argument.

My main interest in the present research was whether or not the associations between group properties and perceived group entitativity differ across cultures. To my knowledge, only Brewer et al. (2004) and Kashima et al. (2005) have examined cultural differences in the relationship between group properties and group entitativity. Brewer et al. hypothesized that people in different cultures endorse different types of group theories. In particular, they hypothesized that, in contrast to Americans, Chinese participants' perceptions of entitativity would be largely affected by essence properties because some research indicates that Chinese people tend to perceive the world as fixed (Chiu et al., 1997).

Brewer et al. (2004) asked participants to rate essence properties of groups, dynamic properties of group, whether or not the groups had fixed characteristics and a core essence, and perceived group entitativity. They found that both essence and dynamic properties were significant predictors of perceived group entitativity. However, the patterns of the relationships between essence and dynamic properties and perceived group entitativity did not differ between the U.S. and China.

Kashima et al. (2005) found some interesting cultural differences. One difference was that English speakers (from the U.S., U.K., and Australia) and other Europeans tended to perceive individuals as more agentic than groups, whereas East

Asians did not. Additionally, Europeans and English speakers perceived individuals to be more agentic than did East Asians, but East Asians perceived society to be more agentic than did Europeans and English speakers. However, only highly entitative groups (i.e., family and friends) were used as target groups. Thus, people's perceptions of the agency of groups that are low in entitativity are unknown.

Summary of group properties and group entitativity. Although there is no direct evidence for cross-cultural differences in the influence of essence and dynamic properties on perceived group entitativity, several studies support the influence of each factor on perceived entitativity (Brewer et al., in press; Lickel et al. 2000). Other studies indicate that there are reliable cross-cultural differences in the emphasis of static or dynamic aspects of the world, morality, and personality (Chiu et al., 1997; Hong et al., 1999; Hong, Levy, & Chiu, 2001; Levy, Plaks, Hong, Chiu, & Dweck, 2001; Menon, Morris, Chiu, & Hong, 1999). Therefore, it seems likely that cross-cultural comparisons, perhaps other than between the U.S. and China, may support the differing influences of essence versus dynamic properties of groups on perceived entitativity.

The Role of Culture in Group Perceptions

Existing studies with American participants indicate that both essence and dynamic properties are important determinants of perceived group entitativity (Brewer et al. 2004; Crawford et al. 2002; Dasgupta et al. 1999; Lickel et al., 2000; Yzerbyt et al. 1998). Therefore, it seems reasonable to argue that both essence and dynamic properties are important for Americans. However, there may be meaningful cultural differences between the U.S. and Japan.

According to Brewer et al. (2004), essence properties are seen as the reflection of a core essence, which is based on the homogeneity of group members. In fact, Crawford et al. (2002), Dasgupta et al. (1999), Lickel et al. (2001), and Yzerbyt et al. (1998) showed that Americans infer group members' core dispositions from individual members' similarity in physical appearance, educational backgrounds, traits, values, beliefs, etc. However, other work indicates that Japanese people are less likely to infer people's core-dispositions from essence properties.

Japanese culture has been characterized by a strong responsibility to larger collectives (Triandis et al., 1988) and the importance of intragroup harmony (Markus, & Kitayama, 1991). A weaker need for high self-esteem, a relative lack of positive bias toward the self (Heine et al. 1999; Heine & Lehman, 1997; Kitayama, & Karasawa, 1997; Kitayama et al. 1997; Van Boven, Kamada, & Gilovich, 1999; Van Boven, White, Kamada, & Gilovich, 2003), and communication strategies that are intended to avoid interpersonal conflicts (Oetzel et al., 2001; Takaku, 2000) support the existence of group-related values.

These cultural values would seem to weaken the association between internal attributes and external behavior among Japanese people. For example, Heine et al. (1999) pointed out the strict regulations of behavior and emotional expressions in Japan. Similarly, Doi (1985) and Dien (1999) argued that Japanese distinguish what they publicly express (tatemae & omote) from what they truly think (honne & ura) in order to maintain interpersonal harmony within in a group. As the saying "the nail that sticks out will be hammered down" indicates, being similar is part of the Japanese norm and

expressions of individual differences tend to be suppressed. Thus, internal dispositions are less likely to be reflected in observable behavior and similarity among group members may thus be considered less informative about internal attributes.

In fact, Besser (1992) concluded from a review of several studies that Japanese people are *psychologically* less committed and less loyal to their company. However, she also reported that Japanese people consistently showed higher commitment *behavior* (higher performance, lower absenteeism). Similarly, Abrams et al. (1998) showed that social norms and organizational systems, rather than internal attributes, were better predictors of Japanese workers' turnover intentions. Because essence properties can be a basis of entitativity only when they provide reliable information about the deeper dispositions of groups, the unreliability of essence properties should reduce their impact on group perceptions in Japan.

At the same time, group-related values, including the values of interdependence, cooperation, and commitment to group goals (Markus & Kitayama, 1991; Sagie et al., 1996; Triandis, 1988) are likely to facilitate the influence of dynamic properties on group perceptions. Studies have shown that these values are formally reflected in Japanese organizational and school systems. For example, the lean work force system in Japanese organizations has been found to facilitate the emergence of common goals and interdependence among team members (Besser, 1992). The system facilitates mutual dependence in terms of their performance and outcome. Japanese collective decision-making policy (Osako, 1977; Sagie et al., 1996) is also likely to facilitate the emergence of common goals and shared responsibilities.

Several other studies also suggest that dynamic properties are likely to be important to perceptions of group entitativity in Japan. For example, in their studies of negotiation, Wade-Benzoni, Okumura, and Brett (2002) and Gelfand et al. (2002) found that Japanese people tended to be more cooperative and expected others to be more cooperative than did Americans. Kumara, Hara, and Yano (1991) found a strong relationship between co-worker support and satisfaction among Japanese workers. Finally, Yuki (2003) showed that Japanese undergraduates' group identification was largely determined by their perceived connectedness with other members and their knowledge of intragroup networks.

Overall, Japanese group values seem likely to reduce the influence of essence properties and facilitate the importance of dynamic factors on group perceptions in Japan. This pattern was supported by Yuki (2003) who found that although Japanese people tended to perceive higher homogeneity both in small social groups and in their nation, their group identification was strongly affected by intragroup relationships rather than by the perceived homogeneity of members.

Some researchers have also argued that Japanese people tend not to perceive individual dispositions as fixed (Heine et al., 1999; Kashima et al. 2005; Markus & Kitayama, 1991; Triandis, 2001), suggesting that the assumption that individuals have a fixed, unchangeable essence is unlikely to hold in Japan. Because essence properties of groups are often treated as the aggregations of members' individual properties, the difference in the conceptualizations of individual characteristics seems likely to affect the relative importance of group properties.

Cousins (1989), for example, showed the existence of a situation-specific self among Japanese. In the study, both American and Japanese high school and university students were asked to describe the self with and without information about a specific context. The results showed that when no specific information about context was given, Japanese participants tended to provide more concrete, role specific descriptions of the self. In contrast, Americans described themselves in terms of psychological traits or other abstract characteristics. However, when specific situations were given to the participants, Japanese tended to use psychological traits and other attributes, whereas Americans reduced the number of trait descriptions and provided somewhat superficial descriptions. The results indicated that Americans tend to endorse domain general attributes whereas Japanese internal dispositions may be domain specific.

In addition, Japanese have been shown to rely more on contextual factors and less on essence properties to understand their environments. Kashima, Seigal, Tanaka, and Kashima (1992) compared Japanese and Australian university students. Participants were shown an essay that was either pro-environmental protection or anti-environmental protection. They were also told that the direction of the essay was given to the writer; the writer had no choice about it. Kashima et al. found that Japanese students were less likely to endorse the statements that individuals' behaviors generally reflect their internal attitudes, whereas Australian students gave more extreme evaluations of the writer of the essay depending on the content of essay. The results indicate that Japanese are less likely to rely on internal dispositions to understand people's behaviors, which may generalize to their perceptions of groups.

Overall, Japanese culture and formal organizations facilitate values which potentially strengthen the influence of dynamic properties on group perceptions. Although dynamic properties of groups are important predictors of perceived group entitativity for Americans, the magnitude of the influence may be weaker than that for Japanese because interdependence and interpersonal harmony are less important in the U.S.

Implicit cultural theories of group autonomy and attribution. Results of cross-cultural studies often indicate reliable differences in the pattern of attributions between Americans and Japanese. Several studies indicate that Americans tend to make internal, individual disposition-based attributions, whereas Japanese show less correspondence bias and tend to focus more on contextual factors (Markus & Kitayama, 1991; Menon, Morris, Chiu, & Hong, 1999; Miyamoto & Kitayama, 2002; Morris & Peng, 1994; Triandis, 2001).

Menon et al. (1999) analyzed several American and Japanese newspapers for content about causes of relatively equivalent organizational scandals (e.g., type, economic loss) that occurred in each country. They found that Japanese newspapers tended to specify organizational processes or systems as reasons for organizational scandals. In contrast, American newspapers tended to focus on the causal role of particular individuals. One of the unique features of the Menon et al. (1999) study is its emphasis on the distinction between individual and group-level attribution, which is a focus of the present research.

Menon et al. (1999) focused on cultural differences in the conceptions of

individual versus group autonomy. Autonomy was defined as the power of an individual or group to exert the law set fourth by its internal will rather than that of an external constraint (Kant, 1786/1949). According to Menon et al., autonomy belief underlies the perception of groups or individuals as causal agents in society. Consistent with their arguments, Menon et al. found that American students had stronger individual autonomy beliefs and made individual level-attributions, whereas East Asian students believed in group autonomy and made group-level attributions.

Although they did not directly assess autonomy beliefs among Japanese, Menon et al. (1999) showed that Japanese tend to make group-level attributions. In addition, both Japanese and Chinese tend to make situational attributions when the target is an individual and are more likely to make group-level attributions when they have a choice. These results imply that Japanese may not only be less likely to perceive individuals as causal agents, but may also have stronger group autonomy beliefs.

Differences in conceptualizations of the self also support the arguments. Specifically, Americans are said to conceptualize individuals as autonomous, independent beings who exercise their internal will and behave in ways that reflect internal attributes. In contrast, Japanese people tend to ascribe a stronger and wider range of obligations to larger collectives (Abrams, Ando, & Hinkle, 1998; Ames et al. 2001; Triandis, 2001; Whitehill, 1964), and the self, including goals, emotions, and thoughts, is largely affected by group memberships (Bond, 1983; Markus & Kitayama, 1991, Menon et al., 1999).

While autonomy of the individual seems largely restricted in Japan, Japanese people hold stronger beliefs about the intentionality of organizations than do Americans

(Ames, Zemba, Morris, Yamaguti, & Lickel., as cited in Menon et al., 1999). In short, although Japanese are less likely to conceptualize individuals as highly autonomous beings, they tend to perceive the "will" of organizations, which is likely to facilitate the conceptualization of groups as autonomous beings. Based on these arguments, I expected that Japanese people would show stronger group autonomy beliefs than would Americans.

Of course, it is unlikely that all groups in Japan would be associated with equally strong autonomy beliefs. Menon et al.'s (1999) finding that Japanese people tend to make group-level attributions was limited to companies. Japanese companies are known to have a variety of systems and policies under which people work and make decisions as a group (e.g., collective decision making), which may reduce the causal role of individuals (Besser, 1992; Zender, 1983, Heine et al. 1999; Sagie et al., 1996). However, such systems are absent in other types of groups. In addition, groups differ in a wide variety of other characteristics (Lickel et al., 2000), which may contribute to differences in group autonomy beliefs. Therefore, the generalizability of Menon et al.'s findings to other kind of groups cannot be assumed.

Entitativity may be a critical determinant of group autonomy beliefs. First, if an aggregate of people is not perceived as a group, perception of group autonomy would seem highly unlikely to occur. In other words, groups must be perceived as meaningful units of society in order to be perceived as causal agents and entitativity seems likely to provide the basis of the meaningfulness.

Second, group autonomy beliefs are associated with the tendency to infer a causal role of the group. Lickel et al. (2001) argued that groups are associated with

different degrees of collective responsibility and that interdependence among members is the important predictor of perceived collective responsibility. Interdependence is one of the components of agency properties of groups (Brewer et al., 2004). Thus, it is not surprising that groups with high entitativity would also be held responsible for members' behavior. In fact, Lickel et al. (2003) found that more entitative groups were perceived to have greater collective responsibility. Therefore, higher entitativity seems likely to be associated with stronger causal attributions.

However, although Lickel et al. (2003) found that Americans' attributions of collective responsibility increased as entitativity increased, it seems unlikely that group autonomy beliefs become stronger as perceived group entitativity increases. First, the idea of an autonomous group is inconsistent with the American cultural theory of autonomous individuals. Second, existing studies repeatedly showed that Americans tend to make individual dispositional attributions even when social pressure is made obvious to them (Markus & Kitayama, 1991; Menon et al., 1999; Miyamoto & Kitayama, 2002; Morris & Peng, 1994; Triandis, 2001). In fact, research has showed that although Americans perceive greater entitativity than do Chinese (Brewer et al., 2004), they also make fewer group-level attributions (Menon et al., 1999). Thus, I expected that Americans would show weak group autonomy beliefs regardless of perceived entitativity.

Summary of cultural influences. Americans' perceptions of entitativity have been found to be equally affected by essence and dynamic properties. However, Japanese cultural values, organizational systems, and conceptualizations of the self seem likely to make essence properties unreliable predictors of the core dispositions of group members.

At the same time, these values and systems may produce strong associations between dynamic properties of groups and perceived group entitativity. Overall, it seems likely that Japanese perceptions of group entitativity rely heavily on dynamic, rather than on essence, properties of groups.

Cultural differences were also expected to affect people's beliefs about person versus group autonomy. Whereas American values emphasize independent, autonomous individuality, Japanese values emphasize obligations to groups and allow groups to have strong influences. Therefore, it was expected that Japanese people would hold stronger autonomy beliefs than would Americans. However, it is unlikely that all groups are perceived as equally autonomous. One of the possible determinants of the magnitude of group autonomy beliefs is the degree of perceived group entitativity.

The Present Investigation

The purpose of this study was to examine cross-cultural differences between American and Japanese participants in the relative contribution of essence and dynamic group properties to perceived group entitativity. The other objective of this research was the assessment of cross-cultural differences in the magnitude of group autonomy beliefs and the effect of entitativity on group autonomy beliefs. This study followed the work of Brewer et al. (2004) with some modifications.

First, instead of Chinese, Japanese participants were compared with Americans. Although Chinese and Japanese are said to have similar cultures, there are important differences. Chinese collectivism is based on the relationship between each individual and authority figures (Dien, 1999). Thus, Chinese people tend to retain a strong sense of

individuality. In contrast, Japanese individuals tend to be more strongly embedded in groups and are typically assumed to have a weaker sense of individuality than do Chinese. Because of the differences, a comparison of American and Japanese people was expected to produce different results than would a comparison between American and Chinese people.

Second, Brewer et al. (2004) asked participants to indicate whether the groups in their study shared a core essence. This type of question asked about interpretations of group properties rather than about the group properties themselves. In order to separate participants' perceptions of objective group properties from their subjective interpretations of these properties, participants were not asked to answer questions regarding groups' core essence.

This investigation also adopted a modified version of Menon et al.'s (1999) questionnaire in order to assess group autonomy beliefs. The original version of the questionnaire assessed autonomy beliefs in general; the modified version assessed beliefs about the autonomy of each of a variety of groups. This modification made it possible to examine within culture variation in autonomy beliefs.

Rationale and predictions. Existing evidence consistently indicates that both essence and agency properties of groups are significant predictors of perceived group entitativity among Americans (Brewer et al., 2004; Carpenter & Radhakrishnan, 2002; Crawford et al., 2000; Dasgupta et al. 1999; Yzerbyt et al., 1998). Although there is no research that has directly assessed the relationships of essence and dynamic properties with perceived group entitativity among Japanese people, research in other domains

indicates that Japanese people have strong tendencies to rely on dynamic properties but not essence properties (e.g., Besser, 1992; Markus & Kitayama, 1991; Miyamoto & Kitayama, 2002; Triandis, 2001; Wade-Benzoni et al., 2002). Thus:

Hypothesis 1a: Essence properties of groups are positively related to perceived group entitativity.

Hypothesis 1b: The influence of essence properties on perceived group entitativity is stronger among American than among Japanese participants.

Hypotheses 2a: Dynamic properties of group are positively relate to perceived entitativity.

Hypothesis 2b: The relationship between dynamic properties of groups and perceived entitativity is stronger among Japanese than among American participants.

Existing studies also indicated that Americans tend to perceive individuals as autonomous and independent (Bond, 1983; Markus & Kitayama, 1991). In contrast, Japanese groups have been shown to more strongly influence their members' behavior (Ames et al., 2001; Besser, 1992; Zender, 1983, Heine et al., 1999; Sagie et al., 1996). These findings led to the following hypothesis:

Hypothesis 3a: Japanese participants hold stronger beliefs about the autonomy of groups than do Americans.

However, existing studies also indicate that higher entitativity is associated with

tendencies to attribute collective responsibility to groups (Brewer et al., 2004; Lickel et al., 2003). Therefore, the degree to which a group is perceived as autonomous was expected to depend on the extent to which the group was perceived to be entitative. At the same time, because beliefs in group autonomy are inconsistent with their cultural values, Americans' group autonomy beliefs were expected to remain relatively low regardless of the degree of perceived group entitativity.

Hypothesis 3b: Group entitativity is positively related to perceived group entitativity.

Hypothesis 3c: However, the relationship between group entitativity and group autonomy belief is stronger in Japan than in the U.S.

Method

Participants

Ninety-six American undergraduate students (36 male and 60 female, *M* age = 23.56, *SD* = 7.24) from the University of Nebraska at Omaha (UNO) and 99 Japanese undergraduate students (29 male and 70 females, *M* age = 20.51, *SD* = .79) from Osaka University participated in this study. Among American participants, 85 were Caucasian, 4 were Latino, and 7 were from various other racial or ethnic groups. The samples in both countries were convenience samples. American participants were recruited from introductory psychology, statistics, and research method classes in exchange for extra credit. Japanese participants were recruited from junior-level psychology courses. Following the regional custom, Japanese students' participation was totally voluntary.

Materials

A questionnaire was administrated to participants. A professional translator translated the English version of the questionnaire into Japanese. Then, two bilingual researchers back-translated the questionnaire into English to ensure that the two versions of the questionnaire had the same meaning for participants in the two countries. Discrepancies were resolved through discussion.

Participants were asked to rate a total of 15 aggregates of people on several group properties, including perceived group entitativity, essence properties of groups, dynamic properties of groups, and degree of their group autonomy belief. Although participants also rated the extent to which they perceived each group property as fixed or malleable, these data were discarded due to a lack of reliability for dynamic property scales (α = .60 to -.18). The order of the items within measure (i.e., entitativity, essence, dynamic, and group autonomy) was consistent, but the measures were presented in a different random order for each participant. The questionnaire took around 20 to 25 minutes to complete.

The groups or aggregates of people were selected from Lickel et al. (2000). Two criteria were used for the selection. First, groups that would be unfamiliar to Japanese people were excluded from the list. Second, Lickel et al. conducted cluster analyses, which showed five fairly stable clusters. Each cluster differed in the degree of entitativity and other group characteristics ratings. Therefore, three aggregates from each cluster were selected in order to maximize variability in the ratings.

Participants were not given specific descriptions of the groups because the

purpose of the study was to assess the extent to which each aggregate of people was perceived as a meaningful group. Groups were presented in the same random order throughout the questionnaire and across participants.

Measures

Essence properties. Items measuring this type of characteristic focused on the perception of group members as having common attributes (see Appendix A). The items, which are based on the work of Brewer et al. (2004), Lickel et al. (2000), and Yzerbyt et al. (1998) include: (a) the extent to which members in the group share similar personality characteristics, (b) the extent to which members in the group show similar behaviors, (c) the extent to which members in the group are similar in their physical appearance, and (d) the extent to which members in the group have similar backgrounds. Participants provided ratings on a 7-point Likert scale. Anchors for each question differed depending on the content of question (e.g., 1 = *very different in physical appearance* to 7 = *very similar in physical appearance*). The four judgments were averaged for each target group.

Dynamic properties. Participants were asked to rate: (a) the extent to which members in the group experience the same outcomes, (b) the extent to which members in the group cooperate with each other to achieve goals, (c) the extent to which members are dependent on each other to achieve goals, and (d) the extent to which members in the group share the same values (see Appendix B). Participants were asked to provide their ratings on 7-point Likert scales. Each question had different anchors based on its content. Again, the four judgments were averaged for each target group.

Perceived group entitativity. Few researchers have directly measured perceived

group entitativity and they have used different scales. For the present study, items based on the similar conceptualization of perceived group entitativity were adapted from several scales. Perceived entitativity was assessed, using a 7-item scale (see Appendix C). For one item, adapted from Lickel et al. (2000), participants rated the overall "groupness" of the groups on a 7-point scale ranging from 1 = *not at all a group* to 7 = *very much a group*. Two items were generated based on the work of Brewer et al. (2004). Participants were asked to indicate the extent to which each group should be thought of as a whole and the extent to which each group was a coherent unit. Finally, three items assessed the extent to which participants perceived that the members of each group felt unified, felt they are part of the group, and were organized. Participants indicated their responses on 7-point scales, but the anchors differed based on the content of the question. Mean scores were again computed for each target groups.

Group autonomy beliefs. This scale was adapted from Menon et al. (1999); two items were added (see Appendix D). Items included "In my society, this group takes control of the situations around them and exercises free will," "The norms in my society say that this group should take control of the situations around it and exercise free will," and "This group sets a course for itself independent of the influences surrounding it." Each item was answered on a 7-point scale in which 1 = *strongly agree* and 7 = *strongly disagree*. Means scores were computed for each target group.

Procedure

American participants completed the questionnaire in groups of about 10 to 25. Japanese participants completed the questionnaire after upper-class psychology lectures

in a large classroom at Osaka University. Instructions were given in participants' native languages. Each page of the questionnaire contained only one question and participants were asked to provide ratings for all 15 groups. Participants were also asked to provide demographic information including age, year in school, citizenship, and gender.

Results

Cronbach's alphas were computed for each measure (i.e. essence property, dynamic property, group entitativity, group autonomy belief) by cultural group and target group. The alphas, which are presented in Table 1, showed that the scales generally had acceptable reliability. However, there were significant differences in the mean alpha coefficients for both dynamic property and group autonomy belief scales. The implications of these differences are discussed in relevant sections.

The mean judgments of entitativity, essence and dynamic group properties, and group autonomy are presented in Tables 2, 3, 4, and 5, respectively. Note that the relative magnitudes of entitativity across groups were similar in the U.S. and Japan. Specifically, intimacy and task groups were judged to be the most entitative whereas transitory groups were judged to be the least entitative. Entitativity ratings for loose associations and social categories rested somewhere between intimacy groups and transitory groups. The patterns of relative magnitude of entitativity across categories are also similar to those reported by Lickel et al. (2000).

Relationships among Group Properties and Group Perceptions

Following Lickel et al. (2000), within-subject correlational analyses were conducted. Specifically, a correlation matrix among the four measures was computed for

each participant's ratings of the 15 groups. These coefficients were transformed into Fisher's z. The mean correlation coefficients from the distribution of correlation coefficients were then estimated for each variable pair separately for American and Japanese participants. These mean correlations are presented in Table 6. Note that the values of coefficients in the table and following text have been converted back into their original metric. As expected, all of the variables were positively related.

The average relationship between essence and dynamic properties was significant for both Americans (*Mean r* = .67, *SD* = .20, $p < .05$) and Japanese (*Mean r* = .71, *SD* = .19, $p < .05$). Although essence and dynamic properties were highly correlated, on average, there was also a great deal of variability among participants in the extent to which they perceived the two properties as related. Essence and dynamic properties were positively related to entitativity for both Americans (*Mean rs* = .76 and .81, $ps < .05$) and Japanese (*Mean rs* = .71 and .82, $ps < .05$), which indicates that groups with higher levels of essence and dynamic properties were perceived as more entitative. These results are consistent with Brewer et al.'s (2004) study and support my hypotheses that both essence and dynamic properties would predict greater entitativity (Hypotheses 1a and 2a).

Predicting Entitativity from Group Properties

I also estimated within-subject regression equations in which entitativity was regressed on both essence and dynamic properties. In other words, for each participant, entitativity ratings of the 15 groups were regressed on ratings of essence and dynamic properties. The mean unstandardized partial regression coefficients from these analyses are reported in Table 7. Note that the coefficients were significantly different from zero.

Thus, the results indicated that both essence and dynamic properties were significant unique predictors of entitativity in both the U.S. and Japan.

I analyzed these coefficients as a function of culture (American versus Japanese) and type of group property (Essence versus Dynamic) with repeated measures on the second factor. The analysis revealed a main effect of group properties, $F(1, 192) = 48.229$, $p = .000$, which indicated that, overall, dynamic properties were more strongly related to entitativity than were essence properties. A significant main effect of culture, $F(1, 192) = 6.104$, $p = .014$, further indicated that, overall, group properties were more strongly related to perceived entitativity in the U.S. than in Japan. The interaction between culture and group properties was also significant, $F(1, 192) = 7.082$, $p = .008$. Simple effect tests indicated that essence properties were more strongly related to entitativity in the U.S. than in Japan, $t(192) = 3.163$, $p = .002$. Although dynamic properties appeared to have a stronger relationship with entitativity in Japan than in the U.S., the difference was non-significant, $t(192) = -1.527$, $p = .128$. The analysis of reliability coefficients indicated that dynamic properties were more reliably assessed in the U.S. than in Japan. Therefore, a lack of difference between the U.S. and Japan in the magnitude of the unstandardized partial regression coefficients associated with dynamic properties is not attributable to the difference in reliability. Overall, dynamic properties predicted entitativity equally well in Japan and the U.S., whereas essence properties predicted entitativity better in the U.S. than in Japan.[1]

Group Autonomy Beliefs and Entitativity

Next, an independent sample t-test was conducted to test the difference in the

magnitude of group autonomy beliefs between the U.S. and Japan. Contrary to the hypothesis, Americans had stronger group autonomy beliefs than did Japanese, $t(191) = 2.525$, $p = .012$. Thus, hypothesis 3a was not supported. To test the relationship between group entitativity and group autonomy beliefs, within subject correlations were computed and transformed into Fisher's z. Then, these coefficients were aggregated for culture level analyses. As expected, entitativity was positively related to group autonomy beliefs both in the U.S. (*Mean* $r = .58$, $p < .05$) and in Japan (*Mean* $r = .24$, $p < .05$). The difference between these coefficients was significant, $t(190) = 5.925$, $p = .000$. Contrary to the hypothesis that Japanese show a stronger relationship between group entitativity and group autonomy beliefs, the result indicated that perceived entitativity was more strongly related to group autonomy beliefs in the U.S. Thus, hypothesis 3b was only partially supported. Analyses of reliability coefficients indicated that Americans' group autonomy beliefs were more reliably estimated than were those of Japanese. However, the large difference in the correlations seems unlikely to be totally attributed to differences in reliability.

Discussion

The present study was conducted to assess cultural differences in the relationships among essence group properties, dynamic group properties and group entitativity in the U.S. and Japan. The difference in the relationship between group entitativity and group autonomy beliefs was also examined. To my knowledge, no study has examined American-Japanese difference in the sources of perceived group entitativity and the relationship between perceived group entitativity and group autonomy beliefs. In the

present study, American and Japanese university psychology students completed a questionnaire in which their perceptions of group entitativity, essence properties, dynamic properties, and group autonomy beliefs for 15 target groups that have been shown to vary in perceived entitativity in the U.S. (Lickel, 2000).

The results indicated that both essence and dynamic group properties were positively related to perceptions of group entitativity. Second, dynamic properties predicted entitativity equally well in Japan and the U.S., whereas essence properties predicted entitativity better in the U.S. than in Japan. Finally, contrary to expectations, Americans exhibited stronger group autonomy beliefs than did Japanese and group entitativity was more strongly related to group autonomy beliefs in the U.S. than in Japan.

For American participants, the present results are generally consistent with the work of Lickel et al. (2000) and Brewer et al. (2004), which showed that both essence and dynamic properties contribute to Americans' perceptions of group entitativity. The stronger relationship of dynamic versus essence properties to entitativity was also consistent with the result of previous studies.

At least two explanations for the stronger role of dynamic properties are possible. One explanation is that although Americans' default style of making social judgments is internal or trait-based, they find it difficult to estimate group-level traits. Perhaps, then, American participants rely on dynamic properties when they judge group entitativity. A second explanation is that Americans tend to be dynamic group theorists, relying more on context-dependent factors to make group-level judgments. Both of these explanations assume that Americans rely on contextual (dynamic) factors when they make group-level

judgments. However, they differ in that the first explanation assumes that Americans at least try to infer group-level traits, whereas the second explanation does not involve the inference of group-level traits at all. Given previous research suggesting that Americans tend to attribute common traits to members of a group when group entitativity is high (Crawford et al., 2002; Dasgupta et al., 1999; Yzerbyt et al., 1998), the first explanation seems more plausible. That is, Americans appear to use dynamic properties as indicators of group-level traits.

The present research further indicates that cultural differences appear to exist not in which group properties relate to group entitativity, but in the relative importance of essence and dynamic properties to perceptions of group entitativity. The analysis of mean regression weights revealed that dynamic properties were a better predictor of entitativity both in the U.S. and Japan and the two cultural groups showed similar levels of reliance on dynamic properties. However, essence properties were far less important among Japanese participants. This finding is consistent with findings in other domains of research, including individual-level attributions (Chiu, 2000; Cousins, 1989) and social identity (Yuki, 2003). These studies indicate that Japanese rely more strongly on dynamic properties and less strongly on essence properties than did Americans when making social judgments of individuals. The present study extends this work by showing that Japanese university students rely more strongly on dynamic factors even when making judgments of groups.

Interestingly, Japanese appear to be different from Chinese with respect to contextual dependence and the importance of dynamic versus essence properties. In

Brewer et al.'s (2004) study, both essence and dynamic properties were equally useful predictors of Chinese people's perceptions of group entitativity. Additionally, Menon et al. (1999) showed that Chinese people tended to make internal attributions when the targets of their judgments were groups. These results suggest that Chinese people's dependence on dynamic properties may not occur when the target of the judgment is a group.

Other interesting findings from the present research are that American participants had stronger group autonomy beliefs than did Japanese participants and the relationship between perceived entitativity and group autonomy was stronger in the U.S. than in Japan. These findings are inconsistent with the two studies that have examined this issue. Menon et al. (1999) argued that Japanese people may hold stronger group autonomy beliefs based on their findings that Japanese newspapers tended to mention organizational systems as causes of organizations' misbehavior, whereas American newspapers tended to mention a particular individual as a cause of an organization's action. Similarly, Ames et al. (as cited in Menon et al., 1999) showed that Japanese people tend to perceive the existence of a group "will."

However, the lack of a relationship between entitativity and group autonomy beliefs in Japan seems consistent with the finding that East Asians' (including Japanese) perceptions of agency were relatively low across targets of varying consistency and fixedness, including individuals, families, friends, and society (Kashima et al., 2005). In addition, the positive correlation between entitativity and group autonomy beliefs in the U.S. is consistent with Lickel (2004) who showed that Americans tend to make group-level causal attributions when entitativity is high.

The present results thus seem to imply the existence of qualitative differences in the nature of entitativity between the U.S. and Japan. In particular, it seems likely that for Americans, one of the key characteristics of highly entitative groups is the existence of consistent group-level traits. For Americans, entitativity appears to relate to essentialism, that is, attributing unchangeable characteristics to groups as Americans often do when judging individuals (Crawford et al., 2002; Dasgupta et al., 1999; Yzerbyt et al., 1998). Indeed, studies conducted with Americans that have used both essence and dynamic properties to manipulate perceived group entitativity have generally shown that members of highly entitative groups tend to be attributed similar traits (Crawford et al., 2002). Because Americans' causal inferences tend to be more internal and trait-based, it seems likely that in the U.S the relationship between entitativity and group autonomy is mediated by the attribution of group-level traits.

In contrast, although both essence and dynamic group properties were significant predictor of entitativity in Japan, Japanese people appear to rely on dynamic properties more than on essence properties. Therefore, it is less likely that Japanese attribute traits to groups. In other words, among Japanese entitative groups are not necessarily seen as being composed of similar individuals. If this is the case, then Japanese may focus on the larger contexts surrounding organizations when they explain the behaviors or actions of those organizations. The context may include the political atmosphere, the economic situation, customs, traditions, and the national culture.

Note that this explanation does not necessarily conflict with Menon et al. (1999) who showed that Japanese newspapers tend to mention organizational systems, rather

than the individual members of organizations, as the causes of organizational misbehavior. Organizational systems may be viewed as reflections of organizational traits. However, organizational systems may also be seen as reflecting social demands, cultural traditions, social norms, and values. From this perspective, organizational systems may be seen as reflections of higher order collectives or even historical factors in which organizations are embedded. Therefore, it is possible to make contextual attributions for group activities.

Additionally, Menon et al.'s (1999) conceptualization of group autonomy may be more closely tied to Americans' definition of individual autonomy. The concepts of "free will" and "independence from the environment" may be hard to understand for Japanese participants. This definition represents a type of entity that behaves based on internal factors and is uninfluenced by the surrounding context. As the present study suggests, and Kahima et al. (2005) showed, it is unlikely that Japanese people perceive groups to be independent from their context or to have trait-like properties. These two factors may combine to weaken Japanese participants' group autonomy beliefs.

Other research indicates that Japanese people are less likely to be influenced by social pressure unless groups strongly regulate their members' behaviors or sanctions are applied for disobeying behavior (Takano & Osaka, 1999). This finding indicates that Japanese people may actually be more independent and self-determining than is commonly thought. Conformity and obedience are often mentioned as core characteristics of Japanese people (Markus & Kitayama, 1991; Takano & Osaka, 1999). This characterization may reflect bias, but it may also reflect conceptual differences in the meaning of autonomy. The Japanese conception of autonomy may be context-

dependent. In Japan, autonomy may refer to spontaneous contributions to one's group in which a person thinks independently about how to contribute to the group without being asked to do so.

Limitations. Of course, there are methodological limitations. First, the data were limited to convenience samples of university students, which likely limits the external validity of the findings. This meant that they were not necessary representative even within a category of university student. This limitation may be especially problematic for Japanese. Japanese university students are freed from a variety of social norms or pressures from larger collectives. For example, they are freed from relatively strong regulations (on clothing, hair style, intimacy relationship, etc.) imposed by junior high school and high school and are also not exposed to the norms of a company or other organization. This unique environment of Japanese university students might contribute to weaker group autonomy beliefs. An assessment of Japanese people who are exposed to stronger pressure from collectives may yield different results. Because of cultural norms, the vast majority of Japanese students do not have work experience. Additionally, Japanese participants had a much narrower age range. Thus, it is likely that Japanese participants were more homogeneous than American participants. Therefore, the results of this study need to be replicated with other populations.

Additionally, the use of Likert scales might lead to cultural group differences, because some work suggests that Japanese people may avoid extreme ratings (Kashima et al., 2005). A difference in the use of the response scale may thus be confounded with the mean cultural difference in group autonomy beliefs. However, the avoidance of extremes

seems less likely to have influenced the relationships among entitativity, group properties, and group autonomy beliefs because the variances in these ratings were otherwise relatively similar across cultures.

Future directions. An important topic for future research involves the assessment of each individual's essence versus dynamic theory of group so that it will be possible to examine the effect of individual's implicit theories on the relationship between each type of group properties and entitativity. Notice that there are within-culture and even within-individual variability in the relationships among two types of group properties and entitativity. It is likely that dynamic group theorist might show strong relationship between dynamic group properties and group entitativity and weak relationship between essence properties and entitativity. The patterns of relationships may be reversed among essence group theorists. People in the same cultural group may differ in their tendency to be essence theorists and dynamic theorist. Moreover, each individual can be essence theorist for some group but relatively dynamo theorist for other groups. If the moderation effect of implicit theory of group will be found and there is cultural difference in people's tendency to be dynamic or essence theorist, the cultural differences in the relationship among group properties and entitativity is attributable to the cultural difference in the implicit theory orientation.

In conclusion, the present study suggests that cultural differences in the concept of entitativity exist. In the U.S., entitativity seems to be associated with the attribution of fixed dispositions to group, but this association appears to be weaker in Japan. These results suggest a reliance on contextual factors in Japan across individual and group

judgment contexts. The present study also showed that group autonomy beliefs were more strongly associated with entitativity in the U.S. than in Japan. Thus, researchers should not assume external validity of findings concerning the effect of group entitativity found in the U.S. Given the consequences of perceived group entitativity for group identification, stereotype, and attribution, the results obtained from the present study are useful initial step for the understandings of nature and source of perceived group entitativity.

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Footnote

[1]In order to assess the consistency of the findings, z-transformed partial correlation coefficients were also analyzed. Overall, the results were highly consistent across analyses. Specifically, the interaction between culture and group properties, the cultural difference in the effect of essence properties, and the non-significant but slightly larger contribution of dynamic properties in Japan than in the U.S. were consistent across analyses.

Appendix A: Essence Property Questionnair

One important element in describing groups/collections of people is the extent to which the members are similar or dissimilar in their **personality characteristics.** Sometimes we would expect that people's personalities are quite similar. In other cases, we might not expect a high degree of similarity among members. **For each group below, please indicate your opinion about how similar or dissimilar to each other the members are in their personality characteristics.**

	Very Different in Personality						**Very Similar in Personality**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups/collections of people differ in the extent to which their members have the same or similar **physical characteristics**. Members in some groups may have the same skin tone, wear similar clothes, or share some other physical characteristics. **Please indicate your opinion about how similar or dissimilar to each other the members in each group or collection of people are in their physical appearance.**

	Very different in physical appearance						**Very similar in physical appearance**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Besides physical appearance and personality, groups/collections of people may also differ in the extent to which their members show similar **behavior**. Members in some groups may behave similarly, while members in other groups may have no commonality in their behavior. **For each group/collections of people below, please indicate your opinion about the extent to which the members are similar or dissimilar to each other in terms of their behavior.**

	Very different in behavior						**Very similar in behavior**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups/collections of people may differ in the extent to which their members have similar **backgrounds**. For example, members in certain groups may share the same racial, religious, and/or educational background. However, other groups can be highly diverse in terms of the members' backgrounds. **Please indicate your opinion about the extent to which the members in each group/collection of people are similar or dissimilar to each other in terms of their backgrounds.**

	Very different backgrounds						**Very similar backgrounds**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Appendix B: Dynamic Property Questionnaire

Groups/collections of people differ in the extent to which membership in the group/collection of people means that the group's members experience the same outcomes. That is, in some groups, all members either succeed or fail together, whereas in other groups, individual members may succeed or fail independently of other members. **For each group/collection of people, please indicate the extent to which you think members experience the same outcomes.**

	Members have independent outcomes						**Members have the same outcomes**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Another way of describing groups/collections of people is in terms of their goals. Aside from whether the people themselves are similar or dissimilar, they may share common goals that bring them together. **For each group/collection of people, we would like your opinion about the extent to which their members have common goals.**

	No goals in common						**Important goals in common**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Sharing important goals does not necessarily indicate that the members **cooperate** with each other. Members may have different individual goals but still cooperate with each other a great deal. **Please indicate the extent to which you think the members of each group/collection of people cooperate with each other.**

	Cooperate very little						**Cooperate a great deal**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups/collections of people may also differ in the extent to which their members are **dependent** on each other. In some groups/collections of people, all members may be mutually dependent on each other. In other groups, what one member achieves, obtains, or experiences may be totally independent from what other members achieve, obtain or experience. **For each group/collection of people below, please indicate your opinion about the extent to which the members in each group are dependent on each other.**

	Not at all dependent on each other						**Very dependent on each other**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Appendix C: Perceived Group Entitativity Questionnaire

Listed on this page are a number of collections of people that may or may not qualify as groups. **We would like you to indicate the degree to which you think each collection of people qualifies as a group.** Please indicate your opinion by circling a number on the scale next to the name of each collection of people.

	Not at all a group						**Very much a group**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups and collections of people differ in the extent to which they are thought of as a whole or in terms of each individual member separately. **Please indicate your opinion about the degree to which each of the groups or collections of people listed below should be thought of as a whole or in terms of each individual member separately.**

	Each individual separately						**Group as a whole**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups and collections of people may differ in the degree to which they are cohesive. Some groups or collections of people may be seen as very cohesive while others are seen as mere collections of random individuals. **Please indicate your opinion about the cohesiveness of each of the groups or collections of people listed below.**

	Not at all cohesive						**Very cohesive**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups and collections of people may differ in the extent to which their members feel unified. **Please indicate your opinion about the degree to which the members of the groups (or collections of people) listed below feel unified.**

	Not at all unified						**Very unified**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups and collections of people may differ in how strongly members feel that they are part of the group/collection of people. **Please indicate your opinion about the degree to which the members of the groups (or collections of people) below feel they are part of the group.**

	Not at all						**Very much**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Groups and collections of people may differ in the extent to which they are organized. **Please indicate your opinion about the extent to which each group or collection of people listed below is organized.**

	Not at all organized						**Very organized**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Appendix D: Group Autonomy Belief Questionnaire

Each of the statements in the following pages represents an opinion about groups and their members. You may totally agree or disagree with each statement, or your level of agreement may depend on the particular group. We want you to consider the statement at the top of each page. **Then, for each group or collection of people, indicate the extent to which you agree or disagree with that statement by circling a number next to the group name.**

In my society, this group takes control of the situations around it and exercises free will.

	Strongly disagree						**Strongly agree**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

The norms in my society say that this group should take control of the situations surrounding it and exercise free will.

	Strongly disagree						**Strongly agree**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

This group sets a course for itself and its members independent of the influences surrounding it.

	Strongly disagree						**Strongly agree**
Airline flight crew	1	2	3	4	5	6	7
Friends	1	2	3	4	5	6	7
People who enjoy classical music	1	2	3	4	5	6	7
Teachers	1	2	3	4	5	6	7
People in the audience at a movie	1	2	3	4	5	6	7
People in line of bank	1	2	3	4	5	6	7
Two people in a romantic relationship	1	2	3	4	5	6	7
People living in the same neighborhood	1	2	3	4	5	6	7
People living in a retirement home	1	2	3	4	5	6	7
People at a bus stop	1	2	3	4	5	6	7
Women	1	2	3	4	5	6	7
Company committee that designs new products	1	2	3	4	5	6	7
Family.	1	2	3	4	5	6	7
Doctors	1	2	3	4	5	6	7
Members of an orchestra	1	2	3	4	5	6	7

Table 1

Scale Reliabilities for American and Japanese for Each Group

Category Name	Entitativity		Essence		Dynamic		Autonomy	
	American	Japanese	American	Japanese	American	Japanese	American	Japanese
Airline flight crew	.828	.899	.646	.799	.558	.809	.758	.602
Friends	.717	.789	.692	.843	.445	.611	.691	.552
People who enjoy classical music	.775	.772	.696	.805	.664	.786	.652	.590
Teachers	.818	.858	.666	.714	.627	.716	.693	.590
People in the audience at a movie	.746	.699	.762	.624	.595	.648	.666	.726
People in line of bank	.714	.641	.761	.632	.587	.629	.724	.710
Two people in romantic relationship	.633	.813	.608	.775	.681	.707	.742	.606
People living in the same neighborhood	.835	.836	.757	.726	.713	.672	.714	.694
People living in a retirement home	.842	.812	.740	.685	.708	.740	.694	.717
People at a bus stop	.800	.689	.738	.464	.616	.638	.684	.727
Women	.839	.830	.769	.814	.687	.818	.793	.695
Company committee that design new products	.808	.790	.721	.578	.674	.680	.837	.668
Family	.641	.664	.673	.632	.548	.688	.718	.672
Doctors	.836	.886	.720	.658	.576	.819	.774	.597
Members of an orchestra	.816	.693	.709	.688	.753	.655	.741	.619

Table 2

Mean Entitativity Ratings in the U.S. and Japan

Category Name	Aggregates of People Belong to The Category	American		Japanese	
		M	*SD*	*M*	*SD*
Intimacy Group	Members of a Family	5.99	.80	5.71	.90
	Friends who do things together	5.20	.87	4.47	1.05
	Two people in romantic relationship	5.40	.93	4.76	1.30
Task Group	Members of an Orchestra	5.45	1.13	6.02	.72
	Company committee that design new product	5.21	1.03	5.67	.86
	Airline flight crew	5.41	.97	4.85	1.40
Social Category	Women	3.86	1.33	3.27	1.28
	Teachers	4.59	1.04	3.94	1.23
	Doctors	4.45	1.14	4.26	1.31
Loose Associations	People living in the same neighborhood	3.75	1.11	3.96	1.07
	People who enjoy classic music	3.07	1.05	3.34	1.15
	People living in a retirement home	4.09	1.05	4.59	1.08
Transitory Group	People at a bus stop	2.02	.97	1.73	.73
	People in line at a bank	1.85	.83	1.70	.73
	People in the audience at a movie	2.27	1.01	2.29	.97
Overall		4.17	1.65	4.04	1.07

Table 3

Mean Essence Property Ratings in the U.S. and Japan

Category Name	Aggregates of People Belong to The Category	American		Japanese	
		M	*SD*	*M*	*SD*
Intimacy Group	Members of a Family	4.99	1.09	4.80	1.10
	Friends who do things together	4.45	1.13	4.65	1.33
	Two people in romantic relationship	4.60	1.00	4.58	1.22
Task Group	Members of an Orchestra	3.22	1.21	4.29	1.24
	Company committee that design new product	3.13	1.14	3.73	.98
	Airline flight crew	3.54	1.06	4.22	1.39
Social Category	Women	2.26	1.15	3.00	1.31
	Teachers	3.25	1.01	3.95	1.16
	Doctors	3.42	1.22	4.37	1.20
Loose Associations	People living in the same neighborhood	2.57	1.06	2.35	.98
	People who enjoy classic music	3.03	1.05	4.05	1.30
	People living in a retirement home	2.81	1.15	3.46	1.19
Transitory Group	People at a bus stop	1.62	.82	1.44	.61
	People in line at a bank	1.53	.78	1.51	.80
	People in the audience at a movie	1.69	.83	2.04	.91
Overall		3.07	1.47	3.50	1.59

Table 4

Mean Dynamic Property Ratings in the U.S. and Japan

Category Name	Aggregates of People Belong to The Category	American		Japanese	
		M	*SD*	*M*	*SD*
Intimacy Group	Members of a Family	5.43	.85	5.40	1.03
	Friends who do things together	4.70	.85	4.22	.92
	Two people in romantic relationship	5.83	.93	5.23	1.10
Task Group	Members of an Orchestra	5.56	1.16	6.06	.86
	Company committee that design new product	5.61	.97	5.95	.87
	Airline flight crew	5.66	.83	5.18	1.27
Social Category	Women	2.91	1.10	2.78	1.32
	Teachers	4.56	.97	4.37	1.05
	Doctors	4.67	1.02	4.69	1.31
Loose Associations	People living in the same neighborhood	3.49	1.01	3.31	.97
	People who enjoy classic music	2.55	.98	3.12	1.35
	People living in a retirement home	3.87	1.16	4.04	1.22
Transitory Group	People at a bus stop	2.38	1.11	1.97	1.07
	People in line at a bank	2.60	1.16	1.98	1.08
	People in the audience at a movie	2.60	1.19	2.32	1.13
Overall		4.16	1.63	4.04	1.75

Table 5

Mean Group Autonomy Belief Ratings in the U.S. and Japan

Category Name	Aggregates of People Belong to The Category	American		Japanese	
		M	*SD*	*M*	*SD*
Intimacy Group	Members of a Family	5.41	1.16	4.76	1.32
	Friends who do things together	5.06	1.06	4.46	1.24
	Two people in romantic relationship	5.16	1.24	4.60	1.28
Task Group	Members of an Orchestra	4.02	1.34	3.61	1.31
	Company committee that design new product	4.74	1.26	3.96	1.24
	Airline flight crew	4.51	1.40	3.45	1.27
Social Category	Women	4.42	1.36	4.07	1.42
	Teachers	4.80	1.20	3.99	1.18
	Doctors	5.00	1.29	3.74	1.24
Loose Associations	People living in the same neighborhood	4.08	1.17	3.78	1.20
	People who enjoy classic music	3.23	1.17	3.96	1.36
	People living in a retirement home	3.56	1.12	3.64	1.27
Transitory Group	People at a bus stop	2.64	1.29	3.21	1.60
	People in line at a bank	2.73	1.40	3.32	1.59
	People in the audience at a movie	2.89	1.36	3.52	1.61
Overall		4.15	1.55	3.87	1.42

Table 6

Mean Correlations among Essence and Dynamic Properties, Entitativity, and Group Autonomy Belief for American and Japanese Participants

	1	2	3	4
		Americans (n = 93)		
1. Entitativity		.76	.81	.56
2. Essence			.67	.56
3. Dynamic				.61
4. Autonomy				-
		Japanese (n = 99)		
1. Entitativity		.71	.82	.28
2. Essence			.71	.31
3. Dynamic				.25
4. Autonomy				-

Note. All correlation coefficients are significant beyond .05 level.

Table 7

Mean Unstandararized Partial Coefficients from Regressions of Entitiativity on Essence and Dynamic Properties

	Essence	Dynamic
American	.416	.592
Japanese	.259	.655

Note. All regression coefficients were significantly different from zero.