

Uncertainty Reduction Among Ethnicities in the United States

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Abstract

Uncertainty reduction underlies relational development, i.e., relationships develop as we learn more about each other. The present study examines ethnic differences in the uses of interactive uncertainty reduction communication--self-disclosure, interrogative strategies, non-verbal immediacy, and other's self-disclosure--and their inter-relationships with attributional confidence (uncertainty reduction). A total of 1163 college students from the United States, representing African-, Asian-, Hispanic-, and Euro-American ethnicities participated in a survey soliciting information on the uses of uncertainty reduction strategies with a same-sexed, same-ethnic, equal-status acquaintance. Significant differences were found in the uses of uncertainty reduction strategies among the various ethnicities. Self-disclosure had a pan-cultural effect on attributional confidence but the other types of uncertainty reduction communication appeared to be more culture-specific, contributing significantly to attributional confidence only for certain ethnic groups. Explanations for these differences are explored and future research directions suggested.

Introduction

In May of 1990 the *Los Angeles Times* reported that, "By early in the next century California is expected to be the first state in the nation with a nonwhite majority" (Clifford 1990: A1). While California may be leading the way, it is clear that the faces of our nation are changing. As we become increasingly ethnically diverse, the need to

understand ethnic similarities and differences in communication patterns heightens. One important means of accomplishing that objective is cross-ethnic comparisons of the applicability of communication theories. This research seeks to accomplish that goal by comparing interactive uncertainty reduction communication among African-American, Asian-American, Hispanic-American and Euro-American ethnic groups.

Uncertainty reduction theory has been widely used as a basis for studying intercultural and cross-cultural communication. Gudykunst and Nishida (1989: 23) argue, "It appears that uncertainty reduction theory (Berger & Calabrese 1975) has generated the most research and theoretical extensions to intercultural and cross-cultural settings." Uncertainty reduction theory attempts to explain the motivation and methods for communication in interpersonal relationships. Berger and Calabrese (1975) propose that as relationships develop, communicators have a high need to understand both the self and the other in an interaction situation. Communication generates understanding (or a reduction of uncertainty) and thus serves as the basis of relationship development. The desire for uncertainty reduction is particularly strong in the early stages of relationships when the parties know little about one another. In order to choose appropriate behaviors to interact with one another, communicators must be able to predict each other's behavior. As uncertainty is reduced the parties feel more comfortable with each other and thus like each other more, resulting in more intimacy. For example, Clatterbuck (1979) found that knowing more about relationship partners (i.e., reducing uncertainty) increased attraction to those partners.

While uncertainty may be reduced through a number of means, interaction with the other would seem to be a primary method (Berger 1979) because it allows the soliciting of information directly from the other person. Among the interactive methods are interrogation (asking questions of the other) and self-disclosure. Self-disclosure results in uncertainty reduction at least in part because of its reciprocity effect. The use of nonverbal expressive affiliativeness (or immediacy) also results in a reduction of uncertainty by increasing the parties' levels of comfort with each other (Berger 1987). Research confirms the use of these types of communication in uncertainty reduction. For example, Berger and Kellerman (1983) found that communicators use question asking, disclosure and target relaxation to obtain information in face-to-face interactions. Subsequently, they found that information seekers used more positive nonverbal behaviors than persons not seeking to reduce uncertainty (Kellerman & Berger 1984).

Uncertainty is reduced when people are able to understand what is occurring in the interaction (retroactive confidence) and feel more confident about their behavioral choices in interacting with another (proactive confidence). As Clatterbuck (1979: 148) notes, "For the individual, reducing uncertainty and increasing attributional confidence become synonymous." Attributional confidence is defined as the perceived adequacy of information with which to explain behavior occurring and to predict appropriate future behaviors, i.e., the converse of uncertainty. Clatterbuck's (1979) research indicated that

attributional confidence is an appropriate measure of uncertainty reduction. Since proactive confidence and retroactive confidence are highly correlated, either may accurately serve as a measure of reduced uncertainty.

Interactive communication and attributional confidence seem logically related. One method of learning more about another is asking that person questions (interrogation). Because disclosure is highly reciprocal, self-disclosure results in other-disclosure. By increasing the comfort levels of the communicators, nonverbal immediacy creates more open interaction. Thus, interrogation, self-disclosure, other's disclosure and nonverbal immediacy should increase attributional confidence. Research supports this supposition. For example, Gudykunst (1985b) found that the use of self-disclosure and interrogation increased attributional confidence. Likewise, Gudykunst, Yang, and Nishida (1985) found that the use of self-disclosure, other disclosure and interrogation had positive effects on attributional confidence for U.S. respondents. Further, Gudykunst and Hammer (1987) found that increased nonverbal immediacy increased attributional confidence.

While a substantial amount of research has examined differences in the use of interactive uncertainty reduction across international cultures (e.g., Gudykunst 1983a, 1983b, 1985a; Yum 1985; Gudykunst, Chua, & Gray 1986; Gudykunst, Nishida, & Chua 1986; Kim & Yoon 1987), little research has focussed on its utility in explaining differences in interpersonal communication within U.S. domestic cultures. The few studies which exist suggest the theory might prove valuable in such an arena. For example, Gudykunst, Sodehara, and Sonoda (1987), comparing communication patterns of Japanese-Americans and Euro-Americans, found that Euro-Americans used interrogation and nonverbal immediacy more and reported a higher degree of low-context attributional confidence than Japanese-Americans. In a comparison of African-American and Euro-American uncertainty reduction interaction, Gudykunst (1986) found that African-American disclosed more than Euro-American across a variety of intraethnic relationships. Gudykunst and Hammer (1987), examining intraethnic dyads, found that Euro-Americans had a higher intent to display nonverbal immediacy than African-Americans. They failed to find a significant correlation between intent to interrogate and attributional confidence for the African-American sample. In other words, African-Americans did not appear to use interrogation as an uncertainty reduction strategy. Thus the research does suggest that there are ethnic differences in uncertainty reduction interaction among some U.S. cultural groups.

Other studies, not specifically examining uncertainty reduction theory, have isolated potentially relevant cross-ethnic differences in interaction. For example, Littlefield (1974) compared self-disclosure rates across U.S. ethnic groups (African-American, Hispanic-Americans, and Euro-Americans); he found the highest levels of disclosure among Euro-Americans and the lowest level among Hispanic-Americans. Shuter (1982) found that Euro-Americans used questioning to gain information in initial

interactions but that African-Americans did so with much less frequency in intraethnic same-sex encounters.

Since current research indicates there may be cross-ethnic differences in the use of interactive uncertainty reduction communication behaviors, we were led to our first research question: Does ethnicity influence the use of disclosure, interrogation, and nonverbal immediacy in intraethnic same-sex acquaintance relationships? Since there is also some evidence that these behaviors may not serve the same functions in achieving attributional confidence across ethnic groups, we were led to our second research question: Are there ethnic variances in the relationships between disclosure, interrogation, and nonverbal immediacy and attributional confidence? To examine these questions, we selected four ethnic groups: Asian-Americans, African-Americans, Hispanic-Americans, and Euro-Americans. These groups were chosen because they represent the largest ethnic groups in the United States.

Method

Sample

A total of 1,163 college students from three western universities volunteered to participate in the study. In terms of the sample's demography, the average age was 22.2 (sd = 5.1) and 57.6% were female. The sample's ethnicity was 65.6% Euro-American, 15.5% Hispanic-American, 13.9% Asian-American, and 5.0% African-American.

Questionnaire

The first step in the construction of the questionnaire was to determine the characteristics of the person whom the subjects would be considering in making their responses to the items measuring uncertainty reducing communication. Research on uncertainty reduction indicates a number of demographic influences on the process, viz., the ethnicity of the other person (Gudykunst & Hammer 1987; Gudykunst *et al.* 1987), the other's gender (Gudykunst & Hammer 1987), the level of intimacy in the relationship (Gudykunst, Chua, & Gray 1986; Gudykunst *et al.* 1987), and the status differences between the two communicators (Berger 1979). In light of these influences, we attempted to control for these factors by specifying that the person that the subject be thinking of when responding to the questionnaire items be: (a) the same ethnicity, (b) the same sex, (c) an acquaintance, and (d) an equal-status individual, i.e., a fellow student. To commit the subjects to thinking about a specific person meeting these characteristics, we asked them to write the first name of the person they had in mind. The questionnaire referred to this person as "Person A."

The next stages in questionnaire construction were the operationalization of the uncertainty reduction behaviors. Four operationalizations were required: (a) self-disclosure, (b) interrogation, (c) nonverbal immediacy, and (d) other-disclosure. Based upon a review of relevant uncertainty reduction research (Gudykunst 1985a, 1985b), a 12-item scale was chosen to operationalize self-disclosure strategies. Two examples of these items are: "What I think and feel about religion; my personal religious views" and "What it takes to hurt my feelings." The 12 self-disclosure items were rated on a three-point scale: 0 = I have not talked about this information, 1 = I have talked about this information in general terms, and 2 = I have talked about this information in specific and detailed terms. The interitem reliability for these 12 items was fairly high for all ethnic groups (Cronbach's alpha for Euro-Americans = .83, Hispanic-Americans = .87, Asian-Americans = .85, African-Americans = .89; Cronbach 1951).

Interrogative communication was operationalized via a modified version of Gudykunst and Hammer's (1987) intent to interrogate scale. (These items were originally drawn from Gudykunst & Nishida's 1984 disclosure scale.) The scale was modified to reflect actual behavior rather than intentions. This six-item scale consisted of content areas that the subject asked Person A about. The six content areas were: family, school major, hobbies and crafts, religious background, political attitude, and ideas toward marriage. These items were rated on a three-point scale: 0 = I have never asked about this, 1 = I have sometimes asked about this, and 3 = I have frequently asked about this. The interitem reliability for these six items was moderate for the four ethnic groups (Cronbach's alpha for Euro-Americans = .67, Hispanic-Americans = .70, Asian-Americans = .69, African-Americans = .79).

Nonverbal immediacy was operationalized as a four-point scale based upon the research of Gudykunst and Nishida (1984; see also, Gudykunst 1983b). The scale items asked the subjects how often they engaged in four nonverbal immediacy behaviors: smiling at the other, looking at the other's eyes, standing close to the other, and shaking hands or touching the other in some way. These items were rated on a three-point scale: 0 = I have never done this, 1 = I have sometimes done this, and 2 = I have frequently done this. Interitem reliability for these four items was moderate for the four ethnic groups (Cronbach's alpha for Euro-Americans = .69, Hispanic-Americans = .62, Asian-Americans = .67, African-Americans = .76).

The last uncertainty reduction behavior to be operationalized was other's self-disclosure. To maintain consistency with the self-disclosure items noted above, the 12-item scale used to operationalize the subject's own self-disclosure was adapted to measure other's self-disclosure. The converted response scale consisted of three-points: 0 = Person A has told me nothing about this aspect of him/herself, 1 = Person A has talked about this item in general terms with me, and 2 = Person A has talked about this item in detail with me. Interitem reliability for these 12 items was fairly high (Cronbach's alpha = .83).

The last step in questionnaire construction was the operationalization of the perceived level of uncertainty in the relationship between the subject and the other person. This construct was measured via Clatterbuck's (1979) Attributional Confidence Scale. The scale consists of seven items designed to assess the degree to which respondents are confident in predicting the behavior, attitudes, feelings, and emotions of the other person. Clatterbuck (1979) presents evidence for the unidimensionality, internal reliability, and validity of the scale. All of the items were measured on a three-point scale: 0 = I am not at all certain about this aspect of Person A, 1 = I am somewhat certain about this aspect of Person A, and 2 = I am very certain about this aspect of Person A. The interitem reliability for this scale was fairly high for the four ethnic groups (Cronbach's alpha for Euro-Americans = .86, Hispanic-Americans = .87, Asian-Americans = .88, African-Americans = .90).

Results

Ethnic Differences in Uncertainty Reduction Variables

A multivariate analysis of variance (MANOVA) indicated that there were significant ethnic group differences in the uncertainty reduction variables (Wilk's lambda = .97, $F[15/3461] = 2.8$, $p < .005$). An examination of the univariate analyses of variance revealed that the significant ethnic differences were in terms of one's own self-disclosure and other's self-disclosure. A multiple comparisons analysis using a least significance difference criterion indicated that for both self- and other-disclosure, African-Americans used greater self-disclosure than Euro-Americans, Hispanic-Americans, and Asian-Americans (Means = .97, .78, .82, and .72, respectively) and perceived greater other intraethnic disclosure (Means = 1.01, .81, .86, and .76, respectively). The only other significant differences found in the multiple comparisons test were between self- and other-disclosure levels for Hispanic-Americans and Asian-Americans, namely, the former perceived greater self- and other-disclosure levels than Asian-Americans.

Regression Analyses

The above normative analyses provide insight into cross-cultural differences in the uses of uncertainty reduction communication, however they do not inform us as to the interrelationships among the behaviors. Multiple regressions should ameliorate this need. Since each of the scales attained satisfactory levels of internal reliability, mean

summed scores were computed and then examined through a multiple regression for each of the four U.S. ethnic groups.

The multiple regressions of attributional confidence included other's level of disclosure, level of self-disclosure, use of interrogation, and nonverbal immediacy. The regression equations for attributional confidence revealed both similarities and differences for the four ethnic groups. For the Euro-American respondents, all four uncertainty reduction variables were significant: other-disclosure ($\beta = .35$, $F = 44.3$, $p < .0001$, $se_{\beta} = .06$), nonverbal immediacy ($\beta = .14$, $F = 23.0$, $p < .001$, $se_{\beta} = .04$), interrogation ($\beta = .17$, $F = 21.2$, $p < .001$, $se_{\beta} = .03$), and self-disclosure ($\beta = .17$, $F = 11.4$, $p < .001$, $se_{\beta} = .06$). The amount of variation in attributional confidence accounted for in the Euro-American respondents' regression equation was 52% (R^2). For the Hispanic-American respondents, three significant beta coefficients were found: other's disclosure ($\beta = .48$, $F = 16.9$, $p < .0001$, $se_{\beta} = .12$), nonverbal immediacy ($\beta = .15$, $F = 8.9$, $p < .003$, $se_{\beta} = .06$), and self-disclosure ($\beta = .29$, $F = 6.7$, $p < .01$, $se_{\beta} = .12$). The amount of variance in attributional confidence accounted for in the Hispanic-American data was 63% (R^2). For the Asian-American respondents, only two uncertainty reduction strategies were significant predictors of attributional confidence: other's disclosure ($\beta = .59$, $F = 62.7$, $p < .0001$, $se_{\beta} = .09$) and nonverbal immediacy ($\beta = .13$, $F = 5.6$, $p < .02$, $se_{\beta} = .07$). The amount of variance in attributional confidence accounted for in the Asian-American data was 58% (R^2). Finally, for the African-American respondents, only other's disclosure was found to be a significant predictor of attributional confidence ($\beta = .79$, $F = 21.2$, $p < .0001$, $se_{\beta} = .17$). The amount of variance in attributional confidence accounted for in the African-American data was 76% (R^2). In summary, the pan-cultural predictor of attributional confidence was other's disclosure, the other uncertainty reduction strategies seemed to be more culture-specific.

Discussion

The results of this research provide support both for the cross-ethnic generalizability of uncertainty reduction theory and for the conclusion that there are some systematic differences in the uncertainty reduction process among U.S. ethnic groups. While African-Americans, Asian-Americans, Hispanic-Americans, and Euro-Americans use disclosure, interrogation, and nonverbal immediacy in same-sex acquaintance relationships there are variances in the frequency with which these are used and the relationships these behaviors have with attributional confidence.

First, significant differences were identified in perceptions of the frequency of self- and other-disclosure. African-American respondents perceived greater use of both

types of disclosure than Euro-American, Asian-American, and Hispanic-American respondents. Further, Hispanic-Americans perceived greater use of both types of disclosure than Asian-Americans. This suggests that both self- and other-disclosure are especially frequent communication behaviors in same-sex intraethnic acquaintance relationships for African- and Hispanic-Americans. While the finding that African-Americans disclose more frequently than Euro-Americans is consistent with Gudykunst (1986), this pattern is inconsistent with Littlefield (1974) who found that Euro-Americans disclosed the most, African-Americans second most frequently, and Hispanic-Americans the least frequently. Gudykunst (1986) suggests that these differences in results may be the results of different statuses of ethnicities (middle vs. lower class), age groups (Littlefield's respondents were adolescents), contexts or a result of social change over time. Since our respondents were of similar status and age, and asked to identify comparable types of relationships, we believe that at least at the present time, this pattern reflects differences where similar relationships are compared.

Significant differences were not found in the frequencies of the use of either interrogation or nonverbal immediacy across the ethnic groups studied. This is somewhat inconsistent with Gudykunst and Hammer (1987: 201) who found a higher level of "intent to display nonverbal affiliative expressiveness" among African-American respondents than Euro-American respondents. Since our questionnaire inquired about the same behaviors, the only obvious methodological differences are that they examined intentions while we viewed recollections and their target person was a "bogus stranger" while we inquired about acquaintance relationships. Thus, it may be that African-Americans intend to use a higher level of immediacy when meeting same-ethnic strangers, but by the time relationships progress to the acquaintanceship stage, ethnic differences in these immediacy behaviors disappear.

Even more intriguing were the results of the regression analyses. All four ethnic groups yielded different patterns of relationships between uncertainty reduction communication and attributional confidence. For Euro-American respondents, other-disclosure, self-disclosure, nonverbal immediacy and interrogation were all significant predictors of attributional confidence, explaining 52% of the variance in that variable. This is consistent with Berger's claims (1979, 1987) that these are primary means for reducing uncertainty and prior research on (probably largely Euro-American) U.S. respondents (e.g., Gudykunst, Yang, & Nishida 1985).

A different pattern of relationships emerged in the Hispanic-American regression equation. For Hispanic-Americans, only other's disclosure, nonverbal immediacy, and self-disclosure were significant predictors of attributional confidence, explaining 63% of the variance in that variable. This suggests that Hispanic-Americans use fewer interactive methods but gain greater attributional confidence in acquaintance relationships. The relatively larger betas for self- and other-disclosure (as compared to

the Euro-American data) suggest that these behaviors are even more important to Hispanic-Americans in reducing their uncertainty in such relationships.

Further, although there were not significantly different means for interrogation (and thus Euro- and Hispanic-Americans use interrogation with similar frequencies), interrogation was not a significant predictor of attributional confidence. Hispanic-Americans apparently do not perceive interrogation as critical in attaining attributional confidence. This finding may be explainable by the various cultural influences on Hispanic-Americans. Such persons are essentially bi-cultural and draw identity both from U.S. (historically European) and Latino influences. Their behavior is influenced by a blending of these factors. Latino cultures are collective cultures (Hofstede 1983). Thus, one's identity is derived more from the groups to which one belongs than individual factors (Triandis, Bontempo, Villareal, Asai, & Lucca 1988). The knowledge of self and other (and thus proactive and retroactive confidence) is gained more through information about the collectivities to which one belongs than individual factors. Consequently, Hispanic-Americans may perceive less need to interrogate the other in order to gain attributional confidence.

The regression analysis for Asian-Americans found that only other's disclosure and nonverbal immediacy significantly contributed to attributional confidence, explaining 58% of the variance in that variable. Thus, while self-disclosure and interrogation are used in acquaintance relationships, Asian-Americans apparently do not perceive them as significantly related to feelings of confidence about knowledge of the other. The finding in reference to interrogation appears consistent with Gudykunst *et al.* (1987) who conclude that the relationship between interrogation and uncertainty may be unique to Euro-Americans. It is likewise consistent with the above analysis regarding the influences of collectivism. Asian-Americans trace at least part of their heritage to collective cultures (Hofstede 1983) and thus may feel less need to interrogate to gain knowledge of the other.

Self-disclosure is likewise not a significant predictor of attributional confidence for Asian-Americans. This may be because Asian-Americans do not perceive that disclosure is reciprocal or that self-disclosure can have a strategic effect on increasing other-disclosure. This is consistent with the view that the "self" is less central in explaining phenomena in collective cultures. It is also consistent with Hall's (1977) concept of the role of context in communication. In high context cultures meaning in an interaction is less dependent upon explicit verbal communication; much meaning is derived from nonverbal and contextual cues. Asian cultures are high-context (Gudykunst & Ting-Toomey 1988) and so place less reliance on explicit verbal cues, such as self-disclosure, in deriving attributional confidence. This factor may be an influence which continues in the bi-cultural Asian-American.

Finally, for African-Americans only other's disclosure was a significant predictor of attributional confidence, explaining 76% of the variance in that variable. The relatively

greater variance explained in attributional confidence (as compared to other ethnic groups) suggests that interaction has a very powerful effect on one's perceived confidence about another for African-Americans. However, the only interactive behavior studied here which contributes to that effect is other's disclosure. The significance of other's disclosure may be in part due to relatively higher levels of disclosure in African-American dyads. However, this does not account for the failure of self-disclosure to predict attributional confidence. Again, this may be due to the failure to perceive a reciprocity effect. We also believe that this is consistent with Hecht and Ribeau's (1984: 148) finding that for African-Americans satisfying communication is other oriented and "revolves around having their own goals fulfilled by the actions of others." This view is likewise consistent with the failure to find interrogation and nonverbal immediacy as significant predictors of attributional confidence. Even though these behaviors are used in acquaintance relationships, for African-Americans it is not how I act but how you act that leads to my attributional confidence.

In summary, we found substantial differences in the use of interactive communication and the effects of such interactive communication on the reduction of uncertainty among U.S. cultural groups. The position that attributional confidence in relatively nonintimate relationships is largely as the result of interrogation, nonverbal immediacy, and disclosure appears to be unique to Euro-Americans. Interrogation was not a significant predictor for any other ethnic group; nonverbal immediacy was not a significant predictor for African-Americans; and self-disclosure was not a significant predictor either for African- or Asian-Americans. Only other's disclosures had a pan cultural effect.

These results lead to a number of intriguing questions: (a) What functions do these interactive behaviors serve in acquaintance encounters if not to increase attributional confidence? (b) What other sources determine attributional confidence for U.S. ethnic groups? (c) Would the same patterns of differences emerge in interethnic relationships as in intraethnic relationships? Our data are obviously insufficient to answer these questions, but they should serve as stimuli for future research.

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References

- Berger, Charles R.
 1979 "Beyond Initial Interaction: Uncertainty, Understanding, and the Development of Interpersonal Relationships," in *Language and Social Psychology*, Howard Giles & Robert St. Clair (eds.), Baltimore: University Park Press. pp. 122-24.
 1987 "Communicating Under Uncertainty," in *Interpersonal Processes: New Directions in Communication Research*, Michael E. Roloff & Gerald R. Miller (eds.), Newbury Park, CA: Sage. pp. 39-62.
- Berger, Charles R., & Richard J. Calabrese
 1975 "Some Explorations in Initial Interaction and Beyond: Toward a Developmental Theory of Interpersonal Communication," *Human Communication Research* 1. 99-112.
- Berger, Charles R., & Kathy A. Kellerman
 1983 "To Ask or Not to Ask: Is That a Question?," in *Communication Yearbook 7*, Robert N. Bostrom (ed.), Newbury Park, CA: Sage. pp. 342-68.
- Clatterbuck, Glen W.
 1979 "Attributional Confidence and Uncertainty in Initial Interactions," *Human Communication Research* 5. 147-57.
- Clifford, Frank
 1990 "Barriers to Power for Minorities," *Los Angeles Times*, May 7, 1990, A1.
- Cronbach, Lee J.
 1951 "Coefficient Alpha and the Internal Structure of Tests," *Psychometrika* 16. 297-334.
- Gudykunst, William B.
 1983a "Similarities and Differences in Perceptions of Initial Intracultural and Intercultural Encounters: An Exploratory Investigation," *Southern Speech Journal* 49. 49-65.
 1983b "Uncertainty Reduction and Predictability of Behavior in Low- and High-Context Cultures: An Exploratory Study," *Communication Quarterly* 31. 49-55.
 1985a "The Influence of Cultural Similarity, Type of Relationship, and Self-Monitoring on Uncertainty Reduction Processes," *Communication Monographs* 52. 203-17.
 1985b "A Model of Uncertainty Reduction in Intercultural Encounters," *Journal of Language and Social Psychology* 4. 79-98.
 1986 "Ethnicity, Types of Relationship, and Intraethnic and Inter-ethnic Uncertainty Reduction," in *Interethnic Communication: Current Research*, Young Y. Kim (ed.), Newbury Park, CA: Sage. pp. 201-24.
- Gudykunst, William B., Elizabeth Chua, & Alicia J. Gray

- 1986 "Cultural Dissimilarities and Uncertainty Reduction Processes," in *Communication Yearbook 10*, Margaret L. McLaughlin (ed.), Newbury Park, CA: Sage. pp. 456-69.
- Gudykunst, William B., & Mitchell R. Hammer
- 1987 "The Influence of Ethnicity, Gender and Dyadic Composition on Uncertainty Reduction in Initial Interactions," *Journal of Black Studies* 18. 191-214.
- Gudykunst, William B., & Tsukasa Nishida
- 1984 "Individual and Cultural Influences on Uncertainty Reduction," *Communication Monographs* 51. 23-36.
- 1989 "Theoretical Perspectives for Studying Intercultural Communication," in *Handbook of International and Inter-cultural Communication*, Molefi K. Asante & William B. Gudykunst (eds.), Newbury Park, CA: Sage. pp. 17-46.
- Gudykunst, William B., Tsukasa Nishida, & Elizabeth Chua
- 1986 "Uncertainty Reduction in Japanese-North American Dyads," *Communication Research Reports* 3. 39-46.
- Gudykunst, William B., Lori L. Sodehara, & Kevin T. Sonoda
- 1987 "Uncertainty Reduction in Japanese-American/Caucasian Relationships in Hawaii," *Western Journal of Speech Communication* 51. 256-73.
- Gudykunst, William B., & Stella Ting-Toomey
- 1988 *Culture and Interpersonal Communication*, Newbury Park, CA: Sage.
- Gudykunst, William B., Seung-Mock Yang, & Tsukasa Nishida
- 1985 "A Cross-Cultural Test of Uncertainty Reduction Theory: Comparisons of Acquaintances, Friends, and Dating Relationships in Japan, Korea, and the United States," *Human Communication Research* 11. 407-54.
- Hall, Edward
- 1977 *Beyond Culture*, Garden City, NY: Anchor Books.
- Hecht, Michael L., & Sidney Ribeau
- 1984 "Ethnic Communication: A Comparative Analysis of Satisfying Communication," *International Journal of Inter-cultural Relations* 18. 135-51.
- Hofstede, Geert
- 1983 "National Cultures in Four Dimensions," *Studies of Management & Organization* 13. 46-74.
- Kellerman, Kathy A., & Charles R. Berger
- 1984 "Affect and the Acquisition of Social Information: Sit Back, Relax, and Tell Me about Yourself," in *Communication Yearbook 8*, Robert N. Bostrom (ed.), Newbury Park, CA: Sage. pp. 412-45.
- Kim, Myoung-Hye, & Tae-Jin Yoon

- n.d. *A Comparative Study of Uncertainty Reduction Theory in High- and Low-Context Cultures.* Paper presented at the Speech Communication Association Convention, Boston, MS, 1987.

Littlefield, Robert P.

- 1974 "Self-Disclosure among Negro, White, and Mexican-American Adolescents," *Journal of Counseling Psychology* 21. 133-36.

Shuter, Robert

- 1982 "Initial Interaction of American Blacks and Whites in Interracial and Intraracial Dyads," *Journal of Social Psychology* 117. 45-52.

Triandis, Harry. C., R. Bontempo, M. J. Villareal, M. Asai, & N. Lucca

- 1988 "Individualism and Collectivism: Cross-Cultural Perspectives on Self-Ingroup Relationships," *Journal of Personality and Social Psychology* 54. 323-38.

Yum, June O.

- n.d. Cross-Cultural Analysis of Uncertainty Tolerance and Discomfort in Uncertain Situations. Paper presented at the annual convention of the International Communication Association, Honolulu, HI, 1985.