A study of 142 foreign college students staying in the United States examined the effects of communication adaptability and interaction involvement on cross-cultural adjustment. Further testing was conducted to investigate which of the components of communication adaptability and interaction involvement best predicted the dimensions of cross-cultural adjustment. It was hypothesized that significant and positive relationships existed among communication adaptability, interaction involvement, and cross-cultural adjustment. E. W. Wheeless and R. L. Duran's 20-item Communicative Adaptability Scale was administered to the students, as were D. J. Cegala's 18-item Interaction Involvement Scale and A. Furnham and S. Bochner's 26-item Social Situations Questionnaire. The results supported the hypothesis. Differences among the subjects from diverse countries were reported. (Two tables are included; 50 references are attached.)
Communication Adaptability and Interaction Involvement as Predictors of Cross-Cultural Adjustment

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Abstract

To extend the analysis of Chen's (1989) work this study further examined the effects of communication adaptability and interaction involvement on cross-cultural adjustment. It was hypothesized that significant and positive relationships exist among communication adaptability, interaction involvement, and cross-cultural adjustment. The results support the hypothesis. Further testing was conducted to investigate which of the components of communication adaptability and interaction involvement best predicts the dimensions of cross-cultural adjustment. Differences among the subjects from diverse countries were reported. Implications and directions for future research were also discussed.
Communication Adaptability and Interaction Involvement as Predictors of Cross-Cultural Adjustment

The interest in the study of communication adaptability and interaction involvement is increasing in the discipline of communication (e.g., Cegala, 1981, 1984; Duran, 1983). Little effort has been made, however, to examine the role the two concepts play in the process of cross-cultural adjustment. Although several studies have explored related concepts such as empathy, environment mobility, and interaction management (Cleveland, Mangone, & Adams, 1960; Ruben, 1976, 1977; Ruben & Kealey, 1979), few studies have attempted to account for communication adaptability and interaction involvement in terms of cross-cultural adjustment. In other words, few scholars have tried to examine whether communication adaptability and interaction involvement can be used to predict an individual's ability to handle social difficulties in the host culture.

The paucity of research is surprising, for communication adaptability and interaction involvement have been considered the important components of communication competence (Cegala, 1981; Wheeless and Duran, 1982). Since the conceptualization of communication competence does not show major difference both in intracultural and intercultural situations (Chen, 1989; Ruben, 1976, 1977; Spitzberg, 1989; Wiemann, 1977), it could be predicted that communication adaptability and interaction involvement would account as well for cross-cultural communication competence, and these abilities will in turn lead individuals to better adjust to
a new culture. The purpose of this study then is to investigate
the effects of communication adaptability and interaction
involvement on cross-cultural adjustment.

Cross-Cultural Adjustment

Studies from different disciplines have focused on the topic of
cross-cultural adjustment, which conceptually refers to the
process "through which an individual requires an increasing level
of 'fitness' or 'compatibility' in the new cultural environment" (Kim, 1988, p. 9). The concept broadly refers to three dimensions (Ruben & Kealey, 1979): first, culture shock; second, psychological adaptation; and finally, interaction effectiveness. Culture shock relates to the dynamics of cross-cultural adjustment (Adler, 1987; Cberg, 1960; Smalley, 1963). Research findings in this area generally indicate that the extent, direction, magnitude and duration of cultural shock have a significant effect on a person's life during the early stage sojourning in a new environment (Brislin & Pedersen, 1976; Furnham, 1986, 1987; Furnham & Bochner, 1986; Gullahorn & Gullahorn, 1963).

Second, psychological adaptation relates to the psychological process of acclimating to a new culture. Studies have shown that this process is related to psychological well-being, contention, self-satisfaction, and comfort within a new environment after the stage of culture shock has passed (Berry, Kim, & Boski, 1988; Church, 1982; David, 1972; Dinges & Lieberman, 1939; Ruben & Kealey, 1979; Taft, 1977, 1988).

Finally, interactional effectiveness refers to a behavioral
perspective which concerns the sojourners' social or communication skills to interact with host nationals. Studies have indicated that these communication skills include the ability to impart one's knowledge in order to understand another, the ability to establish interpersonal relationships with host nationals, and other skills like empathy and interaction management (Abe & Wiseman, 1983; Bara, 1979; Chen, 1989; Hammer, 1984; Hammer, Gudykunst, & Wiseman, 1978; Kim, 1988, 1989; Martin & Hammer, 1989; Ruben, 1976; Ruben, & Kealey, 1979). Taking all these dimensions together, cross-cultural adjustment is conceptualized as the process of sojourners dealing with stressful situations by executing appropriate social or communication skills in the host culture. According to Furnham and Bochner (1982), the stressful situations are caused by the social difficulties sojourners encounter in the host culture.

Furnham and Bochner (1982) indicated that, in order to acclimate to a new culture, sojourners have to reduce the symptoms of culture shock that are caused by the feelings of anxiety, discomfort, embarrassment, and uneasiness when they interact with the host nationals. Furnham and Bochner further indicated that effective social or communication skills such as managing friendship, understanding others, and being assertive are the key to reduction of these symptoms in the process of cross-cultural adjustment.

Communication Adaptability and Interaction Involvement

The study of communication adaptability and interaction
involvement has also gained much attention in the communication discipline (e.g., Cegala, 1981, 1982; Cegala et al., 1982; Duran, 1983; Wheeless & Duran, 1982). Communication adaptability refers to "the ability to perceive socio-interpersonal relationships and adapt one's interaction goals and behaviors accordingly" (Duran, 1983, p. 320). The concept focuses on the ability of behavioral flexibility in the process of communication with a variety of people in different situations. Research in this area has been directed toward identifying communication adaptability as a component of social communication competence (Duran, 1983; Parks, 1976; Spitzberg & Cupach, 1984; Wiemann, 1977) and delineating the relationship between communication adaptability and other variables such as gender orientation (Wheeless & Duran, 1982), self-disclosure and communication anxiety (Chen, 1989).

Interaction involvement, "the extent to which an individual partakes in a social environment" (Cegala, 1981, p. 112), is considered as well a cognitive dimension of communication competency. The concept refers to the general tendency for a person to demonstrate the ability of perceptiveness and attentiveness in the process of interaction. Research has indicated that interaction involvement is related to other concepts including extroversion, neuroticism, self-consciousness, communication apprehension, behavioral flexibility, sociability, interaction management, empathy, and affiliation support (Cegala, 1984; Cegala, Savage, Brunner, & Conrad, 1982).

From the literature of intercultural communication, it may be
predicted that positive relationships exist among communication adaptability, interaction involvement, and cultural adjustment. For instance, one of the seven skills that is important in the process of adjustment to a new culture, suggested by Furnham and Bochner (1982), is perceptive skills which refers to the ability of coordinating verbal and nonverbal behavior, encouraging the speaker, and giving appropriate feedback. The perceptive skills are identical to Cegala's (1981) three dimensions of interaction involvement: responsiveness, perceptiveness, and attentiveness. The study by Cegala and his associates (1982) showed that the three dimensions of interaction involvement were positively correlated with interpersonal communication competence.

Hawes and Kealey (1979, 1981) and Lundstedt (1963) found a set of communication skills that accounts for the sojourners' successful adjustment in the host culture. The ability of flexibility towards the ideas of others is one of them. The concept of flexibility as the key element of communication adaptability has been delineated by Duran (1983). Other studies by Bronfenbrenner, Harding and Gallwey (1958), Gardner (1962), and Ruben (1976) identified as well similar important skills such as sensitivity, empathy and interaction management -- all important components for being well adjusted to a new environment.

Research by Abe and Wiseman (1983), Hammer (1987), and Hammer, Gudykunst, and Wiseman (1978) also indicated that flexibility, empathy, perceptive skills, and interaction management are
constitutive elements of the more general domains for sojourners' effectiveness. All this research suggests that interrelationships exist among communication adaptability, interaction involvement, and cross-cultural adjustment. One hypothesis and a research question are advanced from this overview:

H1: There will be significant and positive correlations among communication adaptability, interaction involvement, and cross-cultural adjustment.

R1: Which of the components of communication adaptability and interaction involvement best predicts the dimensions of cross-cultural adjustment?

In addition to the hypothesis and research question the present study further investigates whether or not differences exist among subjects from different countries on communication adaptability, interaction involvement, and cross-cultural adjustment.

Method

Subjects

Data were obtained from 142 foreign college students who were studying in the United States. Subjects were from Africa (n = 15). Asia (n = 91). Europe (n = 18). and the Middle East (n = 8): 54 were female. and 88 were male. The mean age of the total subjects was 27.4 years.

Questionnaires

Subjects were asked to complete three questionnaires measuring the components of communication adaptability, interaction involvement, and cross-cultural adjustment.
The 20-item Communicative Adaptability Scale, developed by Wheeless and Duran (1982), was used to measure the international students' ability of communication adaptability. The scale is comprised of two dimensions: adaptability and rewarding impression. The adaptability dimension mainly refers to individual's experience and ability "to be flexible and feel comfortable with a variety of people" (Wheeless & Duran, 1982, p. 55). The rewarding impressions dimension "centers around the themes of being other-oriented, sensitive to others, and providing positive feelings toward others" (Wheeless & Duran, 1982, p. 55). The coefficient alphas of the two dimensions of communicative adaptability were .89 for adaptability, .85 for rewarding impressions, and .90 for the overall scale. Wheeless and Duran (1982) reported coefficient alphas of .86 for adaptability and .87 for rewarding impressions.

Cegala's (1981) 18-item Interaction Involvement Scale was used to measure the foreign students' interaction involvement ability. The scale is comprised of three dimensions: responsiveness, perceptiveness, and attentiveness. According to Cegala, Savage, Brunner, and Conrad (1982), responsiveness is "a tendency to react mentally to one's social circumstance and adapt by knowing what to say and when to say it." In other words, it is "an index of an individual's tendency to deliver lines appropriate to the situation" (p. 233). Perceptiveness is the individual's tendency to integrate meanings about the overall interaction situation including the self and the other, and attentiveness is the
individual's ability to concentrate on the conversation during the interaction (Cegala, 1981). The coefficient alphas of the three components, reported by Cegala (1981), ranged from .67 to .82. The present study shows .70 for responsiveness, .82 for perceptiveness, .66 for attentiveness, and .83 for the total scale.

Lastly, Furnham and Bochner's (1982) 26-item Social Situations Questionnaire was used to measure the foreign students' ability to cope with social difficulties caused by the host culture. In other words, the questionnaire was used to measure the subjects' cross-cultural adjustment ability when they were sojourning in the United States.

The Social Situations Questionnaire consists of six dimensions. The formal relations dimension deals with the understanding of the rules and customs of the host culture, especially when the sojourners are the focus of attention in the social interaction. The relationship management dimension involves the foreign students' ability to manage or initiate friendships, and to understand others. The public rituals dimension refers to the foreign students' ability to adapt to public facilities such as using public and private toilets and waiting in a line of the host culture. The initiating contact dimension is concerned with initiating and maintaining contact and involves self-disclosure and self-presentation in the process of interaction. The public decision-making dimension involves making public decisions, and the assertiveness dimension deals with the
ability to show assertiveness in the face of hostility or rudeness. Furnham and Bochner (1982) failed to report the coefficient alpna of the scale. The present study shows that the coefficient alphas of the six dimensions range from .58 to .81, and .92 for the total scale.

Results

Hypothesis 1 predicted that significant and positive relationships exist among communication adaptability, interaction involvement, and cross-cultural adjustment. Pearson product-moment correlations were calculated to test the hypothesis. The results are presented in Table 1. The results indicated that communication adaptability was significantly correlated with interaction involvement ($r = .60, p < .001$), and with cross-cultural adjustment ($r = .47, p < .001$); and interaction involvement was significantly correlated with cross-cultural adjustment ($r = .46, p < .001$). The results also showed that significant correlations exist among the dimensions of communication adaptability, interaction involvement, and cross-cultural adjustment.

Insert Table 1 About Here

To find out which of the components of communication adaptability and interaction involvement best predicts the various dimensions of cross-cultural adjustment, stepwise multiple regression analysis was conducted. Each of six dimensions of
cross-cultural adjustment was regressed onto the dimensions of communication adaptability and interaction involvement. The results are summarized in Table 2.

Insert Table 2 About Here

The results indicated that three dimensions were best predicted by adaptability and responsiveness: formal relations, relationship management and initiating contact. The public decision-making dimension was best predicted by rewarding impressions, and the assertiveness dimension was best predicted by responsiveness. M. variable was shown to predict the public rituals dimension.

Finally, one way analysis of variance was used to examine differences of nationality on the dimensions of communication adaptability, interaction involvement and cross-cultural adjustment. The results showed significant difference between subjects (a) from Europe (M = 4.70) and Middle East (M = 3.75), and Far East (M = 4.72) and Middle East (M = 3.75) on public rituals, F(4,137) = 4.28, p < .01. and (b) from Far East (M = 4.95) and Middle East (M = 3.94), and Africa (M = 5.63) and Middle East (M = 3.94) on perceptiveness, F(4,130) = 4.38, p < .01.

Discussion

The purpose of this research was to assess the effects of communication adaptability and interaction involvement on the process of cross-cultural adjustment. Hypothesis 1 predicted
significant and positive relationships among communication adaptability, interaction involvement, and cross-cultural adjustment. The results showed that the Hypothesis is supported. Positive and significant correlations were found among the three constructs and among their components. The results suggest that people with the abilities of communication adaptability and interaction involvement are more likely to better adjust to a new environment.

The results concerning the relationship between communication adaptability and cross-cultural adjustment are consistent with the notions from Hawes and Kealey (1979), Lundstedt (1963), and Ruben (1976). The authors proposed that communication flexibility is one of the key elements of communication skills for individuals to reach a successful adjustment in a new culture.

The relationship between interaction involvement and cross-cultural adjustment supports Furnham and Bochner's (1982) and Chen's (1989) proposals that interaction involvement is one of the abilities to be effective in the process of cross-cultural adjustment.

Research question 1 was to examine which of the components of communication adaptability and interaction involvement best predicts the dimensions of cross-cultural adjustment. Revealed in the multiple regression results, the dimension of formal relations, relationship management, and initiating contact were best predicted by communication adaptability. The dimension of public decision-making was best predicted by rewarding impression,
and the assertiveness dimension was best predicted by communication responsiveness.

These results are consistent with previous research which found: (a) formal relations to be an important component and for effectively adjusting to the new culture (Hall, 1959; Hall and Whyte, 1963; Kluckhohn, 1948; Turner, 1968); (b) relationship management to affect the degree of sojourner's adaptability in another culture (Hammer, Gudykunst, and Wiseman, 1978; Harris, 1973); and (c) initiating contact to be positively related to behavioral flexibility and intercultural communication effectiveness (Bochner and Kelly, 1976; Chen, 1989).

The results indicated as well that public decision-making is related to rewarding impressions. The ability to show assertiveness when encountering hostility or rudeness is also related to one's appropriate responsiveness in different situations. The results further showed that the dimensions of formal relations, relationship management, and initiating contact were explained as well by communication responsiveness.

Taken together, these results suggest that communication adaptability and interaction involvement not only account for communication competence in an intracultural setting, but also can be used to explain the process of adjustment in an intercultural environment. In other words, when individuals enter a new environment, the abilities of communication adaptability and interaction involvement would help them cope with social difficulties caused by the host culture. This, in turn, would
help individuals better confront the impact of culture shock.

The dimension of public rituals surprisingly showed little relationship to the components of communication adaptability and interaction involvement. One plausible explanation for the result is that public rituals do not have the same communication requirements as most of the other dimensions.

The study suggests several implications and directions for future research. First, the results of the study can be applied to cross-cultural training program helping sojourners better adjust to the host culture by learning communication adaptability and interaction involvement skills.

Second, this study showed that some interpersonal communication concepts may be applied to intercultural settings. Although the issue is still controversial among communication scholars (e.g., Cupach & Imahori, 1989; Spitzberg, 1989), the results of this study showed promise for future research.

Third, since the concept of cross-cultural adjustment can broadly refer to three dimensions including culture shock, psychological adaptation, and interactional effectiveness, researchers might further examine how communication adaptability and interaction involvement affect the three dimensions respectively or how the dimensions of adjustment affect communication adaptability and interaction involvement.

Fourth, the results of nationality differences in this study indicated that subjects from the Middle East show more difficulties dealing with public rituals than do subjects from
Europe and the Far East in the United States and less ability on communication responsiveness than do subjects from the Far East and Africa. Future research might investigate what causes these results from the perspective of cultural differences.

Finally, application of the results to other cultural environments is necessary. That is, for future research, testing whether or not the results are applicable to the subjects sojourning in another culture instead of the United States is important.
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# Table 1

Pearson Correlation Coefficients for Variables

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Note. \( N = 142. \)  
\[ p < .05. \quad p < .01. \quad p < .001. \]
Table 2
Summary of Stepwise Multiple Regression Analysis

1. Formal Relations

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Note. N = 142.