Student Perceptions of Teachers' Nonverbal and Verbal Communication: A Comparison of Best and Worst Professors across Six Cultures

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Abstract

Students from six countries—Australia, Japan, Mexico, Sweden, Taiwan, and the United States—recalled the extent to which their best or worst professors used various forms of communication that have been associated with effective teaching. Across cultures, best professors were perceived to employ more nonverbal expressiveness, relaxed movement, in-class conversation, and out-of-class communication than worst professors. Relative to Japanese and Taiwanese students, Australian and U.S. students perceived their professors to use more nonverbal expressiveness. Students from Australia, Sweden, and the U.S. also perceived their best professors to use more in-class conversation than students from Japan or Taiwan perceived their best professors to use. However, Australian and U.S. students also perceived their best professors to use *less* out-of-class communication than did students from the other four countries. There were also differences in the forms of communication that discriminated between best and worst professors in each culture. For example, nonverbal expressiveness and in-class conversation were the best discriminators for Australian and U.S. students, whereas out-of-class communication and relaxed movement were the best discriminators for Japanese and Taiwanese students.

Keywords: Students, Communication, Effective teaching

1. Introduction

Considerable research suggests that communication is a key ingredient in the recipe for effective teaching. The way a teacher communicates, or is perceived to communicate, is widely considered to be an important determinant of students' attitudes toward a class and a teacher (Nussbaum, 1992). Yet little is known regarding cross-cultural differences in the perceived use of certain types of teacher communication, and even less is known about how perceptions of teacher communication discriminate between "best" and "worst" professors in cultures that may have different expectations and standards about what constitutes effective teaching. The present study addresses these issues by examining differences in the *degree* to which best and worst professors from six countries were perceived to use certain forms of teacher communication as well as determining which specific forms of communication *discriminate* between best and worst professors in each of these countries.

2. Cultural Dimensions

The six countries investigated in this study were chosen for two primary reasons: availability and diversity. First the researchers determined which countries they could potentially have access to for data collection purposes. Second, the researchers approached contacts from the six countries that varied the most from each other on the following cultural dimensions: power distance, contact versus noncontact orientation, collectivist versus individualistic orientation, and high versus low context, as shown in Table 1.

2.1 Low versus High Power Distance Cultures

In high power distance cultures, superiors have considerably more power than subordinates, and superiors and subordinates maintain emotional and psychological distance from one another (Hofstede, 1980, 2001). Of the six countries in this study, Mexico is highest in power distance. Australia, Sweden, and the U.S. are fairly low in terms of power distance, which means that superior-subordinate relationships (such as those between professors and students) are more equalitarian, and communicative behaviors that show friendliness and accessibility may be more common and expected. In Japan and Taiwan, power distance is presumed to be moderate because people communicate a high level of respect to elders and superiors, but salaries and other status indicators are more equalitarian (P. Andersen, 2008; Hofstede, 1980).

2.2 Contact versus Noncontact Cultures

Hall (1990) distinguished between contact cultures, wherein people typically stand close, touch frequently, and are nonverbally expressive; and noncontact cultures, wherein people generally stand farther apart, touch infrequently, and are more emotionally reserved. Countries in the Mediterranean area, the Middle East, and Eastern Europe, as well as countries south of the U.S. in the Americas, are high contact cultures. Asian and, to a lesser extent, Northern European countries, tend to be less contact oriented. The U.S., Canada, Great Britain, and Australia have moderate contact orientations (P. Andersen, 2008; McDaniel & Andersen, 1998). Thus, within the present study, Japan and Taiwan are the least contact-oriented countries, followed by Sweden. Mexico is the most contact oriented.

2.3 Collectivist versus Individualistic Cultures

Cultures can also be distinguished by the extent to which they are oriented toward individual versus group needs. People in individualistic cultures value personal space, autonomy, privacy, and the freedom to express their opinions. People in collectivist cultures value harmony, cooperation, togetherness, loyalty, and tradition (Hofstede, 1980, 2001). People who are high in collectivism also tend to inhibit their emotions more than those who are individualistic (Matsumoto, 2006). Hofstede found the U.S. to be particularly high in individualism. Although not as high as the U.S., Australia is also a relatively individualistic country and Sweden is moderately individualistic. Countries in Asia and South America tend to be more collectivist. Of the six countries represented in the present study, Hofstede's work (1980, 2001) suggests that Taiwan is the most collectivist. Other scholars have also described Japan as a collectivist culture (e.g., Andersen & Wang, 2006; Lustig & Koester, 2003; Matsumoto, 1991).

2.4 Low versus High Context Cultures

Finally, cultures also vary along a continuum of low to high context orientation. In low-context cultures, like Australia, Sweden, and the U.S., people emphasize the spoken word, and meaning is derived primarily from explicit, oral communication. In high-context cultures, such as Japan, Taiwan, and Mexico, meaning is attached to the surrounding context with a heavy reliance on nonverbal expression (Hall, 1981). Thus, subtle behaviors that are overlooked in low-context cultures often contain nuanced and important meanings within high-context cultures. Collier, Ribeau, and Hecht (1986) reported that within the U.S. there are differences in communication preferences based on ethnic background. Specifically, people in the U.S. with heritage from high-context cultures have stronger preferences for nonverbal than verbal communication, whereas people with heritage from low-context cultures have stronger preferences for verbal than nonverbal communication.

3. Effective Teacher Communication

Researchers have identified several types of communication that are associated with perceptions of effective teaching (Gorham, 1988; Nussbaum, 1992; Pascarella & Terenzini, 1991). The current study examines four of these: (1) nonverbal expressiveness, (2) relaxed movement, (3) in-class conversation, and (4) out-of-class communication. The first two of these behaviors are related to a concept called teacher nonverbal immediacy, whereas the latter two behaviors represent verbal strategies that teachers can use to increase interaction with students.

3.1 Nonverbal Immediacy and Positive Perceptions of Teachers

According to Mehrabian's (1971) immediacy principle, people approach and "are drawn toward persons and things they like, evaluate highly, and prefer" while avoiding and moving away from persons and things "they dislike, evaluate negatively, or do not prefer" (p. 1). Immediacy behaviors communicate messages of approach and liking by signaling availability for communication, decreasing physical and psychological distance between people, increasing sensory stimulation, and conveying interpersonal warmth (P. Andersen, 1985). Common nonverbal immediacy behaviors include eye contact, touch, open and relaxed body positions, expressive gestures

and movement, and warm voices (P. Andersen, 1985). In the present study, two distinct forms of nonverbal immediacy emerged across the six countries that were investigated: *nonverbal expressiveness,* which included behaviors such as smiling, speaking with an expressive voice, and gesturing; and *relaxed movement,* which included behaviors such as having a relaxed posture and being able to move around the classroom comfortably. Both types of behaviors have been identified as nonverbally immediate (P. Andersen, 1985).

Starting with J. Andersen's (1979) seminal work, studies conducted in the U.S. have demonstrated that there is a positive association between affective learning and perceptions that a teacher uses nonverbal immediacy in the classroom (see Witt, Wheeless, & Allen, 2004, for a review). Positive affective learning encompasses "student attitudes toward the course, content, and instructor, as well as student attitudes toward anticipated classroom behaviors" (Pogue & AhYun, 2006, p. 333). Teachers who are regarded as nonverbally immediate tend to be rated as especially likeable and competent (Gorham & Christophel, 1990; Guerrero & Miller, 1998; Manusov, 1991), and as able to impose higher workloads while still being regarded positively (Mottet, Parker-Raley, Beebe, & Cunningham, 2007).

Immediacy is regarded as a ubiquitous concept that exists in every culture (Mehrabian, 1971). Indeed, student perceptions of nonverbal immediacy are associated with affective learning in China (Myers, Zhong, & Guan, 1998), Germany (Roach & Byrne, 2001), Japan (Hinkle, 1998; Neuliep, 1997), Kenya (Johnson & Miller, 2002), Finland, Australia, and to a lesser extent Puerto Rico (McCroskey, Fayer, Richmond, Sallinen, & Barraclough, 1996; McCroskey, Richmond, Sallinen, Fayer, & Barraclough, 1995). The first hypothesis seeks to extend these findings to an even broader array of cultures as well as to two specific types of nonverbal immediacy:

H1: Across the six countries investigated in this study, students perceive their best professors to use more (a) nonverbal expressiveness and (b) relaxed movement than they perceive their worst professors to use.

3.2 Cultural Differences in Nonverbal Immediacy

Although nonverbal immediacy has been associated with positive affective learning across different cultures, it is important to note that the effect sizes for this association vary by culture and are typically largest in the U.S. (Witt et al., 2004). In one study, Roach and Byrne (2001) demonstrated that U.S. instructors were perceived as more nonverbally immediate than German instructors, and that perceptions of nonverbal immediacy had a more positive effect on U.S. than German student perceptions of learning.

The association between nonverbal immediacy and positive perceptions of teachers may be especially strong in the U.S. because the U.S. is characterized by relatively low power distance and a moderate contact orientation. Given that nonverbal immediacy decreases physical and psychological distance (P. Andersen, 1985), professors in high power distance countries may be expected to display relatively low levels of nonverbal expressiveness to preserve their status. Thus, although one might expect Mexican students to perceive their professors as using relatively high levels of nonverbal immediacy because they reside in a high contact culture, Mexico's high power distance orientation may negate this, with students and professors maintaining more task-oriented than friendly relationships. In contrast, research suggests that teachers in countries characterized by moderate to high contact orientations and low power distances (like the U.S. and Australia) are expected to be expressive and open with their students (P. Andersen, 2008). The U.S. and Australia are also individualistic countries; therefore, nonverbal expressiveness is likely to be expected and valued (Matsumoto, 2006).

Asian cultures, on the other hand, are characterized as particularly low in contact orientation (McDaniel & Andersen, 1998) and as collectivistic (Matsumoto, 2006). Therefore, professors in Japan and Taiwan are less likely to be perceived as using high levels of nonverbal expressiveness. They may, however, still use high levels of relaxed movement. Recall that Japan and Taiwan are both high-context cultures. People in high context cultures tend to rely on more subtle and nuanced behaviors compared to those in low context cultures. Therefore, professors in Japan and Taiwan may prefer to show immediacy through the more subtle cues related to relaxation and movement than the more direct nonverbal cues associated with expressiveness. Indeed, some forms of teacher nonverbal immediacy, such as standing close to others or using high levels of eye contact, are seen as more appropriate in Western than Eastern cultures (Zhang, Oetzel, Gao, Wilcox, & Takai, 1998).

Taken together, the available evidence suggests that professors from the U.S. and Australia are most likely to be perceived by students as using high levels of nonverbal expressiveness, whereas professors from Japan and Taiwan are the least likely to be perceived as using high levels of nonverbal expressiveness. Predictions for relaxed movement are more speculative given the more subtle nature of these behaviors. Thus, the following hypothesis and research question are posed:

H2: There are cross-cultural differences in the extent to which students perceive their best and worst professors to use nonverbal expressiveness, such that Australian and U.S. students perceive their professors to use the most nonverbal expressiveness, and Japanese and Taiwanese students perceive their professors to use the least nonverbal expressiveness.

R1: Are there cross-cultural differences in the extent to which students from Australia, Japan, Mexico, Sweden, Taiwan, and the U.S. perceive their best and worst professors to use relaxed movement?

3.3 Interactive Verbal Communication and Positive Perceptions of Teachers

Nonverbal communication only tells part of the story regarding what constitutes an effective teaching style. Verbal communication tells the other part. The two types of verbal communication included in this study focus on increasing interaction between professors and students so that students become active learners.

The first of these, *in-class conversation,* includes behaviors such as encouraging students to talk, soliciting different viewpoints, and providing personal examples. These types of behaviors have been shown to associate positively with affective learning (Gorham, 1988) and student motivation (Christophel, 1990). In a study of U.S. students, Sanders and Wiseman (1990) found that European-American, African-American, Hispanic, and Asian students all reported more affective learning when their teachers engaged in discussion-related verbal behaviors such as asking students about assignments and soliciting opinions from students. A study by Ngwainmbli (2004) showed that conversation-oriented tactics were also effective when used by U.S. professors teaching in Chinese classrooms. Ngwainmbli noted that these types of tactics make learning a shared process that is student-centered rather than teacher-generated.

The second type of verbal communication included in this study, *out-of-class communication,* focuses on the extent to which teachers are perceived as accessible outside of class time. Teachers who are rate as high in out-of-class communication tend to invite students to meet with them before, after, or outside of class, and they tend to get into conversations with students when they meet with them. Studies have shown that out-of-class communication is related to positive affective learning (Pascarella & Terenzini, 1991) and higher student teaching evaluations (Lamport, 1993), as well as better actual academic performance (Pascarella, 1980; Terenzini, Pascarella, & Blimling, 1996) and retention (Milem & Berger, 1997; Pascarella & Terenzini, 1991; Pike, Schroeder, & Berry, 1997). Out-of-class communication may be especially important for more reticent students who are reluctant to participate in class discussions (Kelley, Duran, & Zolten, 2001). Students are also more likely to engage in out-of-class communication with instructors who they perceive as responsive and as having a sense of humor (Aylor & Oppliger, 2003), which suggests that out-of-class communication is part of a constellation of behaviors that students associate with effective teachers. Although little research has examined out-of-class communication in cultures other than the U.S., at least two studies have shown that this concept is cross-culturally relevant (Georgakopoulos, 2009; Zhang, 2005).

The aforementioned findings suggest that students are likely to perceive that their favorite or most effective professors use both forms of verbal communication more often than their less preferred professors. Thus, the following hypothesis is advanced:

H3: Across the six countries investigated in this study, students perceive their best professors to use more (a) in-class conversation and (b) out-of-class communication than their worst professors.

3.4 Cultural Differences in Interactive Verbal Communication

Although interactive communication appears to be valued across different cultures, some scholars have suggested that teachers from Western cultures are more likely to use in-class conversation as a teaching strategy (Ngwainmbli, 2004). Other studies have shown that students from Asian countries are less likely to participate in class. For example, Lee and Carrasquillo (2006) compared Korean and U.S. students' perceptions of interaction in U.S. classrooms. Korean students reported talking less in class, liking larger classes more, and seeing their professors as having more authority than did the U.S. students. Contact and power distance orientations may partially explain these patterns. Asian students may be less likely to speak up in class because they tend to be less expressive in public settings, and professors may be less likely to elicit participation because they see themselves as the authority in the classroom.

However, research suggests that Asian students may engage in relatively high levels of out-of-class communication with their professors compared to students from other countries. Zhang (2005) found that Chinese students reported engaging in more out-of-class communication with their college instructors than did U.S. students, and that immediacy was correlated with out-of-class communication for Chinese students but not for U.S. students. Zhang also found differences in how and why U.S. versus Chinese students engaged in

out-of-class communication. Chinese students were more likely to visit their instructors' offices, whereas U.S. students were more likely to contact their instructors via email. Chinese students were also more likely to discuss personal problems during out-of-class communication with their instructors rather than focusing mostly on coursework-related issues, as U.S. students did. These findings are consistent with the distinction between collectivist versus individualistic cultures because teachers in collectivistic cultures may be more inclined to put students ahead of their personal agendas and meet with them outside of class.

Other studies have produced similar results. Georgakopoulos (2009) found that both U.S. and Japanese students mentioned behaviors related to out-of-class communication as part of what makes a professor effective, but a higher percentage of Japanese than U.S. students listed these strategies. Ngwainmbi (2004) included some of the dialogue that he observed between Chinese students and their U.S. professor (in a Chinese classroom). Although the Chinese students were more selective about answering questions and participating than U.S. students typically are, the Chinese students seemed quick to invite the U.S. professor to join them in an out-of-class activity. Students from high-context, collectivistic cultures may be comfortable with out-of-class communication because it allows for more one-on-one interaction where students can attend to subtle communication cues and start to feel more like a community. Accordingly, the following hypotheses and research question are advanced:

H4: There are cross-cultural differences in the extent to which students perceive their best and worst teachers to use in-class conversation, such that U.S. and Australian students perceive their teachers to use more in-class conversation than do students from Japan and Taiwan.

H5: There are cross-cultural differences in the extent to which students perceive their best and worst teachers to use out-of-class communication, such that Japanese and Taiwanese students perceive their best and worst teachers to use more out-of-class communication than do students from and the U.S. and Australia.

R2: When compared to students from the other countries, are there differences in how Mexican or Swedish students perceive their best and worst teachers to use (a) in-class conversation and/or (b) out-of-class communication?

3.5 Types of Communication that Discriminate between Best and Worst Professors within Each Culture

There may also be cultural differences in the extent to which different types of communication help define what constitutes a best versus worst teacher. A qualitative study by Georgakopoulos (2009) suggested that, although there were some similarities, students from the U.S. and China came up with different profiles of behaviors representing effective communication practices by teachers. In cultures where certain types of communication are perceived as especially important for good teaching, the associations between those types of communication and positive affective learning should be strongest. For example, in-class conversation may be perceived as less valuable in high power distance cultures because teachers' opinions would be considered to be superior to students' opinions. If this is the case, then in-class conversation would probably not be a good discriminator of best and worst teachers in a high power distance country. Similarly, the distinction between high- and low-context cultures suggests that the same behaviors can be attended to and interpreted differently depending on culture, with more meaning attached to subtle behaviors in high-context cultures. Thus, some behaviors that are critical discriminators between best and worst teachers in a low-context culture may not be as important in a high-context culture, and vice versa.

The present study does not explore the various behaviors that people from different cultures consider to be characteristic of effective teachers, but it does allow a comparison of how four behaviors—nonverbal expressiveness, relaxed movement, in-class conversation, and out-of-class communication—discriminate between best and worst teachers across the six cultures investigated here. To that end, a final research question is posed:

R3: Which specific forms of communication do students from Australia, Japan, Mexico, Sweden, Taiwan, and the United States perceive as best discriminating between best and worst professors?

4. Methods

4.1 Participants

Students (n= 540) enrolled in elective courses at medium to large universities (with 25,000 to 55,000 students enrolled) in the following metropolitan areas participated: Perth, Australia (n=76, 30 men, 46 women; average age= 20.6); Tokyo, Japan (n=96; 18 men, 78 women; average age= 20.6 years); Mexico City, Mexico (n=96, 37 men, 59 women; average age= 21.5); Stockholm, Sweden (n=94, 53 men, 41 women; average age= 24.6); Taipei, Taiwan (n=92, 38 men, 54 women; average age= 21.2); and Phoenix, Arizona in the U.S. (n=86, 49 men, 37 women; average age= 23.2).

4.2 Measurement

Similar to Gorham's (1988) and Plax, Kearney, McCroskey, and Richmond's (1986) methodology, two versions of a questionnaire were designed, with students asked to recall either the "best" or "worst" professor they had during their undergraduate studies. Except for the distinction between best and worst professors, both questionnaires were identical. Within each country, type of professor (best vs. worst) was balanced so that the same number of students completed each questionnaire. After identifying their best or worst professor, students rated that professor's communication using Richmond, Gorham, and McCroskey's (1987) Nonverbal Immediacy Measure (NIM) and Gorham's (1988) Verbal Immediacy Behaviors (VIB) measure, with an endpoint of 1 meaning that a teacher "almost never" used a particular behavior, and an endpoint of 5 meaning that a teacher "almost always" used a particular behavior. The last part of the questionnaire focused on demographics, including verifying that participants were natives of the country being sampled.

The NIM includes 14 items that tap into various nonverbal immediacy behaviors (e.g., "This teacher smiled at individual students in the class," and "this teacher used a variety of vocal expressions while talking to the class"). This measure has been used successfully with samples from China, Germany, Japan, and the U.S. (e.g., Zhang et al., 2007). The VIB measure includes 37 items that tap into a wide array of verbal behaviors, including the extent to which a teacher used personal examples, encouraged students to talk, invited students to have conversation outside of class, addressed students by name, and used humor. To determine how these items associated with one another across the six cultures, a series of principal components analyses with orthogonal (Varimax) rotation were conducted, both for the entire sample and for each individual culture. The results of these analyses, combined with the reliability coefficients found for each of the component scales that emerged, suggested that there were four distinct forms of communication that could be measured reliability across all six cultures.

The first two of these four forms of communication involve nonverbal communication, with items coming from the NIM. *Nonverbal expressiveness* was composed of five items that related to how much a teacher smiled, used vocal expression, and gestured while teaching (e.g., "This teacher smiled at individual students in the class" and "This teacher used a variety of vocal expressions while talking to the class"). Alpha reliability for this scale was .88 overall (M= 3.44, SD= .98), and ranged from .85 to .91 across the six cultures. *Relaxed movement* included six items (e.g., "This teacher had a very relaxed body position while talking to the class" and "This teacher moved around the classroom with ease while teaching"). The overall alpha reliability for this scale was .83 (M= 3.47, SD= .85), with a range of .76 to .88 across cultures.

The other two forms of communication that emerged from the principal components analysis involve verbal communication, with items coming from the VIB. *In-class conversation* was measured with four items that focused on encouraging discussion and sharing in the classroom (e.g., "The is teacher used personal examples or talked about experiences s/he has had outside of class" and "This teacher asked questions that solicited viewpoints or opinions"). Overall reliability was .83 (M= 3.15, SD= .90), with a range of .80 to .86. *Out-of-class communication* was assessed with three items (e.g., This teacher got into conversations with individual students before, during, or outside of class" and "This teacher invited students to email, phone, or meet with her/him outside of class if they had questions or wanted to discuss something"). Average alpha reliability for this final scale was .77 (M= 3.22, SD= .89), with a range of .73 to .81.

4.3 Questionnaire Translation and Survey Administration

For cross-cultural research, language is a salient factor because researchers strive to attain equivalence (Hui & Triandis, 1985). In the present study, surveys were translated into the native language, and then back translated by a different translator. The translation was an effort by the researcher and translators to ensure that items embodied within the questionnaire were valid for each culture. Items were modified as necessary to capture the intended meaning in different cultures. These adaptations were made until the translators and researchers were confident that the questionnaires had equivalent meaning. After translation was completed, either a faculty member or student of each university proctored the questionnaire at the beginning of class. Although instructions were included on the questionnaire, each administrator provided complementary oral directions to ensure student comprehension of the process.

5. Results

All of the hypotheses and research questions except R3 were tested by means of 2 (best vs. worst professor) by 6 (country) analyses of covariance (ANCOVAs). Each type of communication was treated as a separate dependent variable. Because the proportion of male versus female students differed across the six samples, we treated sex as a covariate even though it was not a significant predictor of any of the communication variables. Within-country correlations among the various forms of perceived teacher communication are shown in Table 2.

5.1 Nonverbal Expressiveness

When nonverbal expressiveness was the dependent variable, there was a main effect for professor type, $F(1,527)= 960.69$, $p < .001$, $\eta^2= .59$, with best professors perceived as using more nonverbal expressivity ($M= 4.20$, $SD= .64$) than worst professors ($M= 2.69$, $SD= .68$), as predicted in H1a. A main effect for country also emerged, $F(5,527)= 23.67$, $p < .001$, $\eta^2= .08$. Tukey B range tests ($p < .05$) showed that, as predicted in H2, students from the U.S. and Australia reported that their professors used the most nonverbal expressiveness, whereas students from Japan and Taiwan reported that their teachers used the least nonverbal expressiveness (see Table 3). Finally, the interaction between professor type and country was nonsignificant for nonverbal expressiveness, $F(5,527)=1.94$, $p > .05$.

5.2 Relaxed Movement

The ANCOVA for relaxed movement only produced one significant effect—a main effect for professor type, $F(1,527)= 201.25$, $p < .001$, $\eta^2= .26$, with best professors perceived as using more relaxed movement ($M= 3.96$, $SD= .74$) than worst professors ($M= 2.98$, $SD= .74$), as predicted in H1b. The main effect for country, $F(5,527)= 1.74$, $p < .05$, and the professor type by country interaction, $F(5,527)= 2.04$, $p < .05$, were both nonsignificant.

5.3 In-Class Conversation

The ANCOVA for in-class conversation revealed a main effect for professor type, $F(1,527)= 320.28$, $p < .001$, $\eta^2= .34$. In support of H3a, best professors were perceived as using significantly more in-class conversation ($M= 3.66$, $SD= .77$) than worst professors ($M= 2.63$, $SD= .70$) across all six countries. The main effect for country was also significant, $F(5,527)= 14.09$, $p < .001$, $\eta^2= .09$, with Tukey-B range tests ($p < .05$) showing that Australian, Swedish, and U.S. students perceived their teachers to employ more in-class conversation than did Japanese and Taiwanese students (see Table 3 for means.) Mexican students' perceptions of in-class conversation did not differ significantly from any other cultural group.

The ANCOVA for in-class conversation also produced a professor type by country interaction, $F(5,527)= 7.09$, $p < .001$, $\eta^2= .05$. This interaction was probed by isolating the data for best and worst teachers and then conducting two more ANCOVAs. There was a main effect for country on perceptions of best teachers, $F(5,263)= 19.70$, $p < .001$, $\eta^2= .22$, with Tukey-B range tests revealing that students from Australia, the U.S., and Sweden reported that their best professors used higher levels of in-class conversation than did students from the other three countries. The range test also showed that Mexican students perceived their best professors to use more in-class conversation than did students from Japan or Taiwan (see Table 4). There was also a main effect for country on perceptions of worst teachers, $F(5,263)= 2.34$ $p < .05$, $\eta^2= .03$, with U.S. students reporting that their worst professors used more in-class conversation than did students from any of the other five countries (see Table 4). Thus, H4 was supported, but only for best professors.

5.4 Out-of-Class Conversation

Consistent with H3b, the ANCOVA for out-of-class communication produced a main effect for professor type, $F(1,527)= 383.16$, $p < .001$, $\eta^2= .38$, with students across all six countries reporting that their best teachers were more accessible for out-of-class communication ($M= 3.77$, $SD= .75$) than were their worst teachers ($M= 2.66$, $SD= .64$). As predicted in H5, there was also a main effect for country, $F(5,527)= 14.65$, $p < .001$, $\eta^2= .10$, with Tukey-B range tests showing that, compared to students from the other four countries, students from Australia and the U.S. reported that their professors used the least out-of-class communication (see Table 3). However, a significant professor type by country interaction, $F(5,527)= 7.09$, $p < .001$, $\eta^2= .06$, suggested that this finding only holds for best professors. Specifically, when the interaction was decomposed, there was a significant main effect for country when best professors were isolated, $F(5,263)= 20.82$, $p < .001$, $\eta^2= .27$, with Tukey-B range tests again showing Australian and U.S. students reporting the least out-of-class communication (see Table 5). When worst professors were isolated, the main effect was non-significant, $F(5, 263)= 1.14$, $p > .05$.

5.5 Communication Variables as Discriminators of Best and Worst Teachers in Each Country

The last research question asked about the specific forms of communication that would discriminate between best and worst teachers in each country. To answer this question, six stepwise discriminant function analyses—one for each country—were conducted. The four types of communication (nonverbal expressiveness, relaxed movement, in-class conversation, and out-of-class communication) were the predictor variables, and the grouping variable was whether the professor was considered a best or worst teacher. As shown in Table 6, all of these analyses produced significant results, although the specific forms of communication that functioned as discriminators varied based on country. The classification rates for correctly identifying cases as representing a best or worst teacher ranged from 78% for Japan to 88% for Mexico and the U.S.

6. Discussion

This study extends work on perceptions of effective teacher communication by investigating perceptions of students from six countries, including three that, to the researchers' knowledge, have not been studied previously in relation to nonverbal immediacy behavior or interactive verbal behaviors (Mexico, Sweden, and Taiwan). The present study's results replicate and extend past work by demonstrating that although specific forms of communication are associated with recollections of best professors across cultures, there are subtle cultural differences in the degree to which best professors are perceived to use these behaviors, as well as how these forms of communication are perceived to differentiate best from worst professors.

6.1 Perceptions of Communication used by Best versus Worst Professors

Students in all six countries perceived "best" professors to use more nonverbal expressiveness, relaxed movement, in-class conversation, and out-of-class communication than "worst" professors. Thus, the present study's findings confirm that these four forms of communication are perceived as important components of teaching effectiveness across a variety of countries that are characterized by different values and expectations. The finding for nonverbal expressiveness was especially robust, with the distinction between best and worst professors accounting for nearly 60% of the variability in how nonverbally expressive professors were perceived to be. The smallest effect size was for relaxed movement; even so, the distinction between best and worst professors still explained 26% of the variability in the degree to which professors were perceived to move in a relaxed manner around their classrooms. Importantly, however, best professors were perceived to use moderately high levels of the four forms of communication investigated in the present study, rather than very high levels. Very high levels of these behaviors could be perceived as overly immediate and inappropriate. Thus, professors may be safest using moderately high (rather than high) levels of nonverbal immediacy and interactive behavior when communicating with students in other cultures.

6.2 Cross-Cultural Differences in Perceptions of Nonverbal Expressiveness

Japanese and Taiwanese students perceive their best and worst professors to use the least nonverbal expressiveness, followed by Swedish students. This is not surprising given research showing that Asians are less contact-oriented (McDaniel & Andersen, 1998) and expressive (Matsumoto, 2006) in public than are people from other parts of the globe. Studies have also suggested that Northern European countries are generally lower-than-average in terms of contact orientation and overall expressivity (P. Andersen, 2008). However, it is important to keep in mind that the effect size for culture was relatively small, with country accounting for only 8% of the variability in nonverbal expressiveness. When compared to the stronger finding for the distinction between best and worst professors, it seems reasonable to conclude that although professors from Asian cultures are generally perceived to be less nonverbally expressive than professors from countries such as the U.S., Australia, and Mexico, moderate to moderately high levels of nonverbal expressiveness are judged positively across both contact and non-contact cultures.

6.3 Cross-Cultural Differences in Perceptions of In-Class Conversation

Students from the U.S., Australia, and Sweden perceived their best professors to use more in-class conversation than did students from Japan, Taiwan, and Mexico, with Japanese and Taiwanese students reporting the lowest levels of in-class conversation for best professors. Of course, this does not mean that Japanese and Taiwanese students reported that their best professors used low levels of in-class conversation. Indeed, the means for best professors were slightly above the mid-point of 3.0 on the 5-point scale measuring in-class conversation for both Japanese and Taiwanese students' perceptions. The means for the other countries were closer to or just above 4.0, which again suggests that moderately high levels of in-class conversation may be perceived favorably across various cultures. On the basis of past research, which has suggested that Western cultures tend to value verbal forms of in-class student participation more than Eastern cultures (Ngwainmbli, 2004), it is not surprising that Asian students perceived their best professors to use relatively low levels of in-class conversation when compared to students from the U.S., Australia, and Sweden.

Power distance may also help explain these findings. Of the six countries included in this study, Sweden, Australia, and the U.S. have the lowest power distance scores (Hofstede, 2001). Because people in these countries have more egalitarian views, they may expect more open discussion and debate in the college classroom than do people in more authoritarian countries, who would, in contrast, expect their professors to dominate discussions. In future studies, researchers should determine whether or not there is a correlation between power distance and perceptions that effective professors use in-class conversation that focuses on discussing ideas and opinions rather than just presenting information.

6.4 Cross-Cultural Differences in Perceptions of Out-of-Class Communication

A distinctly different pattern emerged for out-of-class communication, with students from Australia and the U.S. perceiving their best professors to use *less* in-class communication than students from the other four countries perceived their best professors to use. This replicates past work, which has shown that, compared to U.S. students, Asian students report more out-of-class communication with their professors (Zhang, 2005), and are more likely to regard out-of-class communication as an important characteristic of effective professors (Georgakopoulos, 2009).

The individualistic nature of the U.S. and, to a lesser extent, Australia, may also help explain these findings. In individualistic countries, professors and students may prefer to complete the learning process during class time, so that they have more time to pursue their individual goals outside of class. Conversely, in collectivistic cultures, professors and students may enjoy meeting outside of class as a way to build an ongoing sense of community. In short, people from individualistic countries, like the U.S., may be more likely to compartmentalize school from other tasks and goals, whereas people from collectivist cultures may see out-of-class learning as a natural extension of what occurs within the classroom. More research is necessary to test these speculations and to determine how attitudes toward individualism and collectivism are related to perceptions of the behaviors that constitute effective teaching.

6.5 Discriminators of Best and Worst Professors in Each Country

The present study also reveals which specific forms of communication help discriminate between best and worst professors more effectively in each country. For Australia and the U.S., nonverbal expressiveness and in-class conversation emerged as the best discriminators. This suggests that students in these two countries value professors who engage in behaviors that keep interaction lively, such as smiling, using an expressive voice, gesturing, including personal examples in their lectures, and facilitating discussion and debate. Since Australia and the U.S. are similar in terms of the cultural dimensions that characterize them, it seems likely that the combination of low power distance and a moderate contact orientation help shape expectations for effective professors to use nonverbal expressiveness and in-class conversation. It is also interesting that, of the four forms of communication investigated in the present study, these two forms are the most direct and unambiguous ways of increasing immediacy within the classroom environment.

For Japanese and Taiwanese students, relaxed movement and out-of-class communication emerged as the best discriminators of best versus worst professors. Relaxed movement is a relatively subtle immediacy behavior that may have more meaning in high-context cultures such as Japan and Taiwan. In Asian cultures, it may be less important for the classroom to be lively than for information to be presented in a calm, straightforward, and knowledgeable manner. Indeed, Georgakopoulos (2009) and McDaniels (2006) both found that nonverbal immediacy, as conceptualized in the U.S., was not very relevant to judgments of teaching effectiveness for Japanese students. Specifically, Georgakopoulos noted that Japanese students sometimes regard behaviors such as touch, expressive movement, close distancing, and excessive gaze as "inappropriate expressions" for professors to use in their classrooms (p. 68). However, the present study suggests that more subtle nonverbal immediacy behaviors, such as relaxed movement, may discriminate effectively between best and worst professors for Japanese as well as Taiwanese students. Thus, nonverbal immediacy may be important in both Western and Eastern cultures, but it may be expressed using different specific nonverbal cues. Of course, nonverbal relaxation may be perceived differently depending on the other nonverbal behaviors that professors display. When professors are relaxed and confident they will likely be judged more favorably then when they are relaxed but non-confident. Thus, across various cultures, a combination of cues showing both relaxation and expressiveness may promote the most positive evaluations for professors.

It is also interesting that the best two discriminators for Swedish students were verbal rather than nonverbal in nature. Sweden is moderately low in contact orientation, which suggests that direct forms of nonverbal immediacy, like smiling, touch, and gesturing, may be somewhat less important in discriminating between best and worst professors. In addition, Sweden is a low-context culture. Thus, verbal forms of communication may be valued more than nonverbal forms. Other studies have produced similar results, showing that people in the U.S. whose families come from low-context cultures are more likely to prefer verbal over nonverbal forms of communication (Collier et al., 1986).

Finally, for Mexican students, only in-class conversation failed to emerge as a unique discriminator of best versus worst professors in the stepwise analysis. Perhaps in-class conversation is less expected in a high power distance country like Mexico because professors are expected to assume a dominant role in the classroom. Yet the high contact and high context orientations associated with Mexico may make nonverbal forms of

communication especially important components of effective teaching, with direct forms of nonverbal communication, like smiling and gesturing, and more subtle forms of nonverbal communication, like relaxed movement, both playing a role.

6.6 Limitations and Future Directions

This study highlights similarities and differences in student perceptions of how much best professors from various countries are perceived to use certain forms of communication. Nonetheless, some limitations should be kept in mind. First, although having students reference a "best" or "worst" professor was consistent with the goal of comparing professors who vary in terms of perceived effectiveness, this technique forced students to label their professors a particular way at the outset of the survey. This technique also limited the focus of the study to a comparison of best and worst professors rather than allowing for correlations between perceptions of communicative behaviors and teacher effectiveness.

Second, this study examines *perceptions* rather than actual behavior. Although some research has manipulated levels of nonverbal immediacy and found correlations between nonverbal behaviors and perceptions of teacher effectiveness (e.g., Guerrero & Miller, 1998), other research has shown that student ratings of teacher immediacy are uncorrelated with objective observers' ratings (e.g., Smythe & Hess, 2005). Thus, students might not accurately recall the degree to which their professors used certain communicative behaviors, especially if they rated professors who they had classes with a year or more ago. Instead, this study likely taps into how students *think* a best or worst professor communicates. Future studies should employ innovative techniques to obtain objective measures of communicative behavior and see how they correlate with perceptions of teaching effectiveness.

A third shortcoming is that, although countries were chosen based on their placement on four cultural dimensions, the dimensions themselves were not measured. Research has shown that individuals within cultures differ on dimensions such as collectivism and individualism, and that these individual differences influence communication (Matsumoto, 2006). In addition to measuring these dimensions in future work, it would be helpful to measure cultural expectations related to various dimensions and to determine the co-cultural groups to which students belong, especially since studies have shown that ethnic or co-cultural background is related to perceptions of teacher immediacy (e.g., Powell & Harville, 1990). The present study is limited to operationalizing culture in broad terms rather than considering the many ethnic and socioeconomic variables that could affect perceptions of teacher effectiveness. Consideration of such variables would lead to a richer understanding of the role culture plays in determining what constitutes effective teacher behavior.

7. Conclusion

The present study demonstrates that perceptions of nonverbal expressiveness, relaxed movement, in-class conversation, and out-of-class communication are associated with best teachers across six different cultures. Although these four behaviors appear to be universally related to perceptions of teaching effectiveness, there are subtle cultural differences in how much teachers are perceived to use these behaviors, as well as which behaviors are best at discriminating between best and worst teachers. More research is necessary to uncover the reasons behind these subtle cross-cultural differences so that a better understanding of characteristics of effective teaching—both within and across various cultures—can be reached. Also, future research should examine sex differences in relation to professor type (best and worst), immediacy type, and cultural membership in order to determine their relationships with teaching effectiveness.

References

Andersen, J. F. (1979). Teacher immediacy as a predictor of teaching effectiveness. In D. Nimmo (Ed.), *Communication Yearbook, 3*, (pp. 543-559). New Brunswick, N.J.: Transaction Books. Andersen P. A. (1985) Nonverbal immediacy in interpersonal communication. In A. W. Siegman & S. Feldstein (Eds.), *Multichannel integrations of nonverbal behavior* (pp. 1-44). Hillsdale, NJ: Lawrence Erlbaum Associates.

Andersen, P.A. (1993). Cognitive schemata in personal relationships. In S. Duck (Ed.), *Individuals in relationships* (pp. 1–29). Newbury Park, CA: Sage.

Andersen, P. A. (2008). *Nonverbal communication: Forms and functions* (2nd ed.). Prospect Heights, IL: Waveland Press.

Andersen, P. A. & Wang, H. (2006). Unraveling cultural cues: Dimensions of nonverbal communication across cultures. In L. A. Samovar, R. E. Porter, & E. R. McDaniel (Eds.), *Intercultural Communication: A Reader* (pp.250-265). Belmont, CA: Thomson Wadsworth.

Aylor, B. & Oppliger, P. (2003). Out-of-class communication and student perceptions of instructor humor orientation and socio-communicative style. *Communication Education, 52,* 122-134.

Christophel, D. (1990). The relationship among teacher immediacy behaviors, student motivation, and learning. *Communication Education, 39,* 323-340.

Collier, M., Ribeau, S. & Hecht, M. (1986). Intercultural communication rules and outcomes within three domestic cultures. *International Journal of Intercultural Relations, 10,* 439-457.

Georgakopoulos, A. (2009). Teacher effectiveness examined as a system: Interpretive structural modeling and facilitation sessions with U.S. and Japanese students. *International Education Studies, 2(3),* 60-76.

Gorham, J. (1988). The relationship between verbal teacher immediacy behaviors and student learning. *Communication Education, 37,* 40-53.

Gorham, J. & Christophel D. (1990). The relationship of teachers' use of humor in the classroom to immediacy and student learning. *Communication Education, 39,* 46-62.

Guerrero, L. K. & Miller, T. A. (1998). Associations between nonverbal behaviors and initial impressions of instructor competence and course content in videotaped distance education courses. *Communication Education, 47,* 30-42.

Hall, E. T. (1981). *Beyond culture*. Garden City, NY: Anchor/Doubleday.

Hall, E. T. (1990). *The hidden dimension* (2nd ed.).. New York: Anchor Press.

Hinkle, L. L. (1998). Teacher nonverbal immediacy behaviors and student-perceptions of immediacy and learning: Monitoring process and product. *Communication Education, 39,* 46-62.

Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.

Hofstede, G. (2001). *Cultures consequences: Comparing values, behaviors, institutions, and organizations across nations.* Thousand Oaks, CA: Sage.

Hui, C. H. & Triandis, H. C. (1985). Measurement in cross-cultural psychology: a review and comparison of strategies. *Journal of Cross-Cultural Psychology, 16,* 131-152.

Johnson, S.C. & Miller, A. N. (2002). A cross-cultural study of immediacy, credibility, and learning in the U.S. and Kenya. *Communication Education, 51,* 280-292.

Kelley, L., Duran, R. L. & Zolten, J. J. (2001). The effect of reticence of college students' use of electronic mail to communicate with faculty. *Communication Education, 39,* 46-62.

Lamport, M. A. (1993). Student-faculty interaction and the effect on college student outcomes: A review of the literature. *Adolescence, 112,* 971-990.

Lee, K.S. & Carrasquillo, A. (2006). Korean college students in United States: Perceptions of professors and students. *College Student Journal, 40(2),* 442–56.

Lustig, M. W., & Koester, J. (2003). *Intercultural competence: Interpersonal communication across cultures.* New York: Harper Collins.

Matsumoto, D. (2006). Culture and nonverbal behavior. In V. Manusov & M. L. Patterson (Eds.), *The Sage handbook of nonverbal communication* (pp. 219-235). Thousand Oaks, CA: Sage.

McCroskey, J. C., Fayer, J. M., Richmond, V. P., Sallinen, A. & Barraclough, R. A (1996). A multi-cultural examination of the relationship between nonverbal immediacy and affective learning. *Communication Quarterly, 44,* 297-307

McCroskey, J. C., Richmond, V. P., Sallinen, A., Fayer, J. M. & Barraclough R. A. (1995). A cross-cultural and multi-behavioral analysis of the relationship between nonverbal immediacy and teacher evaluation. *Communication Education, 44,* 287-291.

McDaniel, E. & Andersen, P. A. (1998) Intercultural patterns of tactile communication: A field study. *Journal of Nonverbal Behavior, 22,* 59-76.

McDaniel, E. R. (2006). Japanese nonverbal communication: A reflection of cultural themes. In L. A. Samovar, R. E. Porter, & E. R. McDaniel (Eds.), *Intercultural Communication: A Reader* (pp. 266-274). Belmont, CA: Thomson Wadsworth.

Mehrabian, A. (1971). *Silent messages*. Belmont, CA: Wadsworth.

Milem, J. F. & Berger, J. B. (1997). A modified model of college student persistence: Exploring the relationship between Astin's theory of involvement and Tinto's theory of student departure. *Journal of College Student Development, 38,* 387-400.

Mottet, T. P., Parker-Raley, J., Beebe, S. A. & Cunningham, C. (2007). Instructors who resist "college lite": The neutralizing effect of instructor immediacy on students' course-workload violations and perceptions of instructor credibility and affective learning. *Communication Education*, *56*, 145-167.

Myers, S. A., Zhong, M. & Guan, S. (1998). Instructor immediacy in the Chinese college classroom. *Communication Studies, 48,* 240-254.

Neuliep, J. (1997). A cross-cultural comparison of teacher immediacy in American and Japanese college classrooms. *Communication Research, 24,* 431-451.

Ngwainmbi, E. K. (2004). Communication in the Chinese classroom. *Journal of Education, 125,* 163-176.

Nishida, T. (1996). Communication in personal relationships in Japan. In W. B. Gudykunst, S. Ting-Toomey, T. Nishida (Eds). *Communication in personal relationships across cultures* (pp. 102-121) Thousand Oaks, CA: Sage.

Nussbaum,J. D. (1992). Effective teacher behaviors. *Communication Education, 41,* 167-180.

Pascarella, E. T. (1980). Student-faculty informal contact and college outcomes. *Review of Educational Rsearch, 50,* 545-595.

Pascarella, E. T. & Terenzini, P. Y. (1991). *How college affects students: Findings and insights for twenty years of research.* San Francisco: Jossey-Bass.

Pike, G. R., Schroeder, C. C. & Berry, T. R. (1997). Enhancing the educational impact of residence halls: The relationship between residential learning communities and first-year college experiences and persistence. *Journal of College Student Development, 38,* 609-621.

Plax, T., Kearney, P., McCroskey, J., & Richmond, V. (1986). Power in the classroom VI: Verbal control strategies, nonverbal immediacy and affective learning. *Communication Education, 35,* 43-54.

Pogue, L. L. & AhYun, K. (2006). The effect of teacher nonverbal immediacy and credibility on student motivation and affective learning. *Communication Education, 55,* 331-344.

Powell, R. & Harville B. (1990). The effects of teacher immediacy and clarity on instructional outcomes: An intercultural assessment. *Communication Education, 39,* 369-379.

Richmond, V., Gorham, J. & McCroskey, J. (1987). The relationship between selected immediacy behaviors and cognitive learning. In M. McLaughlin (Ed.), *Communication Yearbook, 10,* (pp. 574-590) Beverly Hills, CA: Sage.

Roach, K. D. & Byrne, P. R. (2001). A cross-cultural comparison of instructor communication in American and German classrooms. *Communication Education, 50,* 1-14.

Sanders, J. A. & Wiseman, R. L. (1990). The effects of verbal and nonverbal teacher immediacy on perceived cognitive, and behavioral learning in the multicultural classroom. *Communication Education*, *39*, 341-353.

Smythe, M. J., & Hess, J. A. (2005). Are student self-reports a valid method for measuring teacher nonverbal immediacy? *Communication Education*, *54*, 170-179.

Terenzini, P. T., Pascarella, E. T. & Blimling, G. S. (1996). Students' out-of-class experiences and their influence on learning and cognitive development: A literature review. *Journal of College Student Development, 37,* 149-162.

Witt, P. L., Wheeless, L. R. & Allen, M. (2004). A meta-analytical review of the relationship between teacher immediacy and student learning. *Communication Monographs, 71,* 184-207.

Zhang, Q. (2005). Immediacy and out-of-class communication: A cross-cultural comparison. *International Journal of Intercultural Relations, 30,* 33-50.

Zhang, Q., Oetzel, J. G. Gao, X., Wilcox, R. G., & Takai, J. (2007). Teacher immediacy scales: Testing for validity across cultures. *Communication Education*, *56,* 228-248.

Table 1. Characteristics of Countries Selection for Inclusion

Country	*Power Distance Index*	*Contact*	*Individualistic vs. Collectivist*	*Context*
Australia	36	moderate	individualistic	low
Japan	54	low	collectivist	high
Mexico	81	high	moderate	high
Sweden	31	moderately low	moderate	low
Taiwan	58	low	collectivistic	high
United States	40	moderate	individualistic	low

Note. For power distance, the higher the score, the higher the power distance. Scores ranged from 11 to 94, with a mean of 51.

Table 2. Bivariate Correlations among the Communication Variables within each Country

Country	*NE & RM*	*NE & ICC*	*NE & OCC*	*RM & ICC*	*RM & OCC*	*ICC & OCC*
Australia	.30**	.46**	.25*	.51**	.02	.19
Japan	.49**	.30**	.61**	.33**	.41**	.18
Mexico	.35**	.49***	.60**	.25*	.21*	.41**
Sweden	.57**	.58**	.54**	.49**	.43**	.54**
Taiwan	.46**	.38**	.62**	.37**	.52**	.24*
U.S.	.51**	.56**	.32**	.43**	.33**	.17

Notes. NE= nonverbal expressiveness; RM= relaxed movement; ICC= in-class conversation; OCC= out-of-class communication. ** = $p < .01$, $p < .05$, two-tailed.

Table 3. Means and (Standard Deviations) for the Significant Main Effects for Country on Perceptions of Teacher Communication

Country	*Nonverbal Expressiveness*	*In-Class Conversation*	*Out-of-Class Communication*
Australia	3.77 (.83) [a]	3.35 (1.00) [a]	2.86 (.73) [a]
Japan	3.18 (.98) [c]	2.86 (.78) [b]	3.27 (.94) [b]
Mexico	3.47 (.91) [b]	3.05 (.85) [ab]	3.39 (.92) [b]
Sweden	3.30 (1.00) [bc]	3.28 (.98) [a]	3.35 (.93) [b]
Taiwan	3.15 (.93) [c]	2.88 (.72) [b]	3.45 (.88) [b]
United States	3.85 (.98) [a]	3.54 (.84) [a]	2.89 (.71) [a]

Note. Tukey-B range tests demonstrated that means marked with different subscripts down each column are significantly different from one another.

Table 4. Cell Means and (Standard Deviations) for the Professor Type by Country Interaction on In-Class Conversation

Country	*Best Professors*	*Worst Professors*
Australia	4.11 (.64) [c]	2.58 (.63) [a]
Japan	3.16 (.68) [a]	2.57 (.76) [a]
Mexico	3.55 (.58) [b]	2.55 (.78) [a]
Sweden	3.95 (.71) [c]	2.59 (.70) [a]
Taiwan	3.20 (.65) [a]	2.55 (.66) [a]
U.S.	4.12 (.72) [c]	2.97 (.60) [b]

Note. Tukey-B range tests demonstrated that means marked with different subscripts down each column are significantly different from one another.

Table 5. Cell Means and (Standard Deviations) for the Professor Type by Country Interaction on Out-of-Class Communication

Country	*Best Professors*	*Worst Professors*
Australia	3.16 (.63) [b]	2.55 (.73)
Japan	3.96 (.63) [a]	2.58 (.65)
Mexico	4.03 (.70) [a]	2.75 (.68)
Sweden	4.02 (.66) [a]	2.68 (.65)
Taiwan	4.10 (.69) [a]	2.81 (.62)
U.S.	3.19 (.73) [b]	2.57 (.64)

Note. Tukey-B range tests demonstrated that means marked with different subscripts down each "best professors" column are significantly different from one another. The means for "worst professors" did not differ significantly from one another.

Table 6. Results for Stepwise Discriminant Function Analyses

Country	*X^2(df)*	*Wilks' Λ*	*Standardized Canonical Function Coefficients*
Australia	106.90(2)***	.30	nonverbal expressiveness= .78 in-class conversation= .74
Japan	85.15(2)***	.40	relaxed movement= .77 out-of-class communication= .48
Mexico	137.23(3)***	.25	nonverbal expressiveness= .67 out-of-class communication= .58 relaxed movement= .53
Sweden	90.24(2)***	.37	out-of-class communication= .67 in-class conversation= .62
Taiwan	79.46(2)***	.41	out-of-class conversation= .71 relaxed movement= .55
U.S.	114.31 (2)***	.29	nonverbal expressiveness= .75 in-class conversation= .43