CHIROPRACTIC, SPORTS, AND THE OLYMPICS
The Role of Chiropractic in Sports and the Recent Olympic Games in Los Angeles
This article examines the degree to which doctors of chiropractic and chiropractic assistants are generally immediate and immediate with their patients. The degree to which the level of communication apprehension of doctors of chiropractic and chiropractic assistants is associated with generalized immediacy and immediacy with patients is also examined. The results revealed that both doctors of chiropractic and chiropractic assistants report higher levels of immediacy than is recorded in the general population. In addition, doctors of chiropractic and chiropractic assistants with high levels of communication apprehension are less generally immediate and less immediate with their patients. This research was supported by a grant from the American Chiropractic Association. The ACA also assisted in the administration of the research. The opinions expressed are those of the authors, and not necessarily those of the ACA.

Dr. Jerry Allen is an associate professor in the Department of Communication at the University of Bridgeport, Connecticut. He consults regularly with doctors of chiropractic concerning communication.

Dr. Virginia P. Richmond is an associate professor at West Virginia University. She has researched the areas of communication apprehension and nonverbal communication for approximately 10 years. She has also taught numerous workshops on effective nonverbal communication in health-care professions.

Dr. James C. McCroskey is chair and professor in the Department of Speech Communication at West Virginia University. He is acknowledged internationally for his research in the communication apprehension area and has developed numerous nonverbal communication courses in several universities over the past 16 years.

It has been clearly established that effective doctor-patient communication is a critical component in the establishment of effective doctor-patient relationships.1, 5, 7 Korsch and associates5, 10 suggest that patient noncompliance with medical procedures is linked to patients' dissatisfaction with their doctors' communication. Many health-care professionals display a lack of sensitivity to the role that their communication plays in increasing patient satisfaction and compliance. Their attitude seems to be one of "I am the expert, hence the patient should do as he/she is told."

Whether the above attitude actually is shared by large numbers of health-care professionals is not the issue. The issue is that patients and the general public perceive that many such professionals are ineffective communicators and are not concerned with patient satisfaction. In a recent article by Allen, Richmond, and McCroskey,2 communication apprehension (the fear or anxiety about communicating with others) was posited as one of the contributing factors to ineffective doctor-patient communication. For example, the doctor of chiropractic who is highly com-
munication apprehensive might be ineffectual with patients.

One of the manifestations of a highly communication apprehensive individual is that he/she withdraws from communication and is generally less approachable than a person who is a low communication apprehensive. In other words, the highly communication apprehensive doctor is likely to be less approachable in general and with his/her patients in particular.

This avoidance behavior of the high communication apprehensive is a negative manifestation of a more global communication construct labeled "nonverbal immediacy." Nonverbal immediacy is the degree of perceived physical or psychological closeness between communicators. According to Mehrabian, communication behavior patterns can be understood by using the following immediacy principle: "People are drawn toward persons and things they like, evaluate highly, and prefer; and they avoid or move away from things they dislike, evaluate negatively, or do not prefer." (p. 1). The most common immediacy behaviors are communication with another at close proximity, smiling, positive facial effect, eye contact, use of direct body orientations, touching, positive body movements and gesturing, and vocal expressiveness.

Behaviorally, immediacy is the actual approach behaviors of a person toward another person or situation, while nonimmediacy is the actual avoidance of a person or situation (e.g., communication). Affectively, people are nonverbally immediate with things, people and situations they like, while being nonverbally nonimmediate with things, people and situations they do not like (e.g., communication). Hence, the highly communication apprehensive person would be expected to be less behaviorally immediate with other people because of the dislike and fear of communication situations.

While health-care researchers have not extensively researched the global impact of nonverbal immediacy, they have researched facets of nonverbal immediacy. For example, nonverbal behaviors such as touch, eye contact, moving toward another, and vocal variety have been found to be potential predictors of whether or not patients react with trust or apprehension toward the health-care practitioner. In fact, in a variety of health-care disciplines (dentistry, medicine, psychiatry, and nursing), the importance of positive-immediate nonverbal communication behaviors has been stressed as critical to an effective health provider-patient relationship. These results supported the presumed link between communication apprehension and immediacy for one group of health-care professionals. The purpose of this study was to pursue the relationship between communication apprehension and perceived immediacy of actual health-care professionals, namely, chiropractors and chiropractic assistants.

**Purpose of Study**

The survey reported here sought to determine the degree to which doctors of chiropractic and chiropractic assistants are generally immediate and immediate with their patients. This study also sought to determine the degree to which doctors' of chiropractic and chiropractic assistants' communication apprehension is associated with generalized immediacy and immediacy with patients.

**Method**

The national office of the American Chiropractic Association both sponsored and assisted in the administration of this research. All members of the ACA were sent a questionnaire to complete as well as one for their assistant to complete. They were asked to duplicate the questionnaire if they had more
assistants. Returns included 3130 doctors of chiropractic and 1809 chiropractic assistants. Responses were received from every state in the United States. Other demographics of the study are reported in the article by Allen et al.4

The three measures included in the questionnaire which are central to this report were the Personal Report of Communication Apprehension (PRCA),5 a revised version of the Generalized Immediacy Measure (GI),6 which measures a general impression of a person's immediacy (see Table 1); and finally, a Patient Immediacy Measure (PI),6 composed of a seven-step, bipolar scale concerning how immediate the DCs and CAs were "when communicating with your most recent patient" (see Table 1). All these instruments have been widely used in previous research.2, 3, 10

In this study the estimated reliability for the PRCA was .94. No reliabilities were available on the GI and PI because of the nature of the instruments.

Results

The mean score of the doctors of chiropractic on the generalized immediacy measure was 5.8, and the chiropractic assistants' mean score was 5.7. The doctors' of chiropractic mean score on the patient immediacy measure was 6.1, while the chiropractic assistants' mean score on the patient immediacy measure was 5.8. The presumed midpoint on both measures was 4.0; hence, both DCs and CAs perceive themselves to be above the norm for generalized immediacy and patient immediacy. This would seem to be consistent with the mission of chiropractic practice.

Table 2 reports the correlations among the PRCA, its subscores, and the generalized immediacy measure and patient immediacy measure for both doctors of chiropractic and chiropractic assistants. The DCs' generalized immediacy correlated with their PRCA scores (−.34), while the CAs' generalized immediacy correlated with their PRCA scores (−.32). The DCs' and CAs' patient immediacy scores both correlated with their respective PRCA scores (−.25). In addition, the DCs' and CAs' generalized immediacy and patient immediacy correlated negatively with the subscores of the PRCA (group, dyad, meet, and public). Hence, the more communication apprehensive the DC or CA is, the less generally immediate he or she perceives himself/herself to be and the less immediate he/she perceives himself/herself to be with patients.

Further analyses confirmed the above. Analysis of variance indicated significant differences attributable to the communication apprehension level of both DCs and CAs on generalized immediacy. High apprehension was operationalized as a score more than one standard deviation above the mean of the PRCA derived from national norms. Low apprehension was represented by a score more than one standard deviation below the normative mean. Moderate apprehension was represented by scores within one standard deviation of the normative mean.

Analysis of variance indicated significant differences attributable to the communication apprehension level of both DCs and CAs on perceived patient immediacy. The low communication apprehensive DCs perceived themselves as being more immediate with patients (6.4) than moderates (6.0) or highs (5.6), and moderates perceived themselves as being more immediate with patients than highs. Low communication apprehensive DCs perceived themselves as being 23% more immediate with patients than highs and 12% more immediate with patients than moderates. All tests were conducted at the .05 level of significance.

In conclusion, as previous research suggests, the more communication apprehension a person experiences, the less immediate he or she will be. Hence, DCs and CAs with high levels of communication apprehension typically will be less generally immediate and less immediate with patients than DCs and CAs with moderate or low levels of communication apprehension.

Implications for the Chiropractic Profession

Doctors of chiropractic, like other health-care professionals, must always be concerned with two "bottom line" items: improved health of their patients and maintenance of a financially sound practice. If patients are not helped, there is little reason for the DC to continue in practice. If patients are not satisfied with the DC (or the CA with whom they have contact),...
Table 2 — Correlations between communication apprehension and generalized immediacy and immediacy with patients

<table>
<thead>
<tr>
<th>COMMUNICATION APPREHENSION MEASURE</th>
<th>GENERALIZED IMMEDIACY OF DOCTORS OF CHIROPRACTIC</th>
<th>GENERALIZED IMMEDIACY OF CHIROPRACTIC ASSISTANTS</th>
<th>PATIENT IMMEDIACY OF DOCTORS OF CHIROPRACTIC</th>
<th>PATIENT IMMEDIACY OF CHIROPRACTIC ASSISTANTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dyed</td>
<td>-29</td>
<td>-27</td>
<td>-20</td>
<td>-21</td>
</tr>
<tr>
<td>Meet</td>
<td>-39</td>
<td>-34</td>
<td>-25</td>
<td>-26</td>
</tr>
<tr>
<td>Public</td>
<td>-30</td>
<td>-27</td>
<td>-22</td>
<td>-20</td>
</tr>
<tr>
<td>Total PRCA</td>
<td>-31</td>
<td>-21</td>
<td>-17</td>
<td>-15</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>-34</td>
<td>-32</td>
<td>-25</td>
<td>-25</td>
</tr>
</tbody>
</table>

*p < .05.

they may fail to return in sufficient numbers for the DC to retain a practice.

Patient compliance and patient satisfaction, then, are the two critical elements underlying a successful chiropractic practice. Both of these are tied to the communication behavior of the DC and CA. Nonverbal immediacy is the central aspect of communication which has been found to be associated with compliance and satisfaction.

In the present study, it was observed that both DCs and CAs report higher levels of immediacy than is recorded in the general population. While this result is encouraging, it should be noted that we did not survey either DCs or CAs who have left chiropractic because they were unsuccessful. Our survey included only those individuals who have been successful enough to remain in practice.

While the normative level of immediacy in the samples we studied was relatively high, not all respondents reported high levels of immediacy. In fact, many DCs as well as CAs reported low levels of immediacy. These reports of lower immediacy were substantially associated with communication apprehension. More communicatively apprehensive DCs and CAs are less immediate generally and less immediate with patients.

Previous research has suggested that lower compliance and satisfaction are associated with lower immediacy of health-care professionals. Such negative effects should be associated with less successful chiropractic practice. The final article in this series will address this specific issue.

References