

THE FACTOR STRUCTURE OF THE IMAGE OF JUDO BY JUDO ATHLETES AND NON-JUDO UNIVERSITY STUDENTS IN THE UNITED STATES

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I INTRODUCTION

Judo is one of the most popular sports in the world. Although the Japanese continue to be leaders in competitive Judo, in recent years, many other countries have come to share that leadership, including France, Great Britain, Korea, Cuba, and Russia. Results from top-level, international competition, including the Olympic Games and the World Championships, provide evidence of the wide-spread development of competitive Judo throughout the world.

Many countries have witnessed not only increased attention to and recognition of competitive Judo at the highest international levels; this attention has been associated with dramatic increases in the numbers of Judo participants on the grass roots levels, including local, regional, and national levels. While competition is a main goal for many of these participants around the world, it is not by far the sole objective of Judo participation for many others. Judo also serves as recreation,

physical exercise, training for self-discipline with application to work or education, or as self-defense.

People of different countries have different cultural values (Matsumoto, 1996). Some cultures, for example, foster a relatively collective value system, where the needs, wishes, goals, and concerns of one's ingroups take precedence over one's own needs and wishes. In these cultures, individuals typically make substantial sacrifices of their own personal desires for the sake of the common good. Group harmony, cohesion, and cooperation are heavily stressed. Japan, Korea, and other Asian countries are examples of such collective cultures.

Other cultures, however, foster a more individualistic value system, where the wants, needs, and desires of individuals come before those of a group. In these cultures, equality and individuality is stressed, and regimentation is frowned upon. Conformity, obedience, and compliance to groups or status systems others are generally seen as negatives in individualistic cultures. Countries such as the United States, Australia, and Canada are generally considered examples of highly indi-

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vidualistic cultures.

The dimension of individualism v. collectivism is not the only way by which cultures can be meaningfully distinguished; indeed, there are other dimensions that can be used for that purpose, such as status, gender, and contextual differentiation; uncertainty avoidance; tightness; etc. Collectively, these dimensions all point to a variety of ways in which cultures can differ meaningfully among each other. These differences should be apparent in cultural and national differences in values, attitudes, beliefs, opinions, and behaviors (Matsumoto, 1996), and these differences should be substantial.

Given considerable national differences in cultural values, it would not be surprising that Judo itself be interpreted differently in different countries. Despite apparent similarities in Judo technique and competitive styles around the world, there are also surprising differences in the application of those techniques, and the use of competitive rules. Just as there is the possibility for national differences in the outward manifestations of Judo application, there is the strong possibility for cultural differences in the underlying perceptions, images, and understanding of Judo across countries. Should these differences exist, they would be important to uncover, as they would be valuable in improving our understanding of how Judo is perceived and understood around the world. Improvements in our understanding of the image and perception of Judo around the world should, in turn, help us design better diffusion programs about Judo that are culturally-sensitive to the particular ways in which Judo is understood in different areas of the world.

In fact, several studies have already taken steps in this direction, using factor analytic techniques on scalar data obtained on multiple-item assessments of images of Judo in different countries. For example, results have been already

obtained from France, Australia, Japan, Korea, West Germany, and England (e.g., see Hosokawa, Masaki, Fujii, 1992; Iida, Endo, Suginami, Aoyagi, Tanaka, Takeuchi, & Yoshioka, 1984; Nakajima, Takeuchi, Iida, & Komori, 1993). Factor analysis is useful in this type of research, as it allows for an investigation of similarities or differences in meanings (factor structures) underlying a consistent set of items and rating scales used across studies. Factor analysis is especially useful in cross-national and cross-cultural research, as it allows for a comparison of similarities or differences in underlying meaning across cultures (Matsumoto, 1994a). Differences in factor structures obtained across different samples are evidence for substantial differences in how the tests are interpreted and understood in those cultures. With regard to images of Judo, the studies conducted to date already show considerable cultural and national differences in how Judo is perceived around the world.

The purpose of this study was to extend previous research on images and perceptions of Judo with subjects from the United States. In this study, American Judo athletes and non-Judo university students completed a survey assessing their images and perceptions of Judo. We considered the collection of data from both Judo athletes and non-Judo participating students as important because both give us information concerning the image of Judo in the U.S. Judo athletes' data may be affected by the nature and practice of Judo itself; the data from non-Judo participants would not be confounded by such effects. In considering the possible influences of culture on images of Judo, therefore, it becomes necessary to survey both groups, as their information should complement each other.

This survey was based on that used in some previous studies, allowing for its comparability with findings in other countries. Based on consid-

erable cultural differences between the U.S. and other countries, we hypothesized that the factor structures for the American samples would be different than those obtained in other countries in other research.

II METHODS

Subjects

Participants included 123 Judo athletes, and 68 matched, non-Judo practicing university students. All respondents participated on a voluntary basis. The Judo athletes were recruited from the participants at the 1993 United States National Collegiate Judo Championships, held in San Francisco, California. All athletes participating in this competition meet eligibility requirements as outlined by the National Collegiate Athletic Association (NCAA), as adapted by the National Collegiate Judo Association (NCJA) and United States Judo, Inc. (USJI). These athletes came from all across the U.S., and can be considered a relatively generalizable sample of American Judo athletes.

The 68 matched, non-Judo practicing respondents were recruited from classes at San Francisco State University. All respondents in this group had never done Judo before. Most participated with no direct benefits to themselves, with some receiving extra credit for their course offered by their instructor.

Materials

All subjects completed a 50-item questionnaire that assessed their image and perception of Judo. This questionnaire was a modified version of several others used in previous cross-national research on Judo image (Hosokawa et al., 1992; Iida et al., 1984; Nakajima, et al., 1993). Subjects responded to each item by using a 5-point Likert scale of agreement, labeled Disagree Strongly(1), Disagree(2), Neither Agree nor Disagree(3), Agree(4), and Agree Strongly(5). All items were

originally drafted in Japanese, and were translated into English. Accuracy of the translation was verified using a decentering process involving back-translation (Brislin, 1992; Matsumoto, 1994a). The items used in the English version of the questionnaire are shown in Table 1.

All subjects gave their gender and age on the cover sheet of the questionnaire. Judo athletes also gave a brief history of their practice of Judo, including the weight division in which they compete, the age at which they started Judo, how long they have been doing Judo, their rank, and brief competition history.

Procedures

Judo athletes were approached by a research assistant during the registration period the day prior to competition, and asked to participate in this survey of images about Judo. The recruitment process had little, if any, impact on the athlete's ability to register for the tournament without incident, and to weigh-in as quickly as possible. Once they agreed to participate, they were provided sitting space and writing utensils in a quiet area to complete the questionnaire, which generally took no more than 15 minutes. Once completed and returned, they were thanked for their time and excused. They received no compensation or any other direct benefit for their participation.

Non-Judo athletes were recruited from their classes at San Francisco State University, where a research assistant explained the purpose of the study and outlined the general procedures. In some cases, class instructors offered extra credit to those who would complete the survey. Interested students were generally allowed time at the end of their class period to complete the survey. Submission of the survey to the research assistant marked the end of the testing procedures.

For comparison purposes, we compared the results we obtained with factor analyses conducted on similar data obtained in France, West Ger-

Table 1 Items Used to Assess the Image of Judo

No.	Item	Judo Athletes	Non-Judo Student
1.	Judo builds character while strengthening your body.	4.675 (.591)	4.324 (.674)
2.	Judo is technique more than strength.	4.285 (.738)	3.985 (.947)
3.	Judo is important in the present.	4.146 (.793)	3.441 (.715)
4.	Judo makes for light hearted people.	3.195 (.985)	2.824 (.923)
5.	Judo is not a high profile sport.	3.764 (1.183)	3.500 (1.243)
6.	Judo brings out will power and mind control.	4.431 (.787)	4.176 (.663)
7.	Judo exemplifies the Japanese heart.	3.691 (.818)	3.471 (.776)
8.	Judo is a free world.	3.455 (.913)	3.088 (.636)
9.	Fighting spirit is important in Judo.	4.472 (.800)	3.015 (1.078)
10.	Judo is a savage sport.	2.382 (1.259)	1.941 (.983)
11.	Judo is the national sport of Japan.	3.382 (1.130)	3.162 (.678)
12.	Judo players are tenacious.	3.585 (.826)	3.397 (.893)
13.	Judo is helpful for peace.	3.634 (.877)	3.279 (.724)
14.	Judo brings out one's courage.	4.285 (.749)	3.912 (.781)
15.	Judo is an old sport.	3.780 (1.172)	4.294 (.824)
16.	Judo is a fighting art within an art.	3.894 (.961)	3.676 (.830)
17.	Judo is comparable to life.	4.008 (.915)	3.441 (.930)
18.	Judo should think of Judo as a sport.	3.878 (1.123)	3.824 (1.070)
19.	Judo increases concentration.	4.366 (.789)	4.412 (.575)
20.	Judo is frightening.	2.325 (1.200)	2.338 (1.009)
21.	To me Judo is my youth.	2.984 (1.036)	2.618 (1.138)
22.	In Judo strength isn't everything.	4.171 (1.010)	4.088 (.966)
23.	Judo is a serious sport.	4.350 (.826)	4.250 (.672)
24.	Judo is great since it has so many techniques.	4.057 (.922)	3.500 (.866)
25.	Judo gives a frightening impression.	2.748 (1.152)	2.603 (1.045)
26.	Judo draws people from around the world by the heart.	3.650 (.928)	3.191 (.772)
27.	In Judo it's better to understand your opponent before attacking.	3.707 (1.018)	3.809 (.895)
28.	Judo shows people's heart.	3.780 (1.024)	3.103 (.860)
29.	Judo strengthens Japan as a nation.	3.171 (.917)	3.103 (.750)
30.	Judo is conservative.	3.163 (1.047)	2.985 (.866)
31.	Judo has no meaning without beating your opponent.	2.016 (1.148)	2.059 (.953)
32.	Faith and sincerity are important to Judo.	4.081 (.916)	3.662 (.759)
33.	Judo is a precious traditional Japanese sport.	3.862 (.849)	3.882 (.718)
34.	In Judo, you must consider your opponent.	4.211 (.799)	4.368 (.705)
35.	Judo and war have no relationship.	2.886 (1.014)	3.088 (1.025)
36.	Judo is something you must like to do.	4.293 (.899)	3.868 (.890)
37.	Judo, like other sports, should be enjoyed.	4.496 (.830)	4.235 (.876)
38.	A Judoka must train through adversity.	4.163 (.840)	3.412 (.927)
39.	In Judo you must adopt techniques to suit your body type.	4.366 (.895)	3.882 (.883)
40.	Judo is a disagreeable sport.	2.309 (1.113)	2.221 (.937)
41.	Let your technique speak for you.	3.837 (.957)	3.676 (.812)
42.	Judo is pleasing to oneself.	4.171 (.853)	3.838 (.740)
43.	Executing a perfect technique is invigorating.	4.431 (.893)	4.000 (.874)
44.	Efforts upon effort is utmost in Judo.	4.049 (.882)	3.485 (.866)
45.	Judo is darkness.	2.228 (1.034)	2.324 (.977)
46.	In Judo you must, at times, train beyond your limits.	4.122 (1.025)	3.588 (.989)
47.	Judo is an endless struggle.	3.602 (1.117)	2.971 (.891)
48.	Judo is righteous and teaches the true way to live.	3.577 (.980)	3.162 (.759)
49.	In Judo manners and politeness in the Japanese way are important.	4.163 (.923)	3.750 (.755)
50.	Judo is conservative/feudal.	3.667 (.613)	2.735 (.797)

Note: Means and standard deviations (parentheses) on right.

many, Japan, and Australia (Hosokawa et al. 1992; Iida et al., 1984; Nakajima et al., 1993). The data from France were obtained using a very comparable image questionnaire; there were, however, some substantial differences between our questionnaire and the ones used in Australia, West Germany, and Japan, and these differences are noted.

III RESULTS

The data were analyzed separately for Judo and non-Judo subjects. All ratings were factor analyzed using a principal components factor analysis with Varimax rotation. Squared multiple correlations were used as communality estimates. For the Judo athlete data, the eigenvalues > 1 criterion for determining factorial complexity resulted in 15 factors; however, six of these were single-item factors. Because of the relatively small sample sizes, we chose to interpret only the first five factors in each analysis, reckoning that the remaining factors were considerably less reliable than the first five (a report of the entire factor structure can be obtained from the first author). We considered items with factor loadings ≥ 0.4 to be indicative of the factors. The first five factors for the Judo athletes were labeled Self-Fulfillment, Self-Enhancement, Philosophical Values, Aggression, and Tradition (see Table 2).

For the non-Judo participants, the factor analysis also extracted 15 factors; none had single-item loadings. The first five factors were Self-Enhancement; Aggression; Self-Discipline; Tradition, Culture, and Philosophy; and Recreation (Table 3). These results were quite comparable to the data for the Judo athletes.

For comparison purposes, we compiled the results obtained in previous factor analytic studies (i.e., Hosokawa et al., 1992; Iida et al., 1984; Nakajima et al., 1993; Takeuchi, Inoue, Nakajima, Shimokawa, & Takeuchi, 1990) conducted in

other countries assessing Judo Image (Table 4). These findings make it clear that there are considerable cross-national differences in the factorial structure underlying perceptions and images of Judo around the world among Judo athletes and non-Judo controls.

IV DISCUSSION

The results clearly indicate that, while there are some similarities in the factor structures underlying images and perceptions of Judo across the countries sampled (e.g., body and mind training), there are considerable differences as well. The most striking similarity for both American samples was the fact that self-related factors—Self Enhancement, Self-Discipline, Self Fulfillment—were the most important factors that emerged. The factor analyses obtained using data from other countries indicated that other factors involving training, discipline, will, and social factors were more important to those countries. This interesting difference is related to the underlying differences in cultural values among all of these countries. The almost exclusive emphasis on individualism in the American culture fosters a view of Judo that translates Judo into an activity that has direct benefits for oneself, either in terms of one's own pleasures and fulfillment, or in terms of enhancement of one's self. Emphasis on self-enhancement (v. effacing) in individualistic cultures has also been documented in a variety of other psychological and attitudinal ratings (Matsumoto, 1996). Other countries have fundamentally different underlying cultures, with less emphasis on self-enhancement or fulfillment. Thus, in these cultures, the practice of Judo takes on different meanings, centering on training, discipline, and development of will.

Another interesting finding from both American samples was the relative importance of the factor we labeled as Aggression. This factor was

Table 2 Factor Structure for the American Judo Athletes

1.	Self-Fulfillment (10.09%)	
	(37) Judo, like other sports, should be enjoyed.....	0.802
	(39) In Judo you must adopt techniques to suit your body type.....	0.683
	(46) In Judo you must, at times, train beyond your limits.....	0.622
	(42) Judo is pleasing to oneself.....	0.596
	(36) Judo is something you must like to do.....	0.567
	(49) In Judo manners and politeness in the Japanese way are important.....	0.561
	(34) In Judo, you must consider your opponent.....	0.556
	(23) Judo is a serious sport.....	0.552
	(38) A Judoka must train through adversity.....	0.488
	(24) Judo is great because it has so many techniques.....	0.420
	(43) Executing a perfect technique is invigorating.....	0.409
2.	Self-Enhancement (7.36%)	
	(19) Judo increases concentration.....	0.736
	(14) Judo brings out one's courage.....	0.677
	(1) Judo builds character while strengthening your body.....	0.617
	(6) Judo brings out will power and mind control.....	0.580
	(23) Judo is a serious sport.....	0.514
	(24) Judo is great because it has so many techniques.....	0.481
	(3) Judo is important in the present.....	0.446
	(2) Judo is technique more than strength.....	0.437
3.	Philosophical Values (5.36%)	
	(17) Judo is comparable to life.....	0.670
	(26) Judo draws people from around the world by the heart.....	0.571
	(48) Judo is righteous and teaches the true way to live.....	0.560
	(13) Judo is helpful for peace.....	0.534
	(32) Faith and sincerity are important to Judo.....	0.421
4.	Aggression (5.28%)	
	(40) Judo is a disagreeable sport.....	0.698
	(20) Judo is frightening.....	0.678
	(25) Judo gives a frightening impression.....	0.593
	(45) Judo is darkness.....	0.583
	(31) Judo has no meaning without beating your opponent.....	0.528
	(10) Judo is a savage sport.....	0.462
5.	Tradition (4.08%)	
	(29) Judo strengthens Japan as a nation.....	0.771
	(30) Judo is conservative.....	0.522
	(27) In Judo it's better to understand your opponent before attacking.....	0.488

NOTE: Factor Labels, Percent of Total Variance Accounted For, Items Loading on Each Factor, and Factor Loadings

Table 3 Factorial Structure for the American Non-Judo Students

.....	0.802	1. Self-Enhancement (6.98%)	
.....	0.683	(19) Judo increases concentration.....	0.696
.....	0.622	(23) Judo is a serious sport.....	0.675
.....	0.596	(46) In Judo you must, at times, train beyond your limits.....	0.645
.....	0.567	(16) Judo is a fighting art within an art.....	0.573
.....	0.561	(43) Executing a perfect technique is invigorating.....	0.532
.....	0.556	(6) Judo brings out will power and mind control.....	0.491
.....	0.552	(1) Judo builds character while strengthening your body.....	0.442
.....	0.488	(42) Judo is pleasing to oneself.....	0.404
.....	0.420	2. Aggression (6.86%)	
.....	0.409	(20) Judo is frightening.....	- 0.816
.....		(10) Judo is a savage sport.....	- 0.658
.....		(25) Judo gives a frightening impression.....	- 0.626
.....	0.736	(9) Fighting spirit is important in Judo.....	- 0.566
.....	0.677	(42) Judo is pleasing to oneself.....	0.534
.....	0.617	(40) Judo is disagreeable sport.....	- 0.455
.....	0.580	(47) Judo is an endless struggle.....	- 0.452
.....	0.514	3. Self-Discipline (5.84%)	
.....	0.481	(39) In Judo you must adopt techniques to suit your body type.....	0.804
.....	0.446	(49) In Judo manners and politeness in the Japanese you are important.....	0.708
.....	0.437	(31) Judo has no meaning without beating your opponent.....	- 0.426
.....		(44) Effort upon efforts is utmost in Judo.....	0.420
.....	0.670	(37) Judo, like other sports, should be enjoyed.....	0.419
.....	0.571	4. Tradition, Culture, and Philosophy (5.62%)	
.....	0.560	(5) Judo is not a high profile sport.....	0.667
.....	0.534	(29) Judo strengthens Japan as a nation.....	- 0.634
.....	0.421	(28) Judo shows people's heart.....	- 0.452
.....		(33) Judo is a precious traditional Japanese sport.....	- 0.427
.....	0.698	(48) Judo is righteous and teaches the true way to live.....	- 0.421
.....	0.678	(26) Judo draws people from around the world by the heart.....	- 0.415
.....	0.593	5. Recreation (5.03%)	
.....	0.583	(3) Judo is important in the present.....	0.659
.....	0.528	(50) Judo is conservative/feudal.....	- 0.647
.....	0.462	(4) Judo makes for light hearted people.....	0.496
.....		(45) Judo is darkness.....	- 0.460

NOTE: Factor Labels, Percent of Total Variance Accounted For, Items Loading on Each Factor, and Factor Loadings

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Table 4 Factor Analytic Results from Previous Studies in Other Countries Using Similar Methodology to Assess Judo Images

France (Judo Athletes)	
1. Training for the Body and the Spirit.....	24.30%
2. Threatening Attack.....	12.30%
3. Affirmative Emotion.....	11.90%
4. Traditional Sport.....	10.20%
5. Approval of Conservatism.....	9.00%
West Germany (Non-Judo Athletes)	
1. Positive Activity.....	9.49%
2. Composed Social Factor.....	9.32%
3. Physically Active Factor.....	8.10%
4. Will Factor.....	7.06%
5. Integrity.....	6.33%
Japan (Judo Athletes)	
1. Physical strength with social activity.....	13.18%
2. Will with activity.....	12.37%
3. Positively social factor.....	9.78%
4. Social activity with mental activity.....	6.68%
5. Lively emotion factor.....	5.82%
Japan (Non-Judo Athletes)	
1. Will Factor.....	9.96%
2. Activity with a Strong Will.....	9.19%
3. Judgment with Consideration.....	7.94%
4. Emotional Stability.....	7.08%
5. Maintenance of Health.....	7.00%
Australia (Judo Athletes)	
1. Activity with a Strong Will.....	10.36%
2. Physical and Mental Stability.....	7.37%
3. Positive Mental Attitudes.....	6.72%
4. Self-Establishment.....	6.41%
5. Social Adaptability.....	6.31%

NOTE: Subject type in parentheses; first five factors listed only; percent of total variance accounted for by each factor provided on right.

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not obtained in other cultures, leading us to suspect that this factor has particular importance for American respondents. In particular, a focus on individualism is generally associated with greater freedom in the expression of emotions in general, especially negative emotions. Other research by our laboratory (e.g., Matsumoto, 1990) has indicated, for example, that American subjects tend to rate the expression of anger toward close friends, family members, and other ingroup others as more socially appropriate than more collectivistic Japanese respondents. Attitudes regarding aggression, anger, and other negative emotions may be considered consequences of an emphasis on individualism, and as such form its own central concept psychologically in the minds of the American respondents in our sample which, in turn, affected how they interpreted the image survey and their perceptions of Judo.

It is interesting to note how underlying differences in culture can produce such differences in the meaning of the practice and image of Judo. After all, the actual activities of Judo practice are mainly the same around the world, including primarily throwing and grappling techniques. Yet, even though the techniques and activities are basically the same, their practice acquire profound differences in meanings to the individuals who practice those activities. These differences in meaning occur because of differences in cultural value systems in the countries in which these individuals exist, and which are harbored by each individual as agents of his or her culture. Because people of different cultures bring these different values with them to the practice of Judo, the practice of Judo can be rather flexible in adapting to the particular cultural mores and systems of the countries in which it attempts to flourish. Also, because people of different cultures attribute different meanings to Judo, they can search for new ways to develop and modify Judo techniques from their

basic applications to ones that would never have been considered should Judo have been limited to a single country or culture (e.g., only in Japan). This is exactly what we have witnessed in international competition over the past few years, with previously unknown Judo techniques being applied by relatively innovative athletes and countries who have modified the basic applications of Judo in their own way.

The fact that Judo itself can be flexible and adapt to the particular cultural meanings and values systems of different cultures and countries has substantial importance to our attempts at education and diffusion of Judo around the world. We must begin to realize that Judo does not mean the same thing to people of different cultures and countries. What we are used to in our own cultural system regarding Judo may or may not be congruent with what is practiced, taught, and held dearly in other countries or cultures. People of some cultures and countries may adapt practices and values regarding Judo that our entirely inconsistent with our own, which we have grown to love and hold fast to. Such observations may bring about negative emotions and moralistic judgments on our part. Yet, we must overcome such feelings if we are to understand Judo on a truly global-cultural as well as geographic-scale. The first step to overcoming such feelings is to recognize these fundamental and basic differences in the meaning of Judo, which arise because of differences in cultural values underlying the different countries of the world. Our ability to do so is important not only for the continued spread of Judo into the future, but also for the building of interpersonal relationships across countries through Judo, and for future, collaborative transformations of Judo into a more comprehensive and encompassing system of sport and moral development.

Clearly, the differences we observed in this

study are not exhaustive of all the possible differences that exist in the data we have obtained, nor in the data of others. We have yet to test for mean differences either on the level of items or factors. The small sample sizes in this study and in others also question the overall reliability of the factors obtained to date. Nevertheless, we believe that differences in factor structures will exist in image survey data on Judo such as that obtained in this study, and that these differences result from different cultural values in the various countries. In short they are reflective of the meanings they derive from the practice of Judo. Future research uncovering further cultural and national differences in the images and perceptions of Judo around the world will help broaden our understanding of the various meanings people in these countries derive from their participation in this international activity. Improvements in our understanding of the image and perception of Judo around the world should, in turn, help us design better diffusion programs about Judo that are culturally-sensitive to the particular ways in which Judo is understood in different areas of the world. These studies are important to consider if Judo is to reach its philosophical, as well as sport-oriented, goals.

V CONCLUSION

While studies on the competitive and performance aspects of Judo continue to dominate most research programs on Judo, studies on other aspects of Judo are sorely needed to improve our knowledge about this important sport. As Judo has gained tremendous popularity around the world, researchers need to ensure its continued growth internationally. One such avenue is the study of perceptions or images about Judo in different countries. In this study, 68 non-Judo athletes and 123 Judo athletes in the United States were administered a fifty item test assessing their

images of Judo. A principal components factor analysis with Varimax rotation was performed on the data, separately for the two groups. Squared multiple correlations were used as communality estimates. The results were fairly similar between the two groups, with both groups viewing Judo primarily via self-enhancement or self-fulfillment. The data for the American Judo athletes were compared to comparable data obtained from French, Japanese, and Australian Judo athletes, and West-German and Japanese non-Judo athletes obtained in previous studies. There were considerable differences between the data for Americans and all others. We believe that differences in the way Judo is viewed around the world are related to meaningful differences in the cultures underlying each of these countries. These studies should add to our understanding of how people in different cultures interpret Judo, as this information can be used by Judo administrators and teachers to further advance the growth of Judo in culturally-relevant ways. (Portions of this paper were presented at the Scientific Congress of the 1994 Asian Games held in Hiroshima, Japan.)

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