A Cross-Cultural Comparison of the Providing-Receiving Social Supports in Sports Teams—Japanese and American Student's Athletes

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Abstract: The purposes of this study were to examine the relationships between providing and receiving social supports with teammates, and to clarify the particularities of Japan, based on an examination of differences between Japan and the U.S. The subjects were 123 collegiate student's athletes from Japan and 115 from the United States. They participated organized sports activities in their universities (including intramural and varsity level). The participants completed questionnaires measuring the providing and receiving social supports for sports participation and persistency. Providing and Receiving Social Support Scale for Sports Team (Hagiwara and Isogai, 2014) were adopted to investigate the amount of social supports with teammates in a sports team. The results of correlations in providing and receiving social supports demonstrated that the amount of providing social support for teammates related to the amount of receiving social support from teammates in both Japanese and American student's athletes. The results of comparison Japan and the U.S. indicated that American student's athletes provided more social supports for teammates than Japanese. The present findings might be an important material to better understand Japanese student's athletes.

Key words: Social support, sports team, collegiate sports, providing support.

1. Introduction

In Japan, the number of students athletes especially collegiate athletes are declining slightly [1, 2]. Population of collegiate athletes are important for maintaining the international competitiveness of sports. Therefore, it is necessary to consider competitive sports participation in Japan.

In recent years, social support has gained attention as a factor predicting sports participation and persistency [3-6]. Social support has been defined as "tangible and intangible support provided by various people or groups surrounding the individual" [7]. In the sport science field, social supports from significant others, such as family members, friends, and

co-reargues apparently serves as an emotional support for sports participants, encouraging their participation and intension of persistency [8-10]. In addition, Rees and Hardy [11, 12], Rees et al. [13] examined the relationship between receiving social support and sports performance, and found that athletes with higher levels of sports performance have greater cognition of social supports for significant others, and they found that greater cognition of social supports were decreased stress related sports participation. Regarding research in American collegiate athletes, Morgan and Giacobbi [14] demonstrated that highly successful collegiate athletes have greater cognition of social supports from significant others such as coaches and parents. Therefore, social support is also an important factor of athletic performance.

Regarding research in Japan specifically, Suga et al.

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[5] examined the relationship between receiving social support and sports participation, and found that people with higher levels of sports participation have greater cognition of social support from significant others. Focusing on collegiate athletes, Tsuchiya and Nakagomi [15] demonstrated that greater cognition of social supports from significant others such as friends, coaches and teammates were decreased stress related athletic persistency. Hagiwara and Isogai [16] examined the relationship between social support and frequency of sports participation. The results suggested that people who receive more social support from significant others have a greater tendency to participate in sports. Thus, social support appears to be an important influence on sports adherence. In addition, Hagiwara et al. [17] demonstrated that collegiate athletes with higher levels of sports performance have greater cognition of social supports from family and friends. Thus, social support also related to sports performance in Japanese collegiate athletes.

In addition, a few studies have demonstrated that receiving social supports from significant others affected team cohesion [18-21]. Fraser and Spink [18] found significant relationships between social supports and group cohesion in an exercise group. Participants reporting high amounts of social support from significant others, such as reliable alliances, indicated higher group cohesion in the exercise group. Additionally, Isogai and Hagiwara [20] demonstrated that there is a relationship between social supports and team cohesion in collegiate athletes. Therefore, social support might be an essential factor for improving group cohesion in sports teams.

Generally, social support has been viewed as an activity that takes place interactively through interpersonal relationships [21]. Previous studies taking this view have focused on the interactional aspect of social support, in which individuals are both the receivers and providers of social support [22, 23]. In addition, several researchers have found

relationships between providing and receiving social supports. Liang et al. [24] indicated that the extent of providing social supports for significant others was related to the amount of social support received from significant others. In addition, Hori [25] found that providing social supports for significant others predicted the support provided by others. Therefore, providing social support for significant others might be an important factor for receiving social support from others.

In the area of sports, social supports should be exchanged interactively by teammates in order to improve team performance or team identification. Therefore, Hagiwara and Isogai [26] developed a scale for measuring the exchange of social supports in sports teams to assess the psychological intention of sports participation and persistency through relationships with teammates. This study also demonstrated a correlation in providing and receiving social supports, thus indicating that the amount of social support provided to teammates predicts the amount received from teammates. In addition, focusing on collegiate athletes, Hagiwara and Isogai [27] found that providing social supports for teammates was more strongly related to the intention of sports participation and persistency than receiving social supports.

These findings suggest that it is necessary to examine the interactive social supports in sports science, including providing social support as well as receiving social support. However, there are currently few studies investigating interactive social supports.

According to Japanese sports sociologist Tatano [28], international comparative research involves “shedding light on the similarities and differences in sports played in different countries in order to examine the actual state of sports in Japan and the feasibility of utilizing the experience thereof” [28]. Based on this notion, we recruited collegiate athletes in both Japan and the United States in order to compare differences between these two countries in

receiving and providing social support in sports teams. We believe that such comparisons can help to understand sports in Japan. Presenting data on the relationships between sports teams in the U.S. and those in Japan should provide some insight regarding any particularities of sports participation in Japan.

The purposes of this study were to examine the relationships between providing and receiving social supports with teammates and also to clarify aspects unique to Japan, based on an examination of differences between Japan and the U.S. Therefore, we conducted a survey of Japanese and American student athletes measuring the exchange of social supports in sports teams.

2. Methods

2.1 Participants

300 questionnaires randomly distributed to Japanese and American collegiate student athletes (150 distributed respectively) while in their classes and club activities, and 236 questionnaires were returned (123 Japanese, 82% response rate: 72 male,

49 female, 2 non-responses, and 115 Americans, 76% response rate: 77 male, 38 female). The participants were mostly male as the ration of males and females was approximately five to two. Japanese participants were athletes affiliated with the sports science faculty of a university located in the southern part of Japan. In the U.S., the participants were athletes majoring in sports science at a college located in the South Central region of the U.S. The average age of the Japanese participants was 20.24 (± 1.24), and the average age of the American participants was 20.62 (± 2.01). With regard to years of experience in sports, the Japanese average was 10.15 (± 3.75), while the American average was 12.94 (± 4.27). With regard to the type of sporting events in which the participants engaged, 37 were track-and-field athletes, 34 were baseball players, 34 were American football players, 34 were basketball players, 23 were soccer players, 17 were volleyball players, 15 were swimmers, 10 were handball players, 9 were gymnasts, 6 were rugby players, 5 were tennis players, 4 were squash players, 3 were golfers, 3 were badminton players, and 1 was a bowler (Table 1). For

Table 1 Demographic data of participants.

		Japanese	American
Gender	Male	72	77
	Female	49	38
	Non-response	2	0
Age		20.24 (± 1.24)	20.62 (± 2.01)
Years of experience in sports		10.15 (± 3.75)	12.94 (± 4.27)
Type of sporting events	Track and Field	27	10
	Baseball	16	18
	American Football	3	31
	Basketball	7	27
	Soccer	14	9
	Volleyball	11	6
	Swimming	14	1
	Handball	10	0
	Gymnastic	4	5
	Rugby	6	0
	Tennis	4	1
	Squash	4	0
	Golf	0	3
	Badminton	3	0
	Bowling	0	1
	Non-response	0	3

the purposes of the present study, we defined sporting events as “competitive sporting activities conducted by members of university-based sport teams,” and we only recruited persons currently participating in activities in university departments and sport clubs. When conducting an international comparison, it is essential to minimize variance in individual attributes and social environment [29]. This being the case, we consulted two American and three Japanese sport science experts regarding the selection of participants to ensure that variance in individual attributes was eliminated as much as possible. Two American experts who specialize in sports management and physical education were well informed about American athletic department and club sports student athletes, and three Japanese experts who specialize in sports management and sports psychology were well informed about Japanese club sports student athletes. Therefore, we consulted them to select samples.

The American college examined in this study was associated with Division I of the National Collegiate Athletic Association (NCAA). Because all athletes are allotted scholarships at a national level, only those individuals and sporting events associated with the NCAA can be part of the official athletics department. Therefore, those who cannot join the athletic department will participate in sports activities organized by a college-approved sport club, which can participate in matches against other universities. On the other hand, Japanese athletic department generally permitted all students as they desire to join an athletic club, therefore, even within the same team, there will be some members who receive full scholarships and compete at a national level, and others are intramural or recreational level. Therefore, in Japan, one can expect a range of different athletic levels. In other words, members of the official university athletics department will have a skill level similar to those in U.S. sports clubs. Having taken the above into account, we conferred with the U.S. and Japanese sports science experts and decided that in order to make

certain that American and Japanese participants had roughly the same attributes, American students should be members of the official athletics department and members of a college sports club, and Japanese students should be members of the official university athletics department.

2.2 Instruments

In order to measure the exchange of social supports in the sports teams, the Providing and Receiving Social Support Scales for Sports Teams [26] were adopted. These scales are a self-report inventory measuring interactive social supports with teammates. In the case of receiving social support, the items begin with the phrase, “We would like to ask you about the help and support you receive from your teammates when you play or decide to continue playing competitive sports. Your teammates...,” followed by actions such as “give you advice to help solve your problems” and “cheer you up when you are feeling low” (Table 2). The scale consists of six items which individuals rate from one (strongly disagree) to five (strongly agree). Values are summed to provide a total receiving social support score indicating the amount of support from teammates. In the case of providing social support, items begin with the words, “We would like to ask you about the help and support you provide to your teammates when you play or decide to continue playing competitive sports. You...” This is then followed by content such as “work with your teammates to solve their problems” and “respect your teammates as a team member and give an appraisal” (Table 3). Individuals respond to these six items on a scale ranging from one (strongly disagree) to five (strongly agree), and values are summed to provide a total providing social support score. Regarding the reliability and validity for the scales, Cronbach's alpha (coefficient of internal consistency) and confirmatory factor analyses (CFA) have been conducted in previous studies [26, 27]. Since the survey was also used with American subjects, we used

Table 2 Providing social support scales for sports teams.

	Providing Social Support Items
<u>You...</u>	
	Cheer your teammates up when they are feeling low
	Give your teammates advice to help solve their problems
	Work with your teammates to solve their problems
	Encourage your teammates when they are feeling insecure
	Teach your teammates techniques that they are unsure of
	Respect your teammates as a team member and give an appraisal

Note: Participant respond to the 6-items of the Providing Social Support Scales for Sports Teams on Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

Table 3 Receiving social support scales for sports teams.

	Receiving Social Support Items
<u>Your Teammates...</u>	
	Cheer you up when you are feeling low
	Give you advice to help solve your problems
	Work with you to solve your problems
	Encourage you when you are feeling insecure
	Teach you techniques that you are unsure of
	Respect you as a team member and give you an appraisal

Note: Participant respond to the 6-items of the Receiving Social Support Scales for Sports Teams on Likert-type scale ranging from 1 (strongly disagree) to 5 (strongly agree).

a back-translation process to produce an English version of Hagiwara and Isogai's scale.

2.3 Data Analysis

All scales used in this study have reliability and validity confirmed by Cronbach's alpha and CFA respectively. The goodness of fit index for CFA utilized the goodness of fit index (GFI), adjusted goodness of fit index (AGFI), comparative fit index (CFI), and root mean square error of approximation (RMSEA). In order to examine the relationships between providing and receiving social supports, Pearson's correlation coefficients were calculated for both Japanese and American respondents respectively. In addition, a t-test was adopted to compare the differences of providing and receiving social supports in Japan and the U.S. All data were analyzed by IBM SPSS Statistics 21.0 and AMOS 20.0.

2.4 Procedure

Institutional Review Board approval was granted

from Arkansas State University (655401-1), and the research team informed participants of the purpose of this study and instructions for the survey prior to participation. Data and informed consent was obtained while the participants were attending sports science classes in a classroom. The survey was completely voluntary.

3. Results

Reliability and validity of the Japanese and English versions of the scales was confirmed. Cronbach's alphas for the Japanese providing social support scale was 0.91 and the English was 0.84, while the Japanese receiving social support scale was 0.92, and the English was 0.88. In addition, the result of CFA, the goodness of fit, for the Japanese providing social supports scale was GFI = 0.982, AGFI = 0.945, CFI = 1.00, RMSEA = 0.014, and for the English scale it was GFI = 0.981, AGFI = 0.934, CFI = 0.998, RMSEA = 0.031. For the Japanese receiving social supports scale, the results were GFI = 0.979, AGFI =

0.936, CFI = 0.998, RMSEA = 0.037, and those for the English scale were GFI = 0.972, AGFI = 0.926, CFI = 0.993, RMSEA = 0.051.

The correlation coefficients between providing and receiving social supports indicated a significant positive correlation between providing and receiving social supports in both Japan ($r = 0.78$, $P < 0.001$) and the U.S. ($r = 0.77$, $P < 0.001$).

The results of comparisons between Japanese and American student athletes demonstrated that there was no significant difference in receiving social supports ($t = 1.28$, $P = \text{n.s.}$; Japan: $M = 24.29$, $SD = 4.47$, the U.S.: $M = 25.00$, $SD = 3.99$; Fig. 1). On the other hand, there was a significant difference in providing social supports ($t = 5.74$, $P < 0.001$; Fig. 2). American student athletes ($M = 26.57$, $SD = 3.14$) had higher scores than Japanese athletes ($M = 23.88$, $SD = 3.98$).

Fig. 1 Result of t-test of the receiving social support with the Japanese student's athletes and American student's athletes.

Fig. 2 Result of t-test of the receiving social support with the Japanese student's athletes and American student's athletes.

4. Discussion

The purpose of this study was to examine the relationships between providing and receiving social supports for teammates in a sports team. Additionally, this study conducted a cross-cultural comparison of Japanese and American student athletes to aid in understanding Japanese status.

All scales were determined to have good reliability and validity by Cronbach's alpha and CFA. The results demonstrated sufficient values for Cronbach's alpha (> 0.70) [30] and the goodness of fit index (< 0.90 for GFI, AGFI and CFI with RMSEA < 0.08) [31]. Therefore, all scales were confirmed as having adequate reliability and validity, and thus may be used in future investigations. In addition, this study confirmed reliability and validity of the English version of the Providing and Receiving Social Support Scale for Sports Teams; thus, further cross-cultural studies will be conducted.

This study was conducted to calculate the correlation coefficients between providing and receiving social supports in a sports team. The results indicated significant relationships in both Japanese and U.S. teams. Hagiwara and Isogai [26] examined Japanese student athletes, and the results demonstrated that the amount social support provided to teammates was related to the amount received from teammates. This study also demonstrated similar results in the U.S., suggesting there might be no difference between Japanese and American student athletes in this regard.

In the results of the t-test, Japanese and American student athletes showed no significant difference in receiving social supports. On the other hand, there was a significant difference in providing social supports, with American student athletes scoring higher than Japanese athletes. This suggests that American student athletes provide more social supports such as advice, admiration, direction, and evaluation for their teammates than Japanese athletes. In other words, Japanese student athletes have fewer opportunities to positively approach their teammates than do American

athletes. Focusing on differences between Japanese and Americans, Klopt and Cambra [32] demonstrated that one of the Japanese characteristics is to not be independent or assert oneself as Americans do when they communicate with others. In addition, Tamase et al. [33] indicated that Japanese people often do not communicate with others voluntarily and might restrain the necessary self-expression to communicate with others by taking into consideration the relationships between others and thinking about others' situations too seriously. Therefore, Japanese student athletes would consider the relationships with their teammates, and they might restrain necessary self-expression such as social support for teammates more than American student athletes.

This study examined the social supports between teammates in a sports team and conducted a cross-cultural study with Japanese and American student athletes to better understand Japanese interaction styles. The results indicated that there were significant relationships between receiving and providing social supports; thus, the provision of social support for teammates is important to increase support received from teammates. On the other hand, receiving social support is also important in enhancing the support provided for teammates. Both receiving and providing social supports might be essential factors in improving team communications. In addition, they might encourage adherence to sports participation and persistency as well as team cohesion and identification for student athletes. Therefore, it is important to consider social supports in a sports team. In particular, Japanese student athletes do not provide the same social supports for teammates as American student athletes, and therefore, Japanese student athletes should endeavor to provide more social supports to their teammates in order to improve their sports team.

The results of this study are essential to understand social supports between teammates; however, there are some limitations of this study. The first is that this

study was conducted in limited areas of Japan and the U.S. In order to better understand cultural differences, future studies should be conducted in broader areas of Japan and the U.S. In addition, more samples are needed in order to explain cultural differences. Finally, this study did not address the relationships between social supports with teammates and sports participation, persistency, and team cohesion. Further research is needed to investigate those relationships in order to increase understanding of the importance of social supports in a sports team.

5. Conclusion

This study found relationships between giving and receiving social supports in a sports team as well as a difference between Japanese and American student athletes. American student athletes provide more social supports to their teammates regarding continuing sports participation. These results might be beneficial in understanding Japanese student athletes. Providing social supports related with receiving social supports from teammates and those receiving social supports were important for sports persistency. Therefore, Japanese student athletes should be more providing social supports to their teammates regarding continuing sports participation.

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