

The Influence of Injured Athletes' Perceptions of Social Support From ATCs on Their Beliefs About Rehabilitation

Jennifer Bricker Bone and Mary D. Fry

Objective: To determine whether athletes' perceptions of social support from their certified athletic trainers (ATCs) were related to their beliefs about the rehabilitation process. **Design:** Division I athletes (N = 57) completed a survey including measures of social support and beliefs about rehabilitation. **Participants:** Division I college athletes (35 men, 22 women) who had sustained an injury that caused them to miss no less than 5 consecutive days. **Measurements:** The Social Support Survey (SSS) and the Sports Injury Rehabilitation Beliefs Survey (SIRBS). **Results:** Results revealed significant correlations between the SSS and the SIRBS scales only for athletes who had sustained severe injuries. Multiple-regression analyses revealed that the SSS scales were significant predictors of each of the SIRBS scales. **Conclusions:** Results suggest that when severely injured athletes perceive that their ATCs provide strong social support, they are more likely to believe in their rehabilitation programs. **Key Words:** psychology of injury, psychology of rehabilitation

Injuries are an inescapable misfortune in sports. On average, 17 million sport injuries occur in any given year to U.S. athletes.¹ Athletes with similar injuries might recover at different rates, making it important to understand the factors that influence the rehabilitation and recovery process.

When athletes are injured, they usually undergo a rehabilitation process that addresses not only the physical injury but the psychological recovery, as well.² One aspect of this process cited as critical for athletes during rehabilitation is their strong belief that the rehabilitation program can help them fully heal and successfully return to their sports. Athletes' beliefs about the rehabilitation they are undergoing are important because they reflect the degree to which athletes believe in the effectiveness of the rehabilitation program. Athletes who do not have confidence in the rehabilitation program will be less likely to comply with it and consequently might progress more slowly.³

Social support is identified as an important factor that affects athletes' beliefs about the value of rehabilitation.⁴⁻⁶ Social support can come from family, friends, coaches, sport-psychology professionals, and, perhaps most important, from the

Bone is with the Athletic Dept, and Fry, the Dept of Health and Sport Sciences, University of Memphis, Memphis, TN 38152.

therapist performing the rehabilitation—the certified athletic trainer (ATC). If athletes perceive a high level of social support from their ATC, this could serve to maximize the effectiveness of their rehabilitation process. Currently, research has not examined athletes' perceptions of social support from their ATCs and the effects this support has on the athletes' rehabilitation beliefs.

Therefore, the purpose of this study was to examine whether athletes' perceptions of social support from their ATCs are related to athletes' beliefs about the rehabilitation process. We hypothesized that athletes who perceive greater social support from the athletic training staff would be more likely to report higher beliefs in the rehabilitation process than would athletes who perceive lower levels of social support from the athletic training staff. We hypothesized this relationship because if athletes perceive high social support from their ATCs, they might adopt a more positive outlook on their recovery, which would be evident in athletes' stronger beliefs about the utility of their rehabilitation and their perceptions that their injuries are something they can overcome.

Method

Participants

Division I athletes ($N = 57$; 35 men and 22 women) between the ages of 18 and 23 years (mean = 20.13, $SD = 1.20$) who attend a university in the midsouthern region of the United States accepted an invitation to participate in this study. The university is staffed with 3 full-time ATCs (2 White men and 1 White woman) and 2 graduate-assistant ATCs (1 Asian man and 1 White woman). Of the 56 athletes in this study, 46.4% were White and 53.6% were African American. The sample included 10.7% freshman, 37.5% sophomores, 30.4% juniors, and 21.4% seniors. The athletes competed in football (44.6%), women's soccer (14.3%), cheer/dance (12.5%), volleyball (8.9%), track/cross-country (7.1%), men's basketball (5.4%), baseball (3.6%), golf (1.6%), and men's soccer (1.8%). The criteria for participation in the study included having a current injury or having sustained an injury within the preceding 12 months (mean = 6.02 months). For the purpose of this study, we defined injuries as causing a minimum of 1 week (5 consecutive days) time lost for rehabilitation and treatment. Thirty-two percent of the athletes were currently injured, and 60% of the athletes had incurred their injuries during their competitive season.

Procedure

We contacted each athletic trainer and coach and obtained permission to survey athletes on their teams who had sustained an injury in the preceding 12 months. The first author, an ATC who was not working with any of the injured athletes in this study, then spoke with the athletes who met the study criteria and invited them to complete the surveys. Athletes completed the surveys in a private area and were instructed to place and seal them in a large envelope when finished. The surveys took approximately 15 to 20 minutes to complete. Athletes were told that their responses would remain anonymous. We obtained written approval for this study from the institutional review board at the researchers' university.

Measures

We asked athletes to complete a survey that included demographic information, as well as measures of their perceptions of social support and beliefs about rehabilitation. The demographic information included items assessing sport, age, sex, race, injury severity, and year in school. With regard to injury severity, we asked athletes to indicate whether they perceived their injury as mild, moderate, or severe. We counterbalanced the surveys so that some of the athletes completed the Social Support Survey first and others completed the Sports Injury Rehabilitation Beliefs Survey first. All survey packets began with the demographic-information page.

Social Support. We employed the Social Support Survey (SSS)⁶ to assess perceptions of social support that athletes receive from ATCs. In previous studies researchers slightly modified the SSS^{4,5,7} to make it specific to the support received from ATCs rather than any person who provides support, and this modified version was used for the purposes of this study. Following is an example of the changes made to modify the original survey. An original question was, In general, how satisfied are you with the overall quality of listening support you receive? The modified question read, In general, how satisfied are you with the overall quality of listening support you receive from the ATC? The SSS includes 8 scales. The scales and their descriptions are as follows:

Listening support: People who listen to you without giving advice or being judgmental

Task appreciation: People who acknowledge your efforts and express appreciation for the work you do

Task challenge: People who challenge your way of thinking about your work or activity in order to stretch you, motivate you, and lead you to greater creativity, excitement, and involvement in your work or activity

Emotional support: People who comfort you and indicate to you that they are on your side and care for you

Emotional challenge: People who challenge you to evaluate your attitudes, values, and feelings

Reality confirmation: People who are similar to you—see things the way you do—who help you confirm your perceptions and perspectives of the world and help you keep things in focus

Tangible assistance: People who provide you with either financial assistance or products [as allowed by NCAA regulations]

Personal assistance: People who provide you with services or help, such as running an errand for you or driving you somewhere

Each scale contains 3 questions to which athletes respond using a 5-point Likert scale (1 = *very dissatisfied/difficult/unimportant* to 5 = *very satisfied/difficult/*

important for each of the 3 items). The first question is, In general, how satisfied are you with the overall quality of [each respective scale; e.g., listening support] you receive from the athletic trainer? The second question is, How difficult would it be for you to obtain more [scale] from the athletic trainer? The third question is, How important for your overall well-being is it to have the athletic trainer provide you with [scale]? Athletes' responses for the 3 items are added together for each scale, and a mean scale score is calculated. Scales are scored separately and cannot be added together to create an overall score of social support.

Richman, Rosenfeld, and Hardy⁶ performed a validation study of the SSS and found that the scales measure separate aspects of social support. They provided support for content, structural, and concurrent validity of the measure.⁶

Rehabilitation Beliefs. We administered the Sports Injury Rehabilitation Beliefs Survey (SIRBS)³ to measure athletes' beliefs about rehabilitation. The SIRBS was developed to measure the rehabilitation beliefs of injured athletes in the clinical setting. The measure consists of 5 scales with a total of 19 items, and individuals respond to each item on a scale ranging from 1 (*very strongly disagree*) to 7 (*very strongly agree*). Mean scores are calculated for the items within each scale. The 5 scales were as follows:

Susceptibility with 5 items (sample: The way to prevent my injury from worsening will be to follow my rehabilitation program.)

Treatment efficacy with 4 items (sample: I have absolute faith in the effectiveness of my rehabilitation program.)

Self-efficacy with 4 items (sample: I consider myself able to stick with my rehabilitation program even though it may include activities that I do not enjoy.)

Rehabilitation value with 1 item (sample: Being fully recovered from injury is extremely important to me.)

Severity with 5 items (sample: As far as injuries go, mine is serious.)

Taylor and May³ reported that their factor analysis of the SIRBS revealed support for the measure. The SIRBS has only been used in one published study, however, and is in need of further psychometric examination.

Results

We analyzed the data using the SPSS for Windows version 13.0 statistical package (SPSS Inc, Chicago, Ill). Cronbach-alpha reliability coefficients for each of the SSS and SIRBS scales were calculated, and each scale revealed acceptable internal consistency (see Table 1). It should be noted that no value was necessary for the scale of rehabilitation value because there was only 1 item. Means and standard deviations for participants' responses to the SSS and SIRBS scales are presented in Table 1. The SSS mean scale scores were all ≥ 3.98 (on a 5-point scale), suggesting that, overall, athletes perceived each type of social support as salient to them.

Table 1 Results From the SSS and SIRBS*

	Total sample		Severe injuries		Mild/Moderate injuries		Alpha coefficient
	Mean	SD	Mean	SD	Mean	SD	
SSS							
listening support	4.20	0.69	4.23	0.77	4.09	0.63	.75
task appreciation	4.18	0.64	4.19	0.63	4.09	0.63	.72
task challenge	4.01	0.70	4.19	0.74	3.98	0.67	.84
emotional support	3.99	0.74	3.95	0.78	3.69	0.69	.67
emotional challenge	3.99	0.72	3.90	0.77	4.00	0.68	.76
reality confirmation	4.13	0.69	4.13	0.72	4.09	0.68	.78
tangible assistance	3.98	0.85	3.93	0.93	3.92	0.75	.81
personal assistance	4.07	0.75	4.05	0.85	4.05	0.65	.86
SIRBS							
susceptibility	5.33	1.44	5.41	1.39	5.26	1.50	.81
treatment efficacy	5.27	1.22	5.54	1.23	5.00	1.20	.82
self efficacy	5.57	1.12	5.91	.87	5.10	1.19	.83
rehabilitation value	6.38	0.97	6.46	0.96	6.19	0.98	NA
severity	4.78	1.10	5.20	1.03	4.35	0.99	.71

*SSS indicates Social Support Survey; SIRBS, Sports Injury Rehabilitation Beliefs Survey; and NA, not applicable.

They reported listening support (mean = 4.20) as being the most important type of social support they received.

We employed 2 MANOVAs to determine whether there were significant differences between the athletes' scores on the SIRBS and SSS among athletes with severe versus mild/moderate injuries (based on their self-report of injury severity). The MANOVA for the SSS revealed no overall significant effect ($F_{8,50} = .70, P = .72$), but the MANOVA for the SIRBS did result in an overall significant effect ($F_{5,50} = 3.32, P = .012$). Univariate analyses revealed that the athletes with severe injuries scored significantly higher on the scales of treatment efficacy ($P = .02$), self-efficacy ($P = .01$), and severity ($P < .01$) than did the athletes who had mild/moderate injuries.

We calculated Pearson correlations for the athletes' responses to the SIRBS and SSS scales. When the total sample was included in the analyses, no significant correlations emerged between the SSS and dependent-variables SIRBS scales. Because the athletes varied considerably in the severity of their injuries, however, the decision was made to further examine only the responses of athletes who indicated

that their injuries were severe ($n = 28$), separate from those who perceived mild or moderate injuries ($n = 28$). The correlations for the severely injured athletes are listed in Table 2. Treatment efficacy and self-efficacy were significantly and highly correlated with all 8 scales of the SSS. Susceptibility was significantly and positively correlated with task challenge, and severity was significantly and positively correlated with emotional support. Rehabilitation value revealed no significant correlations. We observed no significant correlations for the mild/moderate-injury group on either the SSS or SIRBS.

We used multiple-regression analyses to determine whether the athletes' perceptions of the social support they receive from their ATC had any influence on their rehabilitation beliefs and, if so, whether particular types of social support were more important. Independent variables were the 8 scales of the SSS that include listening support, task appreciation, task challenge, emotional support, emotional challenge, reality confirmation, tangible assistance, and personal assistance. These were entered into the regression equation simultaneously. A separate multiple-regression analysis was computed for each of the 5 dependent variables from the

Table 2 Correlations Between the SSS and SIRBS for Severely Injured Athletes*

	Susceptibility	Treatment efficacy	Self-efficacy	Rehabilitation value	Severity
Listening support	.22	.42‡	.43‡	-.04	.02
Task appreciation	.26	.47§	.44§	-.01	.07
Task challenge	.45§	.52§	.59§	.19	.07
Emotional support	.28	.42‡	.48‡	.08	.41†
Emotional challenge	.30	.49§	.44§	-.01	.12
Reality confirmation	.32	.59§	.59§	.10	.10
Tangible assistance	.19	.57§	.41‡	.05	.06
Personal assistance	.29	.48§	.53§	.15	.10

*SSS indicates Social Support Survey, and SIRBS, Sports Injury Rehabilitation Beliefs Survey.

† $P < .10$.

‡ $P < .05$.

§ $P < .01$.

SIRBS (susceptibility, treatment efficacy, self-efficacy, rehabilitation value, and severity). Each of the multiple-regression analyses results was significant, and the results revealed that the 8 independent variables explained 31% (susceptibility), 47% (treatment efficacy), 47% (self-efficacy), 24% (rehab value), and 36% (severity) of the total variance. Task challenge revealed a unique influence on susceptibility, and tangible assistance revealed a unique influence on treatment efficacy. Reality confirmation approached significance for contributing unique variance on self-efficacy, and emotional support revealed unique influence on severity. No variables accounted for unique variance on the rehabilitation-value scale (see results in Table 3). In summary, the multiple-regression results indicate that athletes' rehabilitation beliefs are somewhat explained by their perceptions of the social support they receive from their ATC.

Table 3 Regression Coefficients*

Social support	Sports-Injury Rehabilitation Beliefs Survey				
	Susceptibility	Treatment efficacy	Self-efficacy	Rehabilitation value	Severity
Listening support	-.51 (1.32)	-.29 (-0.88)	-.26 (-0.79)	-.55 (-1.36)	-.41 (-1.08)
Task appreciation	-.24 (-0.57)	-.23 (-0.63)	-.42 (-1.16)	-.45 (-1.02)	-.10 (-0.25)
Task challenge	.98 (2.25‡)	.58 (1.52)	.46 (1.22)	.72 (1.58)	.03 (0.08)
Emotional support	.04 (0.14)	.16 (0.57)	.26 (0.93)	.28 (0.83)	1.02 (3.16§)
Emotional challenge	.29 (0.66)	-.13 (-0.34)	-.35 (-0.90)	-.49 (-1.05)	-.51 (-1.18)
Reality confirmation	-.12 (-0.26)	.28 (0.66)	.71 (1.68†)	.30 (0.59)	.34 (0.71)
Tangible assistance	.18 (0.42)	.69 (1.84†)	.05 (0.13)	.34 (0.77)	.16 (0.39)
Personal assistance	-.22 (-0.53)	-.35 (-0.97)	.17 (0.49)	-.04 (-0.10)	-.33 (-0.82)

*Regression coefficients are listed with beta scores in parentheses; symbols reflect significant unique variance as follows.

† $P < .10$.

‡ $P < .05$.

§ $P < .01$.

Comments

This study reflects the first attempt in the literature to examine the relationship between college athletes' perceptions of the social support they receive from their ATCs and their beliefs about their rehabilitation from their sport injuries. Based on previous research, we hypothesized that athletes who perceive greater social support from the athletic training staff would be more likely to believe that their rehabilitation program would be effective than would athletes who perceive lower levels of social support from the athletic training staff. If athletes perceive high levels of social support from their ATCs, they might adopt a more positive outlook on their recovery, which might be evident in their stronger beliefs about the utility of their rehabilitation and their perceptions that their injuries are something that can be overcome.

No support was found for this relationship when considering the total sample of athletes with a wide variety of injury severity, but when only the athletes who perceived that they had severe injuries were included in the analyses, strong relationships emerged. Specifically, the multiple-regression analyses revealed that for athletes who perceived that they had severe injuries, the social-support scales explained more than 30% of the variance on 4 of the rehabilitation-belief scales. One reason for this might be that for athletes who have mild or moderate injuries, their beliefs in their rehabilitation programs are likely to be high regardless of the level of social support they receive from their ATC. Severe injuries result in more time lost from competition and practices for athletes. Furthermore, severe injuries require lengthier rehabilitation processes in which more time and perhaps attention is provided by the ATC and where relationships are more likely to be developed with the ATC. It is not that social support from an ATC is not important for athletes with minor injuries but rather that it did not emerge as significantly influencing athletes' beliefs about a successful return to their sports. This might not be surprising, in that athletes who experience slight sprains, strains, or bruises (ie, minor injuries) might know that with a few days of rest and treatment their bodies will be ready to return to the rigor of their practice and competition schedules.

In addition to the significant variance accounted for by the SSS scales when they were entered into the model as a group, unique variance was also revealed in several instances (see Table 3). Susceptibility was uniquely influenced by task challenge, indicating that athletes feel that they are more likely to overcome the injury and not as likely to be reinjured when they are challenged by their ATC during the rehabilitation program. This suggests that athletes perceive that their ATCs are providing an important source of social support by requiring them to engage in challenging rehabilitation exercises. Athletes who are doing very simple exercises might feel that the program is inadequate compared with the sport-specific skills they will be asked to perform on return to play. When an ATC challenges athletes with harder or more sport-specific tasks, athletes' beliefs in the rehabilitation program escalate.

In addition, tangible assistance was a significant and unique influence on treatment efficacy. Athletes felt that their treatment or rehabilitation program was more effective when they perceived that their ATCs were providing some form of tangible assistance such as a brace or support for the injury or even a visit to the physician,

including diagnostic testing (i.e., something they can tangibly see). Clearly, those tangible markers of social support are valued by athletes.

We discovered another unique source of influence on self-efficacy coming from the reality-confirmation scale on self-efficacy. Athletes felt that they were able to stick with the rehabilitation program and were able to complete the exercises when the ATC demonstrated alliance with the athletes and confirmed their progress as they set goals to focus on the overall task at hand, which was to return to competition. This result supports the notion that ATCs play an important role for athletes in terms of giving them accurate information about their rehabilitation situation. Athletes perceive their trainers as providing important social support when they give athletes an honest and straightforward assessment of their conditions.

Finally, severity (as measured by the SSS) provided a unique and significant influence on emotional support. When athletes are more severely injured, they will require more time for recovery and a lengthier rehabilitation process. During this time, relationships are formed with the ATC as they spend time together during their rehabilitation program. Athletes who reported their injuries as more severe also reported that they felt that the ATC was on their side and cared for them. This could be a result of the longer time spent with the ATC during rehabilitation in preparing to return to competition.

Two other findings highlighted the differences between athletes with severe versus mild/moderate injuries and are worth noting. First, athletes who perceived that they had severe injuries had significantly higher treatment efficacy and self-efficacy than did the athletes who perceived their injuries to be mild/moderate. This is surprising in that it seems that athletes with less severe injuries would have higher confidence that their rehabilitation programs would help them overcome their injuries and restore their health. In addition, it would follow that these athletes with mild/moderate injuries would have higher confidence that they could do all that needs to be done to adhere to their rehabilitation programs. In actuality, the athletes with severe injuries were more confident that their rehabilitation program would be successful and that they could do everything they needed to do to follow their rehabilitation programs. Although these findings seem counterintuitive, it may be that athletes with severe injuries have more at stake (e.g., loss of playing time across a season) and take the questions on the SIRBS more to heart as they respond and are more focused on the goal of successfully moving through rehabilitation because their recovery is less ensured. In contrast, it could be that athletes with mild/moderate injuries have a greater tendency to take for granted their rehabilitation programs and believe that with mild effort they will be back to their healthy status in a very short period of time.

Also of interest is the finding that there were no significant differences between athletes with severe versus mild/moderate injuries with regard to the social support they perceive that they receive from their ATC. It might seem that athletes who perceive that they have severe injuries would perceive greater social support from ATCs because of their longer and more extensive rehabilitation programs. It is important to remember, however, that scores on the SSS are calculated by having athletes indicate 3 things: whether they are satisfied with the amount of social support they receive, how difficult it would be to obtain more social support, and how important it was for their total well-being to have the ATC provide

them with social support. In these terms it is reasonable to think that there might not be differences between athletes with more or less severe injuries because they are simply responding to whether the amounts and types of social support they received were appropriate for their specific situation. Clearly, the SSS scales do not measure quantity of social support.

Recommendations for Future Research

Overall, our results revealed that athletes' perceptions of the social support they receive from their ATCs are critical for an effective rehabilitation. These results support previous research that has identified social support as an important component of rehabilitation.^{4,5,7-11} A number of directions for continued research on this topic emerged, and several limitations of this study should be noted. First, future research might consider more carefully the sports in which athletes are involved. Some sports are considered high-risk sports, such as football (collision) or basketball (contact), and others are considered low risk for injuries, such as tennis or baseball, where injuries tend to be more chronic than acute. Athletes who participate in high-risk sports are prone to more severe injuries resulting in more time lost and might have more need for social support, or at least types of social support, whereas athletes in low-risk sports very rarely have acute or highly traumatic injuries. Something else to consider is that, in sports of higher profile (ie, televised, media requesting interviews, recognition based on winning), athletes might feel more pressure to perform or get back on the field and might need more social support during rehabilitation. In a similar vein, there might be differences between athletes who play every game and those who are on the scout team or bench players. Bench players might not feel much pressure to return to competition because they get very little playing time, but a player who regularly starts might feel pressure from coaches, fans, or media to return to play faster and consequently might need more social support from ATCs during the rehabilitation process.

It would also be worthwhile to examine whether injured athletes are in pre-season (eg, are in a hurry to get ready for the start of season), in-season (eg, feel pressure to be ready for the next game), or postseason (eg, feel more relaxed, have plenty of time to get ready for next year) at the time of their injuries, because athletes' perspectives could be different based on the point in the competition season and this might lead them to need more or less social support. The point in the season when their injuries occurred could also influence their beliefs about their rehabilitation programs. For example, a postseason athlete might not be as focused and concerned with a rehabilitation program because the competitive season is completed. This study was the first to examine the relationships between athletes' perceptions of social support from their ATC and their beliefs about rehabilitation. It is important for future research to consider the unique differences across athletes' circumstances in their sports and their competitive seasons.

Another factor to consider in future research is not just how athletes' perceptions of social support from their ATC influence their beliefs about rehabilitation but also how perceptions of social support might be related to other important factors such as actual recovery time and compliance with the rehabilitation program. Taylor and May³ found that athletes' beliefs in the rehabilitation process were associated

with their compliance with the rehabilitation program. Athletes were more compliant with their rehabilitation program when they had stronger beliefs about it.³ If social support is associated with rehabilitation beliefs and rehabilitation beliefs are associated with compliance,³ then it may be that social support would have some influence, either directly or indirectly, on compliance, as well. It also might be helpful to employ a qualitative approach to further examine which kinds of social support are most effective or most needed by individual athletes to maximize the physical and mental aspects of their rehabilitation from injury.¹⁰

It is important to note that this study employed a retrospective design, and athletes were surveyed at only 1 point in time. Because this study employed a 1-time measure, athletes were at different points in their recovery processes. Some athletes were still currently injured and not participating, and others were looking back at their experiences weeks later. This reflective approach is common in studying injured athletes because of the challenging logistics of conducting longitudinal studies in which athletes are surveyed over time as their injuries actually occur. For the sample of athletes in this study, the average time since their injuries had occurred was 6 months, and because the focus of this study was the athletes' experience during the rehabilitation period, it may be that the short time that had elapsed for most of the athletes resulted in their memories of the injury and rehabilitation process being salient and easy to recall. In addition, the injuries for all athletes had occurred during the current academic year.

Another aspect of this study that should be noted is that the classification for injury severity was based on athletes' perceptions of their injuries. This decision was made for 2 reasons. First, criteria used to classify injury severity are somewhat arbitrary and inconsistent across studies.¹² In addition, the purpose of this study was to consider athletes' perceptions of the social support they receive from their ATC and their perceptions in terms of how successful their rehabilitation program will be. One could argue that athletes' perceptions of the severity of their injuries are perhaps more likely to influence their reactions and responses to injury than a medical diagnosis or classification of injury.

On a final note, because the SIRBS has currently been used in only 1 published study,³ more research is needed to further confirm the psychometric properties of the measure. Although the scales revealed strong internal reliability in this study, the sample size prevented the employment of more rigorous psychometric analyses such as factor analysis, and this will be important to consider in future studies. The scale for rehabilitation value was also somewhat problematic because it only had 1 item, and thus there was no way to check the scale's reliability.

Application of Findings and Conclusions

Results of this study suggest the need for specific training to be included in the athletic training curriculum that provides ATCs strategies for optimizing social support for injured athletes. Previous research has also shown a need to further educate athletic trainers in this area.^{4,13} Consideration should be given to including sport-psychology classes in athletic training programs. There is enough evidence that social support plays some role in the rehabilitation of athletes to consider offering symposiums or clinics on sport-psychology issues for ATCs as a way of gaining

continuing-education credits or incorporating this topic into the yearly National Athletic Trainers' Association meeting. Research has presented a compelling case to argue that ATCs should consider what is needed for the emotional recovery of injured athletes, as well as their physical recovery.

In conclusion, results from the present study add to the current knowledge base, revealing that ATCs play an important role in athletes' rehabilitation process. The social support offered by ATCs helps athletes acquire stronger beliefs about their capability to successfully overcome and recover from their injuries. Continued research can shed further light on how this process occurs and how social support given by ATCs can be optimized.

References

1. Heil J. *Psychology of Sport Injury*. Champaign, Ill: Human Kinetics; 1993.
2. Pargman D. *Psychological Bases of Sport Injuries*. Morgantown, WV: Fitness Information Technology, Inc; 1999.
3. Taylor AH, May S. Threat and coping appraisal as determinants of compliance with sports injury rehabilitation: an application of protection motivation theory. *J Sports Sci*. 1996;14:471-482.
4. Barefield S, McCallister S. Social support in the athletic training room: athletes' expectations of staff and student athletic trainers. *J Athl Train*. 1997;32(4):333-338.
5. Passman JL. *An Analysis of Perceived and Observed Social Support Behaviors Exhibited by Athletic Trainers During Rehabilitation* [dissertation]. Hattiesburg: University of Southern Mississippi; 2000.
6. Richman JB, Rosenfeld LB, Hardy CJ. The Social Support Survey: an initial validation study of a clinical measure of the social support process. *Res Soc Work Pract*. 1993;3(3):288-311.
7. Robbins JE, Rosenfeld LB. Athletes' perceptions of social support provided by their head coach, assistant coach, and athletic trainer, pre-injury and during rehabilitation. *J Sport Behav*. 2001;24(3):277-297.
8. Hardy CJ, Richman JM, Rosenfeld LB. The role of social support in the life stress/injury relationship. *Sport Psychol*. 1991;5:128-139.
9. Rosenfeld LB, Richman JM, Hardy CJ. Examining social support networks among athletes: description and relationship to stress. *Sport Psychol*. 1989;3:23-33.
10. Tracey J. The emotional response to the injury and rehabilitation process. *J Appl Sport Psychol*. 2003;15:279-293.
11. Wasson CP. *Varied Perceptions of Social Support Among Coaches and Athletes Recovering From Injury* [dissertation]. San Diego, Calif: Alliant International University; 2003.
12. Crossman J, Jamieson J. Differences in perceptions of seriousness and disrupting effects of athletic injury as viewed by athletes and their trainer. *Percept Mot Skills*. 1985;61:1131-1134.
13. Gordon S, Potter M, Ford IW. Toward a psychoeducational curriculum for training sport injury rehabilitation personnel. *J Appl Sport Psychol*. 1998;10:140-156.

Copyright of Journal of Sport Rehabilitation is the property of Human Kinetics Publishers, Inc. and its content may not be copied or emailed to multiple sites or posted to a listserv without the copyright holder's express written permission. However, users may print, download, or email articles for individual use.