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Perceptions of Clinical Athletic Trainers on the Spiritual Care of Injured Athletes

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Context: Treating both the body and the mind of an injured or ill patient is accepted as necessary for full healing to occur. However, treating the spiritual needs of the patient has less consensus.

Objective: To determine the perceptions and practices of certified athletic trainers (ATs) working in the college/university setting pertaining to spiritual care of the injured athlete.

Design: Cross-sectional study.

Setting: A survey instrument was e-mailed to a stratified random sample of 2000 ATs at 4-year colleges and universities.

Patients or Other Participants: Five hundred sixty-four participants (296 men, 234 women; 34 did not specify sex).

Main Outcome Measure(s): We measured the ATs' perceptions and practices related to spiritual care for athletes.

Results: We found that 82.4% of respondents agreed that addressing spiritual concerns could result in more positive therapeutic outcomes for athletes; however, 64.3% disagreed that ATs are responsible for providing the spiritual care. Positive correlations were found between personal spirituality and items favoring implementing spiritual care.

Conclusions: Athletic trainers have a conceptual appreciation of the importance of spiritual care for athletes, but the practicalities of how to define, acquire skills in, and practice spiritual care are unresolved.

Key Words: treatment, spirituality, holistic care

Key Points

- Athletic trainers agreed that addressing spiritual care of injured athletes could result in more positive therapeutic outcomes.
- Participants disagreed that providing spiritual care is their responsibility.
- Hesitancy by practitioners to incorporate spirituality into therapy might result from an inaccurate perception that providing spiritual care is synonymous with sharing personal spiritual beliefs.
- More research is needed to determine the scope and efficacy of practicing spiritual care with injured athletes.

Professionals who treat illness and injury have reached agreement on some of the components that must be addressed to bring individuals back to health. Most would agree that treating the body and mind results in a better recovery process. However, treatment that includes addressing the spiritual care of an ill or injured person has less consensus. The emerging premise from some fields is that, in addition to the body and mind, spirituality should be one of the dimensions that composes holistic care in the allied health care professions.[1,2] Ledger[1(p225)] claimed, "The patient has a right to receive holistic care, which includes cultural, religious and/or spiritual care." However, aspects of spiritual care are not identified easily because they emerge from the concept of spirituality, which has a myriad of interpretations. Reed[3] defined *spirituality* as follows: "In general, spirituality refers to an awareness of one's inner self and a sense of connection to a higher being, nature, others, or to some purpose greater than oneself." According to this definition, spirituality is neither religious expression, which is linked to the experience of external communal practices,[4] nor the psychology of healing, which concentrates more on the mind-body connection for addressing injury. Instead, spirituality and, more specifically, spiritual care places an emphasis on the injured person's phenomenologic or subjective experiences with a higher being.[4] We based our operational definition of *spirituality* for this study on the work of Reed.[3]

Studies in which researchers have evaluated health care workers' perceptions, attitudes, and beliefs concerning the provision of spiritual care are not as common as other types of research in spiritual care; however, they are available in nursing,[5–9] physical therapy (PT),[10–12] and occupational therapy (OT).[13] In nursing, "The Joint Commission has recognized that psychological, spiritual, and cultural values affect how patients respond to their care … [and] requires spiritual assessments and spiritual care for patients."[14(p33)] Most health care professionals have agreed that providing some type of spiritual care or support is an important part of their jobs;[6,10–13] however, they also have reported that their instruction in spiritual care was very limited and they would benefit from more.[7,11,13] Nurses have reported that personal characteristics are the most important factors in proving spiritual care[7] and have agreed that identifying spiritual needs is difficult (62%).[6] However, they have been divided on the difficulty of providing care (42% believe it is not too difficult, 47% believe it is difficult or very difficult).[6]

In addition to nursing, researchers in the fields of OT and

PT have started exploring attitudes about spirituality as part of a treatment plan. Although Engquist et al[13] stated that spiritual care should be added to the OT rehabilitation routine only if it is initiated by the patient, Coyne[10] argued that the move to include spiritual care in PT treatment was, in fact, patient driven. The PT student participants whom Highfield and Osterhues[11] studied suggested that simply listening to spiritual concerns, sharing research findings, and providing referrals to clergy were adequate spiritual interventions for PT patients. In Coyne's[10] interviews, the need to be supportive, positive, and present for patients, even if not always knowledgeable about the particular religion of the patient, also was stated as a necessity for physical therapists. The occupational therapists were not as sure, with most stating that they were "confused, undecided, or disagreed that spirituality holds a viable position in the scope of occupational therapy practice."[13(p176)]

Despite the emerging literature about spirituality in the referenced fields, no researchers to date have evaluated attitudes toward spirituality among athletic training professionals. Therefore, the purpose of our study was to determine the perceptions and practices of certified athletic trainers (ATs) working in the college/university setting pertaining to spiritual care of the injured athlete.

METHODS

Participants

A stratified random sample that was proportionate to the district membership distribution of the National Athletic Trainers' Association (NATA) was obtained through a request to the NATA for a random selection of 2000 e-mail addresses of certified members who currently were employed at 4-year colleges/universities and worked in the clinical setting. Of the 2000 surveys sent, 564 were returned. Although the return rate (28.20%) was less than ideal, the final sample matched within ±2% the same distribution by NATA district as the population, with the exception of District 8, which was overrepresented by 4.18% in our final sample (ie, the population representation for District 8 was 6.57% [n = 360] nationally and was 10.75% [n = 56] in the final sample).

The participants were somewhat evenly distributed across sex (52.5% men [n = 296], 41.5% women [n = 234]; 6.0% [n = 34] did not specify sex). However, they were not distributed evenly across race (86.87% white [n = 490]). Of the 5 age-group categories that were assessed, only ATs up to 24 years of age (representing 1.5% [n = 8] of the final sample) were not represented sufficiently; 24.4% (n = 129) of the sample was aged 25 to 29 years, 19.7% (n = 104) was aged 30 to 34 years, 17.0% (n = 90) was aged 35 to 39 years, and 37.4% (n = 198) was aged 40 years or more. In addition, 61.0% (n = 322) of the sample had 10 or more years of experience as an AT.

Most participants (51.88%, n = 275) were from public institutions. Participants at private, faith-based institutions accounted for 23.77% (n = 126) of the sample, and participants at private colleges accounted for 23.39% (n = 124) of all institutions. Five participants selected the "other" category (0.01%), and 34 participants (6.0%) did not select an institution type. Data were missing for 17 participants.

Participants provided informed consent when they clicked a button on the page that included the informed consent statement and were directed to the next page of the survey. The Institutional Review Board of Azusa Pacific University approved the study.

Instrument

We created a 50-item survey with multiple sections, all of which included a fixed-format item type. After informed consent was obtained, the survey began with the definition of spirituality from Reed.[3] Immediately after this definition, respondents were instructed to use a 4-point Likert scale (1 indicated *strongly disagree*, 4 indicated *strongly agree*) to rate their levels of agreement with 10 statements related to spirituality and athletic training approaches. The next section listed spiritually based clinical interventions (eg, "Praying for the athlete") and instructed participants to use a 3-point scale (1 indicated *not at all appropriate*, 3 indicated *very appropriate*) to rate how appropriate each intervention was for an AT to provide. The subsequent section repeated the list of interventions and instructed participants to identify which, if any, of those interventions they had used as part of the treatment process with an injured athlete. The next section listed 6 possible obstacles or challenges an AT could experience when attempting to provide spiritual care: "lack of knowledge concerning spiritual care," "lack of training in providing spiritual care," "lack of time to provide spiritual care," "discomfort with the subject of spirituality," "fear of imposing personal spiritual views on the athlete," and "difficulty identifying the injured athlete's need for spiritual care" (note: participants were not instructed to rate how much of an obstacle each factor was for them personally). Respondents were instructed to use a 4-point Likert scale (1 indicated *no obstacle*, 4 indicated *significant obstacle*) to rate how much of an obstacle each suggested challenge might be to an AT wanting to provide spiritual care to athletes. The final section of the survey was a reproduction of the Spiritual Perspective Scale (SPS), which originally was called the Religious Perspective Scale.[3] Using 6-point Likert scales, participants indicated how frequently they engaged in spiritual activities (1 signified *not at all*, 6 signified *about once a day*) and indicated their levels of agreement related to personal spirituality (1 signified *strongly disagree*, 6 signified *strongly agree*). The SPS scale has a reported reliability with a standardized α coefficient of 0.92.[13] Because the survey in our study was not conceptualized to measure a single construct and was not intended for further distribution after this study, it was not tested for reliability or validity.

Data Collection

To assess the coherence of the instrument, we piloted the survey with 20 ATs who were attending the Far West Athletic Trainers' Association Conference in 2008. We obtained both written and oral feedback, from which we altered the wording of some questions and revised the rating scale in a section. After final revisions, we obtained permission to use the SPS.

The survey and an informed consent statement were posted to a Web link that was e-mailed to the participants. We sent a follow-up e-mail 8 weeks later inviting ATs to complete the survey, giving participants 2 weeks more to provide their results.

Statistical Analysis

Various analyses were conducted to identify perceptions on the items measured by the instrument and to identify any group differences or meaningful patterns that emerged. Frequency analyses were calculated to determine the distribution of scores on all items. To test for group differences, analyses of covariance, *t* tests, and χ^2 analyses were calculated. We computed

Pearson product moment correlations and Spearman rank correlations to examine the relationships between summary scores from the SPS and the other outcome measures to determine if personal spirituality was associated with opinions about the spiritual treatment aspects of patient care.

RESULTS

Opinions About Spiritual Care for the Injured Athlete

General Opinions About Spiritual Care. Respondents rated their levels of agreement using a 4-point Likert scale, with 10 statements related to spirituality and athletic training approaches (Table 1). Based on a frequency analysis, 82.4% of the respondents (n = 761) agreed or strongly agreed that "Addressing the spiritual concerns of an athlete could result in a more positive outcome when treating an athletic injury (eg, faster return to play)," and 61.7% (n = 346) agreed or strongly agreed that "Research should be conducted to assess injured athletes' spiritual needs." Opinions about who is responsible for addressing the spiritual needs of athletes also were assessed. Participants to a large extent (63.9%, n = 357) disagreed or strongly disagreed that "Only spiritual experts should deal with spiritual issues of injured athletes," and 61.7% (n = 345) agreed or strongly agreed that "Athletic trainers should have some basic skills and knowledge necessary to support the spiritual needs of the injured athlete"; however, most respondents did not agree that spiritual support falls in the domain of an AT's scope of practice. Specifically, 64.3% (n = 362) of respondents disagreed or strongly disagreed with the statement, "If an athlete wishes it to be part of their [*sic*] recovery process, it is the athletic trainer's responsibility to provide spiritual care as part of treatment," and 66.6% (n = 373) agreed or strongly agreed that "Spiritual care is not in the athletic trainer's scope of practice." In addition, 59.3% (n = 334) of the sample disagreed or strongly disagreed that "Athletic Training Education Program curriculums should include the spiritual dimension as part of the comprehensive education curriculum."

Relationship Between Personal Spirituality and Opinions About Spiritual Care. Pearson product moment correlation coefficients were calculated to investigate the relationship between participants' SPS summary scores and their subsequent ratings of agreement on the Likert-scale items (Table 2). All 10 items produced significant correlation coefficients; specifically, positive correlations were found between SPS summary scores and items favorable to incorporating spiritual care as part of treatment. Conversely, negative correlations were found between SPS summary scores and responses on items discouraging spirituality as relevant for athletic training practice.

Sex Differences in Opinions About Spiritual Care. Independent-samples *t* tests were calculated to test for sex differences in the Likert-scale items, and we found differences in 2 of the 10 items. For the item "Athletic Training Education Program curriculums should include the spiritual dimension as part of the comprehensive education curriculum," mean scores were lower for men (2.24 ± 0.848) than for women (2.41 ± 0.689) ($t_{527} = 2.528$, $P = .01$). For the item "Addressing the spiritual concerns of an athlete could result in a more positive outcome when treating an athletic injury (eg, faster return to play)," scores were lower for men (2.88 ± 0.813) than for women (3.01 ± 0.606) ($t_{525} = 2.675$, $P = .008$). Although several other items approached statistical significance, no other items demonstrated sex differences.

Institutional Differences in Opinions About Spiritual Care. To test for institutional differences (public, private, faith based) on the 10 Likert-scale items, an analysis of covariance with sex and personal levels of spirituality (SPS score) examined as covariates was conducted for each item (Table 3). The

Table 1. Levels of Agreement With 4-Point Likert Scale Items (N = 564)[a]

	Level of Agreement, %			
Survey Item	Strongly Disagree	Disagree	Agree	Strongly Agree
If an athlete wishes it to be part of their [*sic*] recovery process, it is the athletic trainer's responsibility to provide spiritual care as part of treatment.	14.9	49.4	30.9	4.8
It is difficult to identify an injured athlete in need of spiritual care.	3.9	31.6	55.4	9.1
Athletic Training Education Program curriculums should include the spiritual dimension as part of the comprehensive education curriculum.	15.6	43.7	36.1	4.6
Research should be conducted to assess injured athletes' spiritual needs.	7.0	31.4	53.5	8.2
Athletic trainers should have some basic skills and knowledge necessary to support the spiritual needs of the injured athlete.	7.0	31.4	55.4	6.3
An injured athlete's spiritual perspective may affect his/her treatment progress.	1.6	7.3	64.3	26.8
Only spiritual experts should deal with spiritual issues of injured athletes.	11.8	52.1	25.8	10.4
Addressing the spiritual concerns of an athlete could result in a more positive outcome when treating an athletic injury (eg, faster return to play).	2.5	15.2	68.8	13.6
Knowledge about spirituality is not relevant to medical care.	15.6	63.9	16.5	3.9
Spiritual care is not in the athletic trainer's scope of practice.	4.8	28.6	49.1	17.5

[a] 1 indicated *strongly disagree*; 2, *disagree*; 3, *agree*; and 4, *strongly agree*.

Table 2. Correlations Between Total Spiritual Perspective Scale Score and Survey Items

Survey Item	Correlation with Spiritual Perspective Scale[3]	*P* Value
Spirituality and athletic training approaches[a]		
If an athlete wishes it to be part of their [sic] recovery process, it is the athletic trainer's responsibility to provide spiritual care as part of treatment.	0.354	<.001
It is difficult to identify an injured athlete in need of spiritual care.	–0.329	<.001
Athletic Training Education Program curriculums should include the spiritual dimension as part of the comprehensive education curriculum.	0.395	<.001
Research should be conducted to assess injured athletes' spiritual needs.	0.375	<.001
Athletic trainers should have some basic skills and knowledge necessary to support the spiritual needs of the injured athlete.	0.432	<.001
An injured athlete's spiritual perspective may affect his/her treatment progress.	0.408	<.001
Only spiritual experts should deal with spiritual issues of injured athletes.	–0.472	<.001
Addressing the spiritual concerns of an athlete could result in a more positive outcome when treating an athletic injury (eg, faster return to play).	0.483	<.001
Knowledge about spirituality is not relevant to medical care.	–0.423	<.001
Spiritual care is not in the athletic trainer's scope of practice.	–0.443	<.001
Spiritually based clinical interventions[b]		
Listening to the injured athlete's spiritual concerns	0.435	<.001
Referring the athlete to clergy or other spiritual advisor	0.259	<.001
Praying with the injured athlete	0.638	<.001
Praying for the injured athlete	0.672	<.001
Teaching meditation techniques	0.094	.02
Teaching general visualization techniques	0.096	.02
Teaching visualization techniques that use spiritual images	0.335	<.001
Talking with the injured athlete about spiritual matters	0.541	<.001
Having a respectful attitude toward the injured athlete's spiritual views	0.072	.05
Encouraging the expression of the injured athlete's spirituality	0.425	<.001
Encouraging the injured athlete's search for meaning and purpose	0.411	<.001
Sharing the athletic trainer's personal spiritual beliefs with the injured athlete	0.612	<.001
Sharing the athletic trainer's personal spiritual journey with the injured athlete	0.622	<.001
Sharing research findings on the relationship between spirituality and health with the athlete	0.437	<.001

[a] Indicates items scored on a 4-point Likert scale that rated level of agreement and included anchors of 1 (*strongly disagree*) and 4 (*strongly agree*). Pearson product moment correlations were calculated for these items.

[b] Indicates items scored on a 3-point Likert scale that rated appropriateness, with 1 indicating *not at all appropriate*, 2 indicating *somewhat appropriate*, and 3 indicating *very appropriate*. Spearman rank correlations were calculated for these items.

SPS score was a significant covariate for each Likert item, and sex was a significant covariate for items 3 ("Athletic Training Education Program curriculums should include the spiritual dimension as part of the comprehensive education curriculum") and 8 ("Addressing the spiritual concerns of an athlete could result in a more positive outcome when treating an athletic injury [eg, faster return to play]"). After controlling for the 2 covariates, institutional differences were found in 1 of the 10 items. Specifically, for item 5, "Athletic trainers should have some basic skills and knowledge necessary to support the spiritual needs of the injured athlete," mean scores were higher for participants at faith-based institutions (2.85 ± 0.601) than for participants at private (2.55 ± 0.730) or public (2.55 ± 0.706) institutions ($F_{2,501} = 4.31$, $\eta^2 = 0.017$).

Ratings of Appropriateness of Spiritual Practices for ATs

Participants used a 3-point scale to rate how appropriate certain spiritually based athletic training actions were to an athlete's treatment plan (assuming the consent of the athlete), and a frequency analysis demonstrated that the most typical response was *somewhat appropriate*, followed by *very appropriate* and *not at all appropriate*. However, exceptions to this pattern existed. The highest percentage of respondents rated the following actions as *very appropriate*: "Having a respectful attitude toward the injured athlete's spiritual views" (94.6%, n = 511), "Referring the athlete to clergy or other spiritual advisor" (65.8%, n = 362), and "Praying for the injured athlete" (50.4%, n = 275). Conversely, the highest percentage of respondents rated the following actions as *not at all appropriate*: "Sharing the athletic trainer's personal spiritual beliefs with the injured athlete" (44.6%, n = 243) and "Sharing the athletic trainer's personal spiritual journey with the injured athlete" (46.3%, n = 254; Table 4).

Relationship Between Personal Spirituality and Ratings of Appropriateness. Spearman rank order correlation coefficients were computed to compare participants' SPS summary scores with their subsequent ratings of the appropriateness of certain spiritually based athletic training actions (Table 2). Of the 14 items, positive correlations emerged for 13, indicating that higher SPS scores were correlated with higher ratings of appropriateness (eg, "Praying with the injured athlete" [$r = 0.64$, $P < .001$], "Praying for the injured athlete" [$r = 0.67$, $P < .001$], "Sharing the athletic trainer's personal spiritual beliefs with the injured athlete" [$r = 0.61$, $P < .001$], and "Sharing the athletic trainer's personal spiritual journey with the injured athlete" [$r = 0.62$, $P < .001$]) (Table 2).

Sex Differences in Ratings of Appropriateness. Chi-square analyses comparing responses by sex on the appropriateness of spiritually based athletic training actions yielded 2 items that were different and yielded a consistent pattern; women were

Table 3. Analysis of Covariance Investigating Institutional Differences After Controlling for Sex and Spirituality (Mean ± SD)

Survey Item	Institution Type[a]			Analysis of Covariance[b]	
	Faith-Based (n = 122)	Private (n = 121)	Public (n = 265)	$F_{2,501}$	η^2
If an athlete wishes it to be part of their [sic] recovery process, it is the athletic trainer's responsibility to provide spiritual care as part of treatment.	2.40 ± 0.736	2.22 ± 0.780	2.23 ± 0.755	0.593	0.002
It is difficult to identify an injured athlete in need of spiritual care.	2.55 ± 0.657	2.79 ± 0.718	2.69 ± 0.652	2.21	0.009
Athletic Training Education Program curriculums should include the spiritual dimension as part of the comprehensive education curriculum.	2.50 ± 0.763	2.24 ± 0.837	2.26 ± 0.745	1.88	0.007
Research should be conducted to assess injured athletes' spiritual needs.	2.84 ± 0.630	2.62 ± 0.722	2.60 ± 0.749	2.19	0.113
Athletic trainers should have some basic skills and knowledge necessary to support the spiritual needs of the injured athlete.	2.85 ± 0.601	2.55 ± 0.730	2.55 ± 0.706	4.31[c]	0.017
An injured athlete's spiritual perspective may affect his/her treatment progress.	3.30 ± 0.587	3.21 ± 0.503	3.12 ± 0.646	1.81	0.007
Only spiritual experts should deal with spiritual issues of injured athletes.	2.14 ± 0.897	2.37 ± 0.819	2.42 ± 0.775	1.72	0.180
Addressing the spiritual concerns of an athlete could result in a more positive outcome when treating an athletic injury (eg, faster return to play).	3.04 ± 0.566	2.96 ± 0.573	2.89 ± 0.634	0.704	0.003
Knowledge about spirituality is not relevant to medical care.	1.96 ± 0.673	2.05 ± 0.743	2.12 ± 0.645	0.665	0.003
Spiritual care is not in the athletic trainer's scope of practice.	2.60 ± 0.759	2.75 ± 0.822	2.87 ± 0.763	2.51	0.010

[a] Five participants selected the category *other*, 34 did not select an institution, and data were missing for 17.

[b] Sex and Spiritual Perspective Scale[3] score were examined as covariates for all analyses, but only Spiritual Perspective Scale was a significant covariate for each analysis.

[c] Indicates $P < .05$. Item was scored on a 4-point Likert scale, with 1 indicating *strongly disagree*; 2, *disagree*; 3, *agree*; and 4, *strongly agree*.

more likely than men to rate practices as *very appropriate*, whereas men were more likely than women to rate those same practices as *not at all appropriate* or *somewhat appropriate*. The χ^2 results indicated that 45.6% (n = 104) of women and 29.4% (n = 85) of men considered "Encouraging the expression of the injured athlete's spirituality" during the course of treatment to be *very appropriate*, whereas 56.1% (n = 162) of men and 44.3% (n = 101) of women considered it to be *somewhat appropriate* ($\chi^2_2 = 14.615$, $P = .001$). A similar trend was found for the appropriateness of "Encouraging the injured athlete's search for meaning and purpose" related to his or her injury ($\chi^2_2 = 8.693$, $P = .013$). It was considered *very appropriate* by 47.8% (n = 88) of men and 52.2% (n = 96) of women and was considered *somewhat appropriate* by 55.1% (n = 161) of men and 43.2% (n = 99) of women.

Institutional Differences in Ratings of Appropriateness. When comparing ratings of appropriateness from ATs at different types of institutions (faith based, private, public), a χ^2 analysis yielded findings that were different for 12 of the 14 items, indicating that the distribution of ratings did not follow a pattern based on chance factors but exemplified a pattern related to the type of institution (Table 5). In all cases, ATs working at faith-based institutions were more likely than expected to rate an action as *very appropriate*, whereas those working at public institutions were less likely than expected to rate an action as *very appropriate*. Conversely, ATs working at public institutions were more likely to rate an action as *not at all appropriate*, whereas those working at faith-based institutions were less likely to rate the same action as *not at all appropriate*. The ATs working at private institutions followed a pattern of response based on a typical, chance distribution.

Spirituality in Clinical Settings

From a structured list, participants identified all activities they had used in a clinical setting (Table 4). The activities matched the list of behaviors from the previous section in which ratings of appropriateness were obtained from participants. A frequency analysis was conducted on these items. Almost all participants (90.1%, n = 498) reported using the clinical intervention "Having a respectful attitude toward the injured athlete's spiritual views," and most (68.7%, n = 380) reported using the intervention "Listening to the injured athlete's spiritual concerns." Dichotomous responses occurred in the area of prayer, where 55.9% (n = 309) reported "Praying for the injured athlete" but 19.9% (n = 110) reported "Praying with the injured athlete." Similarly, 58.2% (n = 322) reported "Teaching general visualization techniques" to athletes, whereas only 4.0% (n = 22) reported "Teaching visualization techniques that use spiritual images." Activities reported with the least frequency included "Sharing the athletic trainer's personal spiritual beliefs with the injured athlete" (32.2%, n = 178), "Teaching meditation techniques" (25.0%, n = 138), "Sharing the athletic trainer's personal spiritual journey with the injured athlete" (23.3%, n = 129), "Praying with the injured athlete" (19.9%, n = 110), "Sharing research findings on the relationship between spirituality and health with the athlete" (13.5%, n = 76), and "Teaching visualization techniques that use spiritual images" (4.0%, n = 22).

Table 4. Ratings of Appropriateness and Reported Use of Spiritually Based Clinical Interventions (N = 564)[a]

Clinical Intervention	Level of Appropriateness, %			Used Clinically, %
	Not at All	Somewhat	Very	
Listening to the injured athlete's spiritual concerns	3.6	48.7	47.6	68.7
Referring the athlete to clergy or other spiritual advisor	4.2	30.0	65.8	32.9
Praying with the injured athlete	33.7	41.9	24.4	19.9
Praying for the injured athlete	11.2	38.5	50.4	55.9
Teaching meditation techniques	15.7	52.8	31.4	25.0
Teaching general visualization techniques	4.8	38.8	56.4	58.2
Teaching visualization techniques that use spiritual images	36.1	51.5	12.4	4.0
Talking with the injured athlete about spiritual matters	19.9	58.1	22.0	Missing[b]
Having a respectful attitude toward the injured athlete's spiritual views	0.0	5.4	94.6	90.1
Encouraging the expression of the injured athlete's spirituality	13.0	51.0	36.0	34.5
Encouraging the injured athlete's search for meaning and purpose	15.7	49.8	34.5	36.9
Sharing the athletic trainer's personal spiritual beliefs with the injured athlete	44.6	43.3	12.1	32.2
Sharing the athletic trainer's personal spiritual journey with the injured athlete	46.3	41.5	12.2	23.3
Sharing research findings on the relationship between spirituality and health with the athlete	12.4	53.2	34.4	13.5

[a] On the Likert scale, 1 indicated *strongly disagree;* 2, *disagree;* 3, *agree;* and 4, *strongly agree*.

[b] Indicates item was struck inadvertently from survey, so no data were collected.

Obstacles to Providing Spiritual Care to an Injured Athlete

In an attempt to identify the extent to which certain obstacles might exist to providing spiritual care to injured athletes, participants used a 4-point Likert scale to rate how much of an obstacle each of 6 factors might be for ATs. Results demonstrated that, across the 6 factors, 13.1% (n = 71) or less of respondents indicated a factor was *no obstacle* and more than 60% of respondents rated every factor as either a *moderate* or *significant obstacle* for ATs. The factors rated most frequently as a *significant obstacle* concerned "fear of imposing personal spiritual views on the athlete" (44.6% [n = 242] rated as *significant obstacle*; 72.8% [n = 395], either *moderate* or *significant obstacle*), "lack of training in providing spiritual care" (40.7% [n = 221] rated as *significant obstacle*; 67.4% [n = 366], either *moderate* or *significant obstacle*), and "lack of time to provide spiritual care" (32.3% [n = 173] rated as *significant obstacle*; 65.6% [n = 355], either *moderate* or *significant obstacle*). We did not find any notable group differences in the pattern of responses to these factors.

DISCUSSION

The purpose of our study was to determine the perceptions and practices of ATs working in the college/university setting pertaining to spiritual care of injured athletes. *Spirituality* was defined as "an awareness of one's inner self and a sense of connection to a higher being, nature, others, or to some purpose greater than oneself."[3] Elements of spirituality and spiritual care for injured athletes were further operationalized by the wording of the items on the survey. Although we hope that respondents operated from the framework of the definition provided, we cannot ensure that participants' personal experiences and cultural lenses did not influence the interpretation of the survey items. This is the difficulty of assessing a construct that has yet to achieve an agreed-upon definition in the academic and professional clinical communities. Most responses provided by the ATs illustrated the complexity of this issue. Participants indicated that addressing spiritual concerns could result in more positive therapeutic outcomes for athletes; that ATs should have some basic skills in spiritual care; and that spiritual care should not be left solely to experts, such as clergy. However, they also agreed that spiritual care should not be taught in the athletic training curriculum, that it is not in the scope of practice for athletic training, and that it is not their responsibility to provide spiritual care.

An investigation of the potential influence of personal and institutional variables on these responses produced both expected and unexpected results. Surprisingly, an exploration of sex differences resulted in few areas where opinions differed between men and women. When differences arose, women were less likely to disagree with statements about the importance of spiritual care for the athlete and were more likely to rate as *very appropriate* spiritually based clinical interventions that men rated as *somewhat appropriate*. For the most part, however, we found few sex differences.

Of little surprise was the relationship between an AT's personal spirituality and his or her subsequent responses to survey items. Pearson product moment and Spearman rank correlations highlighted the fact that ATs with high scores on the SPS were likely to respond more favorably to statements about the appropriateness and helpfulness of spiritual practices in athletic training (Table 2). The effect of personal spirituality also was highlighted in its role as a covariate when examining differential responses across institution types (private, public, faith based). Specifically, when SPS scores were controlled, institutional differences on the Likert items nearly disappeared, indicating that observed differences in perceptions across institutions more likely were a result of personal spirituality than of institution type. However, these results highlighted the logical connection among people's spirituality, the type of institution at which they choose to work, and the subsequent importance they place on integrating spiritual practice into athletic training care.

Although survey results indicated a pattern of responses that was more favorable for those who had higher reported levels of personal spirituality, who worked at a faith-based institution,

Table 5. Chi-Square Analysis Comparing Institution-Specific Ratings of Appropriateness of Spiritually Based Clinical Interventions[a]

Clinical Intervention	Level of Appropriateness, %			χ^2	*P* Value
	Not at All	Somewhat	Very		
Listening to the injured athlete's spiritual concerns				12.18	.02
Public university	3.3	54.0	42.7		
Private university	4.8	44.4	50.8		
Faith-based university	2.4	37.3	60.3		
Referring the athlete to clergy or other spiritual advisor				19.90	.001
Public university	5.8	34.3	59.9		
Private university	1.6	27.4	71.0		
Faith-based university	0.8	19.4	79.8		
Praying with the injured athlete				41.71	<.001
Public university	38.2	44.1	17.6		
Private university	31.5	47.6	21.0		
Faith-based university	19.2	34.4	46.4		
Praying for the injured athlete				22.61	<.001
Public university	13.3	41.9	44.8		
Private university	12.2	35.0	52.8		
Faith-based university	3.2	28.0	68.8		
Teaching meditation techniques				14.29	.006
Public university	17.3	51.8	30.9		
Private university	14.6	61.8	23.6		
Faith-based university	11.3	44.4	44.4		
Teaching general visualization techniques				7.35	.12
Public university	5.9	39.1	55.0		
Private university	4.1	42.6	53.3		
Faith-based university	2.4	31.0	66.7		
Teaching visualization techniques that use spiritual images				16.06	.003
Public university	39.2	51.1	9.7		
Private university	39.2	50.0	10.8		
Faith-based university	25.8	51.6	22.6		
Talking with the injured athlete about spiritual matters				20.35	<.001
Public university	21.6	61.3	17.1		
Private university	18.0	60.7	21.3		
Faith-based university	14.6	48.0	37.4		
Having a respectful attitude toward the injured athlete's spiritual views				4.86	.09
Public university	0.0	7.1	92.9		
Private university	0.0	3.3	96.7		
Faith-based university	0.0	2.4	97.6		
Encouraging the expression of the injured athlete's spirituality				17.08	.002
Public university	14.6	53.0	32.5		
Private university	14.0	54.5	31.4		
Faith-based university	5.7	43.1	51.2		
Encouraging the injured athlete's search for meaning and purpose				12.83	.01
Public university	15.8	51.8	32.4		
Private university	16.7	54.2	29.2		
Faith-based university	9.7	41.9	48.4		
Sharing the athletic trainer's personal spiritual beliefs with the injured athlete				20.62	<.001
Public university	48.5	40.0	11.5		
Private university	47.5	40.2	12.3		
Faith-based university	25.4	59.5	15.1		
Sharing the athletic trainer's personal spiritual journey with the injured athlete				20.36	<.001
Public university	50.2	39.9	9.9		
Private university	50.0	37.1	12.9		
Faith-based university	27.8	54.8	17.5		
Sharing research findings on the relationship between spirituality and health with the athlete				13.04	.01
Public university	13.2	56.0	30.8		
Private university	15.3	51.6	33.1		
Faith-based university	6.4	46.4	47.2		

[a]Ratings on the Likert scale were 1, *strongly disagree*; 2, *disagree*; 3, *agree*; and 4, *strongly agree*.

and who were women, these groups' scores did not overwhelmingly endorse the incorporation of spirituality into athletic training practice. The global pattern of data represented in Tables 1 and 4 captures the landscape of the participants' responses, and, whereas statistical anomalies worth noting exist, they do not change the predominant mindset of the ATs who completed the survey. Specifically, ATs agreed that research should be conducted to assess athletes' spiritual needs and that addressing their spiritual needs likely would result in a more positive outcome. They also agreed that ATs should have some basic skills in spiritual care and that listening to an athlete's spiritual concerns and respecting the spiritual views of their injured athletes are *very appropriate*. However, they disagreed that spirituality should be incorporated into the athletic training education program (ATEP) curriculum or that performing spiritual care is within the AT's scope of practice, and they indicated that sharing their own spiritual perspectives with an injured athlete is *not at all appropriate*.

The consensus about the presumed benefit of spiritual care but the general reluctance to embrace it as part of athletic training practice raises some important questions. Is there an adequate understanding of what is meant by *spiritual care* as it relates to professional practice? Who is responsible for providing the spiritual care to the athletes so they gain more positive therapeutic outcomes? If having some basic spiritual care skills is important for the AT, how will those skills be obtained if they are not presented in the athletic training education curriculum?

Interestingly, our findings do not match those of other researchers who asked similar questions. Udermann et al[15] reported that 69.1% of ATEP program directors believed that the topic of spirituality should be addressed in a course within the ATEP. Similarly, researchers studying registered nurses working in Scotland indicated that 58% of nurses reported that providing spiritual support was either very important or essential and 69% reported that the responsibility for providing spiritual care primarily was that of the nurse (primary care provider).[6] In our study, 59.3% of the clinicians disagreed or strongly disagreed that the spiritual dimension should be addressed in the ATEP curriculum, and 66.6% agreed or strongly agreed that spiritual care is not within the AT's scope of practice (primary care provider).

The data we obtained did not provide explanations of or insights into the reasoning behind participants' responses. Based on our anecdotal experience as professionals in the field, one explanation for the reluctance to accept the provision of spiritual care as part of their clinical responsibilities could be that ATs cannot conceptualize how to incorporate spirituality into their scope of practice because they have not seen it modeled and have not been trained on how to do this, as evidenced in the survey by the identification of "lack of training in providing spiritual care" as an obstacle. As support for this supposition, occupational therapists in Canada, where spiritual practice is a required part of the curriculum, faced a similar dilemma, recognizing that spirituality is an important part of occupation and OT practice; however, they admitted feelings of inadequacy and a lack of educational preparation regarding implementing spiritual care into their practices.[13,16,17] Nurses and physical therapists have reported the same frustration of limited education in spiritual care.[7,11,18] Sargeant[12] found that physical therapists felt strongly that awareness of spirituality was important to PT care and concluded that spirituality should be included in the PT curriculum but that they felt overwhelmed about how to teach it. This lack of training, which nurses, occupational therapists, and physical therapists recognize consistently and we identified as one of the primary obstacles in providing spiritual care, might be part of the reason why ATs see benefit to spiritual care but are reluctant to claim it as part of athletic training practice. Education could clarify what spiritual care should be and alleviate fears about what it is not, thereby addressing the top obstacle in our study, "fear of imposing personal spiritual views on the athlete." If spiritual care is perceived as synonymous with sharing one's personal spiritual beliefs, this certainly could produce the observed reluctance among professionally trained clinicians, especially those who might not claim a strong personal spirituality. For example, the data from our study indicated that those who work in faith-based institutions and those who have a strong personal spirituality were more likely to answer in ways that favored inclusion of spirituality into athletic training practice. Udermann et al[15] found similar results in their survey of ATEP program directors, reporting that program directors

> who believed there was a connection between health and healing, … that addressing spirituality with clients could lead to faster recovery times, … or believed that addressing spirituality with clients could result in a better mental status … were significantly more likely to endorse the inclusion of spirituality into the curriculum of ATEPs.[15(p23)]

These findings also were consistent with those of Soeken and Carson,[8] who reported that spiritual well-being and an optimistic attitude toward providing spiritual care were positively correlated. In addition, Speck[2] discussed an unpublished thesis by Dukes (1999), who found that nurses with weak religious or spiritual beliefs were less likely to recognize patients' religious and/or spiritual needs than were nurses with strong religious beliefs. All these data suggest that the religious or spiritual background (or both) of the clinician could make a difference in the comfort level surrounding practices related to providing spiritual care to the patient. Given the willingness of ATs to be receptive and listen to issues of spirituality, the reluctance of the ATs to agree that spiritual care falls within their scope of practice might stem from a legitimate aversion to the practice of overt personal religious expression.

However, we would be remiss to conclude from our study that spiritual people endorse spiritual practice and vice versa. The predominant trend in the data was still toward a nondirective approach with spiritual issues in athletic training practice. When we examined what the participants deemed appropriate spiritual practices for ATs and what they have used in their own clinical settings, the top practice for both was "Having a respectful attitude toward the injured athlete's spiritual views." Participants also believed "Listening to the injured athlete's spiritual concerns"; "Teaching general visualization techniques"; and "Praying for the injured athlete" were appropriate, and those who believed that such actions were appropriate were more were likely to have actually practiced these interventions. Those spiritual interventions rated most frequently as *not at all appropriate* in our study were "Sharing the athletic trainer's personal spiritual beliefs with the injured athlete," "Sharing the athletic trainer's personal spiritual journey with the injured athlete," and "Teaching visualization techniques that use spiritual images." Our results are similar to those in the nursing literature. Conveying a caring or accepting attitude was also the top spiritual intervention reported by Louis and Alpert[5] in their study of parish and nonparish nurses. This intervention was followed by providing support, encouragement, and respect; listening actively; providing presence; and praying privately for

the patient. Listening and providing respect, along with simply being present, seem to be the essence of spiritual care.[9,10,19] In addition, Treloar[20] stated that the ultimate purpose of spiritual care (in nursing) is not to solve the patient's spiritual problems but to create an environment and provide resources conducive to spiritual expression and healing by the patient and his or her family. As such, a better understanding of the practice of spirituality as it relates to patient care might avert some of the apparent reluctance by ATs to agree that they should do it.

As with any survey research, our study had limitations that might have affected the accuracy of our results. The lower-than-preferred response rate, along with the potential for self-selection bias, might have produced skewed data. However, because the final sample maintained a proportionate representation by NATA district and because group differences in survey responses were lacking, we concluded that their results are not likely to deviate greatly from the population to which we would generalize our results in the future. Although we had hoped to reach a more ethnically diverse sample to ensure that all opinions were represented, ethnic diversity was lacking in our sample, reflecting the lack of diversity in the AT population nationally.

As with all first attempts at survey construction, we identified some limitations with the wording of the survey that need to be remedied for better accuracy. For example, instructing participants to identify how regularly certain techniques were used in the clinical setting would be better than instructing them to identify if they had ever used a clinical technique with their injured athletes (resulting in dichotomous data). This would enable us to better determine which spiritually based techniques were used regularly rather than occasionally. In addition, when instructing participants to rate the obstacles associated with providing spiritual care, it would be more accurate to instruct them to identify how much of an obstacle each item represented to them personally rather than generally. We also would have preferred to acquire other potential obstacles to include in the survey for more robust data collection. The scaling of some survey items limited the complexity of statistical analysis that could be performed and the accuracy of our conclusions. Although these limitations did not prevent us from drawing meaningful conclusions, they identified avenues to produce more accurate results. If we continue to use this instrument to obtain ATs' perceptions, we necessarily will perform a reliability and validity analysis.

Perhaps the greatest limitation of our study was also the most illustrative because the term *spirituality* is subject to personal interpretation by any person involved in the study, from researcher to participant and to reader. Although attempts were made to operationally define *spirituality* at the beginning of the survey, the very words used to construct survey items conveyed a subjective interpretation of the elements of spirituality that were worth assessing. Although the subjective nature of the topic does not preclude a researcher from studying it, the difficulties involved in measuring an abstract construct should be acknowledged.

CONCLUSIONS

We are among the first researchers to critically examine clinical ATs' perceptions of providing spiritual care to athletes; therefore, our research serves as a starting point for an important conversation. According to our data, ATs agreed that addressing spiritual care could result in more positive therapeutic outcomes but disagreed that they are responsible for providing that care. The reluctance might stem from any number of circumstances, ranging from lack of time or space in the curriculum to lack of understanding of what spiritual care would entail and to lack of skills training in the area. Because spiritual care is not an NATA competency, those teaching it or providing it need to continue research in the area to determine the scope and efficacy of the practice of spiritual care, so that results can be communicated to athletic trainers.

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