ATHLETIC TRAINING EDUCATION JOURNAL

www.natajournals.org
ISSN: 1947-380X
DOI: 10.4085/14013

ORIGINAL RESEARCH

Athletic Training Student Perspectives on Spirituality and Spiritual Care in Clinical Practice: A Pilot Study

Cynthia J. Wright, PhD, ATC; Michael J. Ediger, DHSc
Department of Health Science, Whitworth University, Spokane, WA

Context: Spirituality is an important component of holistic health care. While attitudes of athletic training program directors and clinicians toward spirituality are documented, the attitudes and practices of athletic training students are unknown.

Objective: To describe the beliefs and behaviors of athletic training students regarding spirituality and spiritual care.

Design: Repeated measures cohort.

Setting: Online survey.

Patients or Other Participants: All athletic training students (n = 33) enrolled in an accredited athletic training program at a private religiously affiliated university were invited to participate. The response rate was 78.8% (males = 7, females = 19, age = 20.3 ± 2.1).

Intervention(s): An email invitation to complete the online survey was sent in September and April of the same academic year. The online survey included demographic data, the Spiritual Perspectives Scale (SPS), modified Spiritual Care Perspectives Scale (mSCPS), and modified Spiritual Care Therapeutics Scale (mSCTS).

Main Outcome Measure(s): Level of agreement on the mSCPS items and therapeutic action frequency on the mSCTS were recorded and compared between fall and spring using paired *t* tests. For both scales, all item averages were organized from lowest to highest. SPS summary score was calculated.

Results: The mSCPS items with the highest and lowest agreement, respectively, were "Relationships with others are important to patient's spiritual health" and "Spiritual care is only for religious persons." The mSCTS items with the highest and lowest frequencies, respectively, were "After completing a task, remained present just to show caring" and "Offered to pray with a patient." Only 3 mSCPS items changed significantly over time, whereas 8 mSCTS items changed significantly (all $P < .05$). The SPS did not change over time ($P = .848$; fall = 4.74 ± 0.96, spring = 4.73 ± 0.87).

Conclusions: Athletic training students in this pilot study believe that spirituality is an important part of health care; however, athletic training students preferred items in which patients took the lead in raising spiritual issues. Therapeutic actions that support a patient's spiritual well-being without being openly religious were preferred.

Key Words: Faith, health, healing, belief

Dr Wright is currently Associate Professor and MSAT Program Director in the Department of Health Science at Whitworth University. Please address all correspondence to Cynthia J. Wright, PhD, ATC, Department of Health Science, Whitworth University, 300 West Hawthorne Road, Spokane, WA 99251. cwright@whitworth.edu.

Full Citation:
Wright CJ, Ediger MJ. Athletic training student perspectives on spirituality and spiritual care in clinical practice: a pilot study. *Athl Train Educ J*. 2019;14(1);3–11.

Athletic Training Student Perspectives on Spirituality and Spiritual Care in Clinical Practice: A Pilot Study

Cynthia J. Wright, PhD, ATC; Michael J. Ediger, DHSc

KEY POINTS

- Athletic training students believe that spirituality is an important part of holistic health care.
- Therapeutic actions that support a patient's wellbeing without being openly religious are preferred.
- Use of spiritual care therapeutics changes over time and is highly correlated with preceptor modeling.

INTRODUCTION

Spirituality is widely considered to be an important component of holistic health, and has been 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."[1] In times of injury or illness, health care providers are often sought for not only their physical care, but also emotional or spiritual needs.[2–4] Within the health care setting, spiritual care may include actions such as listening to a patient talk about spiritual or emotional concerns, affirming the worth or value of each patient, encouraging a patient to talk about what gives his or her life meaning amid injury or illness, or referring patients to other spiritual resources. Recognizing the importance of spirituality, and when appropriate, infusing certain spiritual care therapeutics into a patient-provider interaction, could be a means of optimizing patient care,[5] giving meaning and purpose to the provider duties[6] and connecting caregivers to patients through shared experiences and beliefs.[7] Practically, spirituality positively affects health status, including physical health and healing, which could be a benefit to athletic health practitioners.[5,8]

Despite spirituality's acknowledged role in health, spiritual care is often ignored during patient-provider interactions.[9] Interestingly, previous research indicates that clinicians in multiple health care professions believe spiritual care is both beneficial to the health of their patients and is part of their discipline.[4,10–13] However, at the same time, professionals also reported hesitance to incorporate spirituality or spiritual care with patients.[10–12,14,15] Thus, there appears to be a disconnect between health care provider beliefs about spirituality as a component of health, and the incorporation of spiritual care into a patient's overall care plan.

A survey conducted on certified athletic trainers may shed light on this apparent disconnect. McKnight and Juillerat[11] reported that the most significant perceived obstacle to spiritual care was fear of imposing personal spiritual views on the patient. This fear may lead a clinician to avoid discussion of spirituality, despite a belief that spiritual care is an important component of health. Other reported barriers included lack of training in providing spiritual care and lack of time to provide spiritual care.[11] Interestingly, unlike nursing or occupational therapy,[16,17] athletic training education does not include specific competencies regarding spiritual care. In this regard, athletic training is similar to physical therapy; both professions encourage the need for culturally sensitive care and incorporating patient values in documents like their respective codes of ethics, but fall short of formal educational requirements.[18–20] In any case, even professionals with required educational competencies on spiritual care still report a lack of training and clinical modeling of spiritual care behaviors as a barrier to their incorporation.[10,13]

Based on the limited existing research specific to athletic training, there is no clear consensus about whether or not spiritual care training should be included as a required part of athletic training educational competencies. A survey of athletic training program directors found the majority (69%) believed the topic of spirituality should at least be addressed in some way in the educational program.[12] However, the majority (86%) were also opposed to the inclusion of a specific spiritual care competency, and only a minority (47%) felt it was appropriate to address spiritual concerns with a patient/client.[12] Again, there seems to be an acknowledgement of spirituality's importance in health, but a hesitance to incorporate spiritual care into education or clinical practice. Similar trends have also been documented among program directors in physical therapy and physician assistant programs.[15,20]

Several authors have reported perceptions of health care students regarding spirituality.[21–25] Physical therapy students, like athletic training program directors and clinicians, report high levels of agreement that spirituality is an important component of health, and that spiritual care should be a part of their practice.[24,25] However, they also report caution about actually implementing spiritual care.[25] Their primary concern was that of imposing beliefs and discomfort with their own limited education regarding spiritual care.[25] Research on medical students has focused primarily on what factors (eg, personal religious commitment, sex, exposure to spiritual instruction) influence students' willingness to engage in spiritual care behaviors.[22,23] Medical residents' own personal spiritual commitments and the perceived gravity of the situation (eg, office visit versus hospitalized versus dying) were 2 of the largest influences on spiritual care behaviors identified in 1 study.[22]

While perspectives on spiritual care in athletic training of both clinicians and educators have been documented in the literature,[11,12] to date there is no research reporting athletic training student perceptions regarding spiritual care. As athletic training students typically are younger and have not yet been fully socialized into the profession, these individuals may have a unique perspective on the incorporation of spiritual care in athletic training. Considering the trend in clinicians and educators to acknowledge the importance of spirituality, but to hesitate to incorporate it into clinical practice, it would also be of interest to see if such a trend extends to athletic training students. Additionally, it would be of interest to know what factors may influence the spiritual care beliefs and actions of athletic training students. Specifically, does student exposure to preceptor modeling of

Table 1. Participant Demographics

Descriptor	Percent of Participants (n = 26)
Sex	27 Male (n = 7)
	63 Female (n = 19)
Ethnicity	73 White non-Hispanic (n = 19)
	4 Black non-Hispanic (n = 1)
	8 Asian or Pacific Islander (n = 2)
	4 Hispanic (n = 1)
	12 Multiethnic (n = 3)
Year in school	23 Seniors (n = 6)
	31 Juniors (n = 8)
	41 Sophomores (n = 12)
Religious affiliation	65 Christian, Protestant (n = 17)
	8 Christian, Catholic (n = 2)
	27 Christian, other (n = 7)

spiritual care activities influence their perspectives and/or actions, or do they remain relatively unchanged over time? Understanding these factors may provide insight into refining current educational practices.

A lack of research regarding the perceptions of spirituality and spiritual care behaviors in athletic training students is an indication for further research. Therefore, the purpose of the current study was to describe the beliefs and behaviors of current athletic training students at a single institution regarding spirituality and the role of spiritual care within their clinical practice. Additionally, it was of interest to assess if/how these beliefs changed over the course of 1 academic year.

METHODS

Participants

All athletic training students enrolled in the clinical portion of the athletic training program at a small private religiously affiliated university were recruited for participation in this study (n = 33; Table 1). Students at this university are not required to have any particular religious affiliation or spiritual background; there are no religious or faith-based restrictions or preferences on admission or enrollment. Athletic training students were recruited in September (at the beginning of the school year) via an announcement in a commonly required clinical course and via email.

Procedures

Due to the small sample size this study was considered a pilot study that would lead to further research. This study was approved by the University Institutional Review Board. Participants were recruited via email and announcements made in required clinical courses. The recruitment email included study details, including the voluntary and confidential nature of the study, and a link to the study questionnaires. A reminder email was sent after 1 week and 2 weeks. Data collection was closed after the end of 3 weeks. Two $20 gift cards given to randomly selected participants were offered as an incentive to participate.

All data were collected online using Qualtrics Survey Software (Qualtrics LLC, Provo, UT). After giving informed consent, participants were asked to complete 4 items in a single session: a demographic background questionnaire, the Spiritual Perspectives Scale (SPS), the modified Spiritual Care Therapeutics Scale (mSCTS), and the modified Spiritual Care Perspectives Scale (mSCPS). The mSCTS was completed twice, once by the student concerning his or her own behaviors, and once by the student concerning observed preceptor behaviors. The SPS, mSCTS, and mSCPS instruments are described below. The demographic background questionnaire included items about the participant's year in school, sex, ethnicity, and so on. Completion of all items took approximately 15 minutes.

Individuals who completed the surveys in the fall (n = 31) were contacted again in the spring (first week of April) to complete the follow-up surveys. Reminders were sent after 1 and 2 weeks, and data collection was closed 3 weeks after the initial spring survey request. The follow-up surveys were identical to the first surveys. Only individuals who completed surveys in both fall and spring were eligible for inclusion (n = 26). At the beginning of the survey, participants were given the following definition of spirituality: "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."[1,13] The variable of time (fall to spring) was included to assess for changes over the course of a single academic year. We hypothesized changes in athletic training student beliefs or actions might occur as a result of the holistic education received during clinical and academic classes at our institution. Specifically, clinical classes encourage students to reflect on how personal beliefs or worldview might influence their actions as clinical health care providers, and to reflect on when it might be appropriate (or inappropriate) to perform spiritual care actions. Academic classes in the department encourage adoption of a holistic model of wellness (including components such as physical, emotional, and spiritual health). Outside of the holistic education received in clinical and academic classes, there was no active controlled intervention in the current study.

Instruments

The SPS by Reed[1,26] is a 10-item questionnaire that measures participants' perspectives of their own spiritual views and spiritually related interactions on a 6-point Likert-like scale. SPS reliability is high (Cronbach $\alpha > 0.90$), and both criterion-related validity and discriminate validity have been reported.[1,26] The SPS is scored by calculating the average score across all 10 items (Table 2). Permission was obtained before the use of the SPS.

The Spiritual Care Perspectives Scale (SCPS), originally developed by Taylor et al.[27] and revised by Stranahan,[10] is a 13-item questionnaire that asks participants to rate their level of agreement on a 5-point Likert-like scale (from *strongly disagree* to *strongly agree*) with various statements about the importance of spirituality in health (eg, Relationships with others are important to a patient's spiritual health). This scale has acceptable reliability (Cronbach α 0.79).[27] The SCPS was originally developed for nursing, and thus included discipline-specific language that was adapted to general health care professions in the current study. For example, the item "Spiritual care is a significant part of nursing" was adapted to read "Spiritual care is a significant part of my health care

Table 2. Spiritual Perspectives Scale Results in Athletic Training Students (n = 26), Mean ± SD (Range)

Survey Item[a]	Fall	Spring
In talking with your family or friends, how often do you mention spiritual matters?	4.62 ± 1.06 (2–6)	4.58 ± 1.03 (3–6)
How often do you share with others the problems and joys of living according to your spiritual beliefs?	4.27 ± 0.87 (2–6)	3.92 ± 1.294 (1–6)
How often do you read spiritually related material?	4.64 ± 1.11 (2–6)	4.32 ± 1.12 (1–6)
How often do you engage in private prayer or meditation?	4.88 ± 1.31 (1–6)	4.92 ± 0.98 (3–6)
Forgiveness is an important part of my spirituality.	5.46 ± 0.71 (4–6)	5.40 ± 0.65 (4–6)
I seek spiritual guidance in making decisions in my everyday life.	4.46 ± 1.17 (2–6)	4.54 ± 1.03 (2–6)
My spirituality is a significant part of my life.	4.69 ± 1.38 (2–6)	4.96 ± 0.98 (2–6)
I frequently feel very close to God or a "higher power" in prayer, during public worship, or at important moments in my daily life.	4.42 ± 1.30 (2–6)	4.62 ± 1.17 (2–6)
My spiritual views have had an influence upon my life.	5.19 ± 1.06 (2–6)	5.19 ± 1.06 (2–6)
My spirituality is especially important to me because it answers many questions about the meaning of life.	4.81 ± 1.23 (2–6)	4.96 ± 1.11 (2–6)

[a] Scale for questions 1–4: 1 = *not at all*, 2 = *less than once a year*, 3 = *about once a year*, 4 = *about once a month*, 5 = *about once a week*, 6 = *about once a day*. Scale for questions 5–10: 1 = *strongly disagree*, 2 = *disagree*, 3 = *disagree more than agree*, 4 = *agree more than disagree*, 5 = *agree*, 6 = *strongly agree*.

discipline." And "The nurse should wait for a patient to raise spiritual issues" was adapted to "The clinician should wait for a patient to raise spiritual issues." This modified SCPS was labeled the mSCPS (Table 3).

The Spiritual Care Therapeutics Scale (SCTS)[28] is a 17-item questionnaire that asks how frequently respondents utilized specific therapeutic activities in providing clinical care (eg, listened to a patient talk about spiritual concerns, prayed with a patient). Spiritual care therapeutics are specific actions intended to promote well-being, coping, relationship, and growth.[27] Participants select responses ranging from *never* to *very often* referring to frequency of behaviors in the last 80 hours of clinical care. Response anchors were defined and coded with the following categories: 1 (*never* = 0 times), 2 (*rarely* = 1–2 times), 3 (*occasionally* = 3–6 times), 4 (*often* = 7–11 times), and 5 (*very often* = more than 12 times). Scale development, validity, and good reliability (alpha coefficient = 0.93) were reported by Mamier and Taylor.[28] Since this scale was developed for nursing, 4 hospital nursing-specific questions (items 4, 8, 10, and 11; eg, "Arranged for a chaplain to visit a patient") were removed for the current study. One question, "Prayed for a patient," was added. Removing 4 questions and adding 1 question resulted in a final 14-item questionnaire, which was labeled the mSCTS (Table 4). The mSCTS was completed twice in the fall and twice in the spring. For the first mSCTS, participants were asked to complete it regarding their own clinical actions. For the second mSCTS they were asked to report how often they

Table 3. Modified Spiritual Care Perspectives Scale Results in Athletic Training Students (n = 26)

Survey Item[a]	Mean ± SD		*t* Statistic	*P* Value
	Fall	Spring		
Relationships with others are important to patient's spiritual health.	4.12 ± 0.86	4.27 ± 0.78	−0.891	.381
My spiritual views influence my clinical practice of my health care discipline.	3.65 ± 0.89	3.62 ± 0.94	0.225	.824
The clinician should wait for a patient to raise spiritual issues.	3.58 ± 0.76	3.92 ± 0.85	−2.368	.026*
Spiritual care is a significant part of my health care discipline.	3.46 ± 0.91	3.35 ± 0.80	0.827	.416
The domain of my health care discipline includes spiritual care.	3.38 ± 0.75	3.19 ± 0.69	1.547	.134
Clinicians in my discipline should assist a patient in using his/her religious or spiritual resources to cope with illness.	3.31 ± 0.68	3.27 ± 0.67	0.272	.788
I believe that as a clinician, I should never share my beliefs with patients.	2.73 ± 0.67	2.31 ± 0.62	3.734	.001*
A patient's spiritual concerns are none of my business.	2.65 ± 0.75	2.65 ± 0.94	0.000	1.000
Only clergy (ie, pastors, ministers, spiritual leaders) should help patients with specific religious activities.	2.50 ± 0.95	2.27 ± 0.92	1.100	.282
In general, my patients have no spiritual need.	2.35 ± 0.85	1.92 ± 0.74	2.518	.019*
A person must believe in a higher being/power to be spiritually healthy.	2.27 ± 1.04	2.27 ± 1.00	0.000	1.000
Religious beliefs can be a hindrance to health.	2.12 ± 0.95	2.15 ± 0.88	−0.205	.840
Spiritual care is only for religious persons.	2.00 ± 0.75	1.92 ± 0.85	0.420	.678

[a] Scale: 1 = *strongly disagree*, 2 = *disagree*, 3 = *neutral*, 4 = *agree*, 5 = *strongly agree*.

* Paired *t* test indicates significant difference between fall and spring.

Table 4. Modified Spiritual Care Therapeutics Scale Results in Athletic Training Students

Survey Item[a]	Mean ± SD		*t* Statistic	*P* Value
	Fall	Spring		
Asked a patient about how you could support his or her spiritual or religious practices	1.15 ± 0.37	1.54 ± 0.71	−3.077	.005*
Helped a patient have quiet time or space	1.85 ± 0.97	2.50 ± 0.91	−3.277	.003*
Listened actively for spiritual themes in a patient's story of injury/illness	2.31 ± 1.09	2.85 ± 1.08	−2.487	.020*
Listened to a patient talk about spiritual concerns	1.81 ± 0.80	2.31 ± 0.68	−2.687	.013*
Encouraged a patient to talk about how injury/illness affects relating to God (or his or her transcendent reality)	1.31 ± 0.47	1.62 ± 0.85	−2.132	.043*
Encouraged a patient to talk about his or her spiritual coping	1.31 ± 0.55	1.50 ± 0.76	−1.729	.096
Discussed a patient's spiritual care needs with colleague/s	1.15 ± 0.37	1.65 ± 0.75	−3.138	.004*
Encouraged a patient to talk about what gives his or her life meaning amidst injury/illness	1.65 ± 0.80	1.96 ± 1.00	−1.397	.175
Encouraged a patient to talk about the spiritual challenges of living with injury/illness	1.50 ± 0.76	1.69 ± 0.88	−1.154	.259
Offered to pray with a patient	1.15 ± 0.37	1.31 ± 0.55	−1.443	.161
Prayed for a patient	2.19 ± 1.17	2.73 ± 1.15	−2.273	.032*
Offered to read a spiritually nurturing passage (eg, patient's holy scripture)	1.15 ± 0.46	1.35 ± 0.89	−0.926	.363
Told a patient about spiritual resources	1.27 ± 0.53	1.50 ± 0.95	−1.140	.265
After completing a task, remained present just to show caring	3.19 ± 1.02	3.88 ± 0.95	−2.675	.013*

[a] Scale: 1 = *never*, 2 = *rarely*, 3 = *occasionally*, 4 = *often*, 5 = *very often*.
* Paired *t* test indicates significant difference between fall and spring.

observed a clinical preceptor completing any of the mSCTS items (Table 5).

Data Processing and Statistical Analysis

Data were exported from Qualtrics to Excel (Microsoft, Redmond, WA) and then imported into IBM SPSS version 20 (IBM, Armonk, NY) for analysis. A paired *t* test assessed for differences in the SPS at 2 time points (fall and spring). Individual item responses for the mSCPS and mSCTS were scored individually, averaged across participants, and then organized from lowest (or least frequent) to highest (or most frequent). A paired *t* test was used to assess for differences between fall and spring responses. Additionally, for both fall and spring, a Spearman rank correlation was used to assess for correlation between preceptor modeling and athletic training student actions. Since slight modifications were made to the previously reported survey instruments, reliability for the mSCPS and mSCTS was assessed after the initial survey administration (fall) using Cronbach α.

Table 5. Student's Observed Preceptor Behaviors of Actions on the Modified Spiritual Care Therapeutics Scale

Survey Item[a]	Mean ± SD		*t* Statistic	*P* Value
	Fall	Spring		
Asked a patient about how he/she could support his or her spiritual or religious practices	1.38 ± 0.64	1.58 ± 0.70	−1.309	.203
Helped a patient have quiet time or space	2.31 ± 1.01	2.65 ± 0.98	−1.397	.175
Listened actively for spiritual themes in a patient's story of injury/illness	1.72 ± 0.84	2.44 ± 1.08	−3.166	.004*
Listened to a patient talk about spiritual concerns	1.96 ± 0.92	2.27 ± 0.96	−1.316	.200
Encouraged a patient to talk about how injury/illness affects relating to God (or his or her transcendent reality)	1.62 ± 0.75	1.92 ± 0.89	−1.873	.073
Encouraged a patient to talk about his or her spiritual coping	1.65 ± 0.75	1.96 ± 0.87	−1.397	.175
Discussed a patient's spiritual care needs with colleague/s	1.38 ± 0.64	2.00 ± 0.85	−3.192	.004*
Encouraged a patient to talk about what gives his or her life meaning amidst injury/illness	1.85 ± 0.88	2.12 ± 0.91	−1.070	.295
Encouraged a patient to talk about the spiritual challenges of living with injury/illness	1.58 ± 0.76	1.69 ± 0.79	−0.681	.502
Offered to pray with a patient	1.65 ± 0.85	1.65 ± 0.89	0.000	1.000
Prayed for a patient	2.00 ± 1.08	2.52 ± 1.22	−2.008	.056
Offered to read a spiritually nurturing passage (eg, patient's holy scripture)	1.31 ± 0.62	1.42 ± 0.70	−0.681	.502
Told a patient about spiritual resources	1.50 ± 0.76	1.62 ± 0.80	−0.550	.587
After completing a task, remained present just to show caring	3.28 ± 1.46	3.36 ± 1.11	−0.267	.792

[a] Scale: 1 = *never*, 2 = *rarely*, 3 = *occasionally*, 4 = *often*, 5 = *very often*.
* Paired *t* test indicates significant difference between fall and spring.

Table 6. Correlation Between Student Actions and Observed Preceptor Behaviors on the Modified Spiritual Care Therapeutics Scale

Survey Item	Spearman rho	*P* Value
Asked a patient about how he/she could support his or her spiritual or religious practices	0.421	.032*
Helped a patient have quiet time or space	0.610	.001*
Listened actively for spiritual themes in a patient's story of injury/illness	0.357	.080
Listened to a patient talk about spiritual concerns	0.369	.064
Encouraged a patient to talk about how injury/illness affects relating to God (or his or her transcendent reality)	0.370	.063
Encouraged a patient to talk about his or her spiritual coping	0.389	.050*
Discussed a patient's spiritual care needs with colleague/s	0.421	.032*
Encouraged a patient to talk about what gives his or her life meaning amidst injury/illness	0.611	.001*
Encouraged a patient to talk about the spiritual challenges of living with injury/illness	0.582	.002*
Offered to pray with a patient	0.376	.058
Prayed for a patient	0.400	.047*
Offered to read a spiritually nurturing passage (eg, patient's holy scripture)	0.055	.789
Told a patient about spiritual resources	0.344	.085
After completing a task, remained present just to show caring	0.562	.003*

* Significant correlation.

RESULTS

Participant Demographics

The final response rate was 26 out of 33 possible athletic training students (78.8%) who completed both fall and spring questionnaires. Participant characteristics are reported in Table 1. The participants' (age = 20.3 ± 2.1) self-reported prior hours of athletic training clinical experience were 435 ± 310 hours (range, 90–1000) in the fall, and 789 ± 446 hours (range, 208–2000) in the spring.

Spiritual Perspectives Scale

Item responses for the SPS are presented descriptively in Table 2. The SPS did not change significantly over time ($t = 0.194$, $df = 25$, $P = .848$; fall summary score = 4.74 ± 0.96, spring summary score = 4.73 ± 0.87).

Modified Spiritual Care Perspectives Scale

Descriptive data for the mSCPS as well as results of the paired *t* test between fall and spring are presented in Table 3. Reliability for the mSCPS was acceptable (Cronbach $\alpha = 0.77$). The mSCPS items with the highest agreement on a 5-point Likert scale were "Relationships with others are important to patient's spiritual health" (4.12 ± 0.86), "My spiritual views influence my clinical practice of my health care discipline" (3.65 ± 0.89), and "The clinician should wait for a patient to raise spiritual issues" (3.58 ± 0.76). The mSCPS items with the lowest agreement were "Spiritual care is only for religious persons" (2.00 ± 0.75), "Religious beliefs can be a hindrance to health" (2.12 ± 0.95), and "A person must believe in a higher being/power to be spiritually healthy" (2.27 ± 1.04). Only 3 mSCPS items changed significantly over time ($P < .05$, Table 3). Specifically, agreement increased on the item "The clinician should wait for a patient to raise spiritual issues," and disagreement increased for the items "I believe that as a clinician, I should never share my beliefs with patients" and "In general, my patients have no spiritual need."

Modified Spiritual Care Therapeutics Scale

Participants completed the mSCTS twice, once reporting on their own actions (Table 4) and once reporting on actions they observed in their clinical preceptors (Table 5). Reliability for the mSCTS reporting students' own actions was acceptable (Cronbach $\alpha = 0.74$), and reliability was high for reporting preceptor observed behaviors (Cronbach $\alpha = 0.92$). Descriptive data as well as results of the paired *t* test between fall and spring are presented in Tables 4 and 5. The average frequency for each item ranged from 1 (*never*), 2 (*rarely*), to 3 (*occasionally*); there were no items that averaged 4 (*often*) or 5 (*very often*). For students' self-reported actions, the mSCTS items with the highest frequency were "After completing a task, remained present just to show caring" (3.19 ± 1.02), "Listened actively for spiritual themes in a patient's story of injury/illness" (2.31 ± 1.09), and "Prayed for a patient" (2.19 ± 1.17). The mSCTS items with the lowest frequencies were "Offered to pray with a patient" (1.15 ± 0.37), "Asked a patient about how you could support his or her spiritual or religious practices" (1.15 ± 0.37), and "Discussed a patient's spiritual care needs with colleague/s" (1.15 ± 0.37). Eight student mSCTS items changed significantly over time (all $P < .05$, Table 4), whereas only 2 preceptor mSCTS items changed significantly (all $P < .05$; Table 5). Preceptors were also most likely to "After completing a task, remain present just to show caring" (3.28 ± 1.46), followed by "Help a patient have quiet time or space" (2.31 ± 1.01) and "Pray for a patient" (2.00 ± 1.08). Preceptors' least frequent spiritual therapeutic action was "Offer[ing] to read a spiritually nurturing passage (eg, patient's holy scripture)" (1.31 ± 0.62), followed by "Asked a patient about how he/she could support his or her spiritual or religious practices" (1.38 ± 0.64), and "Discussed a patient's spiritual care needs with colleague/s" (1.38 ± 0.64). Spearman rank correlations between fall student and preceptor actions on each mSCTS item are reported in Table 6. The 2 strongest correlations were for the items "Encouraged a patient to talk about what gives his or her life meaning amidst injury/illness" ($r = 0.611$, $P < .001$) and "Helped a patient have quiet time or space" ($r = 0.610$, $P < .001$).

DISCUSSION

The purpose of this study was to describe the beliefs and behaviors of current athletic training students at a single institution regarding spirituality, the role of spiritual care within their clinical practice, and if/how these beliefs changed over the course of 1 academic year. Descriptive data on student beliefs and self-reported actions add to the limited current literature on athletic training faculty member and clinician beliefs. Comparisons over time allow insight into the stability and development of student beliefs and self-reported actions regarding spiritual care.

Modified Spiritual Care Perspectives Scale

The mSCPS measures respondent's level of agreement (or disagreement) with multiple statements regarding the role of spirituality in health, for example, "Relationships with others are important to patient's spiritual health." Interestingly, results indicated that students did not feel very strongly about any item—with mean scores for all items ranging from 2.0 (*disagree*) to 4.1 (*agree*), and the majority in the 3 (*neutral*) range. It is unknown why students tended to be fairly neutral in their responses. Considering that past research on practicing clinicians[10,11] has identified training in providing spiritual care as lacking (eg, 22% of nurse practitioners had received no training or education in spiritual care[10]), it may reflect a lack of professional development on the potentially beneficial role of spirituality in health.

The 3 most agreed-upon mSCPS items emphasized general spiritual well-being or that spiritual care was a personal decision (eg, "The clinician should wait for a patient to raise spiritual issues"). This trend may highlight a deference to personal autonomy, which aligns with past research in physical therapy students[25] and practicing athletic trainers who identified "fear of imposing personal spiritual views on the athlete" as the most frequent and significant barrier to providing spiritual care.[11] In contrast, the 3 items with the highest level of disagreement had terms that were explicitly religious or referred to a higher power (eg, "Spiritual care is only for religious persons"). This trend may show that students were less comfortable with statements using the narrower and less inclusive terminology of religion.

Additionally, changes over time in athletic training student responses on the mSCPS were minor (only 3 out of 13 items showed significant change; Table 3). Specifically, students were more likely to see their patients as having spiritual needs, and more likely to feel that it could be appropriate to share personal beliefs with patients, but more likely to affirm that the clinician should wait for a patient to raise spiritual issues. This is an interesting combination, potentially affirming a heightened awareness of patients' spiritual needs while simultaneously having a greater respect for a patient's privacy and wishes regarding spiritual care. Alternatively, it may be that students had a heightened awareness of spiritual needs but were more uncomfortable with addressing them. Interestingly, in contrast, time in the educational program (eg, first year versus third year) did not significantly influence perceptions of spirituality in other health care students.[22,24] The contribution of professional socialization or academic preparation toward the reported changes is unclear, but may merit consideration in future research. Since clinicians often cite a lack of preparation related to spirituality and health,[10,11] introduction of this theme into the athletic training curriculum may be a good place to start.

Modified Spiritual Care Therapeutics Scale

Unlike the mSCPS, which asks students their beliefs regarding spiritual care, the mSCTS asks students to report the frequency with which they have engaged in specific therapeutic actions in their past 80 hours of clinical experience. As expected, initially students largely reported *never* or *rarely* engaging in any of the identified actions (Table 4). In contrast, past research on practicing athletic trainers reported that high percentages of clinicians employed similar spiritual care therapeutics (mean = 38 ± 24%, range, 4%–90%).[11] However, these clinicians were asked simply if they had *ever* performed each action, as opposed to the frequency of performance, limiting direct comparison to the current work. Unfortunately, past research on students in other health care professions has also not reported the frequency of utilization of spiritual care therapeutics, only the level of agreement/disagreement on how appropriate such actions might be.[22–24] Similar to trends in nurse practitioners identified by Stranahan,[10] students were more likely to practice items that did not require direct or noticeable involvement in the spiritual care action with the patient. For example, the 3 most commonly practiced items in the fall were praying for (but not with) a patient, active listening, and remaining present with a patient to show caring. It should be noted that even though these 3 items were practiced more frequently than others, they were only reported as *rarely* or *occasionally* employed.

It is interesting that while athletic training student perspectives on spiritual care were predominately stable over time, the frequency of student self-reported spiritual therapeutic actions did change over time (8 out of 14 items increased in frequency; Table 4). Thus, while beliefs were fairly static, student clinical behaviors were dynamic over time. The observed spring behavior changes may have resulted from exposure to principles of holistic health care in clinical or academic classes, increased awareness of spiritual therapeutics due to completing the fall survey, exposure to preceptor modeling, increased autonomy as students advanced through clinical experiences, or other factors—we are not able to assign causality based on the current study design. In contrast to student behaviors, there were few changes in preceptor modeling of spiritual care therapeutics over the course of the year (as reported by students). This would be expected from professionals with set clinical practice behaviors. While the reported frequency of preceptor modeling of spiritual care therapeutics was largely stable, the strong correlation between preceptor modeling and student behavior may indicate preceptor behaviors were influential. Future research should further investigate the role of the clinical preceptor in modeling appropriate integration of spiritual care therapeutics. In agreement with past research,[10–12] we recommend that professional curricula and clinical experiences incorporate the role of spirituality in health and health care practice.

LIMITATIONS

Perhaps the most important limitation of the current pilot study is the use of a convenience sample of all athletic training students at a private, church-affiliated liberal arts university.

While students at this university are not required to have a particular (or any) faith background, it is likely that through self-selection in their university choice, the current sample is not directly representative of all athletic training students. However, we believe there are several important rationales for utilizing the current sample despite this limitation. First, participant's self-reported personal engagement in spiritual practices (SPS = 4.74 ± 0.96) is highly similar to that in past research in a large cohort of nursing students (SPS 4.38 ± 1.00)[21] and practicing nurse practitioners (SPS = 4.98 ± 1.1).[10] This provides evidence the practices and perspectives of the current sample are perhaps more representative than at first glance. Second, due to its private status, faculty and students at this university may perceive themselves to have greater freedom of speech regarding spiritual matters than peers at public institutions (where legal concerns due to separation of church and state may restrict open discourse). Thus, the private environment provided that the current survey could be conducted freely. Third, despite its limitations the current study adds knowledge to an important gap. While future research would benefit from a larger and more heterogeneous sample, the environment was sufficient to meet the aims of the current study to add to the currently sparse literature in this area.

Additionally, while the SCTS is a valid and reliable instrument for self-reporting,[28] and showed high internal consistency (Cronbach $\alpha = 0.92$) in the current study, the use of this instrument by students to report observed preceptor behaviors is novel and may merit further research. Lastly, surveys such as the SCTS and SCPS were initially designed to capture the situations and perspectives of health care providers working with terminally or chronically ill patients.[10,29] Although all individual survey items retained in the mSCTS and mSCPS can be applied to any patient population or health care discipline, collectively the survey may have been skewed toward more grave situations. Thus, the low frequency at which athletic training students reported performing specific spiritual care therapeutics may be due to encountering a less grave population. Despite each survey's limitations, the decision was made to utilize these instruments because of their established validity, reliability, and ability to compare across other health care disciplines. In the future, however, development of an instrument more specific to athletic training could be considered and a might yield unique information.

CONCLUSIONS

Considering the important role of spirituality in health care, it is important to understand the beliefs and behaviors of athletic training students regarding spirituality and spiritual care within clinical practice. Overall we found that athletic training students believe that spirituality is an important part of health care; however, their responses indicated a preference for therapeutic actions that support a patient's spiritual well-being without being openly religious. Considering this, future research could investigate the most appropriate and effective ways to introduce spiritual care within athletic training curriculum and clinical experiences in nonthreatening and nonspecifically religious ways. Athletic training students beliefs were largely stable over 1 year; however, the frequency of engaging in spiritual care therapeutic actions changed and appeared to be influenced by preceptor modeling of behaviors. Future research should investigate athletic training student perceptions of spirituality and spiritual care in a larger and more diverse sample, as well as further investigate the role of preceptor modeling.

REFERENCES

1. Reed PG. Spirituality and well-being in terminally ill hospitalized adults. *Res Nurs Health*. 1987;10(5):335–344.
2. Hanson L, Dobbs D, Usher B, Williams S, Rawlings J, Daaleman T. Providers and types of spiritual care during serious illness. *J Palliat Med*. 2008;11(6):907–914.
3. McCord G, Gilchrist VJ, Grossman SD, et al. Discussing spirituality with patients: a rational and ethical approach. *Ann Fam Med*. 2004;2(4):356–361.
4. Puchalski CM. The role of spirituality in health care. *Proc (Bayl Univ Med Cent)*. 2001;14(4):352–357.
5. Culliford L. Spirituality and clinical care. *Br Med J*. 2002;325:1434–1435.
6. Gray G. Spirituality and occupational therapy. *J Nat Soc Allied Health*. 2015;12(1):53–62.
7. Rubin M. Spirituality in EMS. *EMS World*. 2012;41(9):55–59.
8. Udermann BE. The effect of spirituality on health and healing: a critical review for athletic trainers. *J Athl Train*. 2000;35(2):194–197.
9. Bergamo D, White D. Frequency of faith and spirituality discussion in health care. *J Relig Health*. 2016;55(2):618–630.
10. Stranahan S. Spiritual perception, attitudes about spiritual care, and spiritual care practices among nurse practitioners. *West J Nurs Res*. 2001;23(1):90–104.
11. McKnight CM, Juillerat S. Perceptions of clinical athletic trainers on the spiritual care of injured athletes. *J Athl Train*. 2011;46(3):303–311.
12. Udermann BE, Schutte GE, Reineke DM, Pitney WA, Gibson MH, Murray SR. Spirituality in the curricula of accredited athletic training education programs. *Athl Train Educ J*. 2008;3(1):21–27.
13. McSherry W, Jamieson S. The qualitative findings from an online survey investigating nurses' perceptions of spirituality and spiritual care. *J Clin Nurs*. 2013;22(21–22):3170–3182.
14. Oakley ET, Katz G, Sauer K, Bonny D, Millar AL. Physical therapists' perception of spirituality and patient care: beliefs, practices, and perceived barriers. *J Phys Ther Educ*. 2010;24(2):45–52.
15. Berg GM, Whitney MP, Wentling CJ, Hervey AM, Nyberg S. Physician assistant program education on spirituality and religion in patient encounters. *J Physician Assist Educ*. 2013;24(2):24–27.
16. Morris DN, Stecher J, Briggs-Peppler K, Chittenden CM, Rubira J, Wismer LK. Spirituality in occupational therapy: do we practice what we teach? *J Relig Health*. 2014;53(1):27–36.
17. Helming MA. Integrating spirituality into nurse practitioner practice: the importance of finding the time. *J Nurse Pract*. 2009;5(8):598–605.
18. NATA Code of Ethics. National Athletic Trainers' Association Web site. https://www.nata.org/membership/about-membership/member-resources/code-of-ethics. Accessed March 8, 2019.
19. APTA Code of Ethics for the Physical Therapist. American Physical Therapy Association Web site. https://www.apta.org/uploadedFiles/APTAorg/About_Us/Policies/Ethics/CodeofEthics.pdf. Accessed March 8, 2019.

20. Highfield ME, Osterhues DJ, Chu L. Religious and spiritual content in physical therapy curricula: a survey of U.S. program directors. ResearchGate Web site. https://www.researchgate.net/publication/293174548. Accessed March 9, 2019.
21. Abbasi M, Farahani-Nia M, Mehrdad N, Givari A, Haghani H. Nursing students' spiritual well-being, spirituality and spiritual care. *Iran J Nurs Midwifery Res*. 2014;19(3):242–247.
22. Luckhaupt SE, Yi MS, Mueller CV, et al. Beliefs of primary care residents regarding spirituality and religion in clinical encounters with patients: a study at a midwestern U.S. teaching institution. *Acad Med*. 2005;80(6):560–570.
23. Saguil A, Fitzpatrick AL, Clark G. Are residents willing to discuss spirituality with patients? *J Relig Health*. 2011;50(2):279–288.
24. Sargeant DM, Newsham KR. Physical therapist students' perceptions of spirituality and religion in patient care. *J Phys Ther Educ*. 2012;26(2):63–73.
25. Highfield ME, Osterhues D. Spiritual care rights and quality of care: perspectives of physical therapy students. *J Heatlhc Qual*. 2003;25(1):12–15.
26. Reed PG. Religiousness among terminally ill and healthy adults. *Res Nurs Health*. 1986;9(1):35–41.
27. Taylor EJ, Highfield M, Amenta M. Attitudes and beliefs regarding spiritual care. A survey of cancer nurses. *Cancer Nurs*. 1994;17(6):479–487.
28. Mamier I, Taylor EJ. Psychometric evaluation of the nurse spiritual care therapeutics scale. *West J Nurs Res*. 2015;37(5):679–694.
29. Reeder MT, Dick BH, Atkins JK, Pribis AB. Stress fractures: current concepts of diagnosis and treatment. *Sports Med*. 1996;22(3):198–212.