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Original Research

Attitudes, perceptions, and expectations of a student special interest group in student members of a professional organization in the United States

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Introduction: Providing quality benefits and value to professional association student members is important for their long-term retention and can cultivate future association leadership. The purpose of this study was to determine the Academy of Clinical Electrophysiology and Wound Management (ACEWM) student members' attitudes, perceptions, and expectations of the ACEWM Student Special Interest Group (SSIG).

Methods: The research design was a cross-sectional survey administered online. The survey questionnaire was comprised of five demographic items and 10 Likert scale items and was sent to all student members of the ACEWM.

Results: The response rate was 31.3% (n=56). Data indicated that: students felt that SSIGs are valuable (71.2%), it is important to interact with other students with a similar career interest (93.3%), SSIGs should promote a culture of clinical excellence (96.6%), and it is important to network with expert clinicians with a similar career interest as theirs (98.3%). Most participants supported the idea of the SSIG offering programs on electrophysiology (71.2%), wound management (89.8%), biophysical agents (69.5%), and diagnostic ultrasound (69.5%) to supplement their DPT curriculum.

Conclusion: Student members of the ACEWM indicated that networking with other students and clinicians is valuable and that the SSIG should offer continuing education on each ACEWM specialty. The results may be used to guide the SSIG's future strategic planning on enhancing the SSIG's value and delivering meaningful benefits to student members. These results may also guide other APTA component SSIGs as well as other external professional organizations on how to enhance their student members' experience.

Keywords: student members, special interest group, survey

1. Introduction

Student physical therapists and physical therapist assistants represented nearly 33% of the just over 100,000 total American Physical Therapy Association (APTA) memberships in 2019.¹ Providing quality benefits and value to student members is important for their long-term retention within the organization and can cultivate future association leadership. Currently, the APTA has 18 specialty sections (some referred to as academies) and 51 state chapters. The sections and state chapters are collectively referred to as

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components.² Each section and chapter may offer sub-component groups, referred to as special interest groups (SIGs), which provide members the ability to expand their clinical network.³

In addition to clinically focused SIGs, student SIGs (SSIGs) may be offered by the components to their student members.⁴ SSIGs promote participation within the association, stimulate students' communication skills, and provide an avenue for students to build their professional network.⁵ SSIGs exist in healthcare professional organizations, such as the American Medical Association (named as Medical Student Section) and American Psychiatric Association, and have emerged within entry-level physical therapy programs.^{5–7} As of May 2022, 78.4% of APTA state chapters (40/51) have a SSIG; however, only three specialty sections or academies offer one to their members.⁴ Although considered as a section of the APTA, the Academy of Clinical Electrophysiology and Wound Management (ACEWM) is a stand-alone organization whose membership consists of nearly 1,000 physical therapists, physical therapist assistants, physical therapy students, and physical therapist assistant students interested in biophysical agents, electrodiagnosis, neuromusculoskeletal ultrasonography, and wound management.⁸ The ACEWM, together with the Private Practice and Pelvic Health sections, is one of three APTA sections offering a SSIG.⁴

Although SSIGs are offered by many of the APTA state-level components, limited data exist on students' engagement with them. The purpose of this study was to determine the ACEWM student members' attitudes, perceptions, and expectations of the ACEWM SSIG. The findings will improve the ACEWM's understanding of what student members perceive as valuable and what they expect out of their membership, providing recommendations to the ACEWM SSIG, other APTA component SSIGs, and other professional organizations on ways to improve their SSIG programming and enhance their student members' experience in a professional organization.

2. Methods

Participants

A convenience sample of all ACEWM student members (n=179), including both physical therapy students and physical therapist assistant students, at the time this study was conducted, were invited to participate via email. Inclusion criteria required participants to hold an active student membership in the ACEWM and be over the age of 18. Exclusion criteria were those with expired student memberships and anyone under the age of 18 years old.

Procedure

Ethics approval for this study was sought and obtained from the Institutional Review Board at Youngstown State University (Protocol 183-19). The survey was administered electronically using the Alchemer online survey platform (Alchemer LLC, Louisville, CO). Data were collected via a cross-sectional survey emailed to eligible participants which was open from April 2019 through June 2019. Participants received reminder emails to complete the survey in week 2 and week 4. Informed consent was provided in the body of the email and at the beginning of the survey, once it was opened. Participants were informed that participation was voluntary and that the survey was designed to be completed anonymously; however, participants were offered an opportunity to enter a raffle after completing the survey for a chance to win one of two \$25 gift cards by providing an optional nickname and contact phone number. The collection of nickname and phone number was not collected separately and was therefore associated with their survey responses.

Questionnaire

Item generation for the questionnaire (Table 1) was developed based on discussions among professional and student ACEWM members. The discussions revealed these ACEWM professional and student members' vision for student members, the perception of the value being received by student members, and opinions on how the ACEWM could improve the student members' experience. Prior to administering the questionnaire, both investigators confirmed its accessibility, usability, and technical functionality. The survey questionnaire was comprised of five demographic items (omitted in Table 1) and 10 survey questions for which students reported their level of agreement on a 5point Likert scale (i.e., 1 = strongly disagree, 2 = disagree, 3 = Neither Agree nor Disagree, 4 = Agree, 5 = Strongly Agree). The participants were able to review and change their answers by toggling between pages prior to submission. To ensure the completeness of each submission, participants were unable to submit the survey unless all questions were answered. An error message, appearing as a highlighted red asterisk, would direct participants back to each unanswered question. To prevent unwanted individuals from completing the survey, the survey was only accessible through an individual link assigned to the e-mail address on file for each SSIG member.

Data Analysis

Microsoft Excel for Mac version 16.58 was used for the data analysis. Descriptive statistics were used to describe the demographic characteristics of the participants and univariate analysis was used to describe the variable distribution for each of the 10 survey items.

3. Results

Figure 1 represents the response rate of 31.3% (56/179) and is broken down by the geographic location of each participant's physical therapy program or physical therapist assistant program. Of the complete responses, 23.2% were males (n=13) and 76.8% were females (n=43). Participants in the second year of their physical therapy education had the largest response rate at 42.9% (n=24), followed by those in their third year (n=18), with a response rate of 32.1%. First-year participants (n=14) responded the least (25.0%). 57.1% of the participants (n=32) were also members of their state chapter's SSIG. Considering eight participants were from a state that did not have a SSIG, the percentage was adjusted to 66.7%. It is notable that participants from New York State (n=17) made up 30.4% of total respondents, the highest compared to those from all other states. Most participants (n=43, 76.8%) were also a member of other APTA sections.



Figure 1. Distribution of Survey Responses by Geographic Location in the United States. The data represents a response rate of 31.3% (56/179) for all electronically administered surveys.

The percentages of responses to each of the 10 Likert items are illustrated in Figure 2. Overall, most participants (71.2%) were aware that the ACEWM offered a SSIG at no additional cost and felt that a SSIG was valuable to them as a student member (71.2%). Most participants acknowledged that they would gain valuable skills, knowledge, and professional opportunities by being a member of the SSIG (85.8%). Participants agreed or strongly agreed that it is important to interact with other students sharing similar career interests (93.3%). Participants identified networking with expert clinicians with common clinical interests to theirs to be of value (98.3%). Most participants were in favor of the SSIG offering programs on electrophysiology (71.2%), wound management (89.8%), bio-physical agents (69.5%), and diagnostic ultrasound (69.5%) to supplement their DPT curriculum.



Figure 2. Summary of Responses to 10-Item Survey Questionnaire. Participants reported their level of agreement on a 5-point Likert scale to close-ended questions presented in Table 1. The data represents a response rate of 31.3% (56/179) for all electronically administered surveys.

4. Discussion

The APTA consists of 51 state chapters and 18 specialty sections – the ACEWM being one of these specialty sections. Within the ACEWM, there are multiple SIGs, including the SSIG. This was the first study investigating student member attitudes, perceptions, and expectations of a SSIG, specifically the ACEWM of the APTA. A thorough literature search using PubMed, WorldCat.org, Academic Search Complete, Research Library, and EBSCOhost was performed. The initial search for full text, peer reviewed publications from 2010-2022 using the keyword 'physical therapy student special interest group' populated 295 results. To narrow the results, publications containing 'physical therapy student special interest group' in both the title and abstract were searched. This reduced the results to a single publication directly related to physical therapy.⁵

Smith et al.⁵ described a physical therapy program's student and faculty participation in weekly SSIG meetings. This specific program developed an orthopedic SSIG and a neurologic SSIG to promote discussion beyond the classroom setting. The purpose of their study was to identify participants' perceptions of how the two SSIGs impact their clinical decision-making skills, knowledge, and clinical skills. At least 95% of the participants (n = 181) surveyed in this study agreed that meeting with the SSIG's members was valuable and would help develop them into stronger physical therapists. Additionally, the participants reported a belief that the presence of interdisciplinary healthcare providers would increase the value of their participants in the SSIG meetings. The attitudes and expectations of the SSIGs were not investigated in their qualitative study. Our data are consistent with their findings that participants have positive perceptions towards a SSIG. Further research to clearly define students' attitudes, perceptions, and beliefs on SSIG participation and membership is needed.

While only one publication⁵ exists on physical therapy SSIGs, there were studies on SSIGs offered to medical students.^{9,10} O'Keefe⁹ investigated medical students' perceptions of an emergency medicine SIG and the impact it had on their choice of medical specialty. In a survey administered to 67 medical students, 54% of participants indicated that the emergency medicine SIG had an impact on the specialty they chose and 97% would recommend interest groups to first-year medical students for the value of networking. Bhatnagar et al.¹⁰ examined the impact of mentorship on fourth-year osteopathic medical students' decisions when choosing clinical rotations, residency programs, area of practice, research interests, and career trajectory. This study indicated that medical students have a desire for mentorship and feel that having a mentor early on in their education made it easier to choose a specialty area of practice. Our data, again, are consistent with the literature that students have a desire for professional development and networking for mentorship.

Outside of the healthcare industry, the American Society for Indexing (ASI)¹¹ administered a survey to its SIG members looking to identify current areas of value, areas for improvement, and ways to better serve ASI members. Students reported online discussions and webinars to be areas they perceived as having the most value.¹¹ We did not collect data about online discussions and webinars in our study, however, it would appear beneficial to implement these strategies for professional development in the future. Our data indicated that participants believed it was important to communicate with students and expert clinicians sharing similar career interests. The SSIG may consider facilitating a structured, online discussion board moderated by an expert clinician to promote student interaction with one another. Different topics for discussion may include the residency application process, a review of test questions in preparation for the physical therapy licensure exam, or a monthly case report with a discussion on clinical reasoning for various treatment strategies. Additionally, the SSIG may consider the development of a mentorship program where a student is paired with a member clinician. Student mentorship has been recognized as having a large impact on personal development, professional development, career guidance, choice of medical specialty, and career progression in the medical profession; however, there is limited detail in the literature outlining the most effective structure for mentorship (e.g., formal vs. informal, group setting vs. one-on-one) and limited insight into how to best pair a mentor with a mentee (e.g., assignment vs. self-identified).¹² The SSIG may need to conduct further research to identify the most appropriate type of mentorship for this group.

Our data indicated that most participants were in favor of the SSIG offering continuing education to supplement their DPT curriculum. Similarly, McCarthy et al. ¹³ described medical student involvement in a SSIG as a way to access affordable continuing education. Linehan et al.¹⁴ described a Student Radiology Interest Group's development of an extra-curricular skills workshop devoted to diagnostic ultrasound as a supplement to their education. The radiology students reported that topics covered in this specialized workshop were critical for their future careers because they did not receive enough training in their current curriculum.¹⁴ Therefore, another way the SSIG could offer supplemental education to its members is through live, pre-recorded, or interactive workshops outside of the curriculum. For example, one such workshop could focus on wound debridement, using a navel orange, to practice manual hand dexterity skills. This simulated environment is a safe way to practice these skills without direct patient care and allows students to participate voluntarily. Another workshop topic could be on the various types of ultrasonography that fall within the physical therapy scope of practice. Whittaker et al.¹⁵ stated that there was no internationally accepted curriculum for training physical therapists in the use of diagnostic ultrasound (DUS) and that appropriate use of DUS is not part of an entry-level physical therapy program. Many ACEWM members are experts in the use of ultrasonography and could provide value in sharing their experience and clinical knowledge with students. Providing informal and formal webinars and education sessions could serve as helpful educational tools for students. An added benefit of recording webinars is that students may revisit the content at any time, allowing time to digest the material.16

Likewise, the literature suggests that SSIG members may benefit from panel discussions with senior members of the professional association. The Student Oncology Society (SOS) within the Boston University Chobanian & Avedisian School of medicine hosts an annual panel of physicians specializing in various oncology specialists.¹⁷ The physicians discuss their career path and describe their typical workday along with answering questions from students. After one panel discussion, researchers distributed a survey to the 35 student attendees to identify the impact the SOS had on student interest in oncology. Of the 23 completed survey questionnaires, 100% of students reported that they found the discussion panels "valuable" or "somewhat valuable." There were 37% of participants who believed a panel discussion on the various career paths within oncology would be beneficial to stimulate early career interest and improve awareness of the oncology field of medicine.¹⁷ A follow-up survey was administered to all 32 former student

leaders of the SOS to identify how their participation informed their career choice.¹⁸ Of the 26 returned surveys, all respondents indicated that having a SOS sponsored by faculty was "moderately important", "very important" or "extremely important". Out of all the participants, 73.1% indicated that they eventually pursued an oncology-related specialty. The most important factor for choosing their career was reported to be having a mentor.¹⁸ These studies support the value of a career panel and may be used as a framework for the ACEWM SSIG to develop similar discussions with the various specialties ACEWM members represent.

Our data revealed that 28.8% of ACEWM student members were unaware that they had access to a SSIG at no additional cost to their membership. This may indicate the need for distinction between a general ACEWM student membership and a SSIG membership, as well as better marketing strategies on behalf of the SSIG. One major benefit of SSIG membership is the opportunity to participate in the student-elected Council of Officers. As most students acknowledged that they would gain valuable skills, knowledge, and professional opportunities as a member, the SSIG could highlight various career and professional development skills obtained from holding an elected officer position. Participation in student government teaches students to be proactive, autonomous, and responsible. It also requires efficient time management skills as participation is voluntary and separate from their schoolwork.¹⁹ Students who hold an elected position can learn life skills of managing individuals and small teams, creating objectives along with methods to achieve them, and improving self-confidence as they recognize their role in the greater operation of their organization. The ACEWM may promote the benefits of holding a leadership position early on in a student's career as a direct benefit of SSIG participation.

5. Limitations

One limitation of this study was the use of convenience sampling because it reduced the generalizability of the findings. We were unable to expand the sample size to include all APTA student members as their contact information is private and requires a monetary fee to gain access. In future studies, it would be advantageous to pay the fee and have access to a larger and more diverse sample.

Another limitation was the use of an online questionnaire as our data collection method. A questionnaire limits the ability for following up on questions and does not allow for clarification of poorly written questions. For instance, question four of our survey asked participants about their expectations of the SSIG to promote a culture of clinical excellence. Clinical excellence is an ambiguous term, and it cannot be expected that all participants define it the same way. This may lead to poor interpretation of the question and can cause the data to be unreliable.²⁰ Future studies may be conducted to characterize the meaning of clinical excellence to all ACEWM members.

Finally, the survey questionnaire was developed by the investigators based on their discussions and perceptions of the student membership presence within the ACEWM and was not tested for validity and reliability. The survey questionnaire was limited to 10 questions to increase the likelihood of completion rate, as evidence has shown that participants receiving a shorter questionnaire are more likely to respond; however, more questions could have been asked.²¹

6. Conclusion

The results of this study may be used to guide the SSIG's future strategic planning for the development of quality content, improvement of the SSIG's perceived value, and delivery of meaningful benefits to SSIG members. There are various methods for meeting the needs of each SSIG member such as implementing a discussion board on the SSIG website, developing a mentorship program, offering live or recorded webinars on special topics, and hosting a panel discussion featuring a provider from each of the specialty areas embodied by the ACEWM. The SSIG can highlight the life skills gained from holding a leadership position on a student-governed council as another added benefit to SSIG membership. A position on the Council of Officers may be a catalyst for continued professional involvement and leadership. The findings of this study can be used to prioritize benefits offered not only to ACEWM SSIG members but to all APTA components as well as other health professional organizations. Further research is necessary to refine the specific type of content and offerings the SSIG should develop.

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Q1. I am aware that we have a student SIG within the ACEWM and there is no additional cost to join in. Q2. The student SIG is valuable to me as a student member.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree Strongly disagree Disagree Disagree
	 3. Neither Agree nor Disagree 4. Agree 5. Strongly Agree
Q3. It is important to interact with other stu- dents with a similar career interest as mine.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
Q4. The student SIG should promote a culture of clinical excellence.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
Q5. It is important to network with expert cli- nicians with a similar career interest as mine.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
Q6. The student SIG should offer more educa- tional programs on electrophysiology in the practice of physical therapy to supplement my DPT curriculum.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
Q7. The student SIG should offer more educa- tional programs on wound management in the practice of physical therapy to supplement my DPT curriculum.	 Strongly disagree Disagree Disagree nor Disagree Agree Strongly Agree
Q8. The student SIG should offer more educa- tional programs on biophysical agents in the	1. Strongly disagree 2. Disagree

Table 1. Blank ACEWM Student SIG Survey Questionnaire.

practice of physical therapy to supplement my DPT curriculum.	 3. Neither Agree nor Disagree 4. Agree 5. Strongly Agree
Q9. The student SIG should offer more educa- tional programs on diagnostic ultrasound in the practice of physical therapy to supplement my DPT curriculum.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree
Q10. I will gain valuable skills, knowledge, and professional opportunities by being a member of the student SIG.	 Strongly disagree Disagree Neither Agree nor Disagree Agree Strongly Agree