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Perceptions of College Students Regarding the Current Physical Therapy Profession and Professional Education Process

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Abstract

The purpose of this study was to determine how undergraduate college students, who are potential physical therapy students, perceive physical therapy as well as the new Doctor of Physical Therapy (DPT) degree. A survey form was created by the authors and was distributed to two universities in the central Arkansas area. Seven hundred and three forms were collected. Descriptive data and Pearson Chi Square (SPSS 10.0) were used for data analysis. Students thought physical therapy was a challenging (76%), physically demanding (72%), and well-paid (79%) health profession. The most commonly recognized interventions used by physical therapists were physical exercises (93%) and massages (77%). Over one-third of the surveyed students were not aware that physical therapy can relieve pain and promote health and well-being (35%). Only 40% of the surveyed students had knowledge of the doctor of physical therapy degree, among which most thought the public should have direct access to these practitioners (73%). Female students showed more awareness and interest in the DPT ($p < 0.01$). The results of this study suggest that students have a positive attitude toward physical therapy. College students also perceive the DPT as educating more competent practitioners. However, DPT programs should pursue efforts to advocate their programs not only on-campus but also off-campus. DPT programs and the American Physical Therapy Association (APTA) should promote more intensively to the public the changes that physical therapy is undergoing.

Introduction

In less than a century, the profession of physical therapy has evolved rapidly, extending the scope of its functions, treatments, and settings, as well as the responsibilities conferred to its practitioners by adapting to changing demographic, social, and political environments.^{1,2} Recently, the pursuit of autonomy through direct access, as well as the search for the patients' best benefits created an increased interest in an upgrade of the existing educational process to the DPT degree.³⁻⁵ The APTA supports this development by mentioning in its vision statement, "By 2020, physical therapy will be provided by physical therapists who are doctors of physical therapy."⁶

Both the educational and professional changes that occur in physical therapy need to be understood by the public to benefit the health care process. With the increase in the autonomy of physical therapists, the public has "more to say about from whom, when, and why health care is sought."² Understanding the public

perceptions and awareness of physical therapy's evolution would help the profession create more effective marketing strategies, knowing what misconceptions need to be corrected. Marketing the desirability of the profession is also very important to attract sufficient clinicians of the highest caliber.⁷ Recruitment of high standard prospective practitioners would go hand in hand with the APTA's promotional strategy, which considers members as the best advertising tool.⁸

In spite of the importance of knowing the public's opinion on physical therapy, no studies have been published in the United States on this specific topic. In an article, entitled "Matters of Perceptions: How Others View Physical Therapy", Eric Ries only mentioned two unpublished studies by the Department of Public Relations and Marketing at the APTA: a "National Probability Survey" conducted in 1986, as well as tracking studies of women aged 25-54, performed in 1993 and 1995.⁹ Results of those studies demonstrate a positive but incomplete image of the profession. Physical

therapy is only associated with rehabilitation and injury recovery, and the public lacks knowledge of the education required to practice the profession.

This study examined college students' perceptions of the current physical therapy profession and the professional education process. Undergraduate college students represent a key target because they could become patients as well as practitioners in the future. Also, students have been found to be socially representative of the general population in their assessments.¹⁰

METHOD

Undergraduate college students from two universities (one public and one private) in central Arkansas participated in this study. Both colleges were chosen for their locality, as well as diversity in size, funding, and programs offered. The public institution counts over 10,000 undergraduate students and possesses a DPT program. On the other hand, the private institution is a liberal arts college counting 1,100 undergraduate students, and does not offer any physical therapy degree.

The survey was created by the authors and was inspired by literature focusing on physical therapy and the DPT. It was distributed after approval by both institutions and authorization by the Institutional Review Board at the authors' school. The survey, composed of 20 questions, was divided into three sections: demographics, perceptions of the profession of physical therapy, and perception of quality of physical therapy services education, and expectations. The questions were composed of 16 multiple choices, and four rankings.

The surveys were distributed from April 18th to 22nd, 2004, to students in both schools. In the private school, one of authors held a display table in front of the school cafeteria and asked students who volunteered to complete the survey. In the public school, which is half mile away from the private school studied, authors obtained permissions for survey distribution from teachers in randomly selected classrooms in each major's colleges at each classification level before the survey started. During the survey week, one of the authors along with five undergraduate students who were from this public school and blind to this study, handed out the survey respectively to students in those randomly selected class who volunteered to complete

the survey as well. Both surveys in these two schools were anonymous without students' signatures.

Data were analyzed with SPSS version 10.0 (SPSS Inc., Chicago, IL). Pearson Chi Square (Asymp. Sig. 2 sided) was used to determine significant difference between different groups. The questions with the answers: "1. I agree 2. I disagree 3. I do not know", were recoded as "1. I agree 2. I do not know 3. I disagree", in order to neutralize the answers of subjects without opinion, while searching for significant differences between different factions of the student population.

RESULTS

Demographics

Seven hundred and three college students (59% female, 41% male) participated in this study. The repartition of the student according to their college was as follows: 505 (72%) from the public school and 198 (28%) from the private school. Subjects consisted of 196 freshmen (28%), 182 sophomores (26%), 182 juniors (26%), and 140 seniors (20%). Of the students surveyed, only a minority were pre-physical therapy majors (7%), while almost a third had experienced consulting a physical therapist (32%) in their lifetime.

Concerning the questions that had been recoded, no consistent significant differences were observed in the proportion of the participants, differentiated by gender, school attended, classification, or major, expressing no opinion. The only difference observed was between subjects who had consulted physical therapists and those who had not. Students who have visited a physical therapist were more likely to have an opinion ($p < 0.05$). One can think that this difference can be explained by the fact that students who have visited a physical therapist have acquired more knowledge through direct experience, which enables them more to create an opinion on the profession of physical therapy compared with students who have never consulted a physical therapist.

Education

Looking at the participants' overall response, 40% of the students had knowledge of the DPT degree. Most of the subjects thought the therapists with the DPT degree are the most competent and knowledgeable physical therapists (71%). Students were more aware of the DPT degree if they were female ($p < 0.01$), if they were more advanced in school (Figure 1) ($p < 0.01$), or if they had visited a physical therapist before ($p < 0.05$).

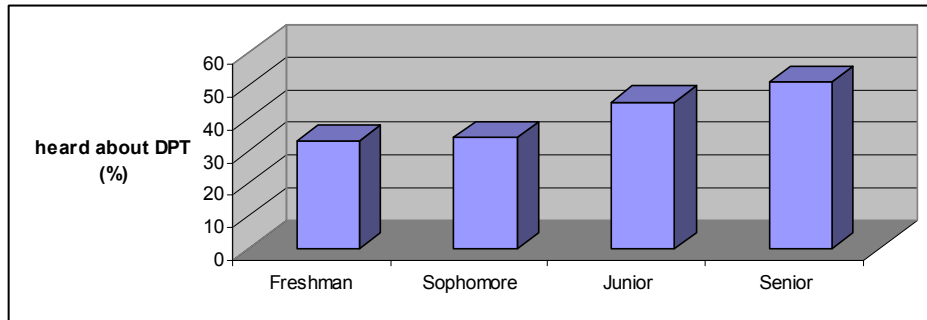


Figure 1. Awareness of DPT degree according to classification

Physical Therapy as a Career

The students surveyed perceived physical therapists as being professionals in high demand (59%). Physical therapy was thought by students as a physically demanding (72%), challenging (76%), and well paid (79%) health care profession. Compared with other health care professions such as physicians, chiropractors, and occupational therapists, physical therapists were considered the second most competent and knowledgeable (figure 2).

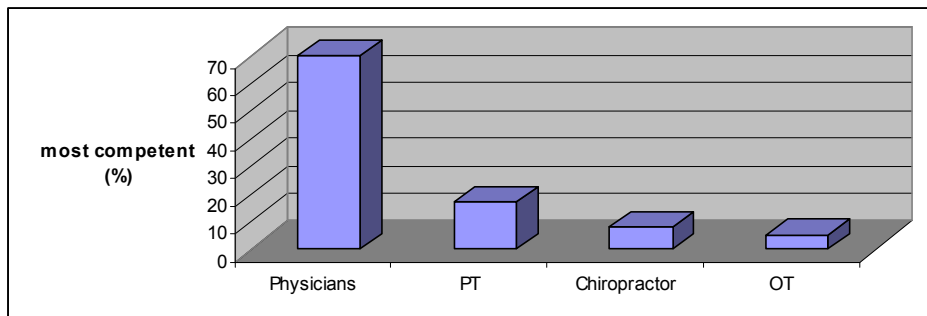


Figure 2. Students' perception of competence of different medical professionals

The first ranked were physicians with 70%, followed by physical therapists (17%), chiropractors (8%), and occupational therapists (5%). Compared to males, females had a higher regard for physical therapy, perceiving the profession as having more job opportunities ($p < 0.01$), being better paid ($p < 0.05$), and being more physically demanding ($p < 0.05$) (Figure 3). Students who are pre-physical therapy majors, as well as student who have consulted a physical therapists perceived physical therapy as having greater opportunities ($p < 0.01$), being better paid ($p < 0.05$), being more challenging ($p < 0.01$), and being more physically demanding ($p < 0.01$).

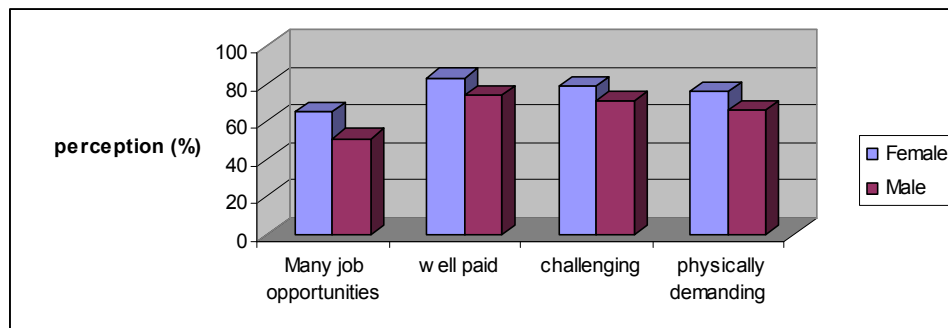


Figure 3. Students' perception of physical therapy as a career according to gender

Physical Therapy Services

The most commonly recognized interventions used by physical therapists were exercise (93%), massages (77%), electrical stimulations (47%), and ultrasound (21%) (Figure 4). Almost 85% of the surveyed students knew that physical therapy was able to improve mobility, but approximately half of the students did not know that physical therapy could also relieve pain (51%), as well as promote health and well being (35%). Students who had consulted a physical therapist connected the profession more with treatments such as electrical stimulations ($p<0.01$), and ultrasound ($p<0.01$), but less with exercises ($p<0.01$) and massages ($p<0.01$) than subjects who had never consulted a physical therapist.

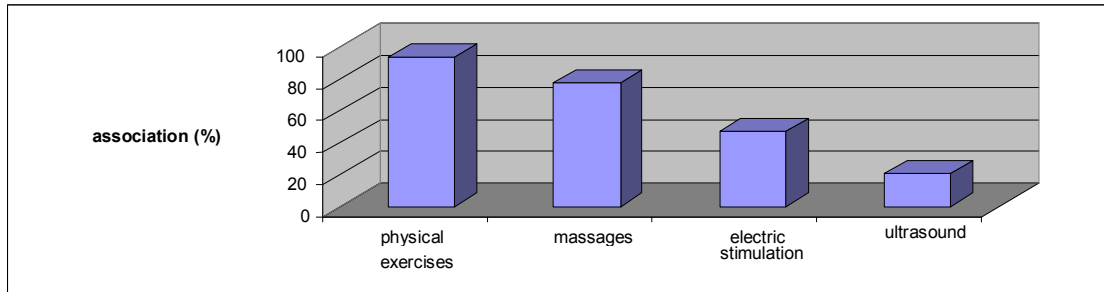


Figure 4. Students' perception of physical therapy interventions

Direct Access

A majority of the students believed that the public should have unrestricted access to physical therapists (61%) (Figure 5). Most of the participants thought direct access should be reimbursed by medical insurances (73%). Students who had consulted a physical therapist were more in support of direct access ($p<0.05$) and its reimbursement ($p<0.05$) than those who had never visited a physical therapist.

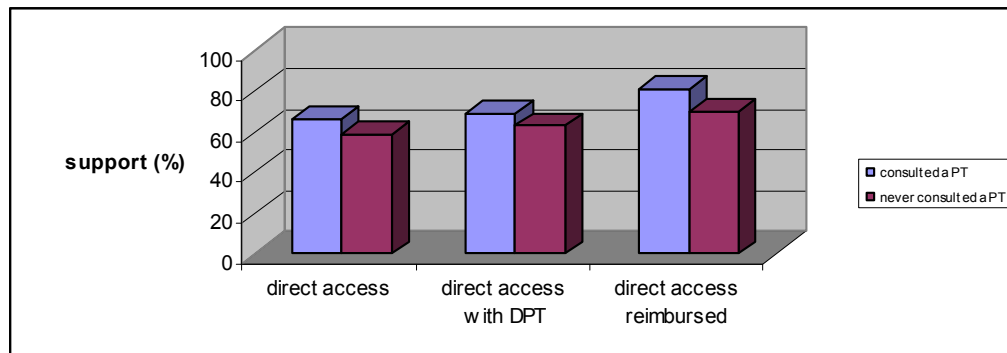


Figure 5. Direct access support according to past experience with a PT

Summary

Over seven hundred students completed the survey. Regarding education, less than half of the subjects had knowledge about the DPT degree. These students thought of physical therapy as a physically demanding, challenging, and well-paying career, with females having a higher regard and interest for the profession. The two most common interventions chosen to describe a physical therapist were exercise and massage, and one of its most common functions was to improve mobility. On the other hand, almost half of the students did not perceive therapists as performing functions such as relieving pain and promoting health and well-being. Finally, the majority of the subjects supported direct access and its reimbursement by medical insurances.

DISCUSSION

Education

Regarding education and the acceptance of the new doctoral level degree, the results give hope while showing the work that needs to be accomplished. The student population accepted doctoral education in physical therapy, perceiving it as producing more competent therapists. However, more than half the participants of the study had never heard about the doctor of physical therapy degree. One can presume that the public is scarcely aware of the existence of physical therapists with a clinical doctoral education. Such finding is alarming for the profession of physical therapy as well as for the clients themselves who are not aware of the quality of care that could be offered to them.

Physical Therapy as a Career

The positive results toward a career in physical therapy are also encouraging, but the profession should not be satisfied with such relatively optimistic appreciation. Physical therapy seems to be held in higher regard than many other medical professions; however, a substantial gap still exists in the students' perception of competence between physical therapists and physicians. A disparity is understandable between both professions as a result of the traditional differences in the educational process. However, with the advancement of physical therapy education to a clinical doctorate, the discrepancy should not be so pronounced.

Physical Therapy Services

Traditional treatments, such as physical exercise and massage, versus modern treatments, such as electrical stimulation and ultrasound, are still widely associated with physical therapy. In the same trend, historically established functions of physical therapy, such as improving mobility, are almost unanimously recognized as part of the practitioner's repertoire. On the other hand, important physical therapy functions, such as pain relief and the promotion of well-being are weakly associated with the profession. This revelation should be a strong motivation for the profession to better its image. Marketing should be a primary focus point for the development of the profession in upcoming years.

Direct Access

The information collected on the attitude of the students toward direct access is very encouraging. A majority of the subjects agreed on the proposition that patients should have unrestricted access to physical therapists. Even more importantly, in a time where discussion about the reimbursement of such services at the federal level is occurring, most of the participants in the survey approved of reimbursement by medical insurances for physical therapy services provided in a direct access environment. This indicates that direct access is not only desired by the profession, but also supported by the public, as represented by the student population. More than an overall perception by the student population, the study found a difference in attitude based on gender, years in college, and a previous experience with a physical therapist.

Gender

Female subjects had a better regard for the profession, which shows that physical therapy may continue to be a female dominant career. As of October 2005, the gender repartition of the APTA was 65.5% female and 34.5% male.¹¹ Such inequality regarding the gender of the practitioners took its root in the history of the profession in the United States, whose first national organization was a female association.¹² The gender repartition in this country is mainly historical and can hardly be explained by the nature of the work, considering that the same profession in other countries has a starkly different distribution. For example, in France, the profession

founded by the union of two occupations dominated by men, is unequally distributed with 42% female, and 58% male.¹³ The profession would likely benefit by changing this traditional attitude toward physical therapy and attracting more male students to physical therapy school. Therefore, if more students want to become physical therapists, the recruitment of students will have to be more selective, which consequently, in the long term, could increase the quality of services provided by having more competent practitioners. If more students want to become physical therapists, the recruitment of students will have to be more selective, which consequently, in the long term, could increase the quality of services provided by having more competent practitioners.

Student Classification

The time spent in college affected the way a person perceived the profession as well as his or her awareness of the DPT degree. Upper class students had more knowledge about the profession and the DPT. The action to promote physical therapy seems to be fruitful on campus, but the promotion should also take place off campus, such as at the high school level to inform future college students about the profession.

Previous Consultation with a Physical Therapist

Finally, a difference was observed between students who had consulted a physical therapist and students who had never visited a physical therapist. Practitioners can be satisfied that contacts between patients and clients foster a greater knowledge and higher regard for the profession among the public. Such information is a key indicator that an improved promotional strategy needs to be implemented. An effective marketing strategy might be to educate students and the public on the variety of the physical therapy's services available in hopes of having more people seeking the help of a physical therapist and experiencing the high quality and diversity of services provided.

Research validity

Looking at the validity of the study, bias regarding the representation of the subjects from the public college and the private college was considered insignificant after the demographics of those subjects were found to be similar to the population of the universities, and followed the same trend of repartition.

However, a bias appeared regarding students from the public institution, who were pre-physical therapy majors. About ten percent of the participants from this university were pre-physical therapy majors, while according to the advisor of the physical therapy department, about two percent of the student population was majoring in physical therapy. This difference, which might have been caused by the method of distribution, boosted minutely the overall perception of physical therapy and its educational process; because the physical therapy major was shown to have higher regard for and knowledge of the profession. The small difference over a small

category of subjects (only 49 students out of 703 participants reported as pre-physical therapy major) does not threaten the validity of the study, but must be considered when interpreting results regarding the overall perception of the students.

Future research should be concerned with the general public perception of physical therapy and its education. By better understanding how the profession of physical therapy is perceived, physical therapists can offer better services by educating patients. In addition, health care providers need to be aware of the patients' perception of their profession because it may impede the health care process.¹⁴ Physical therapists need to take into consideration the power of health beliefs and perceptions in the provision of health care services.⁵

Conclusion

This study demonstrated that the students interviewed demonstrated a relatively positive attitude toward the

profession of physical therapy, describing its practitioners as some of the most competent in the medical field. However, the students did not seem to keep up with the profession's transformation by associating physical therapy with only its traditional functions and treatments. Such results indicate that marketing strategies involving the interventions of physical therapists both on and off-campus would be a valuable tool to inform the public of the changes that the profession is undergoing, both to maximize the clients' benefits and to increase the desirability of the profession as a career. Many more studies, concerned with different subsets and areas, will be needed to understand the public perception of the profession of physical therapy and create an adequate marketing plan. However, these efforts are necessary in order to give the public the best health care services and for the profession to become a major and stable force in the health care market.

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