2005

Attitudes of Potential Employers in Southwestern Virginia Toward Hiring Newly Licensed Physical Therapist Assistants Who are Graduates of the Wytheville Community College Physical Therapist Assistant Program

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ATTITUDES OF POTENTIAL EMPLOYERS IN SOUTHWESTERN VIRGINIA TOWARD HIRING NEWLY LICENSED PHYSICAL THERAPIST ASSISTANTS WHO ARE GRADUATES OF THE WYTHEVILLE COMMUNITY COLLEGE PHYSICAL THERAPIST ASSISTANT PROGRAM

A Research Paper
Presented to the Graduate Faculty
Of the Department of Occupational and Technical Studies
At Old Dominion University

In Partial Fulfillment
Of the Requirement for the
Degree of Master of Science in Occupational and Technical Education

By

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August 3, 2005
This research paper was prepared by Julia S. Jackson King under the direction of Dr. John M. Ritz in OTED 636, Problems in Occupational and Technical Studies. It was submitted to the Graduate Program Director as partial fulfillment of the requirements for the Degree of Master of Science in Occupational and Technical Education.

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DATE: 8-5-05
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CHAPTER I
INTRODUCTION

In 2002, the New River/Mount Rogers Workforce Investment Board commissioned a needs assessment for the region of Virginia extending from Giles and Montgomery Counties westward to the Tennessee border. In that assessment, published in 2004, several factors were addressed that impacted the employment outlook for the region including an economic analysis, a workforce analysis, a compilation of the employer perspectives, an overview of residential perspectives and an occupational outlook. The assessment concluded that of the nearly 9400 job openings that were projected in the region for the next four years, positions in the healthcare industry were among the top six. (Virginia Economic Bridge, 2004, p. 10) Specifically identified in that subgroup was the profession of physical therapist assistant.

Wytheville Community College is a two-year publicly funded institution located in Wytheville, Virginia. It serves the region of Smyth, Wythe, Bland, Carroll, and Grayson Counties and the city of Galax in Virginia. Enrollment figures for 2003-2004 revealed a total student enrollment of 2500. Wytheville Community College offers a two-year professional physical therapist assistant program that draws students from an even larger catchment area that extends from Roanoke, Virginia, west to the Kentucky and Tennessee borders. This area of potential student draw closely mirrors the area studied in the needs assessment mentioned above. Current enrollment in the physical therapist assistant program is 28 students.
Prior to 2002, the physical therapist assistant program at Wytheville Community College was stable and growing. The employment outlook for physical therapist assistants was good in the region and elsewhere and the program had enjoyed established faculty and leadership. Success of graduates in passing the state licensure examination for physical therapist assistants was high and most graduates were easily able to find employment in an entry-level position of their choice.

Since 2002, faculty stability and student enrollment has fluctuated. A variety of factors have contributed to this unsettled state and the impact of the program's ongoing change on the employment prospects of recent graduates is essentially unknown. For this reason, the researcher, a new faculty member in the physical therapist assistant program, undertook this study to determine the attitudes of potential employers toward current and past graduates of the Wytheville Community College Physical Therapist Assistant Program.

Statement of the Problem

The problem of this study was to determine the attitudes of potential employers in southwestern Virginia toward hiring newly licensed physical therapist assistants who were graduates of the Wytheville Community College Physical Therapist Assistant program.

Research Goals

The research goals were five-fold:
1. Did employers of physical therapist assistants in southwestern Virginia feel positively toward graduates of the Wytheville Community College Physical Therapist Assistant program?

2. Would an employer prioritize a new graduate of the Wytheville Community College Physical Therapist Assistant Program over a new graduate of any other physical therapist assistant program, if all other applicable experience was equal?

3. What did the employers identify as the strengths of the Wytheville Community College Physical Therapist Assistant program new graduates?

4. What did the employers identify as the weaknesses of the Wytheville Community College Physical Therapist Assistant program new graduates?

5. Were employers more or less likely to hire a new graduate of the Wytheville Community College Physical Therapist Assistant program today than they were to hire a new graduate of the program in the past?

**Background and Significance**

According to the 2004-05 edition of The Occupational Outlook Handbook produced by the Bureau of Labor Statistics, the occupation of physical therapist assistant was projected to grow faster than the average through the year 2012. The long-term outlook for physical therapist assistant employment is good with anticipated increases in demand. (U.S. Department of Labor, 2004)
In the same report, the median annual income of physical therapist assistants was listed as $36,080 in 2002. (U.S. Department of Labor, 2004) The American Physical Therapy Association published a report listing the median income for physical therapist assistants according to a variety of factors including geographic location. The median annual income of a physical therapist assistant in the Middle Atlantic region for 2004 was $36,325. The median annual income for all physical therapist assistants with \( \leq 3 \) years of experience was $34,000 in 2004. (American Physical Therapy Association, 2005)

Because of the excellent employment prospects and the relatively high annual income of a physical therapist assistant, the field is very attractive to individuals seeking either a first career or a career change. The community college setting provides an ideal venue for the delivery of physical therapist assistant training programs because of the relatively low tuition costs and the location of the colleges close to the homes of the potential students. (Forde, 2002, p. 35) Wytheville Community College has seen a high interest in the physical therapist assistant program since the program’s inception in 1988. Traditionally the program has maintained a list of students awaiting admission to the physical therapist assistant program. Once admitted, the program maintained a high graduation rate and \( \geq 75\% \) of the graduates passed their Commonwealth of Virginia Physical Therapist Assistant Licensure Examination within two tries. (G. Overton, personal communication, January 24, 2005)

After becoming licensed, all graduates who sought employment as licensed physical therapist assistants were able to successfully find employment.
Most graduates sought employment in the southwestern Virginia area, but some relocated to other areas.

In direct consultations with Geneva Overton, PTA, Acting Program Head of the Wytheville Community College Physical Therapist Assistant program, and with Dr. Phyllis Ashworth, Vice President for Institutional Advancement and Effectiveness, it was determined that Wytheville Community College routinely surveys its graduates regarding their opinions about the quality of their educational experience and also regarding the graduates’ employment demographics. Periodically, the employer base is also surveyed to determine if Wytheville Community College is meeting the current educational demands of the workforce. Focused surveying of the employers of the physical therapist assistant graduates regarding the perceived preparation of these graduates has also been performed. Unfortunately, the data collected from these surveys has been limited owing to two factors: decreased rate of response to both the graduate and the employer questionnaires and limited permission granted to the college by the graduates allowing the college to contact the employers. For employers of graduates of the years 1998-2002 the total number of returned questionnaires was nine out of 59. This low rate of return has resulted in little ability to generalize any feedback. (Overton, personal communication, January 24, 2005; Ashworth, personal communication, February 9, 2005)

Anecdotal information within the regional employer base reveals generally positive opinions about graduates of the Wytheville Community College Physical Therapist Assistant program, but there are isolated instances of negative
feedback. There has been little feedback that would indicate moderate opinions. There is also no formally collected information dealing with specific perceptions of the strengths and weaknesses of the program's graduates.

The Wytheville Community College Physical Therapist Assistant Program was fully accredited by the Commission on Accreditation of Physical Therapy Education (CAPTE) in 2000. CAPTE is the accrediting body of the American Physical Therapy Association and has full responsibility to accredit physical therapy education programs as granted by the United States Office of Education and Council on Postsecondary Education. (Pagliarulo, 2001, p. 15)

This accreditation, which was granted for a period of 10 years, indicated that the Physical Therapist Assistant program at Wytheville Community College met all criteria as an appropriate education program, but it did not indicate if the graduates were meeting the specific needs of the employer base in southwestern Virginia. Among the criteria for accreditation by CAPTE is Program Assessment. Included in program assessment are subcategories that address whether—

the program is involved in an ongoing effort to determine the effectiveness of the program. . . including collection of information on a regular basis with input from multiple sources and uses a variety of methods to gather data. Such sources should include, but not be limited to, program graduates, their co-workers and/or employers, the students enrolled in the program and clinical education faculty....

(CAPTE, 2002, Appendix A, pp. 24-25)
Whereas the Wytheville Community College Physical Therapist Assistant Program did meet CAPTE’s criteria for ongoing assessment of the program’s effectiveness, the response rate to the assessment tool did not allow for generalization of responses in order to improve the effectiveness of the program. With a return rate of 15 percent over a five year period, little could be inferred from the feedback and therefore little could be done to improve the program. In addition, the questionnaire that was used was quite lengthy and consisted of 48 questions regarding specific skill competencies using a closed-form question format. Three questions at the end of the questionnaire used the open-form question format and asked for comments and suggestions for improving the program.

Given the findings of the New River/Mount Rogers Workforce Investment Board study that indicated the high need for physical therapist assistants in the southwestern Virginia area, and that also indicated that potential employers of all types in southwestern Virginia feel that education of the workforce was average, and the ability to attract qualified workers from outside of the geographical area was poor to very poor, it was incumbent upon the researcher to devise a method of determining in a statistically significant manner the perceptions of physical therapist assistant employers in southwestern Virginia. (Virginia Economic Bridge, 2004, p. 6) This information could then be used to revise or improve upon the existing physical therapist assistant program at Wytheville Community College in order to produce a potential employee that was better suited to meet the needs of the employer base.
Limitations

This study was limited to including the graduates of the Wytheville Community College Physical Therapist Assistant program for the graduating years 1997 – 2003 and the employers who initially employed those graduates.

Conclusions of this study were limited in application to the Wytheville Community College Physical Therapist Assistant program design and curriculum. They were also limited in generalization to the geographical region of southwestern Virginia, because employers in other regions were not surveyed and the practice of physical therapy varies from state to state.

Methodological limitations of this study were:

1. The ability to survey employer personnel who were familiar with the practice of the graduate Licensed Physical Therapist Assistants versus the need to survey personnel in the human resources department.

2. The ability to survey a statistically significant number of the employers of new graduates in the southwestern Virginia area.

3. The ability of the assessment instrument used to guide the interview to accurately assess the attitudes of employers toward new graduates of the Wytheville Community College Physical Therapist Assistant Program.

Assumptions

In analyzing the data collected in this research study, it was necessary to assume the following items:
1. The results of this study are not influenced by prejudices against the Wytheville Community College Physical Therapist Assistant program for some reason other than the perception of the quality of the Physical Therapist Assistant education program.

2. A variety of employment settings were surveyed, so that any one particular area of student performance strength or weakness was not disproportionately represented.

3. The results of this survey accurately reflected the true opinions and attitudes of employers toward the Wytheville Community College Physical Therapist Assistant Program.

**Procedures**

Graduates of the WCC PTA program for the years 1997-2003 were identified using WCC admissions records. The graduates were contacted and asked to identify their first employer as an LPTA. These employers were then contacted by telephone and surveyed regarding their attitudes toward the newly licensed PTAs. Data were then compiled and analyzed to determine general trends in the attitudes. Lists of the strengths and weaknesses of these newly graduated Licensed Physical Therapist Assistants were compiled for further study.

**Definition of Terms**

For the purposes of this study, the following terms were defined as follows:

PTA: Physical Therapist Assistant
LPTA: Licensed Physical Therapist Assistant; a graduate of an accredited PTA program who had successfully completed a state licensure examination and had been granted the title of licensed physical therapist assistant by the state agency controlling the practice of physical therapy.

WCC: Wytheville Community College

Graduate: a student who had successfully completed the coursework necessary to graduate from an accredited physical therapist assistant program and who had received a diploma or certificate indicating graduation.

Employer: a healthcare agency that employed PTAs to practice as physical therapist assistants within the guidelines established by the state's practice laws.

Southwestern Virginia: the area extending from the eastern-most boundaries of Craig, Montgomery, Floyd, and Patrick counties in Virginia west to the Virginia-Tennessee, Virginia-Kentucky, Virginia-West Virginia, and Virginia-North Carolina borders. This territory included 19 counties and four cities.

Attitudes: the specific opinions of the employers regarding the preparation of the graduates, the work ethic of the graduates, the acceptance of constructive criticism and recommendations for further education by the graduates, and the overall employee performance ratings of the graduates.
Overview of the Chapters

The profession of physical therapist assistant has been identified as a fast-growing high demand field both nationally and in the Mount Rogers/New River region of Virginia. In addition, the field pays well and allows employment in a variety of health care settings. Although there are three community college-based PTA programs in Virginia, the one at Wytheville Community College is the only one in southwestern Virginia. Historically, the WCC PTA program has been very popular, but little data exist to document whether or not the program is meeting the expectations of the PTA employers in the region. Attempts to collect this data have been largely unsuccessful, and therefore are of limited value in adapting the program. This study was undertaken to collect data via telephone survey regarding the attitudes of employers toward the hiring of newly-licensed recent graduates of the WCC PTA program. In the following chapter the current literature relevant to employer attitudes regarding newly licensed professionals and the ability of the community college to prepare healthcare professionals will be reviewed. In additional chapters the methods of the study and data analysis will be detailed, the conclusions gleaned from the data will be discussed, and the study will be summarized with recommendations for further study.
CHAPTER II
REVIEW OF THE LITERATURE

The Wytheville Community College Physical Therapist Assistant Program began in 1988 and had been a high-demand program since its inception. In a report commissioned by the New River/Mount Rogers Workforce Investment Board in 2002, the profession of physical therapist assistant was noted to be in the top six in demand in the southwestern Virginia area. (Virginia Economic Bridge, 2004, p. 10) This area also is served by the WCC PTA program. Traditionally the WCC PTA program had performed well, graduating a high percentage of admissions, seeing a high percentage of graduates pass the Virginia Physical Therapist Assistant Licensure Examination, and seeing most of these newly licensed PTAs employed in the area of their choosing. In the past three years instability in the faculty had caused some anecdotal concern about the quality of the education of the recent WCC PTA graduates; however employer satisfaction questionnaires routinely mailed by the college had not been returned at an adequate rate to determine significance of the individual responses. For this reason, the researcher undertook the responsibility of a survey of employer attitudes toward the graduates of the WCC PTA program using a telephone interview format.

This chapter describes literature relevant to the research problem of this study which was to determine the attitudes of potential employers in southwestern Virginia toward hiring newly licensed physical therapist assistants.
who are graduates of the Wytheville Community College Physical Therapist Assistant Program. It is divided into four sections:

1. Attitudes
2. Measurement of attitudes via survey/questionnaire and interviews
3. Employer attitudes
4. Attitudes of employers of Wytheville Community College Physical Therapist Assistant Graduates

Attitudes

Attitudes have been defined for the purposes of this paper as the specific opinions of the employers regarding the preparation of the graduates, the acceptance of constructive criticism and recommendations for further education by the graduates and the overall employee performance ratings of the graduates. The concept of attitudes has also been defined in the literature as the stands the individual upheld and cherished about objects, issues, persons, groups, or institutions. (Sherif, Sherif, & Nebergall 1965, p. 4.) Others have defined attitudes as a mental predisposition to act that was expressed by evaluating a particular entity with some degree of favor or disfavor. These attitudes generally focused on objects, people, or institutions. (Scholl, 2002, p. 1; Ajzen, 2001, p. 28; Petty, 1997, p. 611) An individual's attitudes were formed by interaction with others to whom he/she was attached emotionally and by exposure to dictums, pronouncements, and printed and spoken exhortations. (Sherif, et. al., 1965, p. 5)
Once an attitude was formed, the individual was no longer neutral and therefore did not have a positive or negative regard for the entity. This impacted the judgment or perception of the entity and colored the individual's evaluation and reaction to the entity. Sherif, Sherif and Nebergall (1965) reported that when an individual encountered the entity of his attitude, his/her behavior took on a consistent, characteristic, and predictable pattern. In fact, the expression of the behavior was what indicated that the individual had an attitude. Sherif, et. al. (1965) also noted that when the individual reacted to the entity, his/her reactions were evaluations or appraisals of that entity.

Scholl (2002) noted that attitudes were comprised of four components: cognition, affect, behavioral intentions, and evaluation. Cognition referred to the beliefs, theories, expectancies, cause and effect beliefs, and perceptions relative to the focal object or entity. Affect referred to the feelings with respect to the entity such as fear, liking, or anger. Behavioral intentions were the goals, aspirations, and the expected responses to the entity. Finally, evaluation was the injection of some degree of goodness or badness to an entity. Evaluation of an entity resulted as an interaction of cognition, affect, and behavioral intentions. Evaluation was most commonly what was stored in an individual's memory without the components of cognition, affect, or behavioral intention. (Scholl, 2002, p. 1)

Therefore, once an attitude was formed regarding an entity, the evaluation of that entity was stored in the memory of the individual. The individual's behavior toward that entity was based primarily upon the evaluation. Sherif, et.
al. (1965) further explored attitudes by identifying two features of psychophysical judgment:

1. When an individual had a definite attitude about an entity, he/she brought a set of evaluations to the consideration of that entity. Therefore there was a degree of acceptability and unacceptability to any given entity for which the individual had formed an attitude.

2. Attitudes varied from individual to individual and therefore the evaluation of the entity varied from individual to individual. (Sherif, et. al., 1965, p. 9)

Measurement of Attitudes

Attitudes could not be observed or measured directly. The attitude existed within the individual and resulted in some behavior. The behavior could be a sole result of an attitude, or the result of a complex interplay of attitude and situational circumstances. Therefore, attitude could not be accurately inferred from simply observing the behavior of an individual. (Sherif, et. al., 1965, p. 19)

There were several widely-accepted ways of measuring attitudes. The first was the Thurstone scale, developed in 1929. In this eleven point scale, the respondent was asked to indicate their level of agreement with a concept with the most unfavorable response (strongly disagree) being zero and the most favorable response (strongly agree) being at 10. Each interval was presumed to be equivalent. The test items were first administered to a panel of experts who, by virtue of their responses, determined the internal validity of the instrument. The test instrument was then administered to the test group and the results were
compared to those from the expert panel. (Sherif, et. al., 1965, p. 139; Ritz, 1999, p. 4; O’Connor, 2004, p. 3) Unfortunately, construction of such an instrument could be cumbersome due to the need to assemble the expert panel and conduct multiple trials of the study with the experts prior to administering the test on the subjects.

A second method was the Guttman scaling which was developed in the 1940s. In this method, the subject answered a series of questions using the format Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. The instrument questions, however, were mixed so that connections and similarities between items were disguised or less apparent. Irrelevant questions were interspersed among questions relevant to the study. The test was scored based on how closely the scores on the relevant questions related and if the scores were significant (above that which was expected by chance alone). (O’Connor, 2004, p. 4) The Guttman scaling was considered to be a one-dimensional test in that the positions on any issues should be cumulative. The subject should exhibit some degree of agreement on items of extreme and less-extreme attitudes. This test had been valuable in assessment of attitudes; however, there were areas of attitudes that did not fit the one-dimensional model. There were entities for which endorsement of the extreme position did not imply acceptance of a less extreme position. For instance, a person who was deeply anti-abortion for religious or moral reasons would not necessarily agree that banning partial-birth abortions was a sufficient step in the movement toward right-to-life. (Sherif,
et. al. 1965, p. 22) In the instances of multidimensional issues, use of a Guttman scaling was not sufficient to fully provide useful data.

The third method of assessing attitudes was developed in 1957 by Osgood, Suci, and Tannenbaum. The semantic differential scale, as this instrument had come to be known, consisted of concepts presented along with a set of evaluative scales the endpoints of which were designated by polar extremes such as Hot/Cold, Good/Bad, Valuable/Worthless. (Sherif, et. al., 1965, p. 23; Ritz, 1999, p. 4) This scale weighed the extremes of the position more heavily than the midranges, presuming that extreme evaluations were more intensely held than those in the middle. It was limited in that the researcher would gather data regarding the subject’s evaluation of a concept, but there was no information about how he/she appraised the various possible positions regarding the concept. (Sherif, et. al. 1965, p. 23)

A fourth method was the Likert scale, developed in 1932. In this method, the subject was asked to indicate his/her relative agreement with statements using a five-point rating scale: Strongly Agree, Agree, Undecided, Disagree, and Strongly Disagree. (Ritz, 1999, p. 4; O'Connor, 2004, p. 3) Rensis Likert, a strong proponent of social sciences research, often employed some version of his scale to measure attitudes relating to management and labor relations. In a study of organizational and performance characteristics of different management systems based on a comparative analysis, Likert had his subjects indicate their opinions regarding several organizational variables by marking a visual analog scale. This scale was only delimited by descriptors indicating a continuum of
An example of one of the questionnaire items was:

“To what extent are subordinates involved in decisions related to their work?”

The respondent then indicated on a visual analog scale with descriptors that ranged from Not at All, to Never Involved in Decisions; Occasionally Consulted, to Usually Are Consulted but Ordinarily Not Involved in the Decision Making Process, to Are Involved Fully In All Decisions Related to Their Work.

(Likert, 1967, p. 8)

The possible responses were then given numeric values ranging from zero for the least favorable responses to five for the most favorable responses, and the data were then tabulated.

Likert scales had become widely used for measurement of attitudes regarding everything from social ethical issues to the most recent movie release. Because of the relative ease in manipulating and analyzing the data, the Likert scale was favored by the novice researcher and it allowed quick data tabulation of attitudes toward a particular entity. In a review of studies measuring students attitudes toward statistics, Gal and Ginsburg found that Likert scales were used to the exclusion of all others, giving examples of both published and established instruments such as the Statistics Attitude Survey and the Attitudes Toward Statistics as well as instruments designed by the individual researcher using the Likert format. (Gal & Ginsburg, 1994, p. 4)
published an on-line resource for its graduate students on guidelines for writing and evaluating psychometrically defensible Likert-type survey items. (University of South Florida, 2005) In this document, the principles that assist in the mathematical and conceptual analysis of survey items were discussed in order to facilitate the research process for the university's graduate students.

Attitudes also had been measured using a variety of formats which could allow for the use of the instrument types discussed above. There were three main formats for assessing attitudes: the survey/questionnaire, the interview (either in person or via telephone), and the focus group. By far, the most commonly used format for attitude assessment was the survey/questionnaire. In a literature review of employer attitudes toward workers with disabilities and their ADA employment rights, Hernandez reviewed 37 studies dated between 1987 and 1999. In her review she found that 27 used commercially available surveys or surveys/questionnaires designed by the researchers. In the same group, there were ten interview studies, three quasi-experimental designs and two experimental designs. (Hernandez, 2000) The Maryland Higher Education Commission performed biennial follow-up surveys of its community college graduates via questionnaire. It surveyed all graduates but did not indicate in its report the rate of return on its questionnaires. (Maryland Higher Education Commission, 2004) The Director of Institutional Effectiveness at Southwest Georgia Technical College, Dr. Debbie Goodman, constructed a survey for potential employers of graduates of the SGTC Physical Therapist Assistant program. Survey items included the perceived need for the program and for
more PTAs to enter the job market in southwest Georgia. Results were not available. (Southwest Georgia Technical College, 2003)

A study commissioned by the Russell Sage Foundation and the Rockefeller Foundation, the Multi-city Study of Urban Inequality, included telephone and face-to-face interviews with several thousand managers in the Atlanta, Boston, Detroit, and Los Angeles urban areas to determine employment characteristics and employer attitudes toward racial and ethnic groups. Although the authors did not report on the response rate, they formed conclusions based on the relative response rates per item. (Moss & Tilly, 1999)

The Division of Vocational Technology of Palomar College conducted a biennial survey of employers of its vocational education graduates using an interviewing technique. The interviews were conducted by the College’s Social and Behavioral Research Institute. It was able to successfully interview approximately 80% of the employer base, and therefore felt the interview results were representative of employer attitudes and could be used to improve the vocational education division’s programs and services. (Brown & Barton, 2002, pp. 1, 7)

As was evidenced by the bulk of information regarding survey results from individual college programs regarding the satisfaction of their graduates with the education they received at their specific school, surveys were used rampantly in the educational field to provide feedback to the different institutions regarding the attitudes of their graduates. Most of these surveys were generalizable only to the institution conducting the survey. In many instances, the return rates on the
surveys were low or not discussed at all. In the instances that the results were positive, institutions frequently used these results as a public relations tool without admitting that the “overwhelming positive experience” was based on two students’ responses. One such example was the Walters State Community College website posting “Physical Therapist Assistant Students Earn 100 Percent Pass-rate on National Examination” dated February 19, 2002. In this posting/press release the Walters State students were commended for their high pass rate and the 100 percent pass rate for Walters State was compared to a national average of 80 percent. However, there was no indication in the posting of exactly how many Walters State PTA students took the exam (was it one or twenty?) which would make the achievement more relative, and there was no indication of how many Walters State PTA graduates needed to take the exam more than once to pass it. Also, this researcher noted that there is no national physical therapist assistant licensure examination, but rather the responsibility of licensure falls to the boards overseeing the practice of physical therapy in the individual states. (Walters State Community College, 2002) These types of omissions were common in much of the so-called research examining the attitudes of recent graduates of professional or vocational programs at community colleges.

**Employer Attitudes**

Attitudes of employers toward their employees were a subset of general attitudes. Again, the tools of survey/questionnaire and interview were
predominantly used with item forms ranging from Likert-type scales, to Thurstone eleven-point scales, to scales designed by the researchers.

In a study conducted by the Business Council of New York State, Inc., employers across New York State were surveyed regarding their attitudes toward newly hired high-school graduates, and graduates of two- and four-year higher education programs. The surveyed pool was 148 companies from across the state varying in size from fewer than 200 employees to greater than 1000 employees. In this study, the data indicated that graduates of community college programs ranked better in every area of technology skills than high school graduates, but not as well as graduates of four-year institutions. In the same study, employers expressed a willingness to use community colleges to provide training or upgrades to the skills of the current workers and they expressed a willingness to improve linkages between business and education, working with educators to define the competencies needed for the workforce of the future. (The Business Council of New York State, Inc., 1998)

In another survey conducted by the Australian Department of Employment and Workplace Relations in 2001, 7089 telephone interviews with the most senior person in charge of recruitment in workplaces across Australia were performed. The interviews were based on an instrument that was designed from relevant issues discussed in a series of focus groups with employers. In this study, employers were noted to assess an applicant's suitability for a position not merely on the skills and experience of the applicant, but also on the employer's attitude toward the applicant. The top three attributes that the employers
interviewed valued were reliability (66%), willingness to work (62%), and relevant work skills (53%). (Australian Department of Employment and Workplace Relations, 2001, p. 2) The employers further identified “personality” and “attitude” as important factors and reported that these traits could not be well assessed by examining the person’s work history or qualifications. The job interview and personal recommendations/references were more predictive of these traits. (Australian Department of Employment and Workplace Relations, 2001, p. 2) In the same survey, employers exhibited a generally negative attitude toward employment of younger people. The employers identified lack of work ethic or poor attitude, lack of desire to work, lack of responsibility, unrealistic sense of self-worth, the impact of social life on work attendance and priorities, and low self-esteem as characteristics of the younger working population. However, there was a segment of the sample that viewed younger workers favorably for reasons such as: “younger workers help to maintain the balance in your company (i.e., a mix of older and younger people), younger workers don’t have the baggage older people bring to the job, such as physical conditions, health problems, previous bad experiences, etc., and having younger people as employees gives the employer a good feeling from supporting youth and giving Australia’s young people a start.” (Australian Department of Employment and Workplace Relations, 2001, p. 7)

In a study of the role of the community college in expanding the supply of information technology workers, interviews were performed with three large high tech employers located in the vicinity of four community colleges being studied in
Alexandria, Virginia; Council Bluffs, Iowa; Sacramento, California; and Bellevue, Washington. In interviews with the hiring managers at these high tech employers, so-called "soft-skills" were stressed as important attributes of applicants and potential employees. These were described as teamwork, communication, and problem-solving skills. In the field of high tech workers, most of the hiring managers interviewed confirmed that their firms never recruited community college graduates. One reason was that the employers viewed the associate's degree awarded by the community colleges as a sign of a lack of motivation and they felt that if the students were serious enough about a career in information technology, they would pursue a bachelor's degree. However, they did concede that if the applicant had the necessary skills and job experience, the degree would not make a difference. (Lerman, Riegg, & Salzman, 2000, pp. 22-23) As an interesting aside, the Northwest Center for Emerging Technologies (NWECT) in Bellevue, Washington, was described in the study as being a nonprofit organization created to build partnerships between business, education, and government to create solutions for information technology education. The NW CET claimed that flexibility in curriculum was one of the reasons why community colleges were better suited than four-year colleges to train information technology workers. This did not seem to be the message of the information technology employers. In fact, even though most community college professional programs had an advisory board of approximately 10-20 local industry representatives who gave suggestions as to what the program should offer, apparently the employer's message to the information technology programs
was that only bachelor’s level applicants needed to apply. As concerning as this information was, it must be viewed in the light of the fact that it was generated by interviews with only four information technology employers (albeit major employers). (Lerman, Riegg, & Salzman, 2000, pp. 16-17) In a related article published on-line for Computerworld, David Bernstein profiled community college graduates and found that “The other thing employers say they like is the way community colleges are tailoring their curricula to meet the specific needs of area companies. Community colleges are eager to serve as job-preparations centers for local labor markets, while four-year schools like to emphasize lifelong skills and well-rounded intellects.” (Bernstein, 2001, p. 2) The article went on to say that local employers such as Spiegel, Inc., McCloud USA, and WorldCom were eager to hire community college graduates. Companies such as Lucent Technologies, Inc. had even donated equipment to community colleges to improve the facilities where the students were trained. Microsoft Corp. provided lesson plans, and Cisco Systems, Novell, Inc., and Oracle Corp. also had close ties to community colleges, which indicated positive attitudes toward community college graduates.

Finally, a 1997 survey of employers in Australia regarding their attitudes toward vocational education and training indicated that there should be more actual work experience content or work experience placements as part of a successful vocational education and training curriculum. (National Centre for Vocational Education Research, 1997, p. 1)
Attitudes of Employers of Wytheville Community College

Physical Therapist Assistant Graduates

Wytheville Community College routinely surveyed the employers of its graduates as a method of measuring its efficacy in meeting the workforce needs of the local community. These surveys were performed by the Office of Advancement and Institutional Effectiveness headed by Dr. Phyllis Ashworth. Surveys of the employers of the Physical Therapist Assistant Program graduates were performed for a two-year cohort of graduates and were performed two years after graduation. Permission of the WCC graduates was necessary to survey the employers. Employers were asked to rate the preparedness of the WCC PTA program graduate on 48 items that described specific work skills of a physical therapist assistant. Included in these items were knowledge of the scientific basis for physical therapy evaluation and treatment procedures, understanding of physical therapy treatment indications and contraindications, knowledge of physical therapy standards of practice, knowledge of applicable state and federal laws, understanding of the role of the PTA in the delivery of care, understanding of the levels of authority and the supervisory process, knowledge of specific treatment modalities and procedures, the ability to adjust or modify interventions within the scope of practice, the ability to document appropriately, the ability to respond appropriately in an emergency, the ability to recognize inappropriate delegation of responsibilities, the ability to carry out administrative responsibilities and participate in outcomes measurements, the demonstration of responsibility to meet the needs of the consumer, the ability to
advocate for the patient appropriately, the ability to participate in socially responsible organizations, and participation in professional development. The respondent was asked to rate the employee’s skills in these areas as Excellent, Good, Fair, Poor, or Not Applicable. The choices were then weighted by the researcher with Excellent being assigned a value of 4, Good 3, Fair 2, Poor 1, and N/A 0. The respondent was also given the opportunity via open-form questions to indicate suggestions or additional knowledge that should be added to the Physical Therapist Assistant program and to give any comments or suggestions for the improvement of the program. (WCC, 2001-2004, pp. 1-2)

Unfortunately, the return rate for the employer questionnaires was very low, and there had been no responses to the open-form questions for the survey years 2001-2004. There were three responses to the 2001 survey which asked questions about the 1998-1999 graduates, three responses to the 2002 survey of the 1999-2000 graduates, two responses to the 2003 survey of the 2000-2001 graduates, and one response to the 2004 survey of the 2001-2002 graduates. For this same time period there were 17 graduates in 1999, 17 graduates in 2000, 13 graduates in 2001, and 12 graduates in 2002. This indicated a response rate of 15%. Probable causes for this dismal return rate included the length and detail of the instrument, the time required to adequately fill it out, the probable lack of follow-up contact to encourage the employers to respond, and the possible perception by the employers that the information would have little impact on the program. The lack of response to the open-form items was possibly due to their location at the end of a lengthy survey and the general
nature of the questions. The respondent may have felt that by the time they had negotiated the previous items, there was little left to say about the skills of the employee and the need for specific areas of improvement in the program.

**Summary**

A review of the pertinent literature revealed four areas of focus: attitudes, measurement of attitudes, employer attitudes, and the attitudes of employers of graduates of the WCC PTA program. Attitudes were defined and the impact of attitudes toward the evaluation of an entity and the individual's behavioral response to that evaluation were discussed. Measurement of attitudes could be performed using a variety of methods including the Thurstone scale, the Guttman scaling, the semantic differential scale and the Likert scale techniques. The use of attitudinal measures incorporated into surveys/questionnaires and telephone or face-to-face interviews was also discussed. It was noted that attitudes as diverse as those of employers toward hiring disabled workers and those of employers toward employees of varied ethnic and racial backgrounds to the attitudes of a community toward the need for more physical therapist assistants have been measured by both survey and interview methods. Specific attitudes of employers toward new applicants and employees were reviewed with studies indicating that specific traits such as "soft skills" and work ethics were high priorities of potential employers. Studies also indicated that graduates of community colleges were met with mixed feelings in the employment world, with some employers preferring to hire applicants with four-year degrees and others preferring to work with two-year programs to provide employees that met their
current workforce needs. A review of the attitudes of the employers of Wytheville Community College Physical Therapist Assistant Program graduates revealed that the data is insufficient to draw conclusions or make generalizations.

The following chapter outlines the methods and procedures used to collect the interview data. The population sampled, the research design, the methods of data collection, and the statistical analysis of the data are detailed in context of the research question and goals.
CHAPTER III
METHODS AND PROCEDURES

To answer the research problem of determining the attitudes of potential employers in southwestern Virginia toward hiring newly licensed physical therapist assistants who were graduates of the Wytheville Community College Physical Therapist Assistant program, the researcher undertook a descriptive study, using telephone interviews to survey the attitudes of 31 employers of graduates of the WCC PTA program. In this chapter the population studied, the instrument designed and used, the methods of data collection, and the type of statistical analysis performed will be reviewed.

Population

Graduates of the WCC PTA program for the years 1997-2003 were identified using WCC admissions records. These graduates were contacted and asked to identify their first employer as an LPTA. The employers that were located in the southwestern Virginia areas extending from the eastern-most boundaries of Craig, Montgomery, Floyd, and Patrick counties west to the Virginia-Tennessee, Virginia-Kentucky, Virginia-West Virginia, and Virginia-North Carolina borders were chosen to participate in the study. This area included 19 counties and four cities and was home to 31 employers.

Research Design

The researcher designed a questionnaire script (See Appendix A) that included two Likert-style closed-form questions and six open-form questions. The questionnaire items were developed based upon the research goals identified by the researcher. Respondents were asked to give their opinions
regarding the strength and weaknesses of graduates of the WCC PTA program, and to elaborate on their rating of their attitudes toward the graduates of the WCC PTA program. The respondents were also asked if they would prioritize hiring of a new graduate of the WCC PTA program over a similarly qualified graduate of another PTA program. Likert-type items were assigned numerical values with Strongly Agree assigned the value of 5; Agree – 4; Undecided – 2; Disagree – 1; and Strongly Disagree – 0. Open-form questions were recorded.

**Methods of Data Collection**

Prior to performing the telephone interviews, the potential subjects were notified by letter of the intent of the researcher to contact them by telephone for the purpose of performing an interview. (See Appendix B) In the cover letter, the subjects were informed of the purpose of the study, the estimated length of the interview, the format of the interview, and their ability to refuse to participate in the study. Subjects were also informed of their rights and protection as human subjects.

Two weeks following the mailing of the letters, subjects were contacted by telephone. They were informed of the purpose of the call and given the opportunity to refuse to participate in the study. After obtaining their verbal consent, the respondents were then asked questions according to the instrument script, and answers were recorded, including a transcription of their responses to the open-form questions. The respondents were asked to elaborate on their responses to Likert-style items and were given full opportunity to respond to open-form questions.
Statistical Analysis

After data were collected, the Likert-type items were tabulated according to the values listed above. Frequencies of responses were analyzed and a mean and a median score were determined for each of these items. Responses to the open-form questions were sorted by question and listed under each appropriate research goal by frequency of occurrence.

Summary

In order to study the research problem of determining the attitudes of potential employers in southwestern Virginia toward hiring newly licensed physical therapist assistants who were graduates of the Wytheville Community College Physical Therapist Assistant program, the researcher undertook a descriptive study, using a telephone interview design. The population was identified as employers of new graduates of the WCC PTA program in southwestern Virginia and the interview instrument was described. Data collection methods were discussed and the procedure for notifying potential subjects and for performing the interview was outlined. Collected data were analyzed using standard measures of central tendency, namely the mean and the median, for numerical data and responses to open-form questions were documented by frequency of occurrence. Chapter IV outlines the results obtained via the telephone interviews including mean and median scores of Likert-type items and responses to open-form questions documented according to the frequency of the response.
CHAPTER IV
FINDINGS

The researcher undertook a study of the following research problem: determining the attitudes of potential employers in southwestern Virginia toward hiring newly licensed physical therapist assistants who were graduates of the Wytheville Community College Physical Therapist Assistant program. A telephone interview of 31 potential employers of new graduates of the WCC PTA program was performed and data were collected and analyzed according to the five research goals:

1. Did employers of physical therapist assistants in southwestern Virginia feel positively toward graduates of the Wytheville Community College Physical Therapist Assistant program?

2. Would an employer prioritize a new graduate of the Wytheville Community College Physical Therapist Assistant Program over a new graduate of any other physical therapist assistant program, if all other applicable experience was equal?

3. What did the employers identify as the strengths of the Wytheville Community College Physical Therapist Assistant program new graduates?

4. What did the employers identify as the weaknesses of the Wytheville Community College Physical Therapist Assistant program new graduates?

5. Were employers more or less likely to hire a new graduate of the Wytheville Community College Physical Therapist Assistant program
today than they were to hire a new graduate of the program in the past?

This chapter lists the results of this telephone survey in sections according to the five research goals listed above. Likert-type items have been assigned numerical values as follows: Strongly Agree assigned the value of 5; Agree – 4; Undecided – 3; Disagree – 2; and Strongly Disagree – 1. Using these values, mean and median scores for the Likert-type items were calculated as well as frequencies of each response. Elaborations on Likert-type items and responses to open-form questions were listed by frequency of occurrence.

**Interview Response Rate**

Thirty-one employers of graduates of the WCC PTA program were identified and sent letters explaining the purpose of the research and requesting their participation in the telephone survey to be conducted approximately two weeks from the receipt of the letter. Thirty-one employers were contacted by telephone, Of the thirty-one contacted, one (3.2%) declined participation, citing time constraints, and one (3.2%) reported having insufficient experience with WCC graduates as an employer because of being new to the managerial position. Therefore, twenty-nine (93.5%) employers responded to the interview.

**Research Goal 1: Did employers of physical therapist assistants in southwestern Virginia feel positively toward graduates of the Wytheville Community College Physical Therapist Assistant program?**
This goal was assessed by a Likert-type response to the statement, “As an employer, I generally feel positively toward the graduates of the Wytheville Community College Physical Therapist Assistant Program.”

There were eight respondents who strongly agreed with this statement, comprising 27.6% of the respondents. The majority of respondents, thirteen (44.8%) agreed with the statement. Two respondents (6.9%) were indifferent or undecided, four respondents (13.8%) disagreed with the statement, and one respondent (3.4%) strongly disagreed (See Table 4.1). The mean score for this item was 3.69, which, when extrapolated to the values assigned each choice, reveals an average opinion of Agree. The median score for this item was 4 (Agree).

Table 4.1: Results of “I feel positively toward the graduates of the WCC PTA program”

<table>
<thead>
<tr>
<th></th>
<th>Number responding</th>
<th>% of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree:</td>
<td>8</td>
<td>27.6%</td>
</tr>
<tr>
<td>Agree:</td>
<td>13</td>
<td>44.8%</td>
</tr>
<tr>
<td>Undecided or Indifferent:</td>
<td>2</td>
<td>6.9%</td>
</tr>
<tr>
<td>Disagree:</td>
<td>4</td>
<td>13.8%</td>
</tr>
<tr>
<td>Strongly Disagree:</td>
<td>1</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Of those responding that they strongly agreed with the statement, five (62.5%) indicated that they had positive experiences with the graduates who they employed. They characterized the graduates as “eager”, “well-educated”, “ready
to enter the field”, “doing a good job”, and as “able to jump right in”. Three respondents (37.5%) who strongly agreed had no elaboration.

Of those surveyed who agreed with the statement, eight (61.5%) reported believing the students were “well-prepared”, “well-rounded”, “well-qualified”, “solid”, “very knowledgeable”, and that they were pleased with the quality of the work of the WCC graduates. One employer (7.7%) reported that they felt the program had improved over the last four-five years, but they were concerned with the lack of consistency and the recent amount of faculty turn-over and change in the program leadership. One employer (7.7%) reported that he “used to strongly agree with the statement, but now it was closer to undecided” because in the past several years he felt there was a decrease in the motivation and desire of the students. Three respondents (23.1%) who agreed with the statement had no elaboration.

Of those responding that they were indifferent to the statement, one (50%) stated that they were having problems with the LPTAs who were graduates of the program and the employer was frustrated to the point of wanting to dissolve the LPTA positions at that facility and to create a PT position instead. One respondent (50%) verbalized concerns about the admissions policy of the program and the ensuing waiting list. This employer listed concerns that lesser qualified applicants were being admitted before more qualified applicants due to their placement on the waiting list. The employer also was concerned with graduates who could not pass their state licensure examination and who seemed to enter the field poorly prepared and “just not knowing information they should
know." This employer strongly recommended some type of selective admission policy to ensure that applicants admitted to the program were qualified to enter the profession.

Those who disagreed with the statement cited bad experiences with individual graduates as influences on their opinion. Three (75%) felt that the recent graduates were not as well prepared as students from other programs or as well prepared as earlier students from the WCC PTA program. These respondents set an average of approximately five years ago as when they began to perceive a decrease in the quality of the student's preparation. One respondent (25%) strongly voiced concern over the poor professional behavior of the graduates and over their poor interviewing skills.

One respondent strongly disagreed with the statement. That employer felt that the quality of the graduates and their knowledge base had deteriorated significantly to the point that the employer was unsure that the graduates were qualified to be in a clinical setting.

Research Goal 2: Would an employer prioritize a new graduate of the Wytheville Community College Physical Therapist Assistant Program over a new graduate of any other physical therapist assistant program, if all other applicable experience was equal?

This goal was assessed by a Likert-type response to the statement, “As an employer, I would prioritize a new graduate of the WCC PTA program over a new graduate of another program, if all other qualifications are equal.”
Eight respondents, 27.6%, indicated that they strongly agreed with this statement. Seven respondents (24.1%) agreed, and the majority of respondents were Undecided or Indifferent (12 or 41.4% of the respondents). Two interviewees (6.9%) disagreed with the statement, and no one indicated strong disagreement with the statement (See Table 4.2). The mean score for this item was 3.86, which, when extrapolated using the assigned values for each option, resulted in an average opinion of Agree. The median score for this item was 3 (Indifferent or Undecided).

Table 4.2: Results of “I would prioritize hiring graduates of the WCC PTA program”

<table>
<thead>
<tr>
<th>Number responding</th>
<th>% of response</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strongly agree:</td>
<td>27.6%</td>
</tr>
<tr>
<td>Agree:</td>
<td>24.1%</td>
</tr>
<tr>
<td>Undecided or Indifferent:</td>
<td>41.4%</td>
</tr>
<tr>
<td>Disagree:</td>
<td>6.9%</td>
</tr>
<tr>
<td>Strongly Disagree:</td>
<td>0%</td>
</tr>
<tr>
<td>Did not answer</td>
<td>3.4%</td>
</tr>
</tbody>
</table>

Many respondents who chose to elaborate on this item either had a common desire to employ residents and natives of southwestern Virginia or they hired based on the individual qualifications of the applicant rather than the school from where the applicant graduated.

Of those respondents indicating they strongly agreed with the statement, five (62.5%) indicated that their main rationale for hiring WCC PTA graduates
was the fact that the graduates were from the region they served. Two of those who strongly agreed (25%) stated that the quality of the educational preparation was their main influence in hiring WCC graduates. One of the respondents who strongly agreed (12.5%) indicated that familiarity with the WCC PTA program was the influencing factor in hiring those graduates. One respondent who strongly agreed (12.5%) reported that he would prefer to hire a new graduate and train them in the therapeutic procedures utilized at that facility over hiring an experienced LPTA who would need to be retrained, and possibly “untrained”.

Of those respondents stating they agreed with the statement, four (57.1%) indicated a strong preference for hiring “local people”. One (14.3%) indicated that familiarity with the program was the reason they would prefer a WCC PTA graduate, and one (14.3%) indicated that the deciding factor was the ineffectiveness of print recruitment advertising versus contacting the college for hiring leads. Additionally, one employer (14.3%) reported that since WCC was the closest PTA program to their facility, they rarely had applicants from other programs.

Of those who indicated they were undecided or indifferent to the statement, six (50%) reported that hiring was based on individual characteristics and interviews versus being based on the program from which the applicant graduated. Four (33.3%) had no elaboration or had not hired personnel, one (8%) reported not having hired anyone except WCC graduates and therefore being unaware of the qualifications of graduates of other programs, and one (8%)
felt that students from the WCC PTA program were not as strong as students from other programs.

Of those who disagreed with the statement, one (50%) listed lack of professional behaviors such as tardiness, absenteeism, and failure to notify superiors of absences, among others, as a problem specific to graduates of the WCC PTA program. One respondent (50%) indicated that the recent graduates of the WCC PTA program were not on par with those from another local program, and that they were not as well prepared.

One respondent reported being unable to answer the question because the hiring structure at that facility did not utilize clinician input in the interview and hiring process, although the respondent was identified as the person best able to answer questions regarding the strengths and weaknesses of the WCC PTA program graduates.

Research Goal 3: What did the employers identify as the strengths of the Wytheville Community College Physical Therapist Assistant program new graduates?

Responses to this open-form question were varied, and at times were very similar to the responses to Research Goal 4 which identified the perceived weaknesses of the graduates. The responses were grouped into five categories by basic strength:

1. Knowledge base: Ten (34.5%) of the respondents identified knowledge base, theoretical base, and clinical skill level as strengths of the graduates of the WCC PTA program. The students were characterized as well-
rounded in general knowledge and exposure, capable in clinical documentation and modalities, competent with orthopedic skills, possessing good knowledge of anatomy and therapeutic exercise, and having good hands-on skills.

2. Work ethic, employee “soft skills” and professionalism: Nine respondents (31%) noted that the graduates of the WCC PTA program showed a good work ethic, were “cooperative”, “eager”, “had good initiative to tackle assignments, projects, and duties”, and understood the legal aspects of practice and knew when it was appropriate to notify their supervising therapist, thereby assuring that therapist that the LPTA could practice safely and the patients were under good care. “Soft skill” areas of strength included a willingness to learn, good time management skills and good use of “down” time including identification of potential patient referrals, and the ability to practice in a variety of settings competently. Employers noted that graduates of the WCC PTA program were able to adapt to unusual practice settings and were able to assume a fair amount of independence in therapy settings such as home health, where supervision was not immediately available. One respondent identified the WCC graduates as “more mature because they have had previous work experience and understand what is expected of an employee.”

3. Seven respondents (24.1%) identified the ability of the students to easily interact with the patients as a strength. These respondents in unison reported that the graduates were from southwestern Virginia and understood the culture and the people better than LPTAs from outside of the region. They cited the ability to build a rapport with the patients and knowledge of the culture,
churches, industry, and people and how those factors interacted within the patient population.

4. One respondent (3.4%) felt that the primary strength of the program was in admitting qualified people who were “right” for the profession.

5. Four respondents (13.8%) reported they could not identify any common strengths of the WCC PTA program graduates, but rather had only noticed strengths of individual graduates.

Research Goal 4: What did the employers identify as the weaknesses of the Wytheville Community College Physical Therapist Assistant program new graduates?

Responses to this open-form question were also varied and could be divided into similar categories to the responses to Research Goal 3.

1. Knowledge base: Fourteen respondents (48.3%) identified some type of general knowledge deficit in the graduates of the WCC PTA program. Identified as deficient were the graduates’ knowledge of wound healing, orthopedics, therapeutic exercise, anatomy, physiology, kinesiology, biomechanics, adaptive equipment, the theoretical basis of different pathological conditions, medical triage, treatment techniques of lower level functioning patients such as patients with severe stroke or Alzheimer’s Disease, and basic assessment skills such as manual muscle testing and range of motion measurement. Some respondents felt that, in general, the Wytheville program did not seem to progress as quickly as other PTA education programs they were familiar with.
2. Professional behavior and work ethic: Five respondents (17.2%) identified weaknesses or an absence of a work ethic and professional behaviors, citing experiences where the WCC graduate showed poor ability to interview and to “sell themselves” to the employer. These respondents noted an inability to multitask or to cope with stressful situations, a poor commitment to the profession of physical therapy, and difficulty in taking initiatives or showing self-directed learning. Respondents identifying weaknesses in this area also noted that the societal norm in southwestern Virginia had produced LPTAs who were hesitant to be dynamic and confident in their approach to the profession. They felt the LPTAs were reticent and submissive, and did not project a professional demeanor that would be appropriate in other geographic areas. The employers were quick to admit, however, that this behavior was not a function of the training at WCC, but was a culturally ingrained attitude. One respondent reported that he felt that the students were very unprepared to walk into a patient’s room and begin the patient-therapist interaction, seeming to “freeze up” instead of engaging the patient.

3. Business/Practice issues: Four respondents (13.8%) identified knowledge of the business of physical therapy as an area of weakness. These employers identified specific areas of deficit as understanding and complying with Medicare/Medicaid regulations, understanding billing for services, knowing the impact of payor sources on practice in different practice settings such as skilled nursing settings and hospitals, being aware of prospective payor systems and the administrative, “real world” aspects of physical therapy.
4. Documentation skills: Three respondents (10.3%) reported that the graduates of the WCC PTA program had deficits in documentation skills including the ability to document the medical necessity of physical therapy and the ability to document objective treatment information.

5. One respondent (3.4%) reported that a consistent weakness of the graduates of the WCC PTA program was their use of improper grammar and vocabulary. This employer noted that while this type of conversational English was appropriate in interacting with many of the patients, it was a glaring detraction when speaking with peers and other members of the health care team. Once again, the employer acknowledged that the speech patterns of the graduates were not so much a reflection of the WCC PTA program as they were a reflection of the graduates' backgrounds and basic educations.

6. One respondent (3.4%) reported that recent experience indicated that the graduates seemed unsure that being a PTA was the career they wanted.

4. Six respondents (20.7%) reported they could identify no weaknesses of the WCC PTA program graduates.

Research Goal 5: Were employers more or less likely to hire a new graduate of the Wytheville Community College Physical Therapist Assistant program today than they were to hire a new graduate of the program in the past?

Of the 29 respondents, nine (31%) reported they were more likely to hire a new graduate of the WCC PTA program now than in the past. When asked to elaborate, those who chose to do so indicated that positive hiring experiences
with previous graduates, confidence in and familiarity with the program and its faculty, and perceptions of improvement in the program were influences in their preference. Again, employers indicated a desire to hire employees from a local applicant base. One employer cited a preference to hire LPTAs directly after graduation in order to provide more in-depth on-the-job training without the need to have the employee “unlearn” previous treatment techniques. Two respondents indicated that they enjoyed being able to contact the school directly or in person to get hiring leads for LPTA openings.

Nine respondents (31%) reported that they were less likely to hire a new graduate of the WCC PTA program now than in the past. Of those responding who chose to elaborate, most attributed their attitude to a perception that the quality of the graduate’s knowledge base and clinical skill level had deteriorated from those of the LPTAs who graduated ≥ 5 years ago. Two (22.2%) cited poor impressions of the graduates’ professionalism. Two (22.2%) reported that they preferred to hire experienced LPTAs over new graduates now, and two (22.2%) reported that, as an employer, they had concerns over the amount of change that had occurred in the program personnel over the last several years and they felt the lack of stability had a “ripple” effect in the quality of the preparation of the graduates.

Ten respondents (34.5%) reported that they were neither more nor less likely to hire a new graduate of the WCC PTA program now than in the past. Of the respondents who wished to elaborate on this position, four (40%) reported that their hiring decisions were based more on individual applicants and less on
the school of origin. Four (40%) reported generally rating the program highly in its ability to prepare students. They commented that they generally felt the graduates had a good work ethic and wished to succeed in the profession of physical therapy. One (10%) reported that they had never been averse to hiring graduates of the WCC PTA program, therefore they could not say that they were more likely to hire now, and they certainly were not averse to hiring current graduates. One (10%) reported looking to WCC as a source of employees, noting that as soon as a position opened in their facility, they contacted the program to determine if any graduates were available. One respondent (10%) reported they were not more or less likely to hire a graduate now because they had not needed to hire anyone for a long period of time and therefore had no current impressions of the graduates. One respondent (10%) indicated that they were new in this hiring position and could not make an informed response to this item.

**SUMMARY**

The findings of the telephone survey of employer attitudes toward the new graduates of the Wytheville Community College Physical Therapist Assistant Program included opinions of the graduates of the program, opinions regarding hiring of the graduates of the program, estimations of the graduates’ strengths and weaknesses, and indications of the likelihood of hiring new graduates of the program. In the subsequent chapter, the results of this survey will be analyzed for trends and patterns, conclusions will be drawn based upon the data and the research questions will be answered according to the responses given.
Recommendations for departmental and curricular revisions will be made based upon the conclusions drawn from the data, and recommendations for further study will be made.
CHAPTER V
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

By means of telephone interviews, thirty-one employers in southwestern Virginia were surveyed to determine the answers to the research problem and research goals. A brief summary of the study will be presented followed by the conclusions drawn based on the research goals. The chapter ends with recommendations based upon the results of the telephone interviews.

Summary

In a 2002 needs assessment commissioned by the New River/Mount Rogers Workforce Investment Board, the profession of physical therapist assistant was identified as among the top six professions in projected job openings in the southwestern Virginia area. The Wytheville Community College Physical Therapist Assistant program, which serves this geographic region, had graduated physical therapist assistants since 1986. Although prior to 2002, the WCC PTA program was growing and stable, after 2002 there had been several changes in faculty and the student enrollment had fluctuated. There was some anecdotal data indicating employer attitudes toward the WCC PTA program following these changes, but routine surveys of employers of the WCC PTA program graduates conducted by the college had been of limited benefit owing to the fact that few were completed and returned, and also to the fact that graduates had not given consent to WCC to survey their employers. For this reason, the researcher, a new faculty member in the program, undertook a descriptive study of the attitudes of regional employers toward the graduates of the WCC PTA program.
The research problem of this study was to determine the attitudes of potential employers in southwestern Virginia toward hiring newly licensed physical therapist assistants who were graduates of the Wytheville Community College Physical Therapist Assistant program. There were five research goals identified:

1. Did employers of physical therapist assistants in southwestern Virginia feel positively toward graduates of the Wytheville Community College Physical Therapist Assistant program?

2. Would an employer prioritize a new graduate of the Wytheville Community College Physical Therapist Assistant Program over a new graduate of any other physical therapist assistant program, if all other applicable experience was equal?

3. What did the employers identify as the strengths of the Wytheville Community College Physical Therapist Assistant program new graduates?

4. What did the employers identify as the weaknesses of the Wytheville Community College Physical Therapist Assistant program new graduates?

5. Were employers more or less likely to hire a new graduate of the Wytheville Community College Physical Therapist Assistant program today than they were to hire a new graduate of the program in the past?
A review of current literature concerning the research problem indicated four main divisions of the literature:

1. Literature pertaining to attitudes
2. Literature pertaining to measurement of attitudes via survey/questionnaire and interviews
3. Employer attitudes
4. Attitudes of employers of Wytheville Community College Physical Therapist Assistant Graduates

Attitudes were defined and the cognitive processes of attitudes discussed. A review of attitude measurement using Thurstone scales, Guttmann scaling, semantic differential scales, and Likert scales was presented. Surveys of employer attitudes were examined and it was noted that attitudinal measurements of employer attitudes toward high school graduates, community college graduates, graduates of four-year institutions, and entry-level employees were common. Attitudinal studies of specific types of graduates from information technology graduates to statistics graduates were also common. A review of the available information from surveys distributed by WCC to the employers of graduates of the PTA program was also described.

Employers of graduates of the WCC PTA program were identified by contacting graduates of the program from 1997-2003 and asking them to identify their first employer as an LPTA. Thirty-one employers were identified in a southwestern Virginia area which extended from the eastern-most boundaries of Craig, Montgomery, Floyd, and Patrick counties west to the Virginia-Tennessee...
Virginia-Kentucky, Virginia-West Virginia, and Virginia-North Carolina borders. These employers were notified of their selection to participate in the telephone survey by letter which explained the purpose of the study as well as emphasizing the anonymity of responses and the ability of the employer to refuse to participate at any time. Twenty-nine employers responded to the telephone interview.

Responses to the survey items were sorted by research goal. Results were tabulated on the Likert-type items with each option being assigned a numerical value: Strongly Agree assigned the value of 5; Agree – 4; Undecided – 3; Disagree – 2; and Strongly Disagree – 1. Responses to open-form questions were recorded and grouped according to frequency of response.

Conclusions

Research Goal 1: Did employers of physical therapist assistants in southwestern Virginia feel positively toward graduates of the Wytheville Community College Physical Therapist Assistant program?

Of the twenty-nine respondents, twenty-one (72.4%) indicated that they either strongly agreed or agreed with the statement. This indicates that over two-thirds of the employers in southwestern Virginia feel positively toward the program. Most concurred that the graduates were well-rounded and well-prepared. Five respondents (17.2%) disagreed or strongly disagreed with the statement, indicating that there a component of employers who had a poor perception of the program. During the data collection, it was interesting to note that these employers who did not feel positively toward the program were
especially strong in their opinions that the quality of the graduates had significantly deteriorated in the past ~5 years compared to the employers who had positive perceptions of the program who were less emphatic in their opinions. Therefore, the majority of respondents indicated a positive opinion of WCC PTA program graduates, although those who did not have a positive opinion tended to be very adamant in their negative views.

**Research Goal 2: Would an employer prioritize a new graduate of the Wytheville Community College Physical Therapist Assistant Program over a new graduate of any other physical therapist assistant program, if all other applicable experience was equal?**

Fifteen of the respondents (51.7%) indicated that they strongly agreed or agreed with this statement. They indicated that a desire to hire graduates who were natives of southwestern Virginia or that a familiarity with the WCC PTA program were their main influences in their preference for WCC PTA program graduates. Twelve respondents indicated an indifferent or undecided preference for WCC PTA program graduates because they reported preferring to hire employees based on individual characteristics versus on the merit of the graduating school. Two respondents indicated they would not prioritize WCC PTA program graduates based on their perception that the graduates showed poor professional behavior and poor academic preparation. Therefore, the majority of respondents would either favor a WCC PTA program graduate or they would prefer to consider the individual qualifications of the applicants.
Research Goal 3: What did the employers identify as the strengths of the Wytheville Community College Physical Therapist Assistant program new graduates?

Knowledge base was considered to be a strength by 34.5% of the respondents. Work ethic, employee "soft skills", and professionalism was identified by 31% of the respondents and interaction with people from the southwestern Virginia area was identified as a strength by 24.1% of the respondents. An area of program strength was indicated as admission of qualified people. Therefore, the most commonly identified strength was the knowledge base of the student. It was notable that of the respondents who identified patient interaction skills with the people of southwestern Virginia as a strength, the comments were nearly unanimous in their perception of the ease with which the graduates of the WCC PTA program built rapport with their patients.

Research Goal 4: What did the employers identify as the weaknesses of the Wytheville Community College Physical Therapist Assistant program new graduates?

The most commonly identified weakness of the graduates of the WCC PTA program was knowledge base, which was indicated by 48.3% of the respondents. Other areas of weakness included professional behaviors and work ethic, indicated by 17.2% of respondents, business and practice issues identified by 13.8% of respondents, documentation and verbal communication
skills indicated by 10.3% and 3.4% of respondents, respectively, and commitment to the profession of physical therapy (3.4%).

It is interesting to note the dichotomy that existed between the strengths and weaknesses. Whereas 34.5% of the respondents felt that a good general knowledge base was a strength of the WCC PTA program graduates, 48.3% of the respondents identified multiple weaknesses in specific areas of knowledge. Whereas 31% of the respondents identified work ethic, professionalism, and employee “soft-skills” as an area of strength, listing several examples of graduates performing above and beyond the duties outlined in their job descriptions, 17.2% of the respondents were equally vocal in their belief that WCC graduates had abysmal professional standards and work ethics.

Research Goal 5: Were employers more or less likely to hire a new graduate of the Wytheville Community College Physical Therapist Assistant program today than they were to hire a new graduate of the program in the past?

Of the 29 respondents, 31% reported they were more likely to hire a new graduate of the program now as in the past, indicating positive hiring experiences and a desire to hire from a local applicant pool. Thirty-one percent reported being less likely to hire a current new graduate than they were in the past, citing a general opinion that the new graduates’ knowledge and skill base had deteriorated. Ten respondents (34.5%) indicated no change in their likelihood to hire a new graduate of the WCC PTA program. This indicates that, although the
margin is small, most employers have not changed in their hiring practices toward the graduates of the WCC PTA program.

**Recommendations**

Despite the recent changes in the Wytheville Community College Physical Therapist Assistant program, the overall opinion of the employers of physical therapist assistants in southwestern Virginia was positive. The majority continued to view the program graduates positively, had not negatively changed their hiring practices toward the graduates of the WCC program, and did not have negative prejudices against hiring a graduate of the WCC program. Many of those interviewed were quick to voice their support of the program and their reliance on it to provide qualified professionals to fill the positions available in southwestern Virginia. Even several of the respondents who felt the program had deteriorated in the last several years expressed concern that the program not be eliminated, but rather be rehabilitated to its former level of competence. One respondent reported that the program was a “blessing” to have nearby, and several volunteered their services as guest lecturers and student mentors.

After establishing that there was positive regard for the program as a whole, the next most useful information dealt with the perceptions of strengths and weaknesses of the program. While over one-third of the employers felt that the program produced graduates with a generally good knowledge base, there were several areas that were repeatedly mentioned as areas of weakness including wound care, assessment skills, anatomy, physiology, kinesiology, documentation skills, and understanding of the business side of therapy provision.
including insurance and third-party reimbursement. These weaknesses were identified frequently enough to require examination of the existing curriculum to determine if these areas can be emphasized more, or dealt with in a more in-depth manner.

It was also noted by a vocal segment of the employers that professional behavior was lacking among the graduates, which may indicate a need for further specific instruction in professional demeanor and deportment, appropriate interviewing skills, and further instillment of pride in their chosen profession. Additionally, those employers who were most vocal in expressing their negative opinions of the graduates of the WCC PTA program admitted to basing their view on the performance of two or three graduates. This indicated a vital need to emphasize to the students before they graduate the importance of their behavior to the success of future generations of students/graduates. Truly one or two bad experiences had nearly ruined the reputation of the entire body of graduates of the WCC PTA program for these employers.

There were several employers who expressed concern about the stability of the program’s faculty. Although, the majority did not appear to directly correlate their opinions of the graduates with the stability of the faculty, they expressed concern that the many, frequent changes in teaching and program head staff would lead to a diminishment in the program’s overall quality. The unspoken recommendation by these employers was to seek stability in the program’s staff.
Finally, due to the difficulties with obtaining significant data through the college's routine surveying of employers of the PTA program's graduates, this type of telephone interview survey should be repeated at intervals of 3-5 years to assess any changes that may occur in the opinions of the employers toward the graduates. This type of information is required by the program's accrediting body, CAPTE, to insure that the program is meeting the needs of the employers and community it was chartered to serve.

Without other recourse, the program cannot ascertain that it is meeting the needs of its employer base unless it asks the employers directly. While completing the data collection, the researcher found that all respondents were eager to participate to the extent possible given the time constraints of their workday. One respondent was so interested in participating that he requested he be contacted at home so that he would have sufficient time to answer completely, and several respondents sacrificed portions of their lunch hours and end-of-the-day wrap-up time in order to "help out". The telephone interview format seemed most successful in collecting data because it added a personal aspect to the data collection, as contrasted to the impersonal nature of the traditional paper survey instrument. The respondents seemed to be favorably impressed that their opinions were being sought out. Therefore a brief interview format, similar to the one performed for this study, seems to be the best method of obtaining this type of information from the employers of the WCC PTA program.
REFERENCES


### APPENDICES

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Appendix A

Questionnaire Script

Hello, my name is Julia Jackson King. Am I speaking with (name of desired subject)?

1. Did you receive a letter approximately two weeks ago that described a telephone interview study that I was conducting regarding your opinion toward new graduates of the Wytheville Community College Physical Therapist Assistant program?

2. Do you wish to participate in the interview study described in the letter mailed to you approximately two weeks ago?

Are you ready to begin the survey?

Please answer the following question with the options Strongly Agree, Agree, Undecided or Indifferent, Disagree, or Strongly Disagree.

3. As an employer, I generally feel positively toward the graduates of The Wytheville Community College Physical Therapist Assistant Program.

   Strongly Agree

   Agree

   Undecided or Indifferent

   Disagree

   Strongly Disagree

4. Why or why not? Do you wish to elaborate?

Please answer the following question with the options Strongly Agree, Agree, Undecided or Indifferent, Disagree, or Strongly Disagree.
Appendix A (continued)

5. As an employer, I would prioritize a new graduate of the WCC PTA program over a new graduate of another PTA program if all other qualifications are equal.

   Strongly Agree
   Agree
   Undecided or Indifferent
   Disagree
   Strongly Disagree

6. Why or why not? Do you wish to elaborate?

7. What are your perceptions of the strengths of the new graduates of the WCC PTA program?

8. What are your perceptions of the weaknesses of the new graduates of the WCC PTA program?

9. As an employer, are you more or less likely to hire a new graduate of the WCC PTA program today than you were in the past?

10. Why or why not?
Appendix B

Cover Letter

2257 Ivanhoe Road
Max Meadows, Virginia 24360
June 1, 2005

Dear ,

You have been identified as an employer of graduates of the Wytheville Community College Physical Therapist Assistant Program. I am a newly appointed instructor in the WCC PTA program and a graduate student at Old Dominion University. As a requirement of my studies, I am conducting a research study of the attitudes of employers toward the graduates of the WCC PTA program. I hope that you will participate in my study to assist us in the continued improvement of the WCC PTA program.

In approximately two weeks, I will contact you by telephone to ask several questions regarding your attitudes and impressions toward the new graduates of the WCC PTA program whom you have hired in the past. The interview will require approximately 10 minutes of your time. You will be asked to rate your impressions of the graduates and you will be given the opportunity to express any specific opinions you may have. Your responses will be kept confidential and will be reported in aggregate form only. Information linking your identification and responses will be destroyed at the completion of this study. You may choose to participate or you may refuse and if at any time during the interview you wish to stop your participation, this will be possible. If you wish to receive a copy of the written research study or its results, you may indicate this at the time of the interview and a copy will be forwarded to you when the study is completed.

Wytheville Community College routinely surveys the employers of its recent graduates; however, the return rate on these traditional paper surveys is low. Also, the Physical Therapist Assistant program has recently undergone significant faculty transition. This is the perfect time for you as an employer and fellow professional to express your opinions and suggestions for improvement of the program. Wytheville Community College strives to meet the workforce need of the employers in its service region. In order to meet these needs we must know from you, the employer, what those needs are. You stand in a unique position to make a real difference by participating in this study.

Thank you in advance for your participation, and I look forward to speaking with you in about two weeks.
Sincerely,

Julia S. Jackson King, PT
Old Dominion University Graduate Student
Instructor, Wytheville Community College
Physical Therapist Assistant Program