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This thesis, RESPIRATORY THERAPY ADMINISTRATORS' PERCEPTIONS OF EFFECTIVE TEACHING CHARACTERISTICS OF CLINICAL PRECEPTORS IN METRO-ATLANTA HOSPITALS, by Abdulelah Aldhahir, was prepared under the direction of the Master's Thesis Advisory Committee of the Respiratory Therapy department at Georgia State University. It is accepted by the committee in partial fulfillment of requirements for the Master's of Science degree in Respiratory Therapy at Byrdine F. Lewis School of Nursing and Health Professions, Georgia State University.

The Master's Thesis Advisory Committee, as representatives of the faculty, certifies that this thesis has met all standards of excellence and scholarship as determined by the faculty.

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DEDICATION

First of all, I would like to thank Allah, our God, for all the great things He has given me throughout my existence. My prayers and faith has helped motivate me to complete this thesis. In addition, I also would like to thank my parents whose continuous support, love, and words of encouragement have enlightened me and pushed me to work harder. If it weren't for them, I would have given up a long time ago. Although I find it difficult to fully express in words how much they have influenced and contributed in my life, I wish to celebrate my accomplishments with them. I also would like to extend my gratitude to my siblings who have helped take care of my parents while I am away. Lastly, I would like to thank all of my friends and the people whose faith, encouragement, and kindness have proven I have wonderful people around me.

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Abdulelah Aldhahir

Fall 2015

RESPIRATORY THERAPY ADMINISTRATORS' PERCEPTIONS OF EFFECTIVE TEACHING
CHARACTERISTICS OF CLINICAL PRECEPTORS IN METRO-ATLANTA HOSPITALS

A thesis submitted by

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in partial fulfillment of requirements for the degree of

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in

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Under the supervision of Dr. Douglas S. Gardenhire

in

the Byrdine F. Lewis School of Nursing and Health Professions

Georgia State University,
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2015

RESPIRATORY THERAPY ADMINISTRATORS' PERCEPTIONS OF EFFECTIVE TEACHING CHARACTERISTICS OF CLINICAL PRECEPTORS IN METRO-ATLANTA HOSPITALS

By

Abdulelah Aldhahir, BSRT, RRT-NPS

(Under the Advisement of Dr. Douglas S. Gardenhire)

ABSTRACT

Clinical preceptors in respiratory therapy (RT) face a great deal of expectations from schools, students, and colleagues. They are expected to possess effective teaching skills and qualities that signify their knowledge, expertise, and professionalism. Thus, it is important to identify and distinguish effective teaching characteristics of present RT clinical preceptors, which will influence the clinical success of RT students and reflect the efficiency of RT administrators. **PURPOSE:** The goal of this study is to determine the effective teaching characteristics of clinical preceptors that are perceived to be most and least important according to RT administrators in select Metro-Atlanta hospitals. **METHODS:** A descriptive survey was utilized to gather data. The survey was an adaptation of previous RT studies and was emailed to all RT administrators of a convenience sample. The survey was composed of three general domains, professional competence, relationship with the students, and personal attributes. Moreover, thirty-five behavioral teaching characteristics were provided based on a five-point Likert scale. It was ranked according to each characteristic's importance. **RESULTS:** A survey response rate of 55.4% was achieved. Female participants accounted for 47.22% of all participants, while male participants account for 52.78%. Managers were the largest position group of administrators (25%), followed by directors (19.4%), assistant managers (16.7%), educational coordinators (16.7), supervisors (16.7) and others (5.5%) represented as a clinical preceptor and a clinical specialist. The teaching characteristics found to be the most important, "showing genuine interest in patients and their care" and "demonstrates skills, attitudes and values that are developed by students in the clinical area (Role modeling)" obtained the highest ranking from all participants with overall mean scores and S.D of (M 4.83, S.D \pm 0.37). Other important teaching characteristics include responding promptly, demonstrating good communication skills, and facilitate critical thinking during clinical practice were ranked highest by the managers. Meanwhile, supervisors perceived that being approachable, supportive and helpful, facilitates critical thinking in clinical practice, as well as showing competence in clinical skills were most important. On the other hand, educational coordinators perceive demonstration of skills, attitudes, and values that are developed by students in the clinical area (role modeling) are seen as most significant. Lastly, assistant managers perceive role modeling, the ability to communicate knowledge and skills to the students for safe practice, and facilitating students' awareness of their professional responsibility as the most important characteristics. **CONCLUSION:** RT administrators in Metro-Atlanta hospitals agree that (role modeling) and showing genuine interest in patients and their care are the most effective teaching characteristics of clinical preceptors. RT administration differs by title in their ranking of clinical preceptors' effective clinical characteristics.

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CHAPTER I

INTRODUCTION

The profession of respiratory care began in 1946 when multidisciplinary groups of medical staff met at the University of Chicago and decided to inaugurate an organization known as the *Inhalation Therapy Association* (American Association of Respiratory Care, 2014). In the past, qualifications and duties for respiratory therapists (RT) were different from the present. RT's used to cart oxygen cylinders and set up oxygen tents, masks, and nasal catheters only (Kacmarek, Stoller & Heuer, 2013). Between 1950 and 1960, mechanical ventilators and aerosol medications became commonplace, which allowed for further expansion of the profession, and made RT's responsible for arterial blood gas and pulmonary function laboratories (Kacmarek, Stoller, & Heuer, 2013). At that time, educational programs began emerging, and RT was recognized as a standard allied health profession. Since then, qualifications required to be an RT have changed. Today, one of the many areas that an RT is required to master is teaching students in the healthcare setting (Kacmarek, Stoller, & Heuer, 2013).

According to the Commission on Accreditation for Respiratory Care (CoARC) (2015), as of 2014, there are 438 academic programs of respiratory care in the United States that are being offered by different institutions: 374 Associate, 61 Baccalaureate, and 3 Masters degree programs (CoARC, 2015). In 2013, there were 9,297 students enrolled in 438 programs with a mean number of 21 students per program (CoARC, 2015).

All undergraduate healthcare education programs have changed markedly within the last decade by focusing more on student learning in clinical settings (Mccarthy & Murphy, 2010). Students in respiratory care programs are required to go through clinical rotations that differ

from other allied healthcare programs (Barnes, Kacmarek, & Durbin, 2010). By participating in multiple clinical rotations, students acquire essential skills such as attitudes, knowledge, clinical experience, and clinical skills, which prepare them for the modern clinical environment (Rye & Boone, 2009). Students need clinical experience because it allows them to practice accurate patient care and implement theory and knowledge from the classroom (Rye & Boone, 2009).

In respiratory care education, there has been a noted faculty shortage in recent years, which includes faculty members teaching inside the classroom and clinical instructors that specialize in the clinical setting. Providing an adequate number of clinical instructors is difficult to accomplish due to the present manpower shortage in RT education (Barnes, Kacmarek, Kageler, Morris, & Durbin, 2011). Due to this shortage, hospital-based staff are being used to precept students in clinical rotations (Ownby, Schumann, Dune, Kohne, 2012). Hospital-based preceptors can link the theoretical education with clinical experience for students who are seeking to work in hospitals (Raines, 2012). The benefits of using the preceptorship method include providing a larger pool of instructors and an increased number of clinical sites (Ownby, Schumann, Dune, & Kohne, 2012).

Preceptorship is a modern method that is preferred by allied health professions for teaching students in most healthcare settings. This method of clinical teaching among students in different allied healthcare programs began in the mid-1970s (Burns & Northcutt, 2011). The process of preceptorship involves the pairing of an experienced clinician with a novice learner where the passage of clinical skills occur under close supervision (Rye & Boone, 2009). Preceptorship involves a relationship between a skillful healthcare professional and a student that takes place in clinical settings. The goal is to prepare the learner to achieve objectives to become a qualified clinician in the future (Burns & Northcutt, 2011). Preceptorship exposes students to the pressures

involved with patient interaction and exposure to other healthcare providers that occur each day (Barker& Pittman, 2008).

Using a qualified respiratory therapist as a preceptor is essential for the process to be successful (Rye & Boone, 2009). However, selecting preceptors in the healthcare environment is often based on their free time or willingness to work with students (Burns& Northcutt, 2011). There is a need to set a standard criteria for selecting RT's as preceptors. Other healthcare professions have identified qualifications for effective clinical preceptors. These qualifications include providing the best environment for learning, stimulating students to ask questions, explaining topics related to the profession, and stimulating critical thinking skills (Young, Cantrell & Shaw, 2014). These as well as additional preceptor qualifications will be discussed in the next chapter.

Purpose

The purpose of this study is to discover the most important behavioral characteristics of RT preceptors as deemed by the respiratory therapy department directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers who are mainly responsible for assigning their roles, ensuring professionalism and ethics, and maintaining proper conduct at all times.

Research Questions

This study answered the following questions:

1. What are the behavioral teaching characteristics among preceptors that respiratory therapy department directors consider the most important?

2. What are the behavioral teaching characteristics among preceptors that respiratory therapy department managers consider the most important?
3. What are the behavioral teaching characteristics among preceptors that respiratory therapy department supervisors consider the most important?
4. What are the behavioral teaching characteristics among preceptors that respiratory therapy department educational coordinators consider the most important?
5. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant directors consider the most important?
6. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant managers consider the most important?
7. What are the behavioral teaching characteristics among preceptors that other respiratory therapy administrators consider the most important?
8. What are the behavioral teaching characteristics among all participants consider the most important?

Significance

The significance of this study lies in its purpose of contributing to the advancement of the profession and the research and studies in the field of respiratory care. By studying the hospital department directors', managers', supervisors', educational coordinators', assistant directors', and assistant managers' perception of effective behavioral characteristics of clinical preceptors, further effective behavioral characteristics among clinical preceptors will be determined, enhanced, and developed to support respiratory therapist training in the future. Moreover, it is hoped that the findings of the study will create a standard among clinical preceptors and will see the need for more proper preceptor training programs for respiratory care professionals.

Definitions of Words and Terms

CoARC: Commission on Accreditation for Respiratory Care

RT: Respiratory Therapy

ECICI: Effective Clinical Instructor Characteristics Inventory

Preceptor: An expert, such as a respiratory therapist, which offers students practical, relevant experiences and training

AARC: American Association for Respiratory Care

Preceptorship: A relationship between a novice student (as a trainee) and a preceptor that happens in the clinical environment (i.e. hospital) (Burns, Beauchesne, Ryan-Krause, & Sawin, 2006).

Chapter II

REVIEW OF THE LITERATURE

Introduction

Preceptorship is an important aspect of learning. While formal knowledge is the foundation of academic learning, it must be complemented by real-world skills and knowledge that can only be emanated from professionals and experts that have had years of training and work experience. In the field of healthcare, preceptorship is a professional relationship between a student, as a trainee, and an experienced registered staff member, as the preceptor or clinical instructor. The preceptor helps the students acquire an individualized clinical experience and education, relate classroom knowledge with real patient management issues, and emanate a role model that will enable them to hone standards and strategies for their practice (Burns, Beauchesne, Ryan-Krause, & Sawin, 2006; Aljasser, 2012; Alspach, 2008; Burns et al., 2006; De Cicco, 2008; Dunlevy, Varekojis, & Sergakis, 2013; Rye & Boone, 2009; Smedley, 2008; Mountain Area Health Education Center [MAHEC], 2015). This paper discusses documented literature in preceptorship in healthcare, with specific emphasis on nursing education, physical therapy, and respiratory therapy programs.

Preceptorship in Health Care

Smedley (2000) states that preceptors, through role modeling, help students develop knowledge, clinical skills, and professional attitudes in nursing through guidance, supervision and personal development. It is a time-consuming practice, but it is something from which practitioners in the health field gain the most learning. According to the *Office of Regional Primary Care Education* of the *Mountain Area Health Education Center* (MAHEC) (2015), the largest Area Health Education Center in North Carolina, addresses the issues of both state and

national supply and retention and quality of health professionals. There are four principles required of a clinician to provide effective teaching to a learner. These include communication, careful analysis, skill in teaching and practice, and motivation of the learner (MAHEC, 2015).

First of all, *communication* is very important. This is the very first skill that an effective preceptor must have. All the skills and education in the world will amount to nothing if it cannot be conveyed or passed on to another person through effective communication. To be effective in communication, one must first be knowledgeable in the given field because one cannot communicate what one does not know. In fact, if one has poor understanding of concepts and ideas, one is not able to transmit the knowledge to another person (MAHEC, 2015).

Secondly, with *careful analysis*, learning is further enhanced when the preceptor makes learning fun. It is also important for a preceptor to be open to questions and answer these questions as a matter-of-fact. By critically analyzing clinical situations, the learner becomes motivated and later adopts a specific learning style. In this event, the preceptor must know how to approach students with varied learning styles. Thirdly, *skills in teaching and practice* are crucial to the learning success of the students. Various teaching methods and aids can be used to assist the preceptor in teaching the students. For instance, financial matters are better taught with graphs and numbers. Another example, in the field of medicine, one will better learn when one is in an actual medical setting than when one is just discussing information inside a classroom. Thus, it has been observed that preceptorship in classrooms for students is quite different from precepting in a clinical setting (MAHEC, 2015). Likewise, it is important for department directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers to inculcate effective teaching characteristics and strategies to clinical preceptors, such

as encouraging clinical preceptors to analyze carefully and improve their skills in teaching and practice.

Lastly, the fourth principle is *the motivation of a learner*. Teaching not only involves relaying concepts and knowledge but is also about role modeling. By becoming role models, clinical preceptors motivate the learners to learn practical clinical skills and knowledge. Clinical students will appreciate it more if they are given increasing responsibility while at the same time maintaining oversight and guidance (MAHEC, 2015). There are times when something must be directly taught, through words and instruction, and at other times teaching is more effective when the action is modeled, and the learner is allowed to execute the action as well. Therefore, to motivate the learner, preceptors must guide the students make good decisions and serve as reliable role models. These principles will allow the students gain valuable lessons and clinical experiences that can be applicable in various clinical areas, such as the critical care unit, emergency rooms, operating rooms, and so on (MAHEC, 2015).

Preceptorship in Nursing Education

Preceptorship programs are used in nursing education to educate nurses, enhance leadership skills, and improve quality of work life (De Cicco, 2008). Although nurses go to work already equipped with knowledge gained from formal schooling, there is still a need to link classroom knowledge to real patient management problems (Burns, Beauchesne, Ryan-Krause, & Sawin, 2006). Not everyone can become a preceptor; clinical teaching and supervision is a skill that must be studied and learned (Horton, De Paoli, Hertach, & Bower, 2015).

In many organizations, precepting is a required skill that is normally added to a job description. Nurses who have been on staff for some time serve as preceptors to those who just

came on board, those new in a specialty area, those who have been away from nursing for years, and those who are new to the United States (Alspach, 2015).

For most preceptors, there is a lack of resources available for information, educational strategies, educational materials on how to handle different types of learners, and guidelines on handling instructional scenarios (Alspach, 2015). But in rare instances, training programs are sometimes provided by organizations who hire nurses. In Kansas, the Nurse Preceptor Academy was established by the U.S. Department of Labor through the *Workforce Innovation in Regional Economic Development* (WIRED) grant (Horton, DePaoli, Hertach, & Bower, 2015). This is important, especially since Alspach (2015) stresses that serving as a preceptor to a nurse orienteer is different from serving as a preceptor to those who are nursing students (regardless if they are just starting in nursing education or on an advanced level of study). Despite some training programs provided available resources for preceptors in the nursing field are still not enough to equip nurse preceptors.

The reason for the lack of adequate preceptors in the nursing field is not just due to lack of training. In a study conducted by Madhavanpraphakaran, Sjukri, and Balachandran (2014), specific factors may interfere with preceptorship: lack of protected time, heavy workload of preceptors, poor correlation between theory and practice, and lack of interest in direct patient care by students. In another study, Madhavanpraphakandaran, Shukri, and Balachandran (2013) found that the behaviour of clinical preceptors affects the learning process of the students. These behaviors include their commitment to assisting directly with patient care and being consistent in shift duty with the assigned preceptor during the entire clinical rotation (Madhavanpraphakandaran, Shukri, and Balachandran, 2013).

Many registered nurses believe they do not have the skills needed to become a preceptor. They would have to undergo additional formal training on preceptorship. Preceptorship is important in the field of nursing because it offers practical knowledge that the student conveys and can apply through skilled communication, patient-nurse interaction and actual rendition of patient care.

Preceptorship in Physical Therapy

The concerns of preceptors and academic instructors in the field of physical therapy are evidenced in the professional behavior of the physical therapists. According to Gleeson (2007), there may be differences in how physical therapists or students define or display professional behavior (Anderson, Taylor, Gahimer, 2014). This is difficult to verify because there are different meanings attached to the term “professionalism.” These differences in meaning also result in manifestations of different behavior by physical therapists at work.

Collaboration with different individuals in different fields of specialization is important for physical therapists for a variety of reasons. For instance, those who need physical therapists first consult a doctor who may come from a variety of fields of specialization. Orthopaedics, for instance, has different fields of specialization. Those who specialize in the hand, only focus on the hand. Those who specialize in the spine are focused on that area. By collaborating with different fields of specialization, or having people from other related fields as a preceptor, a person can learn how to work with people and collaborate well. What one person can do depends on one’s training and background. If one does not know how to interact with a health practitioner from another field of specialization, the risk of misunderstandings and unproductive relationships increase (Anderson, Taylor, Gahimer, 2014).

Hammer (2006) explains that socialization is the manner in which students learn and adopt the values, attitudes, and practice behaviors of a profession. Part of preceptorship is socializing or partnering with someone who has been in the profession one has chosen, so that one's experiences and insights may be passed on. As in preceptorship, learning does not stop inside the classroom. Often, questions occur outside formal confines of the classroom, or outside of formal sessions of preceptorship (Anderson, Taylor, Gahimer, 2014). On the other hand, Wolff-Burke (2005) reported that physical therapist preceptors expect their students to acknowledge responsibility for learning, exhibit empathy, emanate professionalism, and show appropriate communication skills. Meanwhile, the behaviors that were identified as inappropriate include the demonstration of an attitude of disengagement or lack of interest, poor communication, and unprofessional behavior. However, as pointed out earlier, there are differences in what may be considered unprofessional (Anderson, Taylor, Gahimer, 2014). These points are important in identifying the effective teaching characteristics of clinical preceptors.

For example, Anderson, Taylor, and Gahimer (2014) examined graduate students in physical therapy and offered the opportunity to participate in a service learning experience involving students and faculty from several health profession programs across the state. This service learning experience was helpful for graduate students in physical therapy before attending the internship. It has been pointed out in the section for preceptors in nursing education that precepting students is quite different from precepting those who are practicing in the medical field (Anderson, Taylor, Gahimer, 2014).

Furthermore, Solomon (2010) believes now is the time for interprofessional education. Interprofessional education means preceptorship that involves not just those who are in one's

field of specialization, but others who may be able to contribute to one's specialty (Solomon, 2010, 3). This is similar to Hammer's (2006) explanation of socialization. The students get to learn and adopt the values, attitudes, as well practice the behaviors of a profession when one engages in interprofessional education and socializes with people from different healthcare fields (Anderson, Taylor, Gahimer, 2014). It is in such a setting that collaborative skills are enhanced, as it forces people from different fields to learn while at the same time helping each other in achieving their common goals.

Although interprofessional education is being discussed, Solomon (2010) acknowledges that "it is through ongoing innovation and evaluation of collaborative educational initiatives that physical therapists will ensure that the interprofessional education is an integral part" of their future education (Solomon, 2010, 3). Therefore, the health care field and clinical education programs should recognize the importance of interprofessional education in increasing the capacity and capability of people to share knowledge and skills.

Preceptorship in Respiratory Care

Similar to the case of nurses, many respiratory therapists have no training for preceptorship. This is documented by Rye and Boone (2009) in their survey, which revealed that 32% of the respondents claimed the preceptors didn't receive preceptor training and were unpaid. Fortunate preceptors who received training trained by the clinical education director ranging from 1 hour to 6 weeks. Another problem were the presences of hindrances or limitations to preceptor training that 72% of respondents have reportedly experienced. Thus, there is a need to standardize the current preceptor training programs in order to enhance the quality of preceptorship and ensure today's RT program graduates are fully equipped with the necessary knowledge, skills, and practice (Rye & Boone, 2009).

In addition, there is an inadequate ratio of preceptors and students because of a shortage in faculty staff members in most respiratory care departments (Aljasser, 2012). On the other hand, for those who do experience preceptorship, some of their preceptors are not formally trained to perform in this role. As highlighted in this paper, some form of training is needed before one becomes a preceptor because of basic difference between precepting in a classroom and precepting in a clinical setting.

Respiratory care is an important field that is expected to increase its staffing requirement by 28% by 2020 (Aljasser, 2012). This is similar to what the U.S. Department of Labor's *Bureau of Labor Statistics* (2014) predicts. Respiratory therapist employment is expected to increase by 19 percent from 2012 until 2022, which is faster than the average for other occupations (Bureau of Labor Statistics, 2014). The transition from student to professional may be eased if there are enough respiratory care practitioners who are trained as preceptors. This will help them assuage the panic and worry of new graduates who are entering the respiratory care department of hospitals. In fact, preceptorship was the only mode of transferring and delivering the respiratory care education five decades ago, with respiratory therapists being trained by experienced respiratory therapists while on duty (Aljasser, 2012).

The lack of clinical instructors has left students to be precepted by preceptors that are neither necessarily competent nor trained to transmit practical knowledge to the students. This lack of standardized training may result in inconsistent and substandard education of respiratory therapy students in the clinical setting (Dunlevy, Varekojis, & Sergakis, 2013). This presents a serious situation to the medical field, as the practice for respiratory therapy may suffer in such a situation. One cannot expect that the academic education that one received is enough to respond to real life situations that are encountered while practicing in the medical field.

To solve this serious problem, it has been recommended that respiratory care practitioners have formal preceptor training in the same manner of nurses with their standardized training and focus on critical thinking skills (Dunlevy, Varekojis, & Sergakis, 2013). A study conducted by Gross-Forneris and Peden-McAlphine (2009) reveal that preceptors who had received preceptor training have the ability to enhance the students' critical thinking skills. It is highlighted, however, that there must not just be preceptor training made available for respiratory therapists, but that it must be training that is standardized for all would-be preceptors. This ensures that the standard that could be expected for the medical field is one and the same (Dunlevy, Varekojis, & Sergakis, 2013). As seen from the effectiveness in the nursing education preceptor program, standardized training allows for established criteria in all medical facilities in the United States.

Summary

Preceptorship in the healthcare field is a very important program that must be established, enhanced, and part of every clinical practitioner's training. Health professionals deal with lives and have to be accurate in the practice of their profession. However, this accuracy is not readily seen in new graduates, as learning from the classroom is quite different from actual practice in the medical field.

What is learned in classrooms is important as it forms the foundation of knowledge in respiratory care education. However, there is still a need to complement classroom knowledge with the practical knowledge that can be gained effectively through a preceptorship program. Such a program facilitates the development of knowledge, clinical skills, and professional attitudes through the guidance, supervision, and role modeling of more experienced professionals.

One of the main concerns regarding preceptorship is that it is time-consuming. Cost cutting measures often get in the way of having enough staff to effectively engage clinical students. Despite the shortage of staff and clinical preceptors, the emphasis on preceptorship and formal training will help encourage the development of a credible and professional preceptorship in the field of respiratory care. Additionally, it will promote effective teaching characteristics among clinical preceptors throughout the allied healthcare programs.

CHAPTER III

METHODOLOGY

In this study, the researcher investigated the behavioral teaching characteristics of effective clinical preceptors that have contributed to the learning outcomes of students in their respective clinical settings. This study was accomplished through the use of convenience sample and an online survey that was emailed to all hospital directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers participating in this research. Furthermore, members of the committee have met and inspected each element of the instrument to complete the final survey. The researcher has also utilized the online survey software, Survey Monkey to administer the survey. Finally, this chapter describes the methods and procedures to be used in conducting this study.

Research Questions

This study answered the following questions:

1. What are the behavioral teaching characteristics among preceptors that respiratory therapy department directors consider the most important?
2. What are the behavioral teaching characteristics among preceptors that respiratory therapy department managers consider the most important?
3. What are the behavioral teaching characteristics among preceptors that respiratory therapy department supervisors consider the most important?
4. What are the behavioral teaching characteristics among preceptors that respiratory therapy department educational coordinators consider the most important?
5. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant directors consider the most important?

6. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant managers consider the most important?
7. What are the behavioral teaching characteristics among preceptors that other respiratory therapy administrators consider the most important?
8. What are the behavioral teaching characteristics among all participants consider the most important?

Instrumentation

This study used a modified version of the *Effective Clinical Instructor Characteristics Inventory* (ECICI) survey by Alasmari and Gardenhire (2015). In addition, the same instrument had followed Siraj's (2015) instrument in his unpublished thesis. In this regard, Madhavanpraphakandaran et al. permission was originally obtained by Alasmari and Gardenhire (2015) in order to use the survey as the instrument. Upon the approval of the permission request, the survey aimed to determine respiratory care directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers perceptions of effective behavioral teaching characteristics of clinical preceptors was altered with the use of a Q-sort method.

Based on Madhavanpraphakandaran et al. (2013) the alpha reliability coefficient devised by Cronbach that developed the ECICI instrument was used to measure the validity and reliability of the used instrument. As recommended by advisors and results of the original study, five items from the survey were removed while three items were paraphrased to enhance their clarity. Thus, the concluding modified survey was composed of 40 items. According to the alpha reliability coefficient of Cronbach, the tool scored 0.87, which showed the reliability and validity of the instrument.

To test the tool's content validity, a group of respiratory therapy education specialists composed of the director of clinical education, one assistant clinical professor, and one clinical associate professor tested the validity to ensure the degree the instrument was able to measure what it purported to measure. Likewise, the researcher cautiously evaluated the study's instrument and recommended any need for modifications regarding the words, format, and content used. Meanwhile, the committee members also evaluated and discussed all survey questions.

Study Design

According to Brown (2009), a survey is defined as a research process that is concerned with answering questions, and is the most popular type of tool in descriptive research. In this regard, a survey suitable for a descriptive research method was utilized in this study. The survey design aimed to gather information from department directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers. The purpose was to identify how department directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers viewed effective behavioral teaching characteristics of clinical preceptors, as well as how they perceived its impact on overall respiratory care education and the clinical setting. A benefit of using this survey design was having the capacity to gather large amounts of data from numerous participants through the use of a single instrument (Portney & Watkins, 2008). Furthermore, the study's design was advantageous in terms of lessening costs because it only used a free survey software, the Internet, and access to the study's participants

Data Collection and Analysis

In conducting and completing this study, the approval of the *Institutional Review Board* (IRB) at Georgia State University was sought. An anonymous questionnaire was used to gather data and to serve as this study's research instrument. It was then disseminated to convenience sample of respiratory care directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers. While the characteristics were categorized into three areas, including professional competence, educator-student relationship, and personal attributes, a ranking scale was labeled from 5 to 1 to indicate the most and the least important behavioral characteristic.

In addition, the latest version of *Statistical Package for the Social Sciences* (SPSS) was used to analyze descriptive statistics of the collected data. The frequency, percentage, means and standard deviation were analyzed to help determine the differences of the ranking perceptions of directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers. Each behavior's mean scores were calculated; higher scores indicated the characteristics that were deemed important while lower scores indicated the behavioral characteristics that participants thought were least important.

Sample

A convenience sample of Georgia State University, Department of Respiratory Therapy External Advisory Committee members served as the sample population for this study. All directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers based in the metropolitan Atlanta area were included. Subjects were selected based on their availability. More importantly, all participants were given a cover letter that had informed

them about the specifics and purpose of the present study, as well as ensured their confidentiality.

Development of Cover Letter

The researcher developed the cover letter after examining different styles and examples of similar surveys published previously (Portney & Watkins, 2008). After creating the cover letter, it was sent to the thesis advisor for further examination. The final cover letter, a follow-up email, and final follow-up email can be found in appendix B, C and D, respectively.

CHAPTER IV

FINDINGS

The goal of this study was to discover the most important behavioral teaching characteristics of RT preceptors as deemed by respiratory therapy department directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers in metropolitan Atlanta. The results are presented in the chapter as well as the demographic information of the sample. To conduct the statistical analysis for this study, Statistical Package for the Social Sciences 22 (SPSS 22) was used. In this section, each research question will be addressed separately.

Research Questions

1. What are the behavioral teaching characteristics among preceptors that respiratory therapy department directors consider the most important?
2. What are the behavioral teaching characteristics among preceptors that respiratory therapy department managers consider the most important?
3. What are the behavioral teaching characteristics among preceptors that respiratory therapy department supervisors consider the most important?
4. What are the behavioral teaching characteristics among preceptors that respiratory therapy department educational coordinators consider the most important?
5. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant directors consider the most important?
6. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant managers consider the most important?
7. What are the behavioral teaching characteristics among preceptors that other respiratory therapy administrators consider the most important?

8. What are the behavioral teaching characteristics among all participants consider the most important?

Demographic Findings

The study included a convenience sample of respiratory therapy administrators from different hospitals in metropolitan Atlanta. Thirty-six responses were received out of 65 emailed surveys with a response rate of 55.4%. Meanwhile, 47.22% (n=17) of participants were female and male participants accounted for 52.78 (n=19). In addition, the director, the manager, the supervisor, the educational coordinator, the assistant director, and the assistant manager accounted for 19.44% (n=7) , 25% (n=9), 16.67% (n=6), 16.67% (n=6), 0% (n=zero), and 16.67% (n=6) respectively. Furthermore, 5.56% (n=2) represented other positions not listed on the survey. They include a clinical preceptor and clinical specialist. All demographic information of the sample is provided in Table1.

Table 1. Demographic Information of the Sample

Demographics n=36	Director n=7	Manager n=9	Supervisor n=6	Educational coordinator n=6	Assistant Manager n=6	Other; clinical preceptor, clinical specialist n=2
	Mean ±SD or%	Mean ±SD or%	Mean ±SD or%	Mean ±SD or%	Mean ±SD or%	Mean ±SD or%
Male	42.9%	44.4%	50%	66.7%	33.3%	50%
Female	57.1%	55.6%	50%	33.3%	66.7%	50%
Current position in years	M=9.14 SD±10.36	M=5.74 SD±5.79	M=3.08 SD±3.58	M=7.33 SD±4.88	M=9.41 SD±11.55	M=13 SD±1.41
Years of experience as an RT	M=31 SD±9.27	M=18.22 SD±7.64	M=18.5 SD±9.60	M=25.33 SD±10.40	M=25.5 SD±9.60	M=33.50 SD±4.94

Findings Related to Research Question 1

The first research question asked, “What are the behavioral teaching characteristics among preceptors that respiratory therapy department directors consider the most important?” Table 2 shows mean scores (M) and standard deviations (SD) of the top 5 most important effective clinical teaching behavioral characteristics ranked by respiratory therapy department directors. Data results were tabulated and presented in Table 2, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior. Respiratory therapy department directors ranked the behavioral teaching characteristic “Shows genuine interest in patients and their care” as the most effective with a mean score value $M = 4.85$ and standard deviation ($SD \pm .37$).

Table 2. 5 Most Effective Clinical Teaching Characteristics Ranked by Respiratory Therapy Department Directors (n=7)

Item No.	Behavior Description	Category	Mean	Std. Deviation
PC2	Shows genuine interest in patients and their care	Professional competence	4.85	.37
PA3	Demonstrates self-control & patience	Personal Attributes	4.71	.48
PC13	Evaluates students objectively and fairly	Professional competence	4.71	.48
PC10	Demonstrates skills, attitudes & values that are developed by students in clinical area(Role modeling)	Professional competence	4.71	.48
PA11	Exhibits responsibility	Personal Attributes	4.57	.53

Findings Related to Research Question 2

The second research question asked, “What are the behavioral teaching characteristics among preceptors that respiratory therapy department managers consider the most important?” Table 3 shows mean scores (M) and standard deviations (SD) of the top 5 most important effective clinical teaching behavioral characteristics ranked by respiratory therapy department managers. Data results were tabulated and presented in Table 3, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior. Respiratory therapy department managers ranked the behavioral teaching characteristics "responds promptly," "demonstrates good communication skills," "facilitates critical thinking in clinical practice" as the most effective with a mean score value M = 5.0 and standard deviation (SD ± .0).

Table 3. 5 Most Effective Clinical Teaching Characteristics Ranked by Respiratory Therapy Department Managers (n=9)

Item No.	Behavior Description	Category	Mean	Std. Deviation
PA10	Responds confidently	Personal Attributes	5.0	.00
PA1	Demonstrates good communication skills	Personal Attributes	5.0	.00
PC11	Facilitates critical thinking in clinical practice	Professional competence	5.0	.00
PA11	Exhibits responsibility	Personal Attributes	4.88	.33
PA9	Responds promptly	Personal Attributes	4.88	.33

Findings Related to Research Question 3

The third research question asked, “What are the behavioral teaching characteristics among preceptors that respiratory therapy department supervisors consider the most important?” Table 4 shows mean scores (M) and standard deviations (SD) of the top 5 most important effective clinical teaching behavioral characteristics ranked by respiratory therapy department supervisors. Data results were tabulated and presented in Table 4, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior. Respiratory therapy department supervisors ranked the behavioral teaching characteristics "Be approachable," "Be supportive & helpful," "Facilitates critical thinking in clinical practice," "Shows clinical skill competence" as the most effective with a mean score value $M = 5.0$ and standard deviation ($SD \pm .0$).

Table 4. 5 Most Effective Clinical Teaching Characteristics Ranked by Respiratory Therapy Department Supervisors (n=6)

Item No.	Behavior Description	Category	Mean	Std. Deviation
RS8	Be approachable	Relationship with students	5.0	.00
RS7	Be supportive & helpful	Relationship with students	5.0	.00
PC11	Facilitates critical thinking in clinical practice	Professional competence	5.0	.00
PC4	Shows clinical skill competence	Professional competence	5.0	.00
PA11	Exhibits responsibility	Personal Attributes	4.83	.40

Findings Related to Research Question 4

The fourth research question asked, “What are the behavioral teaching characteristics among preceptors that respiratory therapy department’s educational coordinators consider the most important?” Table 5 shows mean scores (M) and standard deviations (SD) of the top 5 most important effective clinical teaching behavioral characteristics ranked by respiratory therapy department educational coordinators. Data results were tabulated and presented in Table 5, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior. Respiratory therapy department educational coordinators ranked the behavioral teaching characteristics "Demonstrates skills, attitudes & values that are developed by students in clinical area (Role modeling)," "Shows clinical skill competence," "Shows genuine interest in patients and their care" as the most effective with a mean score value M = 4.83 and standard deviation (SD ± .40).

Table 5. 5 Most Effective Clinical Teaching Characteristics Ranked by Respiratory Therapy Department Educational Coordinators (n=6)

Item No.	Behavior Description	Category	Mean	Std. Deviation
PC10	Demonstrates skills, attitudes & values that are developed by students in clinical area (Role modeling)	Professional competence	4.83	.40
PC4	Shows clinical skill competence	Professional competence	4.83	.40
PC2	Shows genuine interest in patients and their care	Professional competence	4.83	.40
RS4	Encourages students to feel free to ask questions or ask for help	Relationship with students	4.66	.51
PA11	Exhibits responsibility	Personal Attributes	4.50	.54

Findings Related to Research Question 6

The sixth research question asked, “What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant managers consider the most important?” Table 6 shows mean scores (M) and standard deviations (SD) of the top 5 most important effective clinical teaching behavioral characteristics ranked by respiratory therapy assistant managers. Data results were tabulated and presented in Table 6, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior. Respiratory therapy assistant managers ranked the behavioral teaching characteristics "Demonstrates skills, attitudes & values that are developed by students in clinical area (Role modeling)," "Able to communicate knowledge and skills to students for safe practice," "Facilitates student’s awareness of their professional responsibility" as the most effective with a mean score value M = 5.0 and standard deviation (SD ± .00).

Table 6. 5 Most Effective Clinical Teaching Characteristics Ranked by Respiratory Therapy Department Assistant Managers (n=6)

Item No.	Behavior Description	Category	Mean	Std. Deviation
PC10	Demonstrates skills, attitudes & values that are developed by students in clinical area (Role modeling)	Professional competence	5.0	.00
PC6	Able to communicate knowledge and skills to students for safe practice	Professional competence	5.0	.00
PC1	Facilitates student's awareness of their professional responsibility	Professional competence	5.0	.00
PA4	Demonstrates enthusiasm for teaching	Personal Attributes	4.83	.40
PA2	Able to collaborate with other disciplines	Personal Attributes	4.83	.40

Findings Related to Research Question 7

The seventh research question asked, “What are the behavioral teaching characteristics among preceptors that other respiratory therapy department administrators consider the most important?” Table 7 shows mean scores (M) and standard deviations (SD) of the top 5 most important effective clinical teaching behavioral characteristics ranked by other respiratory therapy department administrators. Data results were tabulated and presented in Table 7, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior.

Table 7. 5 Most Effective Clinical Teaching Characteristics Ranked by Other Respiratory Therapy Department Administrators (n=2)

Item No.	Behavior Description	Category	Mean	Std. Deviation
PA11	Exhibits responsibility	Personal Attributes	5.0	.00
PA10	Responds confidently	Personal Attributes	5.0	.00
PA3	Demonstrates self-control & patience	Personal Attributes	5.0	.00
PA1	Demonstrates good communication skills	Personal Attributes	5.0	.00
RS5	Allows freedom for discussion	Personal Attributes	5.0	.00

Findings Related to Research Question 8

The eighth research question asked, “What are the behavioral teaching characteristics among all participants consider the most important?” Table 8 shows mean scores (M) and standard deviations (SD) of the top 10 most important effective clinical teaching behavioral characteristics ranked by all participants. Data results were tabulated and presented in Table 8, which includes the item number on the survey, a description of the teaching behavior, and the corresponding category for each teaching behavior. All the participants ranked the behavioral teaching characteristic "Demonstrates skills, attitudes & values that are developed by students in clinical area (Role modeling)" and "Shows genuine interest in patients and their care "as the most effective with a mean score value of $M = 4.83$ and standard deviation ($SD \pm .37$).

Table 8. 10 Most Effective Clinical Teaching Characteristics Ranked by All Participants (n=36)

Item No.	Behavior Description	Category	Mean	Std. Deviation
PC10	Demonstrates skills, attitudes & values that are developed by students in the clinical area (Role modeling)	Professional competence	4.83	.37
PC2	Shows genuine interest in patients and their care	Professional competence	4.83	.37
PC4	Shows clinical skill competence	Professional competence	4.80	.40
PA1	Demonstrates good communication skills	Personal Attributes	4.75	.43
PC11	Facilitate critical thinking in clinical practice	Professional competence	4.72	.45
PA11	Exhibits responsibility	Personal Attributes	4.72	.45
RS8	Be approachable	Relationship with students	4.72	.45
PC6	Able to communicate knowledge and skills to the students for safe practice	Professional competence	4.72	.45
PC3	Demonstrates knowledge of respiratory therapy in the area of instruction	Professional competence	4.69	.46
PA10	Responds confidently	Personal Attributes	4.66	.47

CHAPTER V

INTERPRETATION OF FINDINGS

This chapter will discuss the interpretations of the findings revealed in Chapter IV. This chapter is separated into five major sections, which includes an overview of the study, discussion of the findings, implications and recommendations for future research and a conclusion.

Overview of the Study

The goal of this descriptive study was to determine the most important behavioral characteristics of RT preceptors according to the RT department directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers that are responsible for assigning the RT preceptors' roles, ensuring professionalism and ethics, and maintaining proper conduct at all times.

Research Questions

1. What are the behavioral teaching characteristics among preceptors that respiratory therapy department directors consider the most important?
2. What are the behavioral teaching characteristics among preceptors that respiratory therapy department managers consider the most important?
3. What are the behavioral teaching characteristics among preceptors that respiratory therapy department supervisors consider the most important?
4. What are the behavioral teaching characteristics among preceptors that respiratory therapy department educational coordinators consider the most important?
5. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant directors consider the most important?

6. What are the behavioral teaching characteristics among preceptors that respiratory therapy assistant managers consider the most important?
7. What are the behavioral teaching characteristics among preceptors that other respiratory therapy administrators consider the most important?
8. What are the behavioral teaching characteristics among all participants consider the most important?

Discussion of Findings

Findings Related to Research Question 1

The first research question asked, “What are the behavioral teaching characteristics among preceptors that RT department directors consider the most important?” Seven out of the thirty-six respondents (19.4%) in the study, which consists of RT department directors, ranked “shows genuine interest in patients and their care” as the most important behavioral teaching characteristics among RT preceptors. This is similar to Madhavanpraphakaran et al. (2013) study wherein it is believed that the lack of protected time, heavy workload, poor theory-practice correlation, and the lack of interest in direct patient care by the students reflect how some factors interfere with preceptorship. In the same way, behaviors such as the preceptors’ commitment to assist directly with patient care and consistency during shift are seen as very important behavioral teaching characteristics as well (Madhavanpraphakandaran, Shukri, and Balachandran, 2014).

Findings Related to Research Question 2

The second research question asked, “What are the behavioral teaching characteristics among preceptors that RT department managers consider the most important?” Nine out of

thirty-six respondents (25%) composed of RT department managers ranked “responds confidently,” “demonstrates good communication skills,” and “facilitates critical thinking in clinical practice” as equally the most important behavioral teaching qualities among RT clinical preceptors. These three were followed close by the qualities “exhibits responsibility” and “responds confidently.” This is consistent with other studies, such as those revealed by MAHEC (2015). According to the organization, communication is an important skill that efficient clinical preceptors should possess. Similarly, it would require a comprehensive understanding of the concepts and fundamental skills needed to be able to allow the students to acquire knowledge from a skillful clinical preceptor (MAHEC, 2015).

Additionally, aside from communication, socialization is another important area where preceptors are expected to be experts (Hammer, 2006). This involves the adoption and display of the proper attitudes, values, and behavioral practice of a professional (Hammer, 2006). In preceptorship, it is known that learning should not cease inside (or outside) the classroom. Thus, through effective preceptorship, students are expected to exhibit responsibility for learning, empathy, professionalism, and proper communication skills while recognizing the difference between what is appropriate from what is not (Anderson, Taylor, & Gahimer, 2014; Wolff-Burke, 2005).

Findings Related to Research Question 3

The third research question asked, “What are the behavioral teaching characteristics among preceptors that RT department supervisors consider the most important?” Six supervisors (16.66%) out of 36 total respondents claimed being approachable, as well as supportive and helpful to be equally the most significant behavioral teaching characteristics in line with establishing and maintaining a relationship with the students. Likewise, when it came to

professional competence, the supervisors ranked the behavioral teaching characteristics of facilitating critical thinking during clinical practice and showing clinical skill competence as the most important qualities for RT preceptors. This finding can be associated with the principles that motivate the students to learn.

As MAHEC (2015) argues, teaching should build on the foundation of role modeling. Clinical preceptors, as role models, become a source of motivation and inspiration for the students, particularly where practical application of clinical skills and knowledge are concerned. As a result, students are provided with the opportunity to appreciate their craft and clinical training more because of the increased responsibility expected from them (MAHEC, 2015). For example, some RT practitioners are required to complete formal preceptorship training in order to become role models for standardized training and critical thinking skills (Dunlevy, Varekojis, & Sergakis, 2013). In addition to being fair and objective, the findings are synonymous with the results of Alasmari and Gardenhire (2015) that reveal the demonstration of knowledge, being approachable, respecting students and colleagues, and establishing a good student-teacher relationship are a must in any allied health profession because they represent vital characteristics of clinical preceptors (Alasmari & Gardenhire, 2015).

Findings Related to Research Question 4

The fourth research question asked, “What are the behavioral teaching characteristics among preceptors that RT department’s educational coordinators consider the most important?” Six coordinators (16.66%) out of the thirty-six survey respondents ranked the most important behavioral teaching characteristics, which are under professional competence, to be role modeling, or the ability to demonstrate skills, attitudes and values that are developed by the

students in the clinical area, and showing of clinical skills competency as two of the equally most important qualities of RT preceptors.

This finding is relatable to Smedley's (2000) revelation that role modeling helps students develop the necessary knowledge, clinical skills, and professional attitudes that are achieved through guidance, supervision, and personal development (MAHEC, 2015). Likewise, the findings coincide with the belief that careful analysis further enhances learning, especially when the preceptor makes learning fun for the students. The key herein is the ability of the preceptor to be open to the students and to answer any questions they may have that are related to varied clinical situations. Thus, doing so breeds motivation and adoption of effective learning styles. Also, the preceptors' skills in teaching and practice remain significant to the learning success of the students (MAHEC, 2015; Dunlevy, Varekojis, & Sergakis, 2013). In the end, educational coordinators perceive role modeling as the key to the preceptors' and the students' success.

Findings Related to Research Question 5

There were no assistant directors that responded to the survey. Thus, the research question that asked, "What are the behavioral teaching characteristics among preceptors that RT assistant directors consider the most important?" was left unanswered.

Findings Related to Research Question 6

The sixth research question asked, "What are the behavioral teaching characteristics among preceptors that RT assistant managers consider the most important?" Six out of thirty-six total survey respondents (16%) composed of assistant managers ranked the qualities that represent professional competence to be the most significant. These include role modeling, ability to communicate knowledge and skills to the students for safe practice, and facilitates students'

awareness of their professional responsibility to be the most important behavioral teaching characteristics that RT preceptors must possess. Again, the findings of this study remain consistent with numerous studies that point out the impact of effective role modeling and collaboration to the showcasing of effective teaching characteristics of RT clinical preceptors (MAHEC, 2015; Anderson, Taylor, & Gahimer, 2014; Dunlevy, Varekojis, & Sergakis, 2013).

Findings Related to Research Question 7

The seventh research question asked, “What are the behavioral teaching characteristics among preceptors that other RT department administrators consider the most important?” Two RT department administrators out of the thirty-six total respondents (5.5%) ranked the following as five of the most important behavioral teaching characteristics among RT preceptors: exhibits responsibility, responds confidently, demonstrates self-control and patience, demonstrates good communication skills, and allows freedom of discussion. The RT department administrators in this group involve a clinical preceptor and a clinical specialist.

The findings regarding the perception of RT department administrators agree with the findings of numerous research and studies in the past (MAHEC, 2015; Anderson, Taylor, & Gahimer, 2014; Dunlevy, Varekojis, & Sergakis, 2013). Furthermore, the findings emphasize the significance of motivating the learner. As a preceptor, the ability to motivate the students require effective teaching characteristics and admirable qualities (MAHEC, 2015).

Findings Related to Research Question 8

The eighth and last research question asked, “What are the behavioral teaching characteristics among all participants consider the most important?” Thirty-six total respondents out of the sixty-five emailed surveys ranked role modeling (or demonstrates skills, attitudes &

values that are developed by the students in the clinical area) as the most important effective clinical teaching behavioral characteristics that RT preceptors should possess and exhibit. This is followed by other teaching behavioral characteristics according to the top ten most important behavioral characteristics: shows genuine interest in patients and their care; shows clinical skill competence; demonstrates good communication skills; facilitates critical thinking in clinical practice; exhibits responsibility; be approachable; able to communicate knowledge and skills to the students for safe practice; demonstrates knowledge of RT in the area of instruction; and responds confidently. These characteristics signify a clinical preceptor's competence, which is parallel to other studies presented within this study that include the facilitation of critical thinking in clinical practice, professional competence, and the ability of preceptors to interact with their students (Madhavanprabhakaran, Shukri, Hayudini, & Narayanan, 2013; Siraj, 2015).

Implications and Recommendations for Future Research

The results of this study are advantageous for RT clinical preceptors because in that they offer valuable insight to a series of effective teaching characteristics they may adopt and hone through their years of expertise. The findings also encourage RT clinical preceptors to evaluate the teaching characteristics they currently possess, and to decide what areas they may need to improve on. From the perspective of RT administrators, there is a common understanding of the underlying conditions and standardization of these teaching characteristics. In the same manner, the study encourages the appreciation of the perception of colleagues and other members of the RT faculty that would aid RT clinical preceptors in recognizing their weaknesses, as well as improve and reinforce their strengths as clinical preceptors.

Moreover, this study contributes to the existing literature, particularly in determining the commonly perceived important teaching characteristics that RT clinical preceptors should

emanate. It would also help in assisting RT department administrators today and in the future by establishing specific criteria when selecting a clinical preceptor and standardizing effective teaching characteristics requirements.

Furthermore, this study recommends RT clinical preceptors to work harder at improving attitudes, behaviors, and teaching qualities towards the students in order to attain their goals and objectives related to general clinical training and education. On the other hand, further research is suggested due to the limitations of the existing topic has. The replication of the current study is suggested but with a larger sample size, and a recommendation to include hospitals outside the Metro-Atlanta area to validate the results presented.

Limitations of the Study

The present study is limited by different features. The sample was exclusively taken from a convenience of administrator in hospitals only in the Metropolitan area. Another limitation is the sample size involved in this study because the results should not be generalized across the U.S. Also, the limited number of research about the effective teaching behaviors and characteristics in the field of RT should advance literature to include more comprehensive studies in line with the topic.

Conclusion

In conclusion, the RT department managers, supervisors, educational coordinators, assistant directors, and assistant managers in Metro-Atlanta hospitals agree that the demonstration of clinical skills, proper attitudes, and ethical values, as well as role modeling and showing of genuine interest in patients and their care are the most important and effective teaching characteristics among RT clinical preceptors. Also, the findings of this study indicate that majority of RT department managers expect RT clinical preceptors to respond promptly,

demonstrate good communication skills, and facilitate critical thinking. Additionally, RT supervisors see being approachable, supportive and helpful, competence, as well as facilitates critical thinking during practice. Thus, it can be recommended that clinical preceptors improve on their attitudes and behaviors with the help of the findings discovered through this study.

In the end, the standards, quality of training, and uniformity of instruction in all RT departments and among RT clinical preceptors is highly recommended. Such action is crucial in order to develop and sustain effective behavioral characteristics among the RT department.

Appendix A: Effective Clinical Teacher Characteristics Instrument

Part 1: Demographics

(A) Dear directors, managers, supervisors, educational coordinators, assistant directors, and assistant managers please answer the following questions:

1- indicate your position

- (A) Director
- (B) Manager
- (C) Supervisor
- (D) Educational Coordinator
- (E) Assistant Director
- (F) Assistant Manager
- (G) Other

2. How long have you been in your current position?

3. How long have you been a respiratory therapist?

3. Indicate your Gender:

- (A) Male
- (B) Female

4. Your Highest Degree:

- (A) AS/ AAS
- (B) BS/BA
- (C) MS/MA
- (D) PhD/Ed.D/ D.H.Sc

5. Have you choose hospital-based staff to precept a student in your current position?

- (A) Yes
- (B) No

Part II.

Dear Directors, Managers, Educational Coordinators, Supervisors, Assistant Directors, and Assistant Managers.

This study aims to explore the effective Clinical Preceptor characteristics perceived as most and least important by respiratory therapy Directors, Managers, Supervisors, Educational Coordinators, Assistant Directors, and Assistant Managers. Your sincere response is appreciated. We assure you the confidentiality of the data. Please choose according to your opinion on the Effective Clinical Preceptor Characteristics. There are five options to mark. 5= Most Important, 4=Important, 3= Neutral, 2=Less Important, 1=Unimportant

No.	Characteristic of Effective Clinical Instructor	Most Important (5)	Important (4)	Neutral uncertain (3)	Less Important (2)	Unimportant (1)
I	Professional competence					
1	Facilitate student's awareness of their professional responsibility					
2	Show genuine interest in patients and their care					
3	Demonstrate knowledge of respiratory therapy in the area of instruction					
4	Show clinical skill competence					
5	Able to relate theory to practice					
6	Able to communicate knowledge and skills to students for safe practice					
7	Assist in new experiences without taking over the task from the student					
8	Available to work with students in					

	clinical setting					
9	Demonstrate engaging style of bedside teaching					
10	Demonstrate skills, attitudes & values that are developed by students in clinical area (Role modeling)					
11	Facilitate critical thinking in clinical practice					
12	Identifies each individual attribute of the learner					
13	Evaluate students objectively and fairly					
14	Provide individualized timely feedback					
15	Provide constructive feedback on student progress					
II	Relationship with students					
1	Respect student as an individual					
2	Be realistic in expectations of students' performance					
3	Be honest and direct with students					
4	Encourage students to feel free to ask questions or ask for help					
5	Allow freedom for discussion					

6	Allow expression of feeling					
7	Be supportive & helpful					
8	Be approachable					
III	Personal Attributes					
1	Demonstrates good communication skills					
2	Able to collaborate with other disciplines					
3	Demonstrate self-control & patience					
4	Demonstrates enthusiasm for teaching					
5	Demonstrates flexibility in clinical settings					
6	Exhibit sense of humor					
7	Admits limitations					
8	Be organized and well prepared					
9	Responds promptly					
10	Responds confidently					
11	Exhibits responsibility					
12	Exhibits autonomy					

Appendix B: Cover Letter

Dear Respiratory Therapy Department Administrator,

You are invited to partake in the current study, “Respiratory Therapy Administrator Perceptions of Effective Teaching Characteristics of a Clinical Preceptor in Metro-Atlanta Hospitals.” The goal of this study is to investigate what qualities or characteristics of a clinical preceptor do Respiratory Therapy (RT) Administrators believe to be effective. In line with this, the study attempts to further analyze and determine the most effective, as well as the least effective teaching characteristics in the clinical setting as observed by RT Administration. Abdulelah Aldhahir, a Master’s Degree student from Georgia State University, Department of Respiratory Therapy, leads this study. He is guided and supervised by the chair of the Department of Respiratory Therapy at Georgia State University, Dr. Doug Gardenhire. The information you provide will be used in a thesis prepared by Abdulelah Aldhahir.

Please note that participation in this study is completely voluntary. If you decide to partake, please be informed that you will be requested to complete a survey that will be found at the end of this email through the web link provided. This survey should take less than 10 minutes to complete. Since this is voluntary, you may cease in completing the survey at any time you wish without loss of benefits or penalty.

Rest assured that your answers will be kept confidential, no names and codes will not be used to identify you or your response. In fact, all the surveys will be deleted after all the necessary information has been gathered and analyzed.

We hope that you will submit a completed survey. Once findings are completed, I will share the findings with the group. If you wish to receive an executive summary, kindly send your request to aaldhahir1@student.gsu.edu. Meanwhile, if you have any concern or question with regards to this study, please do not hesitate to contact me at aaldhahir1@student.gsu.edu, or Dr. Gardenhire at dgardehire@gsu.edu. Moreover, the contact details of the department are also provided below. You may also contact Ms. Susan Vogtner in Georgia State University's IRB Office at svogtner1@gsu.edu.

Lastly, if you are 18 years old and above and you agree to the stipulations above, please proceed in taking the survey by clicking the link “RT Administrator Survey” below:

[RT Administrator Survey](#)

Sincerely,

Abdulelah Aldhahir

Department of Respiratory Therapy

Georgia State University

P.O. Box 4019

Atlanta, GA 30302

(404) 413-1225

Appendix C: A follow up email

Dear Participant,

You may have received an email last week that requesting you to complete a survey for a study named “Respiratory Therapy Administrator Perceptions of Effective Teaching Characteristics of a Clinical Preceptor in Metro-Atlanta Hospitals.” The goal of the survey is to explore how Respiratory Therapy (RT) Administrators see effective teaching characteristics of clinical preceptors. The current study aims to improve research by identifying the most significant (and the least significant) teaching qualities of clinical preceptor through the opinions of Respiratory Therapy (RT) Administrators.

If you have already finished taking the survey, I would like to thank you for your participation. Your information will be of great value and contribution to the research and development in respiratory therapy clinical education. On the other hand, if you have not completed the survey, please do so by clicking the link below. Your participation would greatly be appreciated. Rest assured all responses are confidential.

Thank you for your utmost consideration.

Sincerely,

Abdulelah Aldhahir

Appendix D: Final Email

Dear Respiratory Therapy Department Administrator,

Respiratory Therapy (RT) professionals have hectic schedules which are understandable, however, please be reminded about the survey sent to you about two weeks ago. The goal of the study, entitled “Respiratory Therapy Administrator Perceptions of Effective Teaching Characteristics of a Clinical Preceptor in Metro-Atlanta Hospitals,” is to determine the perception of RT Administrators concerning clinical preceptors and their most effective (and least effective) teaching characteristics. Once again, I would like to invite you to participate in this study, which will improve the clinical education of RT students today and in the future. If you have already completed the survey, I would like to thank you for your participation. Your information will be of great value and contribution to the research and development of RT clinical education.

If you have not, your contribution in the betterment of RT clinical education would be deemed highly valuable. Please take time today to complete the study, it should take less than 10 minutes. All information and responses will be kept confidential at all times. To complete the survey, you may click the link provided below. If you have any question or concern, please feel free to email me at aaldhahir1@student.gsu.edu.

Sincerely,

Abdulelah Aldhahir

[RT Administrator Survey](#)

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