THE IMPACT OF AFFECTIVE FACTORS RELATED TO WORK ON

THE TURNOVER INTENT OF SPEECH LANGUAGE

PATHOLOGISTS IN TEXAS

A Dissertation

by

JOHNNY R. O'CONNOR, JR.

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

December 2007

Major Subject: Educational Human Resource Development

THE IMPACT OF AFFECTIVE FACTORS RELATED TO WORK ON

THE TURNOVER INTENT OF SPEECH LANGUAGE

PATHOLOGISTS IN TEXAS

A Dissertation

by

JOHNNY R. O'CONNOR, JR.

Submitted to the Office of Graduate Studies of
Texas A&M University
in partial fulfillment of the requirements for the degree of

DOCTOR OF PHILOSOPHY

Approved by:

Chair of Committee,   Toby Marshall Egan
Committee Members,   Larry Dooley
                                    Bryan Cole
                                    James Lindner
Head of Department,   Jim Scheurich

December 2007

Major Subject: Educational Human Resource Development

ABSTRACT

The Impact of Affective Factors Related to Work on the Turnover Intent of Speech

Language Pathologists in Texas. (December 2007)

Johnny R. O'Connor, Jr., B.S., Southern University and A&M College

M.Ed., Southern University and A&M College

M.B.A., Texas Southern University

Chair of Advisory Committee: Dr. Toby M. Egan

This study was an attempt to add to the existing research base, as well as fill in a gap in the literature with regard to speech language pathologists in public educational organizations in Texas. Variables explored in this study were recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent.

The purpose of this study was to explore the relationship between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and the turnover intent of speech language pathologists in Texas. Additionally, this study sought to identify those factors that most influence the recruitment and retention of speech pathologists.

A random sample of 500 speech pathologists was identified for participation in this study. Responses were elicited via Questionnaires, and consisted of eight sections: (a) demographic information and (b) seven previously validated and reliable instruments

related to the variables identified in this study. All instruments were deemed appropriate for use in this study and were set to a six-point Likert scale.

The data revealed that job responsibility, pay level, size of caseload, needing a job, and administrative support played a major role in the recruitment of speech language pathologists. On the other hand, job satisfaction, caseload, and job security were found to be the most influential in the retention of speech language pathologists. Furthermore, recruitment, retention, and job overload were found to have a significant positive relationship to turnover intent in speech pathologists, whereas career commitment, organizational commitment, and job satisfaction were found to have a significant negative relationship to turnover intent.

DEDICATION

This dissertation is dedicated to my late grandparents, James and Mary O'Connor, Wilbert and Celestine Coats; my parents, Johnny and Olivet; my wife Kandra; my daughters, Chaisly and Briley; and my siblings, Jermaine, Jason, and Elayna.

This has been a long journey made bearable by your constant love and support. I could never repay you for the inspiration, guidance, and motivation you provided me throughout all of my educational endeavors. I am very grateful to have had such a support system, and am deeply humbled by the wisdom I have gained from you, the sacrifices you have made on my behalf, and your confidence in me.

Thank you and I love you!

vi

ACKNOWLEDGEMENTS

As this journey comes to an end, I sit and begin to reflect. As I reflect, I soon recognize that I could not have accomplished this feat without the help of many others.

First and foremost, I would like to thank God, who serves as my foundation and inspiration. You instilled in me the strength, perseverance, and mental being to complete this task. For this, I am forever thankful! Your works are truly amazing!

I would like to extend a special thanks to my committee members: Dr. Toby M. Egan – Chair, Dr. Bryan Cole, Dr. Larry Dooley, and Dr. Jimmy Lindner. Being a dissertation committee member is truly a selfless act. I appreciate the time you take from your sometimes hectic schedules to transform a student into a scholar.

Dr. Egan, thank you for guiding me and giving me encouragement throughout this process, from prelims to defense. You assured me that there was a light at the end of the tunnel even when it appeared dim. Your support did not go unnoticed.

Dr. Cole, thank you for your guidance throughout this process. The insight you gave me in the design of my study was invaluable. And, how could I forget to thank you for your knowledge of "Paretos!" As a result, they are no longer awry!

Drs. Dooley and Lindner, thank you for agreeing to lend your expertise in the completion of my dissertation. As I have said before, I am very appreciative of you stepping in midway of this process. You made a situation that could have become complicated, a lot easier for me.

A special thanks to my wife Kandra for the sacrifices she made during this journey. This journey yielded two children along the way, which meant that it was not

easy. Thank you for caring for Chaisly and Briley as I attended class and burned the midnight oil at the library. This task was made a lot easier for me by knowing that our daughters were well taken care of. Thank you for supporting my aspirations. With all the sacrifices they entailed, at times it may have become discouraging; however, you embraced and endured. For this, I thank you again, and want to let you know that you are appreciated, I love you, and your sacrifices did not go unnoticed. The best has yet to come!

I would like to thank Celestine B. Coats, for the wisdom she gave me. "Grandmother," unfortunately you were not here to see some of your premonitions come to fruition, but let it be known and duly recorded, that your advice was taken and applied.

A special thanks to my mother, Olivet O'Connor, and my Father, Johnny R. O'Connor, Sr., for instilling in me the importance of education and for the many sacrifices they have made throughout my life. Early on, both of you made intellectual deposits in me that have paid dividends. Without your support, encouragement, and unwavering love, I do not know where I would be. When I describe you to people, I often say I have the most positive, loving, and supportive parents in the world. You both have been my role models. This degree is just as much yours as it is mine, and if it were up to me, I would have your names printed on it as well. Your wisdom, encouragement, and faith in me have left a positive impression. You taught me to have confidence in all I do, and that anything I put my mind to, I can and will achieve. You taught me that adversity is only temporary and that you can rise above all things when you put your

faith in God. You made it clear what your expectations were and always supported me, even if it meant making personal sacrifices.

I would also like to extend my appreciation to my siblings Jermaine, Jason, and Elayna O'Connor. Thanks for your love and encouragement. You guys made the ride from College Station a lot more bearable. The laughter and encouragement you provided was much needed.

And to my mother and father in-law Anthony and Jeanell Maxie; and my brother in-law Kenneth Carr, I would like to thank you for your love, support, and concern throughout this process. I realize that it was not easy entertaining Kandra and the girls while I was in class, or at the library. But you endured it, and I owe you!

To my "traveling cohorts," Dr. Chandra Stephens and Bert Jennings. You also kept me encouraged and inspired along the way. Just think, those "long drives through the pastures and country sides" we took together to College Station became even longer for me when I had to complete the journey by myself. Many times I became tempted to turn around, but persevered. I kept focused on the pact we made to finish. With this, as I cross the finish line, I reach my hand out to pull along the last of our cohort Mr. Bert Jennings. You can do it!

To Timothy, Lauren, Jalen, Kenneth Jr., Hanniyah, Kimora, Erica, Erinn, my cousins, and future nieces and nephews I may have, you have and continue to inspire me to succeed. Just as intellectual deposits were made in me, I, too, realize the importance of passing them along to others. I was humbled by the fact that I could potentially serve as a role model to you and also let you know that goals are attainable.

To the Honorable Lori Burgess, thank you for having such a vested interest in the well being of my family. Once graduating from high school, you made my transition to higher education a lot easier. Thank you!

And to Chaisly and Briley, I thank you for all the hugs, kisses, and smiles that a father can ask for. You all put in some late nights on this project, too, and should probably be co-authors on this document. I really appreciate the editing work that you completed on my dissertation (thank goodness for the undo function!). You both appear to be scholars in the making. Daddy has raised the academic bar really high. However, remember that there is much more out there to achieve. I have only scratched the surface of what is available. I would be very proud for you to meet or exceed my accomplishments, but what I want most from you, is **NOT** to measure your success by my or anyone else's accomplishments, but to (a) be obedient and (b) to set your own goals for accomplishment and to succeed in your own way. While I do hope that your success includes furthering your education as far as you can go, I do recognize that there is not one measure of success. And always remember that anything you put you mind to, you can and will achieve, just as long as you are willing to make sacrifices. Sacrifice is not easy, but can be rewarding. Remember one thing, when all else fails, Daddy will always be there for you.

And to the remainder of my family and friends, especially my aunts and uncles, thank you for your words of encouragement and prayers. I am fortunate to have such a support system.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

FIGURE   Page

CHAPTER I

INTRODUCTION

Recently, there has been an increased awareness of accountability in education, among educational and government agencies. Given this, bridging the gap among all students has become a top priority. As a result, several mandates have been handed down in order to assure that school districts implement plans for the better education of students. Of these mandates, provisions to provide children with highly qualified services and a free and appropriate education, have many educational agencies struggling to recruit and retain qualified individuals, in turn giving rise to many organizational issues (Kossar, Mitchem, & Ludlow, 2005; McDonnell, 1994; Miller, Brownell, & Smith, 1999; Porter, 1994; U.S. Department of Education, 2002).

Available research suggests that increases in public school retirement, coupled by the effect of the baby boomer generation, have increased school enrollment, making the recruitment and retention of well-qualified personnel in public schools a national priority (Blood, Ridenour, Thomas, Qualls, & Hammer, 2002; McLeskey, Tyler, & Flippin, 2004). Specifically, Health Careers Center (2007) predicts job growth for speech language pathologists to increase approximately 21 to 35% through the year 2010. This percentage represents approximately 150,000 new positions in the United States, during this time period. Paul-Brown and Goldberg (2001) and Levine et al. (2002) suggested that the increase in demand for speech language pathologists is a result of increased

_____

The style and format of this study follow that of *Human Resource Development Quarterly*.

awareness of early intervention of students with disabilities and comprehensive state and federal public school laws. Furthermore, Sack (1999) reported that during the 1996-1997 academic years, there were approximately 5.8 million U.S. students identified with disabilities. Employment of speech language pathologists is expected to drastically increase, growing at a much faster rate than that of all other occupations, in 2006 (Health Careers Center, 2007).

The shortage of special education personnel is very serious and has many implications. Unsuccessful recruitment and retention of personnel could lead to inadequate educational opportunities, unqualified staff, and a decrease in student achievement (Billingsley, 2004). This has been evident in several states where decreased qualifications for speech pathologists have been proposed (Deppe & Boswell, 2005). Likewise, West Virginia submitted a proposal to revisit the role of speech therapy assistants, allowing such practitioners the opportunity to work as independent providers in shortage areas (American Speech-Language-Hearing Association [ASHA], 2003). Menlove, Garnes, and Salzberg (2004) argued that the lack of credentialed special educators is an issue that should be resolved by addressing both recruitment and retention. According to McLeskey et al. (2004), throughout the 1990's, approximately 30,000 special education positions were filled each year. However, with regard to speech pathologists, Paul-Brown and Goldberg (2001) suggested that as educational resources decrease, the resolution to this problem will not be as easy as hiring more speech pathologists, but will ultimately involve school districts being forced to determine ways in which to reduce costs in order to acquire adequate personnel.

Rosa-Lugo, Rivera, and McKeown (1998) further stated that the financial lure of the private sector is in direct competition with education agencies, leading to new speech language pathologists opting for the higher salaries (almost double that of educational agencies) and better benefits. In support of this, Billingsley (2004) reported evidence for the claim by Rosa-Lugo et al. (1998) that teachers who worked with students with speech, hearing, and vision impairments, were more likely to leave the educational setting to pursue other opportunities outside of education. As a result, the critical shortage of speech language pathologists remains unchanged. Brownell, Hirsch, and Seo (2004) state that the attention given to this has presented a good opportunity for the field of special education to actively engage in efforts to retain and recruit the most qualified personnel. Consequently, several states have introduced bills to address teacher recruitment. These bills include programs such as scholarships and loan forgiveness for individuals working in critical shortage areas.

Hoff (2001) reported that the Houston Independent School District budgeted $100,000 dollars for teacher recruitment. This budget included billboards, TV and radio spots, and newspaper space. Rosa-Lugo et al. (1998) suggest that educational agencies use reasonable hours, summer vacation, payment of credentialing fees, and offering continuing education opportunities as possible selling points in the recruitment and retention of speech pathologists. Likewise, Billingsley (2004) identified a wide range of factors that influence the attrition of special education personnel, such as low salaries, poor work environment, role problems, and lack of administrative support, and suggests that subsequent studies of attrition focus on:

- Factors that influence different types of attrition.

- Differences among geographic regions and types of school districts.

- Teachers working in different instructional models.

- Teachers working in high versus low incidence groups.

- Difference in high versus low attrition districts.

- Teachers who work with students of varying cultural backgrounds.

However, these efforts only address part of the problem. It appears that the factors leading to the turnover intent of speech pathologists may be more complex than salary or another single factor (Brownell, Smith, McNellis, & Miller, 1997). Billingsley (2004) suggested that other affective factors related to work may potentially impact the recruitment and retention of individuals who work with students in special education., prompting these individuals to leave for other jobs (Billingsley, 2004).

Research suggests that variables such as organizational commitment, career commitment, job satisfaction, and job overload may affect an employee's intent to turn over. Billingsley and Cross (1992) found that increased professional commitment was a significant predictor of a person's intent to stay in teaching. Research has well documented this negative relationship between career commitment and an employee's turnover intent (Blau 1988; Kuei-Yun Lu, Wu, Hsieh, & Chang, 2002). Similarly, a negative relationship between organizational commitment and turnover intent has been noted (Gersten, Keating, Yovanoff, & Harniss, 2001). That is, as organizational commitment increases, turnover intent decreases (DeConinck & Bachmann, 1994; Loi, Hang-yue, & Foley, 2006).

Moreover, job satisfaction has been linked to an employee's turnover intent. Gersten et al. (2001) found that job satisfaction was able to differentiae between those special education teachers who intended to stay with an organization and those whose intent it was to leave. Moreover, Blood et al. (2002) found job satisfaction to correlate with a speech pathologist's longevity on the job and caseload.

Furthermore, job overload has been found to have a positive correlation to turnover and turnover intent (Pines & Maslach, 1978). Morvant, Gersten, Gillman, Keating, and Blake (as cited by Gersten et al., 2001) found that only 50% of special educators felt that their workload was manageable. Furthermore, Singer (1992) reported that teachers who worked with students with speech impairments were most likely to turn over. These departures were speculated to be because of high work demands. Billingsley (1993) cited job design factors such as lack of time, paperwork, and excessive meetings as reasons for turnover in special educators more than any factor. On the other hand, Westling and Whitten (1996) have linked other job design factors with a special education professional intent to stay with an organization. These factors included adequate time to complete paperwork, plan instruction, and prepare materials.

While identifying those factors that influence the recruitment and retention of speech language pathologists is very important, based on research, understanding those affective factors related to work and their impact on a professional turnover intention is very important, especially in a market where mandates are becoming stricter and shortages apparent.

Statement of the Problem

There is a growing shortage of special education personnel (Brownell, Bishop, & Sindlear, 2005) The Bureau of Labor statistics reports that by the year 2012, approximately 120,000 speech pathologists will be needed to replace retirees and meet current demand. As demand continues to grow, awareness of the recruitment and retention of special education personnel becomes more prevalent in research. In addition, understanding why these professionals turn over becomes more critical. More specifically, the importance of understanding the turnover intention of employees is vital because research has shown turnover intent to be a good predicator of actual turnover (Hom, Caranikas-Walker, Prussia, & Griffeth, 1992).

McLeskey et al. (2004) stated that there is less known about how effective local, state, and federal efforts have been in the recruitment of certified special education teachers. However, one fact that remains evident is that many areas remain desperate for special education teachers, which has prompted more attention to the recruitment and retention of special education personnel (Brownell et al., 2004).

According to Deppe and Boswell (2005), several factors contribute to the ongoing vacancies of speech pathologists in Texas public schools. These factors include high caseload, uncompetitive pay, and increased accountability standards. Consequently, during the Texas 2005 legislative session, the senate drafted a bill that would allow bachelor level speech pathologists the opportunity to provide speech therapy to students ages 3 to 12 years old. This bill would waive the current full licensure requirements (Deppe & Boswell, 2005). Currently, full licensure requirements include a master's

degree with appropriate clinical experience (Texas State Board of Examiners for Speech

Pathology [TSBESP], 2007). Claims regarding reasons for speech pathologists'

turnover, the causes of such turnover and potential interventions that would support

recruitment and retention appear under supported and lacking systematic investigation.

On the other hand, in other professional areas, several studies have implied the

importance of considering these affective factors as variables that may impact the

recruitment and retention of employees; however, no study appears to look at these

variables as they relate specifically to speech pathologists and their relationship to

recruitment and retention (Caplan, Cobb, French, Harrison, & Pinneau, 1980; Simpson,

2002; Somers, 1995). Similarly, no studies identified to date have explored the role of

affective dimensions of work such as turnover intention and organization commitment

among speech pathologists. Finally, there is a void in the literature, with regard to the

impact of career commitment and job overload on the recruitment and retention of

speech language pathologists.

Purpose of the Study

The purpose of this study was to explore the relationship between recruitment,

retention, career commitment, organizational commitment, job satisfaction, job overload,

and the turnover intent of speech pathologists in Texas. Additionally, this study sought

to identify those factors that most influence the recruitment and retention of speech

pathologists. This study used a questionnaire exploring key elements associated with the

recruitment, retention, commitment, workload, and turnover intention of speech

pathologists in school districts in the state of Texas.

Several of the variables identified in this study have been studied and acknowledged in HRD literature (Hatcher, 1999; Rowden & Ahmad, 2000; Tansky & Cohen, 2001). Specifically, each research question identified in this study provided information vital to improving organizational effectiveness, recruitment, retention, and retention.

Findings will add to the body of literature regarding recruitment, retention, job overload, career commitment, and other work-related affective reactions and may provide information that will be beneficial to school districts in Texas, with regard to recruitment, retention, and the turnover intent of speech language pathologists.

Research Questions and Hypotheses

What are the relationships between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent in speech language pathologists employed by school districts in Texas? The study addressed the following research hypotheses regarding the previously discussed speech pathologists:

HO_1: There is no statistically significant relationship between recruitment and turnover intent.

HO_2: There is no statistically significant relationship between retention and turnover intent.

HO_3: There is not statistically significant relationship between career commitment and turnover intent.

HO_4: There is no statistically significant relationship between organizational commitment and turnover intent.

HO_5: There is no statistically significant relationship between job satisfaction and turnover intent

HO_6: There is no statistically significant relationship between job overload and turnover intent.

HO_7: There is no statistically significant relationship between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent.

HO_8: There is no statistically significant relationship between recruitment, retention, turnover intent, organizational commitment, job satisfaction, job overload, and career commitment.

HO_9: There is no statistically significant relationship between recruitment, retention, career commitment, turnover intent, job satisfaction, job overload, and organizational commitment.

HO_{10}: There is no statistically significant relationship between recruitment, retention, career commitment, turnover intent, organizational commitment, job overload, and job satisfaction.

HO_{11}: There is no statistically significant relationship between recruitment, retention, career commitment, turnover intent, organizational commitment, job satisfaction, and job overload.

HO_{12}: There is no statistically significant relationship between organizational actions and turnover intent.

HO_{13}: There is no statistically significant relationship between job satisfaction,

organizational commitment, and job overload.

Operational Definitions

Affective Reactions – a general term used in this study to identify the ways respondents

feel about their work including: career commitment, job satisfaction,

organization commitment, and turnover intention.

Career Commitment – an individual's loyalty to one's career (Fields, 2002).

Job Overload – when the demands of a job become excessive. This includes the point at

which an individual or individuals do not have adequate time to complete work

during regular work hours/or days, excessive workloads, etc. (Caplan et al.,

1980).

Job Satisfaction – the degree that an individual feels fulfilled or happy with his/her job

(Fields, 2002).

Organization Commitment – an individual's loyalty to an organization (Mowday, Porter,

& Steers, 1982).

Recruitment – ability to successfully acquire speech pathologists in a Texas school

district.

Retention – ability to keep qualified speech language pathologists employed for an

extended period of time, in a Texas public school district.

Speech Language Pathologist (SLP) – a professional who has met all requirements set

forth by the State Board of Examiners for Speech Pathology or the Texas

Education Agency (grandfather clause). This individual usually holds a master's

degree unless otherwise granted privileges by a grandfather clause.

Responsibilities of this individual include: the evaluation and treatment of

communication disorders such as: language and articulation (ASHA, 2006a)

Selected Demographic Variables – includes years of experience, educational level, age,

and gender.

Turnover Intention – an individual's plan to leave an organization for any given reason

(Menlove et al., 2004).

Assumptions

For the purpose of this study, the researcher made the following assumptions:

1. The researcher was impartial in collecting and analyzing the data.

2. The respondents of the study understood the scope of the study and the

   language of the instrument, were competent in self-reporting, and responded

   objectively and honestly.

3. Interpretation of the data collected accurately reflected the intent of the

   respondent.

4. The methodology proposed and described here offered the most logical and

   appropriate design for this particular research project.

Limitations

The researcher identified the following limitations:

1. The scope of this study was limited to speech pathologists in school districts

   in Texas and, therefore, may not be generalized to a broader population.

2. This study was limited to the information acquired from the literature review and survey instruments.

3. This study was dependent upon the accurate self-report of respondents regarding their recollections and reactions regarding their recruitment and intentions pertaining to their persistence and turnover intention in their current jobs and careers.

Methodology

Population

The number of speech pathologists registered with the American Speech Language Hearing Association (ASHA) in the state of Texas, as public school speech pathologists, is estimated to be 2,178. The sample population for this study included speech pathologists from selected areas in Texas (approximately a sample of 500). Each speech pathologist was randomly selected based on predetermined demographic criteria. The identity of each speech pathologist was confirmed by using The American Speech Language and Hearing Associations Directory. This directory is available to the public via the Internet and/or by public request and includes the name of the speech pathologists, telephone number, and addresses. This method appeared to be the most reliable and efficient way to obtain information for the purpose of this study.

Instrumentation

Data were collected using a modified version of an instrument developed by Simpson (2002) and previously validated survey items related to the research questions obtained from available publications (Fields, 2002). Proposed survey items were used to

gather unobservable information regarding the feelings, motivation, attitudes, accomplishments, and experiences of each individual, by presenting the same questions to each person identified for the study. Specifically, the instrument developed for this study collected information on the following variables, as they relate to the research questions and hypotheses presented above: recruitment, retention, job overload, career commitment, organization commitment, job satisfaction, and turnover intention (Balfour & Wechsler, 1996; Fields, 2002; Seashore, Lawler, Mirvis, & Camman, 1982; Simpson, 2002). The survey (Appendix A) consisted of a total 65 items and took approximately 15-20 minutes to complete.

All of the survey items utilized in the current study were previously validated. In the Simpson (2002) study, content validity for the instrument utilized was established by a panel, which included: special education professionals, university professors, and certified educational diagnosticians. In addition, Simpson (2002) completed a field test for wording and coherence. Blau's (1989) instrument of career commitment was developed to look at workers' commitment toward their occupations, profession, and career. Additionally, Reilly and Orsak (1991) modified this instrument for the nursing profession. In looking at the reliability of these instruments, coefficient alpha values ranged from .76 to .88.

The organizational commitment scale (OCS) was developed by Balfour and Wechsler (1996) to measure organizational commitment in three dimensions: (a) commitment based on affiliation or pride in the organization, (b) commitment based on identification with the organization, and (c) commitment based on satisfaction exchange

with the organization. In this study, items from the affiliation component was used. The coefficient alpha value from this part of the instrument was .81; the job satisfaction survey that was used in this study was developed by Cammann, Fichman, Jenkins, and Klesh (1983). This instrument is used as an overall indicator of an employee's satisfaction with a job. For this instrument, coefficient alpha values ranged from .67 to .95 in various versions of the instrument; Caplan et al.'s (1980) instrument of job overload was developed to quantify employees' perceptions of job overload. Studies that have used this instrument have yielded alpha coefficients ranging from .72 to .81. A review of the literature suggests that each instrument is appropriate for this study. All instrumentation was deemed reliable and valid based on use in previous studies including: recruitment, retention, job overload, career commitment, organizational commitment, turnover commitment, and job satisfaction (Balfour & Wechsler, 1996; Fields, 2002; Seashore et al., 1982; Simpson, 2002).

Procedures

The researcher obtained permission to implement the study from the Texas A&M University Institutional Review Board (IRB). Upon approval, names, addresses, and phone numbers of identified speech pathologists were obtained from The American Speech and Hearing Association's Directory. Speech pathologists were mailed information regarding confidentiality, purpose of study, and a questionnaire. Instructions directed participants to return the questionnaire promptly in either online or paper formats. By mailing back the survey or confirming consent as a part of the online survey, participants verified their informed consent. The participant, by mailing back the survey,

implied informed consent. The instrument took approximately 20 minutes to complete. In addition, a web-based survey was distributed via electronic mail. Data from the instrument were compiled and statistically analyzed.

Data Analysis

The results of the study were reported using appropriate descriptive and inferential statistics. Data were analyzed using SPSS. The data included all information obtained from surveys. Statistical procedures used in this study were descriptive, factor analysis, Cronbach Alpha, linear regression, multiple regression, and t-tests to address nonresponse error. Data analysis included figures and tables to present the findings. In addition, a written explanation of findings is included.

Significance of Study

Higher demands of special education services have consistently increased the amount of uncertified special education personnel hired in school districts (Eichinger, 2000). In 2002, approximately 8,000 speech language pathologists worked in the state of Texas. Of this, about half work in the public schools, forcing approximately 60% of all Texas school districts to fill vacancies with high-priced independent contract workers or speech pathology assistants. Despite noble attempts, agencies appear unable to lure speech language pathologists to work with them (Rednova News, 2005). Billingsley (2004) suggests that studies should begin to investigate those factors that contribute the attrition and retention of special education personnel. Likewise, McLeskey et al. (2004) suggest that a wide range of factors influence special education teacher shortage.

Shortages in educational personnel are steadily increasing. Specifically, specialized personnel such as speech pathologists are becoming even scarcer, often leaving school districts ill equipped to comply with the state and federal regulations that require all children receive a free and appropriate education, within specific guidelines. In addition to state and federal regulations, school districts have the added tasks of competing for the employment of speech pathologists with rehabilitation facilities, hospitals, etc. With this, it is the intent of this study to provide insight to selected Texas school districts that will assist in the successful recruitment and retention of speech language pathologists, as well as provide a better understanding of why these employees turn over. The failure of educational institutions to successfully recruit and retain personnel may cause process breakdowns. This, in turn, impacts district referral processes and disrupts the continuity of services to those students who qualify, ultimately bringing on compliance issues. Information from this study may be helpful in guiding organizational processes in educational institutions, in turn, assisting them in operating more efficiently and effectively. The findings of this study will also have practical implications for selected Texas school districts, providing information based on research methodology and a review of the literature.

Furthermore, the importance of this study must be recognized from a human resource development perspective. This study adds knowledge to current HRD literature about employees' attitudes toward work (job satisfaction, organizational commitment, career commitment, retention incentives, and recruitment incentives) and their relationship to turnover intent. This study may assist both the HRD and speech

pathology fields in better understanding the role of recruitment and retention incentives and other affective factors of work on the turnover intention of employees. If factors that negatively and positively impact the recruitment, retention, and turnover intent of employees are not adequately identified, decisions made related to these variables could result in organizational ineffectiveness.

CHAPTER II

LITERATURE REVIEW

The recruitment and retention of speech language pathologists has long been a problem in both private and public schools. Specifically, speech pathologists have consistently reported job overload as a major concern. This study examined the impact of affective factors related to work on the turnover intent of speech pathologists in Texas. This section will offer an overview of literature related to: recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent, offering definitions, theory/models, and an overview of studies.

Recruitment and Retention of Speech Language Pathologists

Definitions of Recruitment

"Organizational recruitment has been defined as the process of seeking out and attempting to attract individuals from the external labor market who are capable of and interested in filling job vacancies" (Taylor & Bergmann, 1987, p. 261). It is what occurs before the actual hiring of an employee (Boudreau & Rynes, 1985) and has been said to be a critical part of organizational success (Carlson, Connerley, Ross, & Mecham, 2002). Recruitment has also been defined in literature as those organizational activities that (a) influence the number and types of applicants who apply for a position and/or (b) influence whether a job offer will be accepted (Breaugh, 1992; Rynes, 1991). The term recruitment typically includes a wide range of activities and characteristics, including but not limited to, the dispensing of organizational literature (Taylor & Bergmann, 1987) to those activities carried out by organizational recruiters (Rynes & Barber, 1990).

Definitions of Retention

Retention has been said to be a prominent issue in both military and civilian organizations (Rocco, Pugh, & Gunderson, 1977). It is what organizations are concerned with after employment has been offered. Due to the value of intellectual capital and the costs associated with replacing valuable employees, retention has began to receive notable attention (Mitchell, Holtom, Lee, Sablynski, & Erez, 2001; Podsakoff, LePine, & LePine, 2007). Retention can be defined as the process in which an organization encourages employees to render long periods of service or commitment to an employer (Schuh, 1967). Billingsley (1993) offered a definition of retention that stated that this variable referred to those employees who remained in the same position as the previous year. Moreover, Rocco et al. (1977) contend that low retention rates subsequently lead to significantly high financial waste and reduced organizational effectiveness.

Supply and Demand of Speech Pathologists

In special education-related professions, supply has always exceeded demand (Cronis & Ellis, 2001). Specifically, the scarcity of speech language pathologists in public schools has become a major concern (Edgar & Rosa-Lugo, 2007). According to the ASHA (2006b) Schools Survey, 68% of school-based SLPs indicated that the demand of speech pathologists far exceeds the current supply available (Edgar & Rosa-Lugo, 2007). The U.S. Bureau of Labor Statistics (2005) states that the employment rate of speech pathologists will experience growth of 9%-17% through the year 2014. As a result of this anticipated growth, an additional 14,000 speech pathologists will be needed to satisfy this demand, with a projected 13,900 in vacancies, due to growth and net

replacements (U.S. Bureau of Labor Statistics, 2005). In 2000, The U.S. Office of

Special Education Programs (2000) conducted a Study of Personnel Needs in Special

Education (SPENSE). Similar to BLS findings, it was reported that there were

approximately 11,148 job openings for speech pathologists. A further breakdown of this

number suggests that 6,107 of these vacancies were in suburban areas, 2,610 in urban

areas, followed by 2,496 in rural areas.

Factors Contributing to the Demand for Speech Pathologists

The increase in the demand for speech pathologists has been contributed to

several factors: (a) an increase in the number of students being diagnosed with speech

impairments, (b) newly imposed legislative guidelines, (c) high turnover in school SLPs,

due to job dissatisfaction, and (d) voluntary turnover, due to retirements (Blood et al.,

2002; Cronis & Ellis, 2001; Dowden et al., 2006; Edgar & Rosa-Lugo, 2007). As a

result, school districts have been forced to fight an uphill battle, often competing with

SLPs who have opted for alternative settings as a preferred workplace, citing higher pay,

as well as lower caseloads as main attractors (Chmelynski, 2005; Edgar & Rosa-Lugo,

2007; Frederick Schneiders Research, 1998).

The demand for speech pathologists has many implications and consequences.

Shortages of qualified personnel have resulted in larger caseloads, less opportunity for

professional collaboration, decreased ability to serve students individually (Blood et al.,

2002), increased expense for contracted services, and decreased quality of services

(ASHA, 2005). Given this, efforts to recruit and retain speech pathologists have been

ongoing, with many now recognizing this as a nationwide problem that will need

significant attention (Boe & Cook, 2006; Edgar & Rosa-Lugo, 2007).

Barriers to Recruitment and Retention of Speech Pathologists

Barriers to the recruitment and retention of speech language pathologists have

been well documented in several studies (ASHA, 2006a; Darling-Hammond, 1999). In

the ASHA (2004b) School Survey, high amounts of paperwork were identified as the

greatest challenge facing speech language pathologists, in turn serving as a deterrent to

recruiting and retaining these employees. This paperwork included individual education

plans, quarterly reports, assessment reports, and therapy logs (ASHA, 2000). Other

barriers identified were: salary disparities (ASHA, 2004b), difficult working conditions,

(Blood et al., 2002), insufficient planning/meeting time, and limited technology

available (ASHA, 2000), lack of pension portability across states, late budget decisions,

and loss of salary credit (Darling-Hammond, 1999). Given this, it is noteworthy that

several studies have found that excessive workload demands decrease job satisfaction

(Billingsley & Cross, 1992; Dwyer & Ganster, 1991). Furthermore, Frederick

Schneiders Research (1998) suggests that these identified barriers may be the reason

why new graduates prefer healthcare settings versus schools.

Strategies for Recruitment and Retention of SLPs

Many strategies and solutions have been presented to resolve the issue of

recruiting and retaining highly qualified educational staff (Darling-Hammond, 1999).

Consequently, several of these strategies have been cited to have potential in solving the

issues that schools face in the recruitment and retention of speech language pathologists

(ASHA, 2005). Darling-Hammond (1999) suggests that organizations:

- Raise teacher standards while equalizing salaries.

- Establish licensing reciprocity across states.

- Grant licenses to out-of-state applicants who have earned national
  certification.

- Create national recruitment initiatives, streamline hiring procedures, and
  develop online information technologies.

- Create service scholarship programs to prepare highly-qualified candidates in
  fields where shortages exist (i.e., speech pathologists).

- Expand teacher education programs in high-need fields.

- Create high-quality induction programs.

Similarly, the Urban Teacher Collaborative (2000) proposes that organizations offer:

- Housing assistance, relocation benefits, and moving expenses.

- Tuition assistance for graduate work.

- Incentives for national certification.

- Student loan forgiveness program.

- Monetary bonus for high-need subject area candidates.

In support of offering incentives for recruitment and retention, several authors

have suggested similar offerings. Boe, Bobbit, Cook, Whitener, and Weber (1997)

suggested that school districts offer employment at as high a salary level as possible.

Additionally, Whitaker (2000) stated that mentoring is correlated with a teacher's plans

to stay in special education. Furthermore, Russ, Chiang, Rylance, and Bongers (2001), found that higher caseloads correlated to special education teachers leaving.

As noted, innovative plans will need to be implemented in order to begin closing the gap between supply and demand. This will include developing relationships with colleges and universities to increase efforts to train students in this profession.

An Overview of Recruitment Related Literature

Recruitment has been identified as one of an organization's most important human resources functions. This function is responsible for attracting the most qualified job applicants, which has been linked to organizational effectiveness (Allen, Scotter, & Otondo, 2004). Over the years, several studies have been completed, with regard to this construct, providing valuable recruitment information to organizations. Blau (1990), in a study of recruitment source and employee performance of bank tellers, found ability to be significantly related to performance, where as, motivation to apply was positively related to productivity. However, in this study, realistic job expectations were not significantly related to performance. Looking at the differences between demographics/or backgrounds across recruitment sources, Blau (1990) discovered that minority group tellers were more likely to be recruited by newspaper, were as non minority group tellers were more likely to be recruited by employee referral or walk in. Additionally, it was found that employee referrals had a more realistic view of the job. Furthermore, walk-ins were found to have the greatest perceived ability to perform. This finding was supported in earlier literature (Breaugh, 1981; Breaugh & Mann, 1984).

In another study of recruitment source, Swaroff, Bass, and Barclay (1985) examined the relationship between recruitment source, employee tenure, and productivity. These researchers found no relationship between recruitment source and job tenure or employee productivity. Findings were contrary to earlier literature, which consistently found that employees who were hired through informal methods (employee referral, self-initiated contact, etc.) stay longer with an organization than those hired through formal methods (newspaper advertisements, college recruitment or employment agencies (Decker & Corneilius, 1979; Gannon, 1971; Reid, 1972). However, Swaroff et al. (1985) sought to explain this deviance from prior literature as a result of : (a) the characteristics associated with this specific job, (b) the fact that levels of jobs are not always considered, and (c) the turnover rate of the population studied.

In 2004, Collins and Han examined the relationship among early recruitment practices, organizational factors, and organization-level recruitment outcomes. Results suggested that early recruitment practices (i.e., general recruitment ads, sponsorships, detailed recruitment ad, and employee endorsements), corporate advertising, and firm reputation had a direct effect on applicant pool quantity and quality. Of these practices, corporate advertising presented as the most powerful. Collins and Han (2004) contend that corporate advertising increases job seekers' awareness of an organization as an employer and create a positive image of the company. Hence, companies that invest in corporate advertising may gain a competitive advantage in attracting more quality applicants. Furthermore, Collins and Han (2004) found both low and high involvement recruitment practices to be effective in pursuing applicant pool quantity and quality.

Results found that low involvement practices lead to increased applicant pool quantity and quality in firms that had low scores on corporate advertising and firm reputation, and high involvement recruitment practices appear to be effective for organizations with already established organizational awareness and positive beliefs through both corporate advertising and firm reputation. However, companies using high involvement recruitment practices and having weak initial interest did not gain in applicant pool quantity and quality (Collins & Han, 2004).

In a recent study of the impact of recruitment communication media on prehire outcomes, Allen et al. (2004) identified a sample of 1,064 undergraduate business students. As rationale for this sample, the authors argued that although a student sample may limit the generalizability of the results, college students were the target audience for the jobs identified in the experiment; hence, the context appeared to be appropriate for the sample. Findings suggested that both choice and use of media matter in organizational recruitment. Furthermore, the researchers found that transmitting a recurrent recruitment message through various media sources resulted in differing perceptions (amount of information, two-way communication, personal focus, social performance, and symbolism). These features were found to be positively related to the prehire outcomes of credibility and satisfaction, which were found to be positively related to attitudes toward joining the organization.

Flextime has become one of the most prevalent strategies used to address the changing needs of the workforce (Kemske, 1998). In fact, The Society for Human Resource Management (SHRM) (2001) reported from an annual survey of human

resource professionals, that 58% of participants were currently offering flextime. Given this, Rau and Hyland (2002) investigated role conflict and flexible work arrangements, with regard to their effects on applicant attraction. Findings suggested that employees who face increased levels of all types of role conflict (work to family (WTF), family to work (FTW), and work to school (WTS), exhibited greater interest in organizations offering flextime, as opposed to those exhibiting low levels of role conflict. These participants showed no difference in preference. Furthermore, Rau and Hyland (2002) reported that subjects experiencing low levels of role conflict were more attracted to organizations that offered telecommuting. Conversely, subjects experiencing high levels of role conflict showed no clear preferences.

Recruitment Theory

Vroom (1964) states that the expectancy theory assumes that "behavior is a result of conscious choices among alternatives. Furthermore, expectancy theory is based on three beliefs: (a) valence, (b) expectancy, and (c) instrumentality. Valence refers to the emotional importance/or value that individuals put on the potential rewards that an organization may to offer. Expectancy relates to an individual's confidence in doing a specific job. Furthermore, instrumentality is an employee's perception as to whether or not he/she will achieve a desired outcome. Drawing from this theory, Rynes (1991) suggests that a person seeking employment will more likely pursue a job perceived as having both high valence and high expectancy. That is, a job that has several positive attributes and high obtainability will increase attraction (Collins & Han, 2004).

Marketing Brand Equity Theory

Research on brand equity says that exposure to a company through advertising efforts increases consumer attraction toward the company (Mitchell & Olson, 1981) and willingness to purchase from the company (Collins & Han, 2004). Furthermore, Collins and Han (2004) state that people typically like what is familiar and are reluctant to trust the unfamiliar. This familiarity is developed through advertising, which in turn signals the quality of a brand to the consumer. Cable and Turban (2001) contend that this concept can be applied to job seekers. When applying this theory to job seekers, employee beliefs play a big role. Consequently, firms that use corporate advertising that create increased awareness and positive attributes, will likely be attractive to employees.

Social Identity Theory

Tajfel's (1982) social identity theory suggests that a person's self-concept is partially based on his/her association with certain social groups. Therefore, as a result of being a member of a particular group, members achieve the social status and attributes associated with that group. Therefore, "individuals can enhance their self-concepts by associating themselves with positive reputations" (Collins & Han, 2004, p. 693). As applied in the context of recruitment, Turban and Cable (2003) argue that an organization with a positive reputation will have increased recruitment pools.

Media Richness Theory

According to Dreft and Lengel, as cited in Allen et al. (2004), "media richness theory (MRT) suggests that communication outcomes depend on the match between media capacities and communication requirements" (p. 144). MRT identifies that visual

images, symbols, sounds, or information that is personal, often require media with large capacity. Consequently, media that lack the ability to support large capacity, are less effective in communicating messages that are complex, ambiguous, or personal (Allen et al., 2004). "MRT suggests that recruitment messages communicated through different media will be perceived as differing in terms of important features and the ability to effectively communicate different types of information, and thus, result in different outcomes" (Allen et al., 2004, p. 148)

Signaling Theory

Signaling theory states that because job choice sometimes takes place under limited information (outside the organization), recruitment experiences often serve as signals of unobservable organizational characteristics. Furthermore, content analysis suggests that employee recruitment experiences have strong signaling when less is known about the organization prior to the search, recruitment representatives are in the same hiring area of the applicant, and when experiences occur on location, as opposed to on a campus (Rynes, 1991).

Job Satisfaction

Over the years, job satisfaction has been intensely studied (Cranny, Smith, & Stone, 1992) in the social and (Pezzei & Oratio, 1991; Vroom, 1964) behavioral sciences, as well as in education (Thompson, McNamara, & Hoyle, 1997). In as early as the 1920's, several empirical studies of job satisfaction have been completed. Specifically, since the 1970's, the majority of job satisfaction studies have explored a variety of industrial and non-industrial settings, while attracting increasing attention

(Snarr & Krochalk, 1996). In these studies, job satisfaction has been used as both a dependent and independent variable (Wanous & Lawler, 1972). Recent literature suggests that over 3000 studies of job satisfaction have been completed over the last 60 years (Quarstein, McAfee, & Glassman, 1992).

In general, job satisfaction is said to be composed of both intrinsic and extrinsic characteristics (Herzberg, Mausner, & Snyderman, 1959). Herzberg and his colleagues state that intrinsic characteristics are perceived as being a result of an individual's relationship to a job (Rynes, 1991). Furthermore, they conclude that intrinsic factors include: autonomy, achievement, responsibility, and job interest. On the other hand, researchers state that extrinsic factors are those rewards or sources of need satisfaction that are derived from an organizational perspective (Rynes, 1991). Extrinsic factors include: salary, supervision, policy, job security, and work setting (Herzberg et al., 1959). Of the two, intrinsic factors have been found to be the most important to workers in a variety of occupations (Pezzei & Oratio, 1991). To date, literally thousands of studies of job satisfaction have been completed (Quarstein et al., 1992). Job satisfaction can be related to any aspect of a job and is an important part of organizational effectiveness (Spector, 1997).

Defining Job Satisfaction

Within the extensive research that exists, significant progress has been made in the development and defining of job satisfaction (Vroom, 1964). Consequently, this has given rise to an array of definitions (Wanous & Lawler, 1972), though it has become apparent that the consensus is that job satisfaction is an affective reaction to a job that

results from an individual's comparison of actual outcomes, versus what is actually desired (Cranny et al., 1992; Locke, 1976; Porter, Lawler, & Hackman, 1975).

Job satisfaction has been defined as the extent to which an individual likes his/her job (Agho, Mueller, & Price, 1993). This construct has also been viewed as a person's overall feeling of his/her job and/or different aspects of his/her job (Spector, 1997). Similarly, both Cramer (1996) and Rowden (2002) argue that job satisfaction is the degree to which an employee has a favorable affective connection or attitude toward their job or a particular facet of their job. Moreover, Rowden (2002) offers two perspectives to consider when addressing job satisfaction: (a) the humanitarian perspective and (b) the utilitarian perspective. The humanitarian perspective contends that people deserve to be treated fairly and with respect. And, the utilitarian perspective states that job satisfaction can lead to employee behaviors that ultimately affect the overall functioning of the organization. It is further argued that both perspectives combined; provide an explanation of why much attention is given to this variable (Rowden, 2002).

Other definitions of job satisfaction have identified it as being "a pleasurable or positive emotional state resulting from the appraisal of one's job or job experiences" (Locke, 1976, p. 1300). However, Porter et al. (1975) contend that satisfaction is the way a person feels about a job that "is determined by the difference between the amount of some valued outcome he feels he should receive" (pp. 53-54). Furthermore, Weiss (as cited in Rowden, 2002) defines job satisfaction as "a positive (or negative) evaluative judgment one makes about one's job or job situation" (pp. 411-412).

Job satisfaction is directly related to an individual's current work situation. Given this, job satisfaction is dependent on many factors such as: the current marketplace, work conditions, job location, and other strong influences (Zingeser, 2004). Consequently, some researchers have recognized job satisfaction as a multidimensional construct, consisting of facets (Spector, 1997; Thompson et al., 1997; Wanous & Lawler, 1972). Specifically, Wanous and Lawler (1972) identified job satisfaction in terms of facets. These researchers suggested that addressing satisfaction as Job Facets Satisfaction (JFS) provides a more detailed view of a person's job satisfaction, versus a global approach. For example, an employee may feel differently toward different facets of a job. They may be satisfied with their co-workers and be dissatisfied with their pay. A facet approach to job satisfaction allows organizations and researchers to identify those parts of a job that produce satisfaction or dissatisfaction (Spector, 1997). In support of this perspective of job satisfaction, Weiss (as cited in Rowden, 2002) argued that "job satisfaction is multidimensional – that is, a worker may be more or less satisfied with his or her job, supervisor, pay, workplace, and so forth" (Rowden, 2002, p. 412). As research on the facets of job satisfaction continues to emerge, a continuum of definitions of job satisfaction will be sure to follow.

Job Satisfaction Theory and Models

In a review of literature, Thompson et al. (1997) have identified three theoretical frameworks related to job satisfaction: (a) Framework One: Content Theories of Job Satisfaction, (b) Framework Two: Process or Discrepancy Theories of Job Satisfaction, and (c) Framework Three: Situational Models of Job Satisfaction. According to Locke

(1976), "content theories are concerned with analyzing the particular needs, motives, or rewards that motivation theories include" (p. 23). Furthermore, Locke (1976) states that "Process theories concentrate more on the psychological or behavioral processes in motivation, often with no designation of the important rewards or motives" (p. 23). Lastly, Situational Models of Job Satisfaction are described as models that explain how several subsets of variables join to relate to job satisfaction (Hoy & Miskel, 1996).

Content Theories of Job Satisfaction

Malsow's Need Hierarchy

In 1954, Abraham Maslow proposed a theory of needs (Golembiewski, 2001). In this theory, Maslow (1954) argues that in order for a person to be satisfied, five basic needs must be met: (a) physiological needs, (b) safety needs, (c) social needs, (d) esteem needs, and (e) self-actualization needs. Specifically, Maslow (1954) explains that: (a) physiological needs include the need for relief from hunger, thirst, and fatigue, etc., (b) safety needs include the need to be free from bodily harm, (c) social needs include the need for love affection and belonging to groups, (d) esteem needs include the need for individuals to be recognized and to achieve, and (e) self-actualization needs includes the need to reach one's full potential in a specific area. Maslow (1954) further indicated that individuals who are genuinely self-actualized accomplish this ultimate satisfaction by being truly dedicated to a specific duty, form of work, or mission. He further stated that each of these traits serves a higher purpose than that of self-satisfaction, in turn benefiting others or society (Golembiewski, 2001). Moreover, this theory argues that needs are ordered in a hierarchy from most to least dominate (Rynes, 1991).

Herzberg's Two-Factor Theory

This theory is one of the best known analyses of motivational issues. The Herzberg two-factor theory focuses on the higher order of needs in individual motivation in organizations (Golembiewski, 2001). In this theory, Herzberg et al. (1959) argues that two major factors influence individual motivation at work, "hygiene factors" and "motivators." According to Herzberg et al. (1959), hygiene factors "act in a manner analogous to the principles of medical hygiene. Hygiene operates to remove health hazards from the environment of man. It is not curative; it is rather, a preventive" (p. 113). Without hygiene factors, dissatisfaction of the job can occur. However, it is noteworthy that the presence of hygiene factors does not necessitate high satisfaction levels (Golembiewski, 2001). Unlike hygiene factors, motivators serve as a stimulation source, and motivate employees. Motivators "serve to bring about the kind of satisfaction and…the kind of improvement in performance that industry is seeking from its workforce" (Herzberg et al., 1959, p. 114). Furthermore, this theory argues that both job satisfaction and dissatisfaction are results of different causes. That is, satisfaction is reliant on motivators, whereas dissatisfaction is a result of hygiene factors (Rynes, 1991).

Process or Discrepancy Theories of Job Satisfaction

March and Simon Inducements – Contributions Theory

In this theory, the exchange of inducements and contributions are viewed. Inducements are the extrinsic rewards given by the organization. Contributions are the outputs of the individuals in the organization. This theory suggests that: (a) an

organization is made of participants from many social backgrounds, (b) participants receive inducements for work performed, (c) participants will continue to participate only if inducements are greater than or equal to contributions made, (d) as participants contribute, the organization should develop inducements to offer, and (e) organizations will survive only as long as inducements can illicit participation. Hence, the organization must be designed in such that it encourages individuals to continuously participate (March & Simon, 1958).

Vroom's Subtractive & Multiplicative Models of job Satisfaction

Vroom (1964) states that:

The subtractive model is not an interactive one. In this model the effects of an increase in the frequency or probability of attainment of a particular kind of reward on job satisfaction is always positive and does not depend on strength of a person's desire for that reward…On the other hand, the multiplicative model implies interaction between motivational and work role variables. The effect of changes in frequency or probability of attainment of an outcome in a work role on the valence of that work role is predicted to depend on the valence of the outcome. If the person desires the outcome, an increase in the extent to which it is provided by the work role should result in an increase in the valence of the work role. (pp. 163-164)

This theoretical approach focuses on psychological needs, allowing individuals to exercise both judgment and initiative at work. Vroom (1964) suggests that jobs that allow individuals to showcase their talents are more rewarding than those without these characteristics (Fournet, Distefano, & Pryer, 1966). Furthermore, this model contends that a person's work decisions are a function of: (a) the perceived value of the outcome and (b) the belief that the behavior will assist in achieving an outcome (Rynes, 1991). The importance of psychological needs is an important part of Vroom's (1964) theoretical approach.

Situational Models of Job Satisfaction

Situational Models of Job Satisfaction

The Situational Occurrences Theory of Job Satisfaction has been established by two factors: situational characteristics and situational occurrences. Both are unique in that Situational Characteristics are those aspects of a job that a person evaluates prior to accepting the job. These include pay, promotional opportunities, working conditions, company policies, and supervision. Assuming the importance of these factors to the prospect, these characteristics are often communicated during the interview or published in promotional materials. On the other hand, situational occurrences focus on those aspects that are typically not pre-evaluated. They are unexpected occurrences that typically arise after the job is accepted. They can be positive or negative. For example, a positive facet may include spontaneous coffee and donut breaks by the bosses, as a kind gesture, whereas, an example of a negative facet may be as simple as broken work equipment, confusing memos, or a forgetful supervisor. In short, situational characteristics are somewhat stable/or stable aspects of a work environment and situational occurrences are relatively transient. Furthermore, the situational occurrence theory contends that job satisfaction is a function of situational occurrences and situational characteristics and that any given factor can result in job satisfaction or job dissatisfaction (Quarstein et al., 1992).

Predictors of Job Satisfaction

Researchers have acknowledged several variables that contribute to both job satisfaction and organizational commitment. Given this, these variables have been

separated into three categories: (a) variables that describe characteristics of the job tasks performed by the worker, (b) variables that describe characteristics of the organizations in which the tasks are performed, and (c) variables that describe characteristics of the workers who perform the tasks. Of these, the category containing job tasks performed by the worker have received the most attention in research (Glisson & Durick, 1988). Furthermore, Glisson and Durick (1988) contend that the more clear a person is about his/her responsibilities when completing a job-related task and the more they are allowed to use a variety of their skills, the more satisfied they will be with their jobs.

Overview of Job Satisfaction Literature

Job satisfaction has produced thousands of research articles, over the years (Quarstein et al., 1992; Spector, 1997; Thompson et al., 1997). In fact, it has been reported that more studies have been completed related to job satisfaction than for any other variable (Spector, 1997). These studies have included the examination of the antecedents of job satisfaction, dimensions of job satisfaction, and the relationship between job satisfaction and job performance and turnover (Fields, 2002). In this section, a review of job satisfaction literature will be completed.

In studies of special education personnel, the role of job satisfaction has been linked to attrition. Researchers found that increased job satisfaction can decrease the attrition of employees (Billingsley & Cross, 1992; Singh & Billingsley, 1996; Westling & Whitten, 1996). Furthermore, in the same population, Gersten et al. 2001 found job satisfaction to be a significant predictor of those who will stay in an organization and those who choose to leave.

Moreover, in a meta-analysis of job satisfaction and job performance, Iaffaldano and Muchinsky (1985) reported that a small positive (.17) relationship existed between job performance and job satisfaction. In comparison, Petty, McGee, and Cavender's (1984) meta-analytic study of job satisfaction and job performance, yielded a correlate level of .31 between the two constructs, suggesting that the relationship between job satisfaction and job performance was stronger than previously reported. However, despite this finding, researchers have been cautious to cite this relationship (Judge, Bono, Thoresen, & Patton, 2001), due to the fact that the Petty et al. (1984) study was limited to only 16 studies, in comparison to the 74 studies reviewed by Iaffaldano and Muchinsky (1985). More recently, Judge et al. (2001) completed a similar meta-analytic study of these two constructs. Findings of this study supported Petty et al. (1984), reporting that there was a moderate relationship (.30) between job performance and job satisfaction. Given these findings, researchers indicate that more studies related to the relationship between job satisfaction and job performance may be warranted (Judge et al., 2001).

In a study of work attitudes, Smith, Smits, and Hoy (1998) investigated a population 286 females and 416 males in 27 female-owned and 29 male-owned small businesses. In this study, Smith et al. (1998) found that there was no significant difference between the job satisfaction of males or females. This finding supported previous meta-analytic studies of this variable, which found mean correlations of these variables to be virtually zero. Consequently, this means that both men and women have

the same job satisfaction levels (Witt & Nye, 1992). Furthermore, what has been compelling about these results is that that researchers have reported that despite disparities in both pay and position in males/females, this nearly non-exist difference in satisfaction levels remains consistent (Spector, 1997).

Job burnout has been found to be significantly related to job satisfaction. In a study of student services personnel, Brewer and Clippard (2002) found an overall significant negative relationship between emotional exhaustion and total job satisfaction. This has been supported throughout the literature in several studies, where an inverse relationship between burnout and job satisfaction has been found (Brewer & Clippard, 2002; Cordes & Dougherty, 1993).

Research has revealed that age and job satisfaction are significantly related. Studies show that job satisfaction is considerably higher in older employees than in younger employees (Clark, Oswald, & Warr, 1996). Although not much is known about the causes of this relationship, several thoughts have been recorded (Spector, 1997). Wright and Hamilton (1978) propose that older employees are more compliant to authority, have lower expectations from their jobs (Clark et al., 1996), and have better skills than their younger counterparts. Others argue that job satisfaction increases in older employees due to that fact that confidence and prestige increase with age (Bedian, Ferris, & Kacmar, 1992).

Several other relationships to job satisfaction have been found in the literature (Fields, 2002). Job satisfaction has been found to be significantly positively correlated

with leader's positive affectivity, leader's job involvement, distributions of risk exposure in the workplace, the economic value placed on health and safety, organizational commitment, job involvement, job focus, and work complexity (George, 1995; McLain, 1995; Siegall & McDonald, 1995). On the other hand, job satisfaction has been found to negatively impact employees' off-job focus, perceived danger, perceived risk, tasks distractions, and intent to leave (Siegall & McDonald, 1995). Additionally, in confirmatory analysis, job satisfaction was found to be empirically distinct from organizational commitment, job involvement, organizational munificence, high involvement human resources practices, and benchmarking (Mathieu & Farr, 1991; Sanchez, Kraus, White, & Williams, 1999).

In this study, the job satisfaction of speech pathologists was explored. Table 1 highlights the findings of several studies related to speech language pathologists and job satisfaction. Pezzei and Oratio (1991), in a study of school speech language pathologists, found that several job setting factors were predictive of job satisfaction. These factors were size of caseload, job location, status of clinician, and grade of clients served. Similarly, Blood et al. (2002) found that speech pathologists with a decreased caseload were in general more satisfied.

Table 1. Findings Related to Speech Language Pathologists and Job Satisfaction

Year	Author	Abstract	Key Findings
1991	Pezzei & Oratio	This study was designed to structure and identify variables related to the job satisfaction of public school speech-language pathologists. A total of 281 clinicians nationwide rated their degree of job satisfaction on 34 critical variables. Factor analysis yielded three distinct dimensions of satisfaction: (a) supervision, (b) workload, and (c) co-workers. Variables from each of these dimensions, and from the clinicians' backgrounds and job settings, were found to correlate most significantly with their overall levels of job satisfaction. A preliminary model for predicting job satisfaction is proposed. Implications for clinicians seeking employment in the public schools, as well as for those currently employed, are discussed.	• Factor 1 - Supervision was the strongest factor and accounted for 33% of the total variance (defined by 6 variables). • Factor 2 - Workload accounted for 8% of the total variance (defined by 3 variables). • Factor 3 – Co-workers accounted for 7% of the total variance (defined by 4 variables). The following variables contributed significantly to the predication of clinicians' overall job satisfaction: • Variable 1 (The people I work with are friendly). • Variable 13 (I receive enough help to get the job done). • Variable 4 (My supervisor is friendly). Found to contribute significantly, but relatively little to the prediction of job satisfaction: • Variable 20 (having enough time to get the job done. • Variable 33 (having chances to make friends. • Variable 25 (having a competent supervisor). The following background characteristics were found to be the most predictive of clinician overall job satisfaction: • Academic status (the composite of highest degree earned and credits beyond the highest degree). • The clinician's sex . • The number of years the clinician was employed in the public schools. • Female speech pathologists with advanced degrees expressed the most job satisfaction.

Table 1 (continued)

Year	Author	Abstract	Key Findings
			The following job setting factors were found to be predicative of clinician job satisfaction: • Caseload size was the most potent predictor of job satisfaction. • Location of the job setting. • The status of the clinician, • The average number of clients serviced per day. • The grade level of the students serviced. Limitations: • Majority of participants are from urban settings. • Majority of participants are female.
2002	Blood, Ridenour, Thomas, Qualls, and Hammer	The aims of the present study were (a) to compare the job satisfaction ratings of speech language pathologists (SLPs) working in schools with other workers on a standardized index and (b) to examine whether geographic setting (i.e., rural, suburban, and urban), specific demographic variables (i.e., gender, ethnicity, age, and education), and practice-related variables (i.e., years in current position and caseload size) explain/predict job satisfaction among SLPs working in public schools.	Findings: • The longer speech language pathologists remained in jobs, the more likely they were to report high job satisfaction. • Higher job satisfaction correlated with decreased caseloads. • The older the SLP the higher their job satisfaction. • Racial/ethnic background and demographics did not predict job satisfaction. • Almost half of SLP reported being satisfied with their job. Limitations: • Responses are reflective of the participants at the time of study. • Survey was given unsupervised. • Lack of control over participants who responded • .

However, these researchers offered other factors that influenced the satisfaction of speech language pathologists. These factors were longevity on the job and age. In fact, over 50% of respondents in this study reported being satisfied with their job. Though research on the job satisfaction of speech pathologists is scarce, these studies provide a foundation from which future research can be built.

Organizational Commitment

The construct of organizational commitment has been well researched in several studies, meta-analysis, and reviews, and has gained attention from both academics and researchers (Balfour & Wechsler, 1996; Cohen, 1996; Mathieu & Zajac, 1990; Meyer & Allen, 1991). In fact, most study suggests that organizational commitment is a powerful predictor of turnover intention (Mathieu & Zajac, 1990; Meyer & Allen, 1997). In general, these works have been categorized in the organizational commitment literature as attitudinal or behavioral (Dunham, Grube & Castaneda, 1994). According to the attitudinal approach, commitment is a result of the synergy between job experience, organizational perceptions, and personal characteristics, which may lead to positive feelings towards an organization (Mowday et al., 1982). On the other hand, a behavioral approach to commitment suggests that "a person attains a state or position of commitment as a result of engaging in commitment behaviors – behaviors that, in effect, make it costly to subsequently reverse a position or disengage from some line of activity" (Brown, 1996, p. 23). Consequently, several researchers have made attempts to define the construct of organizational commitment, giving rise to a variety of definitions (Balfour & Wechsler, 1996; Hunt & Morgan, 1994).

Defining Organizational Commitment

During the last several decades, researchers exploring organizational commitment have defined this variable according to several distinct attributes (Balfour & Wechsler, 1996). Mowday et al. (1982) defined organizational commitment as the strength of the connection that one has with his/her organization. He further described this as an individual's: (a) strong belief and commitment in an organization's goals and values, (b) eagerness to exert significant efforts on behalf of the organization, and (c) a strong desire to continue as a part of the organization. This definition of organizational commitment suggests that the individual has more than just a submissive devotion to an organization and contends that there is an active relationship between the individual and the organization, which in turn motivates an individual to contribute to the overall interest of the organization (Mowday, Steers, & Porter, 1979).

Likewise, in earlier organizational identification studies, both Brown (1969) and Hall and Schneider (1972) viewed commitment to an organization similarly to that of Mowday et al. (1982), identifying the strength of the connection that exists between an individual and an organization as the defining key to their definitions of organizational commitment. Sheldon (1971) further stated that organizational commitment includes an employee identifying with the goals and values of the organization.

Grusky's (1966) definition of organizational commitment focuses on the desire of an individual to stay with an organization. Furthermore, he states that two factors influence the intensity of one's attachment to an organization: (a) rewards received and (b) what he/she has to do to receive the rewards. However, in further discussion of this

definition, Grusky (1966) contends that at the point a person discovers that he/she may not receive these desired rewards, commitment to the organization is tremendously decreased, and consequently, the individual will either leave or accept what rewards he/she can get and continue on being less committed to the organization.

In contrast, DeCotiis and Summers (1987) argued that the desire to stay in an organization in order to support its goals and values is more of a correlate of organizational commitment and the willingness of an individual to exceed normal work expectations in support of these goals and values appears to be a consequence of organizational commitment. Given this, DeCotiis and Summers (1987) offered the following definition, suggesting that organizational commitment is

> The extent to which an individual accepts and internalizes the goals and values of an organization and views his or her organizational role in terms of its contribution to those goals and values, apart from any personal instrumentalities that may attend his or her contribution. (p. 448)

This definition is similar to that of Buchanan (1974), which suggests that commitment is the congruence between personal and organizational goals and values.

Given the varying perspectives of organizational commitment, there has been some disagreement as to how it should be measured (Brown, 1996). Overall, while it is apparent that researchers continue in the quest of developing a definition, most of the current thoughts in organizational commitment literature have been shaped based on Mowday et al. (1979) measures. Hence, regardless of how organizational commitment is defined, researchers appear to be interested in exploring the psychological attachment an individual has to an organization (Kacmar, Bozeman Carlson, & Anthony, 1999).

Models and Theory

Several models and theories have been developed to help better explain the construct of organizational commitment. Rhoades, Eisenberger, and Armeli (2001) offered the organizational support theory as an explanation of an employee's emotional commitment to their organization. This approach suggests that in order for an employees' socioemotional needs to be met and to evaluate an organization's readiness to reward their efforts, employees form beliefs on how much they feel the organization values their work and cares about their well being. Similarly, Bartlett (2001) suggests that organizational commitment is centered on psychological contracts and employee relationships embedded in the context of social exchange theory. Robinson, Kraatz, and Rousseau (1994) stated that these psychological contracts describe one's belief about his/her employment relationship and further influence the beliefs of what an employee may feel he/she is entitled to based on perceived or actual promises made by the employing organization. Psychological contracts are unique to both formal and implied contracts because they are both an individual reflection of what a person views and are individualized (Robinson & Wolfe-Morrison, 1995). Furthermore, it has been stated that they are influential determinants of organizational behavior (Schein, 1980). Moreover, the exchange theory contends that an employee's commitment is developed based on his/her happiness with the rewards a company has to offer (Jaros, Jermier, Koehler, & Sincich, 1993).

Similarly to the exchange theory, Becker (1960) introduced a "side bet theory." This theory has been credited with significantly contributing to commitment research

(Jaros et al., 1993). The "side bet theory" suggests that employees stay bound to their workplace by personal investments such as: pensions and seniority, rather than by how they actually feel about the organization itself (McGee & Ford, 1987). Consequently, it is suggested that these investments decrease the attractiveness of pursuing other employment opportunities, outside of the organization (Becker, 1960; Jaros et al., 1993).

Allen and Meyer (1991) state that although there are several different conceptualizations of commitment in the literature, they can be categorized into three different themes: (a) affective attachment to the organization, (b) perceived cost with leaving the organization, and (c) obligation to remain with the organization. In developing their three-component framework, Meyer and Allen (1991) have specifically identified these concepts of commitment as: (a) affective, (b) continuance, and (c) normative commitment. They argue that the three are common in the view that commitment is a psychological state that (a) describes the relationship between an employee and an organization and (b) "has implications for the decision to continue or discontinue membership in the organization" (Meyer & Allen, 1991, p. 67).

According to Meyer and Allen (1991):

Affective commitment refers to the employee's emotional attachment to, identification with, and involvement in the organization. Employees with a strong affective commitment continue employment with the organization because they want to do so. Continuance commitment refers to an awareness of the costs associated with leaving the organization. Employees whose primary link to the organization is based on continuance commitment remain because they need to do so. Finally, normative commitment reflects a feeling of obligation to continue employment. Employees with a high level of normative commitment feel that they ought to remain with the organization. (p. 67)

Similarly, it is noteworthy that Morrow (1993) identifies the same concepts; however, the term calculative is used instead of continuance.

In a similar conceptualization of organizational commitment as a multidimensional construct, O'Reilly and Chatman (1986) proposed that an individual's connection to an organization can be predicted based on three foundational concepts: (a) compliance, (b) identification, and (c) internalization. Compliance was noted to occur when attitudes and behaviors are accepted not on a common belief, but in order to gain a specific reward. Identification occurs when an individual takes pride in being a part of an organization, while respecting its values and accomplishments without accepting them as his or her own. Internalization occurs when the values of the individual and organization are parallel (Balfour & Wechsler, 1990; Meyer & Allen, 1991; O'Reilly & Chatman, 1986). "An individual's psychological attachment to an organization can reflect varying combinations of these psychological foundations" (Meyer & Allen, 1991, p. 14).

Overview of Organizational Commitment Literature

Organizational commitment continues to be a popular area of research. This has been due to the fact that organizational commitment has been linked to several variables that impact the performance and productivity of organizations (Cohen, 1996; Kontoghtorghes & Bryant, as cited by McMurray, Scott, & Pace, 2004; Naquin & Holton, 2002; Randall, Fedor, & Longenecker, 1990). Additionally, there has been discussion about the redundancy of organizational commitment and other work-related constructs. However, several studies have shown organizational commitment to be

empirically distinct from other work-related variables (Balfour & Wechsler, 1990;

Becker, 1960; Cohen, 1996; Fields; 2002; Kacmar et al., 1999).

Much of the organizational commitment research has linked this construct to

several variables categorically: (a) antecedents, (b) consequences, and (c) correlates.

Antecedents of organizational commitment have been used to predict employee

absenteeism, performance, and turnover. Consequences of organizational commitment

have been linked to many personal variables, role stress, and characteristics of the work

environment from job characteristics to dimensions of organizational structure.

Additionally, variables related to organizational commitment have also been referred to

as correlates (e.g., job involvement and job satisfaction), which have demonstrated

relationships with organizational commitment (Mathieu & Zajac, 1990).

Researchers have found significant relationships between organizational

commitment and several personality, demographic, and organizational variables

(Kacmar et al., 1999). Mathieu and Zajac (1990) report a positive relationship exists

between age and commitment. However, it was further noted that age was significantly

more related to attitudinal than to calculative commitment (Mathieu & Zajac, 1990). In

support of this, Meyer and Allen (1984) suggest that older employees become more

attitudinally committed to organizations for numerous reasons. These reasons include

increased satisfaction with their jobs, promotions, and having justified their remaining in

the organization. However, several researchers have linked age with calculative

commitment, contributing this to limited alternatives and greater sunk costs in future

years (Mathieu & Zajac, 1990). Furthermore, Dunham et al. (1994) suggest that older

individuals are more committed to their organizations because they have more invested in the organization than that of younger workers.

In a study of gender differences, Marsden, Kalleberg, and Cook (1993) found "men to have slightly higher overall levels of organizational commitment than women, a difference primarily attributable to gender difference in commitment-related jobs and career attitudes" (p. 384). However, "women may be slightly more committed to their employers than are men in comparable positions" (p. 384). Likewise, meta-analytic findings report that women tended to be more committed than men (Mathieu & Zajac, 1990). This was said to be partially a result of women having to overcome more barriers than men when attempting to become a part of an organization (Grusky, 1966; Kacmar et al., 1999).

Several studies have reported a positive relationship between organizational commitment and job satisfaction (DeCotiis & Summer, 1987; Kacmar et al., 1999). Mathieu and Zajac (1990) state that organizational commitment and job satisfaction are uniformly positive. In their meta-analytic study, it was hypothesized that attitudinal commitment would be more positively correlated to overall job satisfaction, satisfaction with supervision, co-workers, and the actual job. Furthermore, calculative commitment was hypothesized to be related strongly with satisfaction with promotional opportunities and pay. The first four hypotheses were supported, however, satisfaction with promotional opportunities was found to be more highly correlated with attitudinal commitment. In further support of this, DeConinck and Bachmann (1994), in a study of marketing managers found that high levels of distributive, job satisfaction, promotion

opportunity and seniority were predictors of organizational commitment. This relationship has been consistently reported in professional literature (Kacmar et al., 1999).

Other positive relationships that have been identified with regard to organizational commitment are: (a) leadership member exchange (Kacmar, et al., 1999), (b) job involvement (Mathieu & Zajac, 1990), and (c) tenure on job (McMurray et al., 2004). Furthermore, studies completed on organizational commitment and turnover intent have reported that high levels of organizational commitment lead to decreased turnover intent (DeConinck & Bachmann, 1994; Loi et al., 2006). Researchers have found support for these findings. In studies of special education personnel, it was cited that teachers with a high level of professional and organizational commitment were found to have a high intent to remain with their organization (Billingsley & Cross, 1992; Gersten et al., 2001; Miller et al., 1999). Additionally, increased commitment among special educators has been linked to lower stress (Cross & Billingsley, 1994; Singh & Billingsley, 1996), high job satisfaction (Billingsley & Cross, 1992; Gersten, Keating, Yovanoff, & Harniss, as cited by Gersten et al., 2001), and decreased role problems (including, but not limited to overload) (Billingsley & Cross, 1992). Moreover, several negative relationships between organizational commitments have been identified in the literature. These negative relationships include: (a) job tension, (b) role strain, (c) voluntary turnover, and (d) organizational politics (Fields, 2002).

Organizational Commitment in Human Resource Development (HRD)

In HRD literature, organizational commitment has been researched in several recent studies. McMurray et al. (2004) explored the relationship between organizational commitment and organizational climate. In this study, it was discovered that a significant positive correlation between organizational commitment and organizational climate exists. McMurray and his colleagues further stated that by knowing the relationship between these two variables, managers and HRD professionals will have information to assist in finding ways to reduce absenteeism and turnover, as well as the negative aspect of a work environment.

In Barlett's (2001) study of training and organizational commitment, it was found that perceived access to training, social support for training, motivation to learn, and perceived benefits of training are significantly and positively related to organizational commitment. This has many implications for HRD practitioners, in that HRD practitioners consider organizational commitment to be an outcome of training and development activities. The findings of this study further suggested that HRD practitioners play an important role in creating positive perceptions toward training and development in organizations.

Additionally, Tansky and Cohen (2001) completed an empirical study of organizational support, employee development, and organizational commitment. Findings suggest that development can be trickled down from managers to employees. That is, when organizations make attempts to develop their managers, managers become more committed to the organization and are likely to reciprocate this to their employees.

Implications for HRD are that the development of employees is important and that though many facets of development may be in place, employees may not be knowledgeable of these programs. Given this, proper promotion of development programs in organization can prove beneficial.

Organizational commitment has been researched in relationship to several variables. Consequently, having knowledge of the interaction between specific variables, gives organizations information that can prove to be beneficial in achieving organizational commitment. Table 2 provides a deeper look into organizational commitment studies in terms of key findings and limitations.

Career Commitment

As previously stated, career commitment has been found to be empirically distinct from organizational commitment (Cohen, 1996). An individual can be committed to his/her career, but not to the organization and vice versa (Goulet & Singh, 2002). Additionally, empirical studies have found career commitment to be distinct from job involvement (Cohen, 1996). In recent years, career commitment has steadily gained the attention of both vocational and organizational psychologists (Arnold, 1990). This has lead to an increase in career commitment literature (Blau, 1989; Carson & Bedeian, 1994; Morrow & Wirth, 1989). Given this, just as its counterpart (organizational commitment), several definitions have been identified.

Table 2. Organizational Commitment Studies in Terms of Key Findings and Limitations

Year	Author	Abstract	Key Findings
2004	McMurray, Scott, and Pace	The purpose of this study was to explore the relationship between organizational commitment and organizational climate. Subjects were chosen from three large Australian automotive component manufacturing companies. A questionnaire was administered to 1,413 employees from 42 countries of origin. A 97.8% response rate yielded 1,382 usable questionnaires. A significant correlation (.66) between organizational commitment and organizational climate was discovered.	• Significant positive relationship: When reactions to organizational climate are positive, reactions to organizational commitment are positive. Limitations: • Study was completed using a combination of both supervisory and factory workers. This limits the findings of this study to the population identified, limiting the generalization of the findings in this study.
1990	Mathieu and Zajac	In this article, we summarize previous empirical studies that examined antecedents, correlates, and/or consequences of organizational commitment using meta-analysis. In total, 48 metaanalyses were conducted, including 26 variables classified as antecedents, 8 as consequences, and 14 as correlates. Statistical artifacts were found to account for the variance between studies in only one meta-analysis that used attendance. Type of organizational commitment (attitudinal vs. calculative) was proposed as a moderator variable and was found to account for significant between study variance in 9 of 18 comparisons. Theoretical and methodological issues pertaining to the measurement of various forms of organizational commitment, its interrelations with other forms of attachments, and its role in causal models of behavior in organizations are reviewed. Directions for future research are highlighted.	

Table 2 (continued)

Year	Author	Abstract	Key Findings
			Antecedents

Personal Characteristics
- Age: more closely related to attitudinal commitment than calculative commitment.
- Sex: women were found to be more committed to organizations than men (small effect). No consistent link between sex and levels of commitment identified.
- Education: had a small negative correlation with organizational commitment. Additionally, it was found to be significantly more stronger for attitudinal as compared to calculative commitment.
- Marital status: had a small positive correlation with commitment.
- Position and organizational tenure: was shown to be more closely related to organizational commitment than position tenure (small effects). Additionally, it was found that position tenure was more positively related to attitudinal commitment, and organizational tenure was more positively related to calculative commitment.
- Perceived competence: Results suggested a large positive correlation with attitudinal commitment.
- Salary: Results revealed a low positive correlation to commitment.
- Protestant work ethic: Results revealed a moderately positive correlation with organizational commitment.
- Job level: A positive correlation between job level and commitment was found.

Table 2 (continued)

Year	Author	Abstract	Key Findings
			Job Characteristics • Skill variety: Results identified a medium positive correlation between skill variety and organizational commitment. • Autonomy: Results stated that there was a small positive correlation between autonomy and organizational commitment. • Job Challenge: was found to positively correlate with organizational commitment. • General job scope: was found to be the most positively correlated variables compared to the other job characteristics tested in the study. Group-Leader Relations • Leader initiating structure and consideration: study reported a medium positive relationship for both correlates. Job Involvement: Job involvement correlated highly with attitudinal commitment. Occupational commitment: Occupational commitment correlated with organization commitment. Additionally, a higher correlation with calculative commitment, as opposed to attitudinal commitment was found. Job Satisfaction: Resulted in a positive relationship between job satisfaction and organizational commitment. Consequences of withdrawal behaviors: Organizational commitment correlated positively with attendance and negatively with being tardy - small effect. Larger correlations were larger with turnover intent. No relationship was noted between organizational commitment and employee perceptions of job alternatives.

Table 2 (continued)

Year	Author	Abstract	Key Findings
2001	Tansky and Cohen	An empirical study conducted in a major Midwestern hospital found that organizational commitment and perceived organizational support were significantly correlated with satisfaction with career development. Results suggested that when organizations make efforts to develop their managers, the managers become more committed to the organization and also more likely to develop their employees.	Findings: • There is a positive relationship between satisfaction with employee development and organizational commitment. • There is a positive relationship between employee satisfaction with development and knowledge of employee development plans. • There is a positive relationship between self-efficacy of coaching skills and knowledge of development plans. • There is a positive relationship between satisfaction with employee development and perceived organizational support. • There is a positive relationship between self-efficacy of coaching skills and perceived organizational support. • There is a positive relationship between perceived organizational support and organizational commitment. • There is a positive relationship between perceived organizational support and knowledge of employee development. • Satisfaction with employee development and perceived organizational support were found to be significant predictors of organizational commitment for managers after controlling for demographics. • It was found that organizational support has both a direct and indirect effect on organizational commitment. Limitations: • Variables were measured by self-reports. • A .68 reliability for satisfaction with employee development. • Respondents were not given a definition of development. • Respondents were from a single industry.

Table 2 (continued)

Year	Author	Abstract	Key Findings
1993	Marsden, Kallenberg, and Cook	Data obtained from the 1991 "Work Organizations" module of the General Social Survey (GSS) reveal a small but significant tendency for employed men to display higher organizational commitment (OC) Than employed women do. This article examines the gender differences and factors that arguably heighten or dampen it. The authors consider both job models highlighting gender differences on job attributes such as autonomy or rewards, and gender models that stress socialization, family ties, and differential labor market opportunities. They find that the primary explanation for the gender difference is that men are more likely than women to hold jobs with commitment-enhancing features. Gender differences in family ties do little to affect male-female OC difference. When job attributes, career variables, and family ties are simultaneously controlled, the authors find that, if anything, women tend to exhibit slightly greater OC. Contrary to implications of some gender models, the correlates of OC do not appear to be appreciably different for men and women.	Findings: • Self-employed individuals have significantly more organizational commitment than employees. • Men scored significantly higher on the organizational commitment scale than women. • Modest correlations between married men and organizational commitment. • Individuals with several children have lower organizational commitment. • Respondents with job home conflict have levels of organizational commitment. • Males are more likely to hold jobs with commitment enhancement features. • Gender differences in family roles are not significantly different between organizational commitment in males and females. • Overall organizational commitment is higher in men than women. • In comparable jobs, women are slightly more committed. • Women have higher organizational commitment when job attributes, career variables, and family ties are controlled • Limitations
1992	Billingsley and Cross	The primary purpose of this study was to identify variables that influence teachers' commitment and job satisfaction among both general and special educators. A secondary purpose was to determine the extent to which these commitment and satisfaction variables influence teachers' intent to stay in teaching. A questionnaire using primarily extant measures was sent to a random sample of 558 special educators and 589 general	Findings: • Respondents were primarily white (13.5% - general education And 17.5% - special education). • Females were the majority of participants (82% general education And 95% special education). • Work-related variables were found to better predict commitment and job satisfaction than demographic variables (special and general education).

Table 2 (continued)

Year	Author	Abstract	Key Findings
		educators in Virginia. Completed questionnaires were received from 83% of both samples. Cross-validated regression results suggest that work-related variables, such as leadership support, role conflict, role ambiguity, and stress, are better predictors of commitment and job satisfaction than are demographic variables. Generally, the findings were similar for general and special educators. Implications for educational agencies were addressed.	• Attitudinal and behavioral measures significantly predict the intent to stay in teaching (special ed and general education) • In both general and special educators, job satisfaction is associated with increased leadership support, work involvement, and low levels of role conflict and stress. • Race is a predictor of job satisfaction in both special educators and general educators (lowest satisfaction found among non-Whites). • Organizational commitment is associated with increased leadership support and low levels of role conflict (both special and general educators). • Job satisfaction was found to be influenced by increased leadership support, work involvement, and low levels of role conflicts (special and general educators) • In special educators, low levels of stress and role ambiguity were associated with increased job satisfaction. • Professional commitment was found to be negatively correlated to stress (special and general educators). • Professional commitment was found to be positively correlated to job involvement (special and general educators). • In special educators, there was a negative relationship between professional commitment and role conflict. • Among general educators, professional commitment was found to associate with increased levels of role ambiguity.

Table 2 (continued)

Year	Author	Abstract	Key Findings
			• Among general and special educators, job satisfaction was found to be influenced by increased leadership support, work involvement, and low levels of role conflict. • For special educators, low levels of stress and role ambiguity were associated with greater job satisfaction. • In special educators, there is a negative relationship between professional commitment and role conflict. • In general educators, it was found that professional commitment is decreased with high levels of role ambiguity. • In both special and general educators, school commitment was significantly correlated with increased levels of leader support and low levels of role conflict. • Role conflict is a significant predictor of job satisfaction (as job conflict increases, job satisfaction decreases). • Special educators reported more role conflict than general educators. • Demographics were found not to be significantly related to commitment and job satisfaction. Limitations: • Study looks at the intent to leave (and those variables believed to impact turnover) and not actual turnover. • Several other variables that influence turnover, not addressed.

Table 2 (continued)

Year	Author	Abstract	Key Findings
2002	Meyer, Stanley, Herscovitch, and Topolyntsky	The authors conducted meta-analyses to assess (a) relations among affective, continuance, and normative commitment to the organization and (b) relations between the three forms of commitment and variables identified as their antecedents, correlates, and consequences in Meyer and Allen's (1991) Three-Component Model. They found that the three forms of commitment are related yet distinguishable from one another as well as from job satisfaction, job involvement, and occupational commitment. Affective and continuance commitment generally correlated as expected with their hypothesized antecedent variables; no unique antecedents of normative commitment were identified. Also, as expected, all three forms of commitment related negatively to withdrawal cognition and turnover, and affective commitment had the strongest and most favorable correlations with organization-relevant (attendance, performance, and organizational citizenship behavior) and employee-relevant (stress and work-family conflict) outcomes. Normative commitment was also associated with desirable outcomes, albeit not as strongly. Continuance commitment was unrelated, or related negatively, to these outcomes. Comparisons of studies conducted within and outside North America revealed considerable similarity yet suggested that more systematic primary research concerning cultural differences is warranted.	Findings: • There is a considerable amount of duplication between affective and normative commitment. • Separate analysis of 6- and 8-item measures of affective and normative commitment suggest a larger correlation for the 6-item measure. • Analysis of affective and normative commitment, outside of North America, suggests a high correlation between the two. • Modest correlations were found between continuance, affective, and normative commitment. • Low correlations between affective commitment and the alternatives and sacrifice subcomponents of continuance commitment were found. • Commitment, as measured by the OCQ, was highly correlated with commitment measured using ACS. Antecedent variables • Correlation of demographic variables was low. • Positive correlation between age and tenure (organization and position) was found, with all commitment components. • Age and continuance commitment correlated more strongly in studies outside of North America. • Correlations between work experience and personal characteristics were strong. • Role ambiguity and conflict had strong correlations with affective commitment in studies within North America. • Role conflict was found to be strongly correlated with continuance commitment, in studies within North America.

Table 2 (continued)

Year	Author	Abstract	Key Findings
			• Correlations between organizational support and normative commitment were stronger out side of North America.
			• Availability of alternatives and investment variables correlated strongly with continuance commitment.
			• Strong correlations between affective commitment and job satisfaction, job involvement, and occupational commitment were found (strongest with job satisfaction).
			Consequence variables
			• Turnover and withdrawal cognition were negatively correlated with affective, normative, and continuance commitment.
			• Affective commitment was negatively correlated with absenteeism.
			• Normative and continuance commitment were both positively correlated with absenteeism
			• Affective and normative commitment correlated positively with job performance.
			• Continuance commitment correlated negatively with job performance.
			• Affective and normative commitment were found to be positively correlated with organizational citizenship behavior (continuance was found near zero).
			• Limitations: Correlations between organizational support and normative commitment were stronger out side of North America.
			• Availability of alternatives and investment variables correlated strongly with continuance commitment.

Table 2 (continued)

Year	Author	Abstract	Key Findings
			• Strong correlations between affective commitment and job satisfaction, job involvement, and occupational commitment were found (strongest with job satisfaction).
			Consequence variables
			• Turnover and withdrawal cognition were negatively correlated with affective, normative, and continuance commitment.
			• Affective commitment was negatively correlated with absenteeism.
			• Normative and continuance commitment were both positively correlated with absenteeism.
			• Affective and normative commitment correlated positively with job performance.
			• Continuance commitment correlated negatively with job performance.
			• Affective and normative commitment were found to be positively correlated with organizational citizenship behavior (continuance was found near zero).
			Limitations:
2001	Bartlett	This study examines the relationship between attitudes toward training and feelings of organizational commitment among a sample of 337 registered nurses from five hospitals. Using social exchange theory as a framework for investigating the relationship, the researcher found that perceived access to training, social support for training, motivation to learn, and perceived benefits of training are positively related to organizational commitment. Using a three-component model of organizational commitment, the strongest relationships appear with	Findings: • Training measured by duration was significantly and possibly related to affective commitment. • Training measured by frequency was significantly related only to affective commitment. • Perceived access to training was found to have a positive relationship with affective and normative commitment. • There was a positive relationship between all forms of commitment and support for training among senior staff.

Table 2 (continued)

Year	Author	Abstract	Key Findings
		affective form of commitment. The relationships between perceived access to training opportunities and affective form of organizational commitment is moderated by job satisfaction but not job involvement. The findings are discussed for their theoretical and practical application to HRD, for the management of HRD in health care settings, and for researchers interested in outcomes of HRD.	• Moderate relationship was found between organizational commitment and support for training from colleagues. A significant relationship between affective and normative commitment was found. • A positive relationship between motivation to learn and affective and normative commitment was found. Additionally, a non-significant relationship was found between motivation to learn and continuance organizational commitment. • Benefits of employee training was related to all forms of commitment. • There was a positive relationship between perceived benefits of training and organizational commitment. • The relationship between access to training and affective organizational commitment (being moderated by job involvement) was insignificant. • When controlled for organizational size, and moderated for job satisfaction, individuals who have more access to training will feel higher levels of affective commitment, and vice versa. Limitations: Access to training does not imply that the employee actually engaged in training.

Definitions of Career Commitment

Career commitment has been defined as the importance of one's career. Blau (1985) states that career commitment is "one's attitude toward one's profession or vocation" (p. 280). Career commitment has also been defined as the degree to which an individual is committed to completing a specific work task and the importance that work plays in one's life (Somech & Bogler, 2002). This construct has been used interchangeably with many terms such as: (a) occupational commitment (Meyer, Allen & Smith, 1993), (b) work commitment (Morrow & Wirth, 1989; Somech & Bogler, 2002), and (c) professional commitment (Blau & Lunz, 1998; Morrow & Goetz, 1988). According to Hackett, Lapierre, and Hausdorf (2001) "individuals high in occupational commitment should be more likely to participate in skill development, devote greater energy to developing their career, do more to advance their occupation, and should be less likely to leave their occupation" (p. 394).

Measures of Career Commitment

Several measures of career commitment have been identified in the literature (Morrow, 1993). They have been identified as: (a) career salience (Greenhaus, 1971), (b) career involvement (Gould, 1979), (c) Blau's (1985) measure of career commitment, and (d) the modified career commitment (Bishop & Solomon, 1989).

Career salience has been identified as the value that an individual places on his/her work and career (Greenhaus, 1971; Morrow, 1993). This instrument, used to measure career salience, is a 27-item instrument, based on a five-point Likert scale. Seventeen of the Likert-type items were positively worded, and the remaining 10 were

negatively worded (Greenhaus, 1971). Divided into three subscales, this instrument

focuses on an employee's: (a) attitudes toward work, (b) depth of career planning, and

(c) importance of work. Furthermore, career salience was found to correlate positively

with work ethic endorsement, work as central life interest, organizational commitment,

and job involvement (Morrow, 1993).

Career involvement is seen as how positive one view's his/her career. Gould

(1979) developed an instrument to measure this. In this instrument, age, tenure, and sex

were obtained by asking single word objective questions. Additionally, remaining

responses were elicited using a six-point Likert-type scale, with similar items being

disbursed throughout the survey to prevent artificially high reliability (Gould, 1979). In

this eight-item instrument, Gould (1979) makes references to one's career as "line of

work" and "career field." Additionally, a factor analysis suggested that career

involvement is distinct from career planning, personal identify resolution, and job

adaptability (Morrow, 1993).

Blau's (1985) measure of career commitment has received thorough examination

in studies. This eight-item measure has yielded test retest reliability .66-.87.

Furthermore, career commitment was found to be distinctly separate from job

involvement and organizational commitment (Morrow, 1993).

The last form of career commitment that will be discussed in this section is

identified as modified career commitment (Morrow, 1993). This measure was developed

from a previous organizational commitment instrument, by substituting the word career

for organization (Colarelli & Bishop, 1990; Morrow, 1993). This instrument consists of

15 and 17 items (modified version), and is based on a seven-point Likert scale. Both have been correlated with organizational commitment and have been found to be distinctively different.

Table 3 reviews studies employing career commitment concepts and measures: career salience; career involvement, and career commitment, modified.

Models of Career Commitment

Model of Work Commitment

Randall and Cote (1991) proposed a model of work commitment that includes multiple variables. Specifically, this model outlines the interrelationships between: (a) organizational commitment, (b) career salience, (c) work group attachment, (d) job involvement, and (e) Protestant work ethic. Randall and Cote (1991) contend that until the relationships between these forms of work commitment are thoroughly examined in a multivariate framework, researchers should proceed with caution when exploring bivariate correlations. In this model, each variable is presented as related but unique constructs.

Career Motivation Model

Similarly, London (1983) viewed career motivation as a multidimensional construct consisting of the relationships between situational characteristics, individual characteristics (individual career identify, career insight, and career resilience), and career decisions and behaviors. London (1983) suggests that how these variables interact will ultimately determine how motivated an individual is toward his/her career.

Table 3. Employing Career Commitment Concepts and Measures

Year	Author	Abstract	Key Findings
1989	Gary Blau	Using a longitudinally tracked sample of 133 full-time bank tellers from a large bank, this study tested the generalizability of a career commitment measure and its impact on employee turnover. The results indicated that career commitment could be reliably operationalized and was distinct from job involvement and organizational commitment. Additional evidence for the convergent and discriminant validity of career commitment was also found. Career commitment was found to be significantly negatively related to turnover; however, this relationship was mediated by career withdrawal cognitions. Findings are discussed in terms of identifying the threshold level for operationalizing career commitment and the need for future research.	• Career commitment is discernible from job involvement and organizational commitment. • Social desirability is positively correlated to organizational commitment. • Job involvement, organizational commitment, and career commitment are positively related to each other. • Career commitment was found to be significantly negatively related to employee turnover. • Job withdrawal cognitions and career withdrawal cognitions were found to be positively related to turnover.
1971	Greenhaus	The present research investigated the role of career salience (or perceived importance of work and career) in occupational choice and occupational satisfaction. It was predicated that career salience would be positively related to the degree of self-occupational congruence attained in an occupational choice and that the correlation between congruence and occupational satisfaction would be greater for high career salient subjects than for low salient subjects. The first hypothesis was supported for males, and the second hypothesis received no support. The relationships between career salience and other vocationally related variables were supported and related to prior research.	• A significant relationship between career salience and congruence for males was found. However, this was not true for females. • Career salience was found to be significantly related to the tendency to choose and ideal occupation (both males/ females). • No significance in magnitude of correlation was found between congruence and satisfaction in high salient subjects and low salient subjects. In males and females, career salience was found to be positively related to: the prestige of occupation, level of education aspired, degree of occupational satisfaction, amount of effort toward schoolwork, self-ratings of ambition, scholarship, and persuasiveness.

Table 3 (continued)

Year	Author	Abstract	Key Findings
1989	Bishop and Solomon	In this research, attitudes and behavioral dispositions of men and women in two age groups that may correspond to different career stages were compared. Locus of control and career commitment were studied using a sample of 293 full-time employed MBA students. Analysis supported the hypothesis that older men would have a more internal locus of control than older women who would be more external. No other differences were found. Explanations and implications of the findings for sex difference in career development were discussed.	Locus • No difference in locus of control was found in men and women 29 year andnd under. • Older men showed more internal locus of control, versus older women who showed more external scores. • Men's locus of control was more internal than their younger counterparts (both men and women).
1990	Colarelli and Bishop	Because of the longitudinal nature of careers, career commitment would seem to be important for career development and progression. Yet, it has received little attention in the career literature. This article addresses the role of career commitment in career development and examines some personal and situational correlates of career commitment. The sample includes both managerial (n= 341) and professional (n = 85) employees. Among the variables examined, one of the strongest correlates of career commitment was having a mentor. Practical implications were discussed, including those for mentoring and organizational career development programs.	• Career commitment was positively correlated with age, years of education, and having a mentor (total sample). • Career commitment was found to be negatively correlated with role ambiguity, inter-role conflict, and locus of control (total sample). • Career commitment was found to be positively correlated with: age and having a mentor (manager sample). • Career commitment was found to be negatively correlated with: locus of control and inter-role conflict (manger sample). • Career commitment was found to be positively correlated with: years of education and having a mentor (professional sample). • Career commitment was found to be negatively correlated with role conflict and role ambiguity (professional sample).

Table 3 (continued)

Year	Author	Abstract	Key Findings
1988	Steffy and Jones	This study evaluated the independence of three commitment variables: organizational, career, and community commitment. The study also evaluated the influence of extra-work variables such as family career planning, individual career planning, marital stability, coping behaviors, and financial status on each of the three commitment types. A sample 118 married professional women was used. Findings suggest that organizational, career, and community commitment are independent variables. Findings also suggest that extra-work factors strongly influence career commitment, moderately influence organizational commitment, and weakly influence community commitment. Financial insecurity, coping behaviors, and marital satisfaction possibly predicated career commitment. Organizational commitment was higher among women feeling financially insecure and engaging in individual career planning. A woman who earned more than her husband was more committed to her career and organization, but less committed to her community.	• Organizational, career, and community commitment are distinct variables. • A negative relationship between organizational, career, and community commitment was found. • Organizational commitment was positively related to marital satisfaction and career planning. • Community commitment was positively related to dual career planning/support, coping behaviors, and individual career planning. • Community commitment was negatively related to marital satisfaction. • Career commitment was found to be positively related to marital satisfaction, effectiveness of problem solving in marriage, dual career planning, coping behaviors, and individual career planning. • Organizational commitment was found to be positively predicated by individual career planning, employee making more than her husband, and financial insecurity. • Career commitment was most influenced by extra-work variables. • Career commitment was found to be positively predicated by marital satisfaction, dual career planning, spouse earning 20% more than husband, management of multiple role demands, individual career planning, not have relatives nearby, and financial insecurity.

Table 3 (continued)

Year	Author	Abstract	Key Findings
			• Commitment was negatively predicated by the number of children and the spouse making more than 20% of husband's salary. • Individual career planning was found to positively predict community commitment.

Overview of Career Commitment Literature

As previously stated, career commitment has increasingly become a variable of interest (Arnold, 1990). In a study of 2,200 nurses, Kuei-Yun Lu et al. (2002) found a negative relationship between turnover intent and professional commitment. Additionally, in this study, unmarried nurses were found to have higher professional commitment. This finding was supported by Blau (1985) where it was reported that nurses who were unmarried are more career committed. Furthermore, Kuei-Yun Lu et al. (2002) found wages to be positively correlated with professional commitment.

Career commitment literature has offered other positive relationships in predicting career commitment. These include: experience, perceived less role ambiguity, increased supervisor initiating structure, identification with job, financial insecurity, coping behaviors, and marital satisfaction (Blau, 1985; Steffy & Jones, 1988). Furthermore, Baggerly and Osborn (2006) in a study of school counselors reported that having appropriate counseling duties was a positive predictor of career commitment, whereas, stress was a negative predictor.

With regard to outcomes of career commitment, Aryee and Tan (1992) found that career commitment was positively related to skill development. However, career commitment was found to be negatively related to career and job withdrawal intentions (Aryee & Tan, 1992; Blau, 1985). This implies that individuals who are displeased with their career or have not had career success will subsequently consider leaving a career or seek other employment opportunities (Rhodes & Doering, 1983).

Goulet and Singh (2002) distributed surveys to several private and nonprofit organizations in order research the effects of several work-related variables on career commitment. In this study, organizational commitment was found to be positively related to career commitment. This supported previous hypothesis that employees who are committed to their organizations and satisfied with their job are more committed to their career. Furthermore, job satisfaction and job involvement were found to be positively related to career commitment (McGinnis & Morrow, 1990). Some support was found for the need for achievement and work ethic, with regard to their relationship to career commitment. On the other hand, this study reported that the fear of losing one's job is negatively related to career commitment. (Blau, 1989; Goulet & Singh, 2002).

In the Colarelli and Bishop (1990) study of managers and professionals, several situational correlates of career commitment were examined. Findings of this study suggested that in a combined sample of both managers and professionals, career commitment was found to be positively correlated with: (a) age, (b) years of experience, and (c) having a mentor. However, career commitment was found to be negatively correlated with: (a) role ambiguity, (b) inter-role conflict, and (c) locus of control. This

supported all preliminary predictions of these variables. Colarelli and Bishop (1990) further examined each subgroup individually, finding that for managers, career commitment was positively correlated with age and mentorship and negatively correlated with locus of control and role ambiguity. On the other hand, in the professional sample, positive correlations were found between career commitment and years of experience and mentorship and negative correlations between career commitment and role conflict and ambiguity.

Job Overload

Role overload has been said to be prevalent among many organizations today. In fact, 70% of human resource executives reported that they believed that the employees in their organizations are overworked (Brown, Jones, & Leigh, 2005). Studies have shown that job burnout has had negative consequences for both organizations and individuals. These consequences have included, increases in turnover, absenteeism, and low productivity (Cordes & Dougherty, 1993; Maslach & Jackson, 1982; Pines, 1981). In this study, job overload was investigated. This burnout antecedent has been much closely related to emotional exhaustion component of burnout in the literature (Wright & Cropanzano, 1998).

Defining Work Overload

Work overload has been used synonymously in work stress literature with: (a) role overload, (b) job overload, and (c) job demand. Work overload has been defined as "the extent to which the job performance required in a job is excessive or overload due to performance required on a job" (Iverson & Maguire, as cited in Brown & Benson,

2005). Furthermore, job demand has been defined as the amount of work required from an employee, the degree to which he/she has to work under the stress of timelines, and the degree to which an employee is expected to complete multiple tasks (Sargent & Terry, 1998). Similarly, role overload has been viewed as "situations in which employees feel that there are too many responsibilities or activities expected of them in light of the time available" (Rizzo, House, & Lirtman, as cited in Bolino & Turnley, 2005, p. 741). Other researchers have offered definitions of work overload. Mueller, Boyer, Price, and Iverson (1994) define workload as "the degree to which work activities are distributed among the employees" (p. 186). Additionally, workload has been identified as a role stressor (Bacharach, Bamberger, & Conley, 1991). Work overload is becoming an increasing problem in many work environments (Brown, Jones, & Leigh, 2005).

Overview of Studies of Job Overload

In a study of Canadian speech language pathologists, Potter and Lagace (1995) reported a significant relationship between caseload size and degree of burnout in speech pathologists. It was further determined that speech pathologists with high caseloads experienced both job dissatisfaction and feelings of ineffectiveness. This finding was later supported by Blood et al. (2002), which reported that speech pathologists experienced increased job satisfaction when decreased caseloads were reported. Pezzei and Oratio (1991) identified caseload as the strongest predictor of job satisfaction among speech language pathologists. Furthermore, Morvant, Gersten, Gillman, Keating, and

Blake (as cited by Billingsley, 2004), found that only 50% of special education educators thought that their workload was manageable.

Contrary to these findings, Bacharach et al. (1991) reported that role overload had a strong positive relationship to job satisfaction of engineers. This was contributed to speculation that engineers view new projects as an opportunity for growth. However, in this same study, it was reported that an insignificant negative relationship existed between role overload and job satisfaction of nurses. This was felt to be due in part that nurses often do not view extra duties as opportunities for growth.

Job overload has been found to be positively correlated with turnover (Pines & Maslach, 1978). That is, as job duties increase, intent to turnover increase. In support of these findings, Billingsley (1993) reported that teachers who worked with students with speech impairments were found to be more likely to leave to pursue opportunities outside of education. These departures have been thought to be connected to the high demands and responsibilities associated with this position.

In a recent study, job overload has been linked to health issues (Melamed, Shirom, Toker, Berliner, & Shapira, 2006). Researchers have reported that chronic stressors, such as job overload, have been linked to such illnesses as CVD (Melamed et al., 2006). Furthermore, exhaustion has been found to cause mental problems such as: anxiety, depression, low self-esteem, etc. (Jex & Thomas, 2003; Major, Klein, & Ehrhart, 2002).

Current job overload research has explored job overload and the appraisal process. In this study, Brown and Benson (2005) sampled 2,399 employees. Findings

suggest that participation in setting performance objectives, hard objectives, and higher performance ratings were linked with increased job overload. These findings were interesting in that organizations often use appraisal tools to motivate employees to excel and increase productivity.

Work Overload Theory

Theory of Job Demands

Karasek (1979) contends, in his model of job strain, that when job demands are high and control of the job is minimal, an employees' overall well-being is low. However, Karasek (1979) further states that when both demands and control are high, an employee will experience an increased motivation to perform.

Maslach and Jackson (1982) suggests that burnout includes three dimensions: (a) emotional exhaustion, (b) depersonalization, and (c) diminished personal accomplishment. Emotional exhaustion is said to occur when an employee feels overextended and emotionally drained from work. Emotional exhaustion has been further defined as "a chronic state of physical and emotional depletion that results from excessive job demands and continuous hassles" (Wright & Cropanzano, 1998, p. 486). Depersonalization has been identified as "a detached and cynical response to the recipients of one's service or care." And, reduced personal accomplishment refers to the self-identification that an employee is no longer effective in working with stakeholder or fulfilling job obligations (Demerouti, Nachreiner, Bakker, & Schaufeli, 2001).

Turnover Intent

Turnover intent has been identified as a conscious and deliberate willfulness to depart from an organization (Tett & Meyer, 1993). Furthermore, Mobley, Horner, and Hollingsworth (1978) contend that intent to turnover is the final sequence of withdrawal cognitions. Both researchers and practitioners have shown interest in better understanding turnover. Managers appear to be concerned due to personnel cost associated with employees who voluntarily turn over (Mitchell et al., 2001), whereas, scholars are interested in turnover because it is an important criterion and reflects a critical motivated behavior, one that may provide insight onto volitional behavior (Barrick & Zimmerman, 2005). High turnover levels have been said to result in significant financial cost to organizations (Mitchell et al., 2001). Consequently, selecting employees who will stay with an organization for long periods of time has become a serious and persistent problem of human resource managers in various types of organizations (Rocco et al., 1977; Schuh, 1967).

Overview of Studies Related to Turnover and Retention

In a study of 11 companies in China, the role of organizational citizenship behavior in turnover was explored. Data were collected from 205 supervisors. Findings of this study suggested that employees who show low levels of OCB are more likely to leave an organization than those who exhibit high levels of OCB. This was consistent across all companies (Chen, Hui, & Sego, 1998). In general, Chen et al. (1998) further found turnover intent to be a predictor of turnover. That is, those employees who exhibited a strong intent to leave were more likely to leave than those with weaker

intentions. This finding was replicated in other studies. However, contrary to the first finding reported from this study, this finding was not consistent throughout each company. Despite this, through further investigation, the two companies that did not share this finding were found to have existing tension between management and employees, hence explaining this variation. It was speculated that employees may have been reluctant to reveal their true intentions for fear of top management finding out.

In a study of rehabilitation professionals (occupation therapist, physical therapist, and speech pathologists), Randolph, Doisy, and Doisy (2005) found that intrinsic factors (i.e., professional growth and work environment aligned with personal values) overall, were predicative of a professions desire to stay on the job in total, and for OT and PT exclusively. Adequate support staff was found to be predicative of desire to stay on the job for OT, whereas accomplishing career objectives was predicative of desire to stay on the job for PT and SLP. Additionally, flexible scheduling, proper training, absence of role conflict, and having a manageable workload were predictive of a desire to stay on the job for speech pathologists. Similar to this study, Labedo (2005) completed a study of teacher turnover intent. It was found that tangible rewards, advancement, working environment, intrinsic satisfaction, job apathy, and professional commitment were associated with intent to leave and retention of employees.

Furthermore, Singh and Billingsley (1996) in a study of special education teachers found that the most influential factor of a teacher's intent to stay with an organization was workplace conditions. It was found that job satisfaction had the strongest direct effect on turnover intent, with professional commitment having the

second highest effect on this variable. Furthermore, stress appeared to negatively influence turnover intent through job satisfaction and professional commitment. Additionally, in this study, teachers who felt supported by administrators were less likely to leave.

Mitchell et al. (2001) proposed a new construct (job embeddedness) in understanding why people stay on their jobs. These researchers suggest that job embeddedness represents a broad group of influences on employee retention. Mitchell et al. (2001) further described job embeddedness as a web that an employee can become stuck and identified several critical dimensions of job embeddedness: (a) personal links, (b) personal fit, and (c) personal sacrifice. Links are described as formal or informal connections between a person and institution. The suggestion of a link is that a number of strands connect a person to his/her family in social, psychological, and financial web that is inclusive of both work and non-work associates, as well as the community and psychical environment in which he/she lives. Therefore, the greater the number of links between the person and the web, the more likely he/she will be bound to a job and organization. The dimension of fit is defined as an employee's perceived compatibility or comfort with an organization and his or her environment. Moreover, the more closely an employee's personal values, career goals, and future plans fit with an organization, the more likely an employee will feel professionally and personally bound to the organization. This concept was partially supported by O'Reilly, Chatman, and Caldwell (1991), who suggested that "misfits" terminated faster than "fits," and by Chatman (1991) who contended that when entry in an organization produced poor person-

organization fit, employees would likely leave the organization. The last dimension of job embeddedness is sacrifice. Sacrifice addresses the perceived costs of material and psychological benefits they may be left behind as a result of leaving an organization. For example, salary and benefits may be easily replaced by another organization; however, pensions and stock options may require sacrifice (Mitchell et al., 2001).

In a study of high turnover environments (grocery store and community-based hospital), Mitchell et al. (2001) found job embeddedness to be negatively correlated with employee intent to leave and eventual turnover. Job embeddedness was also found to improve the prediction of voluntary turnover, even more so than job satisfaction, organizational commitment, perceived alternatives, and job search. Results were consistent across both samples. These findings compel organizations to think in new ways with regard to employee retention. It is apparent that being embedded in both an organization and community is associated with decreased intent to leave and actual departure from an organization (Abelson, 1987; Chatman, 1991; Mitchell et al., 2001; O'Reilly et al., 1991; Shaw, Delery, Jenkins, & Gupta, 1998).

Job design has been found to play a significant role in the decision to leave a profession or the field (Billingsley, 2004). According to Billingsley (2004), when considering job design, several questions must be addressed: Does the job make sense? Is it feasible? And is it one that special educators can manage in order to accomplish their goals and objectives? Furthermore, Billingsley (2004) suggests that poor job design can result in failure to achieve organizational goals and frustration and stress in individuals, which may lead to ineffectiveness, and increased employee attrition.

Furthermore, in support of this finding, Billingsley (1993) in a qualitative study found

ineffective job design to be a more significant factor in the departure of special

educators, than any other factor.

The economy, in mostly all conditions, is an accurate predictor of job turnover.

When jobs are abundant, voluntary movement is high; when jobs are scarce, voluntary

turnover is low (March & Simon, 1958). Mobley, Griffeth, Hand, and Meglino (1979)

similarly suggested that job market conditions influence voluntary turnover via

perceived ease of movement, which interacts with perceived desire to move to influence

turnover. This model was supported by a study conducted by Gerhart (1990), which

found that, overall, voluntary turnover was influenced by unemployment rate and

perceived ease of movement. Moreover, perceived ease of movement was found to

interact with job satisfaction to influence voluntary turnover indirectly via intent to stay

or leave. However, in contrast to the Mobley et al. (1979) model, the relationship

between voluntary turnover and unemployment rate was more direct (Gerhart, 1990).

Researchers propose that general labor market conditions work together to influence

turnover (Michaels & Spector, 1982).

> Blau (2007) found that
>
> Corresponding job satisfaction and intent to leave organization (occupation) variables were each significant for explaining subsequent organization (occupational) turnover. Job insecurity was found to be a significant correlate for organizational turnover while work exhaustion was found to be a significant correlate for occupational turnover. (p. 135)

In a recent study of turnover intent, Chang, Chi, and Miao (2006) found that

normative organizational commitment negatively correlated with organizational turnover

intention most strongly, and affective occupational commitment negatively correlated with occupation turnover intention most strongly. Moreover, organizational turnover intention was found to play a mediating role in the relationship between normative organizational commitment and occupational turnover intention, while occupational turnover intention mediated the relationship between affective occupational commitment and organizational turnover intent. Specifically, there appears to be a reciprocal relationship between organizational and occupational turnover (Chang et al., 2006).

Job satisfaction is negatively correlated with turnover intent (Trevor 2001). This finding has been supported in several studies in turnover literature (Egan, Yang, & Bartlett, 2004; Kacmar et al., 1999; Muchinsky & Morrow, 1980). Turnover intent has also been found to negatively influence organizational learning (Egan et al., 2004), perceived organizational support (Eisenberger, Fasolo, & Davis, 1990; Fields, 2002), and job involvement (Fields, 2002). Positive correlations have also been identified between turnover intent and role ambiguity (O'Driscoll & Beehr, 1994) and job tension (Fields, 2002). Furthermore, Judge (1993) found in a study of disposition, that the more positive the disposition of an individual, the stronger the observed relationship between job dissatisfaction and turnover. Additionally, individuals dissatisfied with their job but positively disposed to life, were most likely to quit.

Turnover Theory

Most theory related to voluntary turnover is founded from the theories of March and Simon (as cited in Mitchell et al., 2001). This theory focuses on the perceived ease and desirability of an employee leaving his/her job. Similarly, Mobley's (1977)

psychological model of turnover suggests that when an employee is dissatisfied with a job, he/she then begins to evaluate alternatives and then quits if the alternative is expected to result in a more satisfying job.

Blau (as cited in Mitchell et al., 2001) suggested that negative attitudes joined with job search, predict leaving. On the other hand, Gerhart (1990) concluded that perceptions of the job market predicted turnover. Drawing on field theory, Mitchell et al. (2001) proposed that being embedded in an organization and a community will reduce both intent to leave and actual leaving.

CHAPTER III

METHODOLOGY

Introduction

The purpose of this study was to explore the relationship between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and the turnover intent of speech language pathologists in Texas. Additionally, this study sought to identify those factors that most influence the recruitment and retention of speech pathologists. In exploring these constructs, a quantitative approach to research was used. Methods employed included running both descriptive and inferential statistics. This chapter will discuss the research design, population, sample, instrumentation, data collection, and data analysis related to this study.

Research Design

As previously stated, this research study was framed as a quantitative study. Data were collected using survey measures related to each construct. All measures were rated on a Likert-type scale. A Likert scale permits responses such as strongly agree, agree, neutral, etc., and assigns scoring values to each category (Charles, 1995). Measures used in this study were *Job Satisfaction* by Cammann et al. (1983), *Turnover Intent* by Seashore et al. (1982), *The Organizational Commitment Scale (OCS)* by Balfour and Wechsler (1996), *Career Commitment* by Blau (1988), *Job Overload* by Caplan et al. (1980), and *Recruitment/Retention* by Simpson (2002). All surveys were self-administered and distributed either through electronic or U.S. Postal Service.

Population

Gall, Gall, and Borg (2003) stated that researchers often seek to learn about a larger population by studying a smaller group (sample). In research, a population is referred to as the overall group about which a researcher wants to learn (McClave, Benson, & Sincich, 2001). In this study, speech language pathologists in Texas schools were the target population. Moreover, a comprehensive review of the literature found that in 2000 there were approximately 4,000 speech language pathologists working in Texas public schools. The population for this study was further narrowed to 2,179, based on subjects meeting the following criteria: (a) being American Speech Language and Hearing Association (ASHA) certified as a speech language pathologist and (b) being registered in the ASHA's database as a school-based speech language pathologist in Texas, at time of sampling.

Sample

A sample is a smaller group of an identified population (Gall et al., 2003; Swanson & Holton (2001). Sampling procedures, based on the total population, determined that a sample of 500 would be well above the recommended sample for a population of 2,179 (Krejcie & Morgan, 1970). It was further determined that a simple random sample (Cohen & Manion, 1994) would be used. By using random sampling, the researcher can "have much greater confidence that their findings are not due to some special characteristic of the sample but rather are truly representative of the whole population (Swanson & Holton, 2001, p. 71). Furthermore, in this type of sampling technique, all participants who meet a specified criterion have an equal chance of being

selected (Cohen & Manion, 1994). In general, this means that the selection of one participant did not impact the selection of subsequent participants (Gall et al., 2003), hence eliminating selection bias.

Sampling Frame

In obtaining the sample for this study, a sampling frame was identified. According to Gall et al. (2003), a sampling frame is often used by researchers to identify all the members of a particular population. A sampling frame can be a published list or a set of directions for identifying a specific population (Gall et al., 2003). In obtaining the sample for this research, the American Speech Language and Hearing Association's (ASHA) list management department was contacted via phone. This department is responsible for the management of list rentals and distribution. Once connected, the researcher discussed the specifics of the proposed study and was then referred to the ASHA website to download an ASHA list rental order form. As previously stated, specific criteria were noted on the order form, stating that a simple random sample of those speech pathologists who were both registered with ASHA as a school-based speech pathologist in Texas and ASHA certified should be considered for participation in this study. A simple random sample of 500 participants was then generated and mailed to the researcher.

Demographic Profile of the Participants in the Study

The study sample was illustrated using measures of central tendency (mean and median), standard deviations, and frequencies and percentages.

Out of a random sample of 500 speech language pathologists, there were 253 speech pathologists who participated in this study and provided complete usable surveys. Descriptive analyses in this section were computed on the participants by gender, age, work experience, academic degree, number of SLPs, number of vacancies, average caseload, and work location.

Descriptive Analyses

Gender

Table 4 provides information regarding gender. Data collected in this study suggested that of the participants in this study, the majority were female. Specifically, 98.8% or 250 of the respondents were female and 1.2% or 3 were male. This disparity in gender is aligned with state and national trends that report that this is a female-dominated field. See Table 4 for these results.

Table 4. Number and Percent Distribution of Participants by Gender

Gender	Number	Percent
Male	3	1.2
Female	250	98.8
Total	253	100.0

Age

Table 5 provides information regarding the age of speech pathologists in this study. The majority of the responding speech pathologists were between the ages of 30-34 and 35-39, accounting for 16.2% and 17% of the respectively. Furthermore, Table 5

shows that of the remaining speech pathologists in this study, 10, or 4% were between the ages of 20-24; 25, or 9.9% were between the ages of 25-29; 31, or 12.3% were between the ages of 40-44; 40, or 15.8% were between the ages of 45-49; 38, or 15% were between 50-54; and 17, or 6.7% were between the ages of 55-59. Moreover, the minority of respondents were identified to be between the ages of 60-64 and over 65, accounting for 2.8% and less than 1% of the sample.

Table 5. Age Frequencies and Percentages of Participants

Age Classification	Frequency	Percent
20 – 24	10	4.0
25 – 29	25	9.9
30 – 34	41	16.2
35 – 39	43	17.0
40 – 44	31	12.3
45 – 49	40	15.8
50 – 54	38	15.0
55 – 59	17	6.7
60 – 64	7	2.8
Over 65	1	.4
Total	253	100.0

Table 6 provides information with regard to years of experience for the speech pathologists in this study. A majority of the responding speech pathologists, 60, or 23.2% had 6-10 years of experience as a speech pathologist.

Table 6. Frequencies and Percentages of Speech Pathologists' Years of Experience

Years of Experience	Frequency	Percent
1	6	2.4
2	7	2.8
3	13	5.1
4	4	1.6
5	8	3.2
6	11	4.3
7	13	5.1
8	11	4.3
9	9	3.6
10	15	5.9
11	4	1.6
12	14	5.5
13	7	2.8
14	10	4.0
15	8	3.2
16	4	1.6
17	6	2.4
18	9	3.6
19	3	1.2
20	17	6.7
21	9	3.6
22	5	2
23	9	3.6
24	6	2.4
25	12	4.7
26	7	2.8
27	4	1.6
28	8	3.2
29	2	.8
30	3	1.2
32	1	.4
33	4	1.6
34	1	.4
38	1	.4
39	1	.4
Total	253	100.0

Furthermore, 38, or 15.1% of speech pathologists had 1-5 years of experience. Forty-three, or 17.1% of speech pathologists had between 11-15 years' experience. Sixteen percent or 39 of the respondents had 16-20 years' experience. Forty-one respondents or 16.3% had 21-25 years of experience as speech pathologists. Twenty-four percent of respondents, or 9.6%, had 26-30 years' experience. Moreover, the findings suggested that only 8, or less than 4% of speech pathologists in this study had 32-39 years of experience.

Academic Degree

The academic degree obtained by each speech pathologist was categorized into three distinct groups for this investigation. These groups were identified as bachelor's degree, master's degree, and doctorate degree. Table 7 provides information related to the highest degree earned by a speech pathologist. Three (1.2%) of the speech pathologists indicated their highest academic credential to be a bachelor's degree and one (.4%) said she had obtained the doctorate. On the other hand, the majority of speech pathologists or 249 (98.4%) reported they had a master's degree. This finding was not surprising, in that a master's degree is the primary qualifying degree for the certificate of clinical competence.

Table 7. Frequency and Percentage Distribution of Participants by Academic Degree

Academic Degree	Number	Percent
Bachelors	3	1.2
Masters	249	98.4
Doctorate	1	.4
Total	253	100.0

Number of Speech Pathologists Currently Working in District

Table 8 provides information regarding the number of speech pathologists currently working in a school district or co-op. Respondents in this study were asked to answer the question "How many speech pathologists are in your district?" Results indicated that overall, districts had anywhere from 1-150 speech pathologists in their district or co-op. Furthermore, high standard deviations suggest the number of speech pathologists in a district varies a great deal. Specifically, some districts may have several speech pathologists, whereas, others may have few (see Table 9).

Table 8. Frequencies and Percentages of the Number of Speech Pathologists Currently Working in a District or Co-op in Texas

# of Speech Pathologists	Frequency	Percent
1	3	1.2
2	5	2.0
3	7	2.8
4	5	2.0
5	7	2.8
6	16	6.3
7	14	5.5
8	9	3.6
9	4	1.6

Table 8 (continued)

# of Speech Pathologists	Frequency	Percent
10	11	4.3
11	1	.4
12	7	2.8
14	3	1.2
15	10	4.0
16	2	.8
17	7	2.8
20	13	5.1
21	2	.8
22	4	1.6
23	1	.4
25	5	2.0
27	2	.8
30	11	4.3
31	2	.8
32	1	.4
33	2	.8
35	5	2.0
37	1	.4
38	1	.4
40	6	2.4
44	1	.4
45	6	2.4
47	1	.4
50	11	4.3
54	1	.4
55	5	2.0
57	1	.4
58	3	1.2
60	11	4.3
62	1	.4
65	7	2.8
66	1	.4
70	7	2.8
75	6	2.4
80	14	5.5
90	4	1.6
96	1	.4
100	4	1.6
150	1	.4
Total	253	100.0

Statistics

Table 9. Mean and Standard Deviations Regarding the Number of Speech Pathologists Working in a School District or Co-op

Description	Statistics
Mean	32.77
Standard Deviation	28.133
Minimum	1
Maximum	150

Vacancies

Several speech pathologists reported vacancies for speech pathologists. Table 10 shows that the average number of vacancies in a school district or co-op was 4.64. The standard deviation reported was 6.197, suggesting that vacancies vary from district to district. One hundred and twenty respondents in this study, or 50.6%, reported 0-2 vacancies in their district or co-op. Twenty-six percent, or 66 respondents, reported 3-5 identified vacancies. Eleven, or 4.4% of speech pathologists, reported that there were between 6-8 vacancies in their district or co-op. Sixteen, or 6.3% of speech pathologists, reported 10-12 vacancies, whereas 29, or 11.4% of speech pathologists, reported vacancies of 14-20. Notably, only 3, or 1.2% of speech pathologists, reported 23-33 vacancies. Overall, 71% of district or co-ops reported at least one vacancy for a speech language pathologist (see Table 11).

Statistics

Table 10. Mean and Standard Deviations of Speech Pathologists in a District or Co-op

Description	Statistics
Mean	4.64
Standard Deviation	6.197
Minimum	0
Maximum	33

Table 11. Frequencies and Percentages Regarding the Number of Vacancies in a District or Co-op

Number of Vacancies	Frequency	Percent
0	71	28.1
1	23	9.1
2	34	13.4
3	38	15.0
4	9	3.6
5	19	7.5
6	4	1.6
7	4	1.6
8	3	1.2
10	14	5.5
11	1	.4
12	1	.4
14	1	.4
15	12	4.7
20	16	6.3
23	1	.4
30	1	.4
33	1	.4
Total	253	100

Average Caseload

Table 12 shows that on average, the caseload of a speech pathologist in a Texas school district or co-op is 60.94. Furthermore, the standard deviation for average caseload was 14.029. Moreover, 52.96%, or 134 speech pathologists, reported a caseload between 4-60. In contrast, 47% of speech pathologists reported average caseloads above 60.

Table 12. Caseload of a Speech Pathologist in a Texas School District

Description	Statistics
Mean	60.94
Standard Deviation	14.03
Minimum	4
Maximum	150

Work Location

Relative to the work location of the speech pathologists surveyed in the study, 238 (94.1%) of speech pathologists reported that they work in a school district. In comparison, 15 (5.9%) participants reported working in a co-op (see Table 13).

Table 13. Frequency and Percentage Distribution of Participants by Work Location

Variable	Number	Percent
District	238	94.1
Co-op	15	5.9
Total	253	100.0

Instrumentation

Data for correlation studies are often obtained by using a form of measurement (Charles, 1995). For example, if an organization wanted to identify the relationship between job satisfaction and turnover intent in top level executives, a measure of both job satisfaction and turnover intent would need to be developed or identified to measure these affective reactions. Once collected, correlations can be run to identify any significance. All instruments used in this study were previously developed questionnaires that measured variables related to this study. According to Gall et al. (2003), questionnaires present the same questions to all individuals in a sample. Furthermore, on a questionnaire, respondents are able to record their responses and complete them at their leisure (Gall et al., 2003). Instruments identified for use in this study were deemed appropriate and have been used in an array of organizational settings. In this study, measures of recruitment incentives, retention incentives, job satisfaction, job overload, organizational commitment, career commitment, and turnover intent were used.

Completion of the survey took participants approximately 15-20 minutes to complete all components. Instruments were further modified to be completed based on a six-point Likert-type scale. This modification was implemented to decrease the potential confusion as participants completed the survey.

Recruitment

In this study, a modified form of Simpson's (2002), measure of recruitment was used to measure the influence that recruitment incentives have on an individual's decision to accept a job with an organization. This 14-item measure of recruitment was originally rated using a five-point Likert scale, rating responses as 1 = strongly disagree, 2= disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. Previous reliability was established using the split-half reliability technique. The researcher also verified the validity of this instrument through content validity. The panel consisted of a group of special education experts including professors, directors of special education, and educational diagnosticians.

Retention

As with the previous instrument, this instrument was adopted for use from Simpson (2002). As with the recruitment instrument, this instrument used a five-point Likert-type scale; items were rated as 1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree, and 5 = strongly agree. This instrument has 16 items. Reliability of this instrument was evaluated using the split-half technique. Validity was established using content validity procedures.

Job Satisfaction

A survey by Cammann et al. (1983) was used to elicit participant responses related to overall job satisfaction. Consisting of three items, this instrument was originally based on a seven-point Likert scale, rating responses as 1= strongly agree, 2 = disagree, 3= slightly disagree, 4 = neither argree or disagree, 5 = slightly agree, 6 = agree, and 7 = strongly agree. Coefficient alpha values for this instrument ranged from .67-.95 in several studies. In a check of validity, job satisfaction was found to positively correlate with leaders' positive affectivity, leaders' job involvement, organizational commitment, and job involvement and correlated negatively with intent to leave. Additionally, confirmatory factor analysis showed job satisfaction to be distinct from other constructs.

Career Commitment

Blau's (1988) measure of career commitment was used to examine individuals' commitment toward their occupations. This seven-item instrument was originally designed based on a five-point Likert scale, rating responses as 1 = strongly agree to 5 = strongly disagree. Coefficient alpha values for this instrument ranged from .76 to .88 in several studies, and this scale has been used in several professions (Reilly & Orsak, 1991). Career commitment was found to be negatively correlated with work stress, emotional exhaustion, and low accomplishment and positively correlated with perceived performance. Factor analysis has shown career commitment to be distinct from affective organizational commitment, continuance commitment, and normative commitment.

Job Overload

Caplan et al. (1980) measure of job overload was used to measure employees'
perceptions of quantitative job overload. This measure consisted of 11 items. In its
original format, this instrument was based on a five-point Likert scale, rating responses 1
through 4 as: 1 = rarely, 2 = occasionally, 3 = sometime, 4 = fairly often, and 5 = very
often. Questions 5 – 11 were rated similarly using the working 1 = hardly any, 2 = a
little, 3 = some, 4 = a lot, and 5 = a great deal. Reliability for this instrument ranged
from .72 to .81. In previous studies, job overload was found to be positively correlated
with hours worked and absenteeism and negatively correlated with work satisfaction, job
satisfaction, and professional commitment.

Organizational Commitment

To measure organization commitment in this study, Balfour and Wechsler's
(1996) organizational commitment scale (OCS) was used. In general, this scale consists
of three parts: (a) identification commitment, (b) affiliation commitment, and (c)
exchange commitment. Specifically, in this study, the affiliation component of this
survey was used. This section consists of three items, rated on a seven-point Likert-type
scale. Reliability for this component of this instrument was found to be .81.
Additionally, affiliation commitment was found to be negatively related to age and
positively related to job involvement. Confirmatory analysis suggests that the OCS and
the 15-item Organizational Commitment Questionnaire are empirically distinct.

Turnover Intent

Seashore et al.'s (1982) measure of turnover intent was used to examine individuals' intent to turn over in an organization. This three-item instrument was originally designed on a seven-point Likert-type scale, rating responses as 1 = strongly agree to 7 = strongly disagree. The coefficient alpha value for this instrument was .71. Turnover intent was found to be negatively correlated with job satisfaction, organizational commitment, and career commitment.

Reliability Results of the Investigative Instrument

Reliability for the seven construct item sets employed in this study was assessed by using Cronbach's alpha to determine internal consistency reliability for each instrument (Table 14). The following alpha reliability coefficient was completed for each of the seven constructs.

A reliability coefficient of .70 and above is considered reliable. This suggests that all instruments used in this study are reliable.

Validity

Two of the investigative instruments (recruitment/retention) employed in this study were validated in a previous research study by using the content validity procedure. In this study, both content and construct validity procedures were used.

Content Validity

In this study, evidence of validity for these instruments was established by the following: (a) A panel of 20 experts in speech pathology reviewed the surveys, (b) appropriate corrections were made as directed by the panel, (c) the panel of experts

reviewed the instrument a second time, and (d) the same panel took the survey under the same conditions as the study. The panel came to a consensus that the content of the items being used were consistent with the constructs being measured.

Table 14. Cronbach's Alpha Reliability Results

Measure	α In Present Study	α In Previous Study
Recruitment	.765	___
Retention	.747	___
Career Commitment	.883	.76-.88
Turnover Intent	.892	.70
Organizational Commitment	.775	.81
Job Satisfaction	.839	.67-.95
Job Overload	.731	.72-.81

Factor Analysis of Investigative Instruments (Recruitment/Retention)

Recruitment

Factor analysis was conducted to determine what, if any, underlying structure exists for measuring the 14-item Recruitment Survey. Principal Component Analysis was conducted utilizing a varimax rotation. The initial analysis retained four components. Three criteria were used to determine the appropriate number of

components to retain: (a) a .45 cut off value for the inclusion of a variable interpretation of factor, (b) an acceptable KMO-Bartlett's Test of .70 and above, and (c) at least three items per factor.

After rotation, the first component accounted for 26.49%, the second 15.89%, third 8.62%, and the fourth 7.38%. Of the four factors in the initial analysis, three had at least items that met the loading criterion. These factors were factorially analyzed again using Principal Component Analysis and varimax rotation. One factor was extracted that met the KMO-Bartlett's criterion of .70 and above (see Table 15). This factor accounted for 60.838% of the variance.

Table 15. Items Load With Recruitment Factor

Items	Loading
Q9	.848
Q11	.803
Q 13	.746
Q 26	.717

Note. Variance accounted for 60.838%.

Retention

Moreover, factor analysis was conducted on the 16-item Retention Survey. Principal Component Analysis with varimax rotation was done. The initial analysis retained four components. The aforementioned criteria were used to determine the

appropriate number of components. After rotation, the first component accounted for

19.27%, the second 14.25%, third 12.35%, and the fourth 11.71%. All four components

in the initial stage had at least three items that met the loading criterion for acceptance.

These factors were factorially analyzed again using Principal Component Analysis with

varimax rotation. One factor was extracted that met the KMO-Barlett's criterion of .70

and above (see Table 16). This factor accounted for 57.218% of the variance.

Table 16. Items Load With Retention Factor

Items	Loading
Q42	.706
Q46	.788
Q 48	.762
Q 51	.767

Note. Variance accounted for 57.218%.

As previously addressed, validity for remaining instruments was established in

previous studies; however, the same panel reviewed the survey in its entirety and

established that each section was appropriate.

Data Collection

Before distributing the survey/or collecting data, permission was obtained from

the Texas A&M University Institutional Review Board (IRB). Any research study

involving human subjects, conducted by Texas A&M students and/or its staff, must be

approved by the IRB. This process includes filling out a formal application to complete a proposed study, along with submitting other supporting documentation such as information sheets, consents, and a copy of the questionnaire/survey to be used in the study (Texas A&M University Office of Research Compliance, 2007).

As previously stated, data in this study were collected using a survey questionnaire. Further, it was the initial intent of this study to collect data from a web based site. However, due to a number of participants with unregistered e-mail address, non-working e-mail addresses, and non-responses, a traditional mail-out survey was also used in this study.

Web-Based Survey

Researchers have shown an increase in the use of web-based survey instruments (Daley, McDermott, Brown, & Kittleson, 2003; Gall et al., 2003). Given this, researchers have noted several advantages of using this type of communication medium versus the use of a more conventional paper and pencil mailed survey approach (Gall et al., 2003). Some of the advantages noted have been: the ability to communicate asynchronously (i.e., responding at the convenience of the user), lower cost, faster transmission time, and ease of editing (Daley et al., 2003; Gall et al. 2003).

A web-based survey was used to contact all participants with registered e-mail addresses. All e-mail addresses were loaded into a database, and prepared for distribution. Additionally, in order to protect the identify of all participants involved, appropriate filters, and procedures were put in place, to assure that participants' e-mail addresses were concealed and inaccessible to other participants, etc. Once e-mail lists

were set, the actual web survey was loaded onto the site. As with any survey, in order to prevent duplicate participant responses, appropriate filters were employed to assure that once a respondent completed the survey, his/her name or ID was removed from the invitation list.

Mail-Out Survey

Mail-out survey is the most typical form of survey distribution. In a mail-out distribution, participant names and postal addresses are identified from a sample list and prepared for distributions. A mail-out survey was used to illicit responses from participants who: (a) did not have registered e-mail addresses and (b) did not respond via e-mail attempts. Furthermore, the survey contained in the mail-out survey was coded, for record keeping, and to avoid unwarranted resending of duplicate surveys to participants who had already completed it. Mail-out survey packages included a pre- addressed and pre-stamped return envelope, with return instructions.

Information provided with both surveys included all information required by the IRB, including background information regarding the study, a description of the sample in the study, and the contact information of the investigator and co-investigator.

The first round of both mail-out and web surveys were sent out simultaneously. During the first round, 78 responded via web based and 20 from mail out, resulting in an initial 19% response rate. In attempt to increase the rate of response for this study, a second round of reminders was sent out to all participants. After another round, 35 web respondents submitted responses compared to 50 mail-out respondents. A third round of reminders were sent out to all participants, to increase participation in this study. After a

third round, 17 from web and 8 from mailout participants were obtained. A fourth and final round of reminders were sent out, with results yielding 38 web and 7 mail surveys.

Data Analysis

The instruments in this study yielded quantitative data for the independent and dependent variables. Moreover, three parametric techniques were utilized, namely, the Pearson Product Moment Correlation and Linear Regression, Multiple Regression, and t-tests to address nonresponse error.

According to Hinkle, Wiersma, and Jurs (2003), the Pearson Product Moment Correlation is a statistical procedure that allows the researcher to determine the relationship between two quantitative variables. In addition, Linear (Bivariate) regression is a statistical technique that examines the relationship between two variables as well as predicts scores on one variable based upon information regarding the other variable (Hinkle et al., 2003). On the other hand, a multiple regression technique is used to estimate a variable based on more than one variable. However, in addressing nonresponse error, extrapolation methods are used in scenarios where an unfavorable response rate is found, in order to support or refute the generalization of results to a broader population (Dooley & Lindner, 2003).

Moreover, descriptive statistics involving the mean and standard deviation were completed for each variable in the study. The research questions formulated for this study were tested at the .05 levels or better.

Summary

The purpose of this study was to explore the relationship between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and the turnover intent of speech language pathologists in Texas. Additionally, this study sought to identify those factors that most influence the recruitment and retention of speech pathologists. The target populations for this study were speech language pathologists in Texas who were both registered with ASHA as a school speech pathologist and ASHA certified. According to ASHA, this population at the time of the study was 2179. From this number, a 500-participant sample was taken. Surveys used in this study were used in earlier published research studies. As reported, most had previously established reliability and validity; however, both reliability and validity procedures were used in this study where deemed appropriate. It was further stated that both web-based and mail-out surveys were used. Several rounds of mail-outs were completed in attempt to get a favorable response rate. An approximately 51% response rate was established.

Descriptive statistics were run, and Pearson correlations procedures were used to determine significant relationships between variables.

CHAPTER IV

DATA ANALYSIS

This chapter contains a presentation and analysis of data collected from the sample population and for each proposed hypothesis. This research study examined the relationship between the independent and dependent variables identified in this study. These variables included: recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and, turnover intent.

Statistical data analysis was completed using SPSS 14 statistical package and included descriptive statistics, simple linear regression, Pearson correlations, and standard multiple regressions. Simple linear regression was used to determine if a significant linear relationship exists between the independent and dependent variables identified in a hypothesis. Moreover, Pearson correlations were used to determine relationships between variables before completing multiple regression procedures. Additionally, t-test were run between early and late responders, in order to address nonresponse error. In the original form of the Recruitment and Retention Scale, each speech pathologist participant was asked to score the factors that may influence his/her recruitment and retention by a school district in Texas. In addition to rating on a Likert type scale (6-1) respondents were asked to indicate which factors were already present in their district. Of these, for recruitment, hiring/signing bonuses, stipends, pay grade/level, and computer-generated scoring/reporting were identified as PCA factor structures. For retention, part of decision-making process, administrative support, professional development, and caseload were identified as PCA factor structures. Although these

factors were used in the final instrument, descriptive analyses were conducted on all original factors.

Descriptive Analysis of Recruitment and Retention Variables

Recruitment Factors

#1: Hiring/Signing Bonus

Figure 1 shows that 101 or 39.9% of the respondents in this study felt that hiring/signing bonuses were a significant recruitment factor for speech language pathologists in Texas schools. Furthermore, 14.6% or 37 respondents and 53 or 20.9% of respondents felt that hiring/signing bonuses were important or somewhat important, respectively. However, 7.9% or 20 respondents felt that hiring/signing bonuses were somewhat unimportant, 34 or 13.4% felt that hiring/signing bonuses were unimportant, and 3.2 or 8 respondents stated that hiring/signing bonuses were very unimportant

Figure 1. Percentages of Recruitment Responses Regarding Hiring/Signing Bonus for Speech Pathologists.
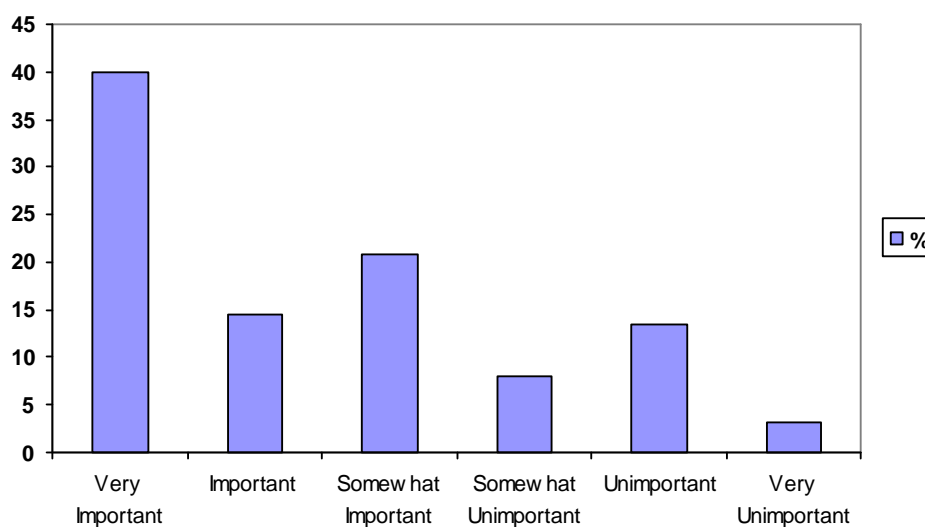
#2: Stipends

  With regard to recruitment factor number two, stipends, 150 or 59.3% of respondents felt that stipends were a very important recruitment factor for speech language pathologists in Texas schools. Furthermore, 47 (18.6%) respondents and 33 or 13% of respondents found stipends to be important or somewhat important, respectively. Furthermore, 10 (4%) respondents felt that stipends were somewhat unimportant, 12 or 4.7% felt that hiring/signing bonuses were unimportant, and .4 or 1 respondent reported that stipends were very unimportant (see Figure 2).

Figure 2. Percentages of Recruitment Responses Regarding Stipends for Speech Pathologists.
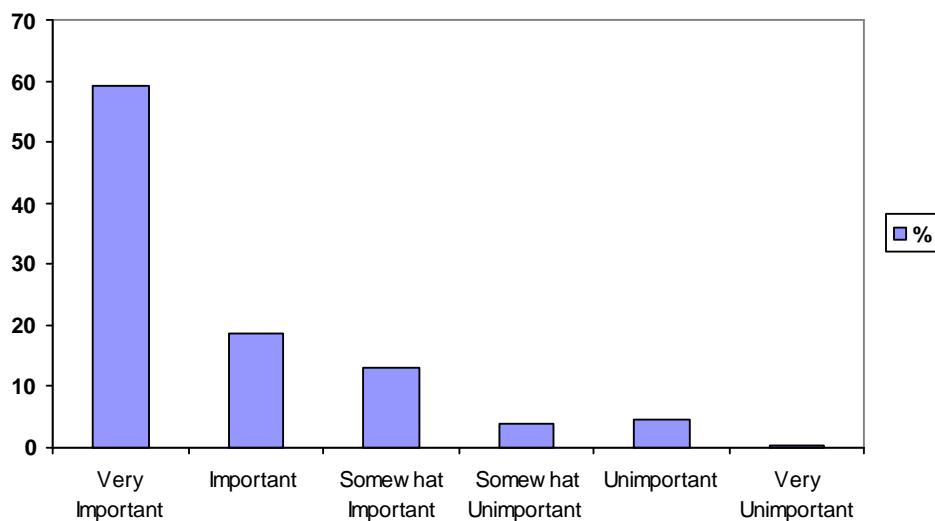

 # 3: Pay Grade/Level

  Figure 3 reports the responses for factor #3 (pay grade/level). Based on the results, 70.8% (179) of respondents in this study reported pay grade/level to be a very important factor of influence in recruitment. Additionally, 20.2% or 51 respondents

reported that pay grade/level served as an important factor of influence, 7.9% (20)

reported this factor to be somewhat important, 1 (.4%) respondent reported this factor to

be somewhat important, and 2 (.8%) of respondents reported that this factor was very

unimportant.

Figure 3. Percentages of Recruitment Responses Regarding Pay Grade/Level for Speech
Pathologists.
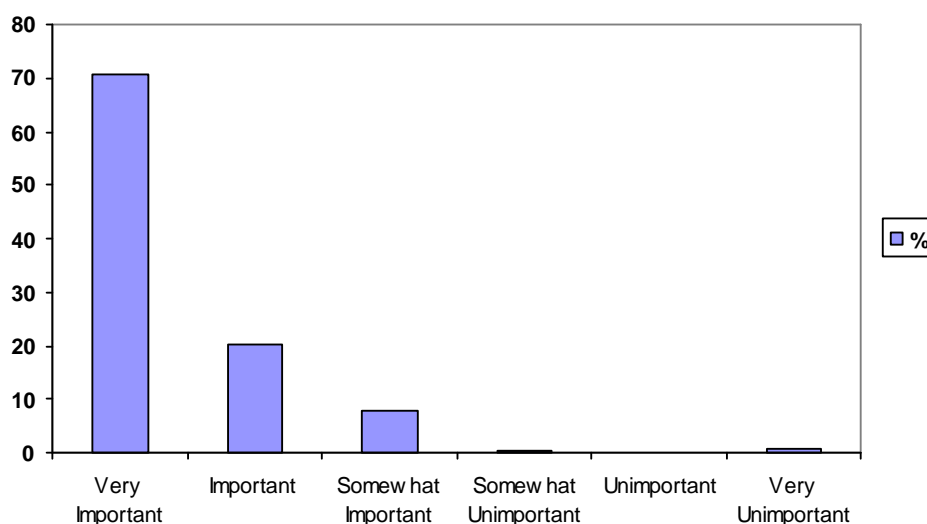
#4: Benefits Offered

Figure 4 shows that 105 (41.5%) or respondents identify that benefits play a very

important role in the recruitment of speech pathologists in a Texas school. Seventy-five

(29.6%) of respondents reported that benefits were important. Moreover, the remaining

respondents 57 (22.5%), 9 (3.6%), and 7 (2.8%) felt that benefits were somewhat

important, somewhat unimportant, or unimportant, respectively.

Figure 4. Percentages of Recruitment Reponses Regarding Benefits Offered.
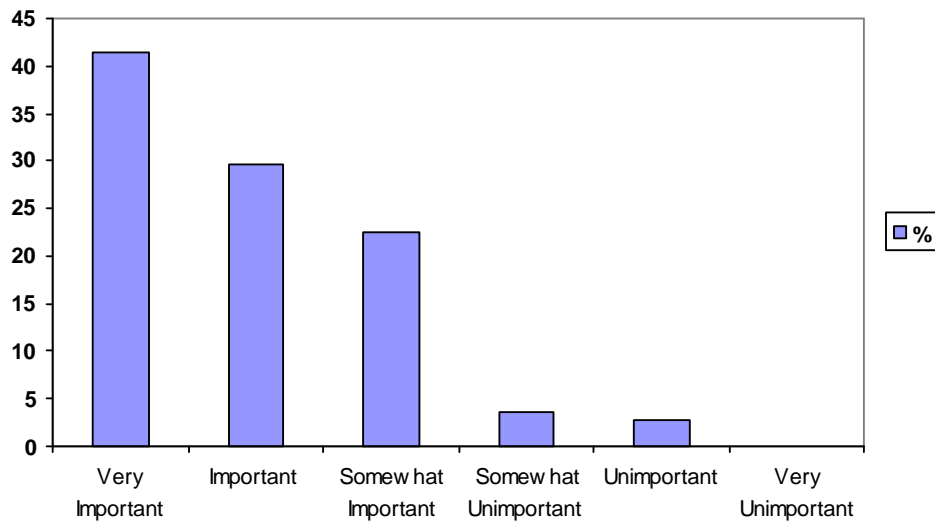
#5: District Size

Figure 5 shows that respondents in this study found district size to be a factor in the recruitment of speech language pathologists in Texas schools. A compilation of data found that 20.2% (51), 17.4% (44), and 101 (39.9%) of respondents reported district size to be very important, important, or somewhat important. On the other hand, 15.4% (39), 5.9% (15), and 1.2% (3) reported district size to be somewhat unimportant, unimportant, or very unimportant.

Figure 5. Percentages of Recruitment Responses Regarding District Size.
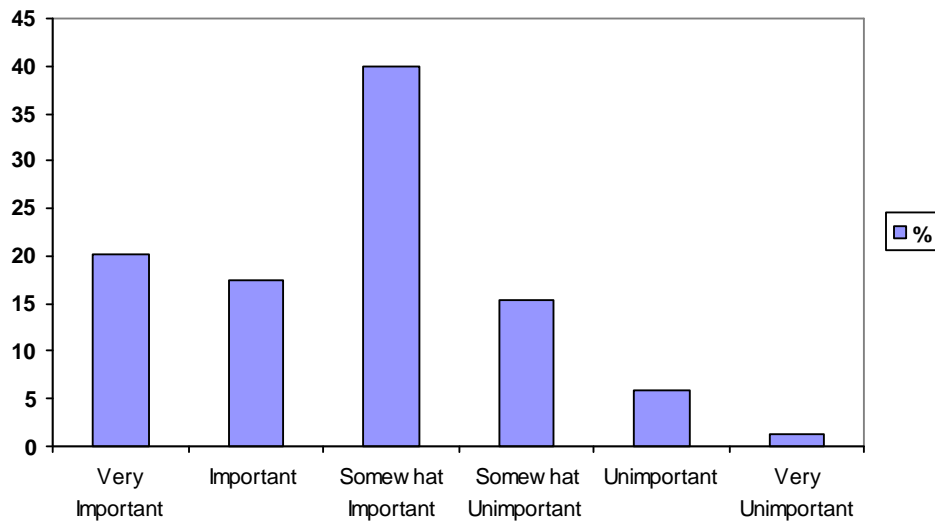
#6: Size of Caseload

Figure 6 shows that out of 253 respondents, 174 (68.8%) agree that caseload has a very important influence on the recruitment of speech language pathologists in Texas schools. Furthermore, 53 (20.9%) of respondents reported that size of caseload is an important factor in recruitment. Of the remaining respondents, relating to size of caseload, 21 (8.3%) responded somewhat important, 4 (1.6%) responded somewhat unimportant, and 1 (.4%) reported size of caseload to be unimportant.

Figure 6. Percentages and Frequencies of Responses Regarding Caseload Size.
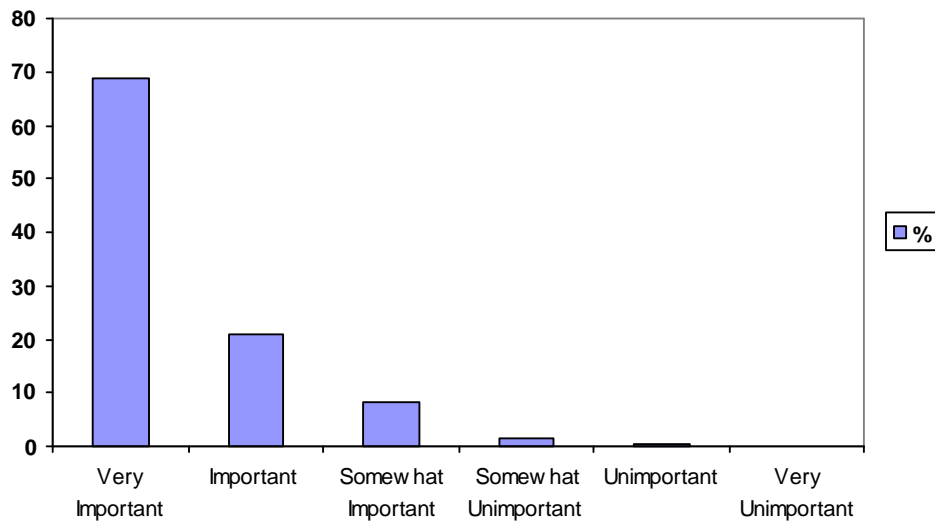
#7: Available Induction/Support Mentoring Programs

Figure 7 shows that 226 participants in this study found some type of importance in induction and mentoring programs as a part of recruitment. Specifically, 86 (34%) responded very important, 76 (30%) responded important, and 64 (25.3%) responded somewhat important. However, remaining participants reported that induction/mentoring programs were somewhat unimportant (12 or 4.7%), unimportant (13 or 5.1%), or very unimportant (2 or .8%).

Figure 7. Percentages of Recruitment Responses Regarding Available Induction/Support Mentoring.
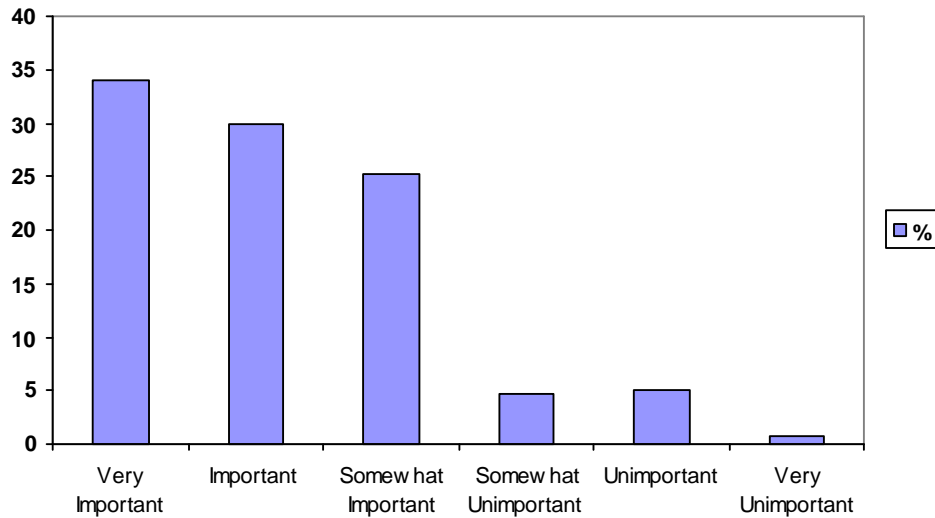
#8: Location of School District

Recruitment factor number eight examines how much the location of a school district influences the recruitment of speech pathologists in a Texas school. Based on the responses given by the participants, 109 (43.1%) felt like location of school district was very important in the recruitment of speech pathologists. Furthermore, 49 (19.4%) felt location was important, 81 (32%) reported it was somewhat important, 10 (4%) reported location to be somewhat unimportant, and 4 (1.6%) participants reported location of district to be very unimportant (see Figure 8).

Figure 8. Percentages of Recruitment Responses Regarding Location of School District or Co-op.
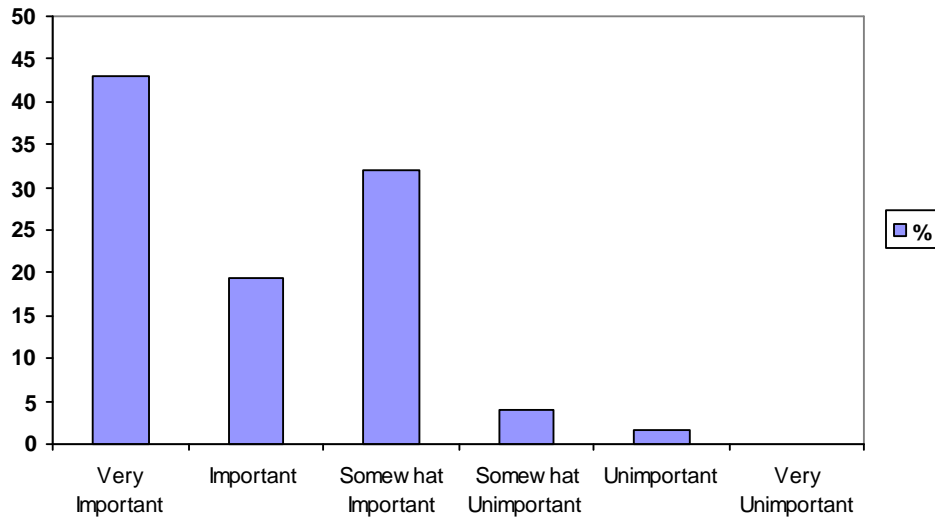
#9: Administrative Support Offered

Based on data collected, Figure 9 shows that 128 (50.6%) of the participants in this study felt as if administrative support was a very important recruitment factor for speech pathologists. Additionally, 72 (28.5%) reported administrative support to be an important recruitment factor in influencing speech pathologists to work for their organization. In addition, 43 (17%) of respondents reported this factor to be somewhat important, with the remaining respondents (9 or 3.6% and 1 or .4%) reporting administrative support to be somewhat unimportant and unimportant, respectively.

Figure 9. Percentages of Recruitment Responses Regarding Administrative Support.
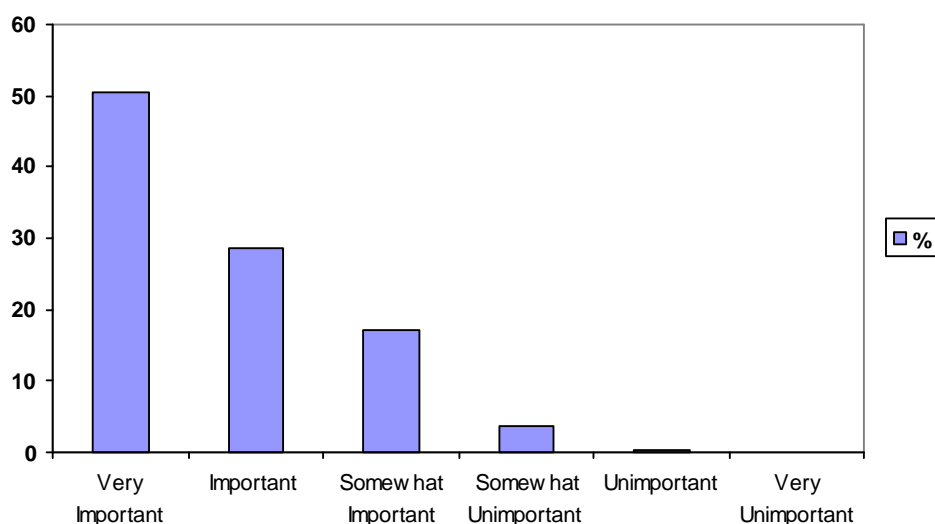
#10: Clerical Assistance

Figure 10 shows that 63 or 24.9% of respondents felt that clerical assistance was very important in the recruitment of speech pathologists in Texas schools. Moreover, data revealed that 45 (24.9%) respondents felt that clerical assistance was important, 65 (25.7%) felt that clerical assistance was a somewhat important recruitment factor, 51 (20.2%) of respondents felt that clerical assistance was somewhat unimportant in the recruitment of speech pathologists, 8.3% (21) of respondents identified clerical assistance and being unimportant in influencing speech pathologists to be recruited to school district, with less than 5% (8) acknowledging clerical assistance as a very unimportant recruitment factor.

Figure 10. Percentages of Recruitment Responses Regarding Clerical Assistance.
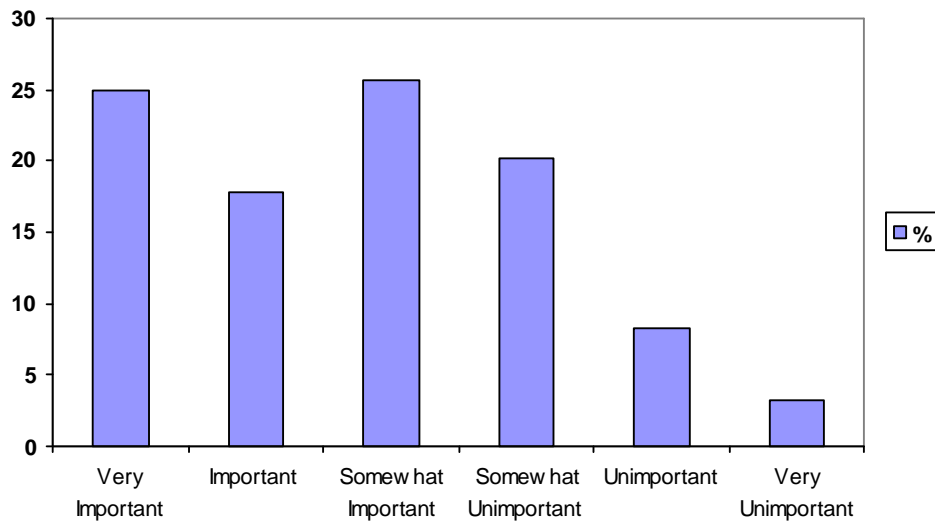
#11: Computer Generate Scoring/Reporting

Figure 11 shows that according to the data collected, 80 (31.6%) of respondents reported that the availability of computer-generated scoring software and report writing packages played a very important role in selecting to work with their school district. Furthermore, in rating their level of importance, the remaining respondents stated that computer-generated scoring and reporting, was important (51 or 20.2%), somewhat important (66 or 26.1%), somewhat unimportant (26 or 10.3%), unimportant (26 or 10.3%), and very unimportant (4 or 1.6%).

Figure 11. Percentages of Recruitment Responses Regarding Computer-Generated Scoring and Reports.
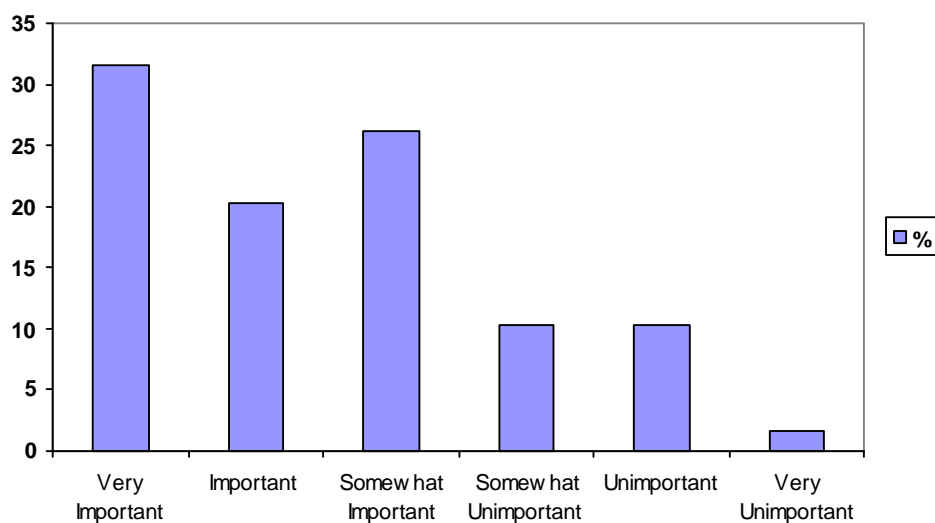
#12: Job Responsibilities

Job responsibilities were found to be a factor in speech pathologists being recruited to a school district in Texas. One hundred eighty-eight (74.3%) or 54 (21.3%) of respondents felt that job responsibilities are very important or important in the recruitment of speech pathologists. However, the remaining respondents made up less than 5% of the responses. These respondents reported the importance of job responsibilities in recruitment as somewhat important (9 or 3.6%), somewhat unimportant (1 or .4%), and unimportant (1 or .4%). This information can be seen in Figure 12.

Figure 12. Percentages of Recruitment Responses Regarding Job Responsibilities.
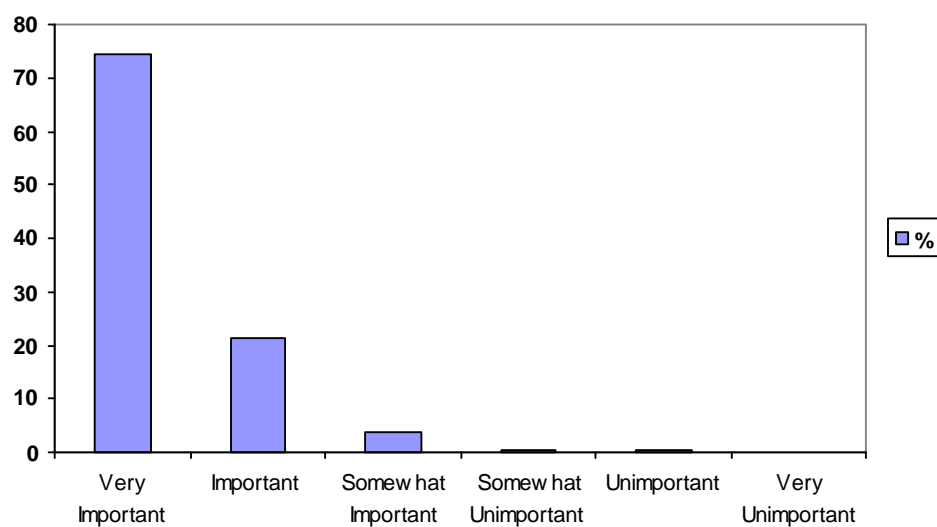
#13: Needed a Job

In rating the level of importance that needing a job played in the recruitment of speech pathologists in a Texas school, respondents in this study reported the following: 150 (59.3%) very important, 74 (29.2%) important, 13 (5.1%) somewhat important, 10 (4%) somewhat unimportant, 5 (2%) unimportant, and 1 (.4%) very unimportant (see Figure 13).

Figure 13. Percentages of Recruitment Responses Regarding Needing a Job.
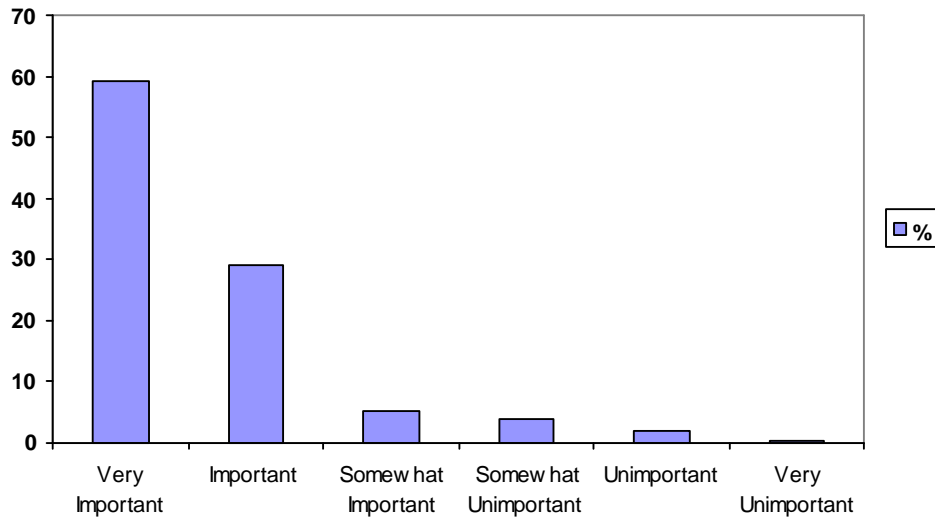
#14: Contributions to Society

Figure 14 shows that contributions to society were found to be a very important recruitment factor to 27.3% (69) of the respondents in this study. Moreover, 62 (24.5%) of respondents and 57 (22.5%) of respondents reported contributions to society as an important and somewhat important factor in recruitment. All remaining respondents reported contributions to society as a somewhat unimportant (54 or 21.3%), unimportant (9 or 3.6%), or very unimportant factor in recruitment.

Figure 14. Percentages of Recruitment Responses Regarding Contributions to Society.
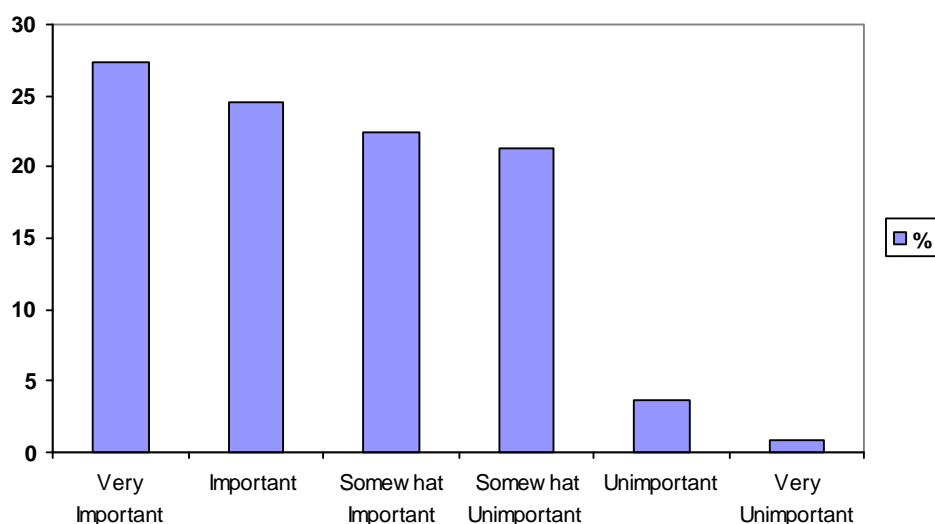
Table 17 provides a summary of the means and standard deviations of recruitment factors based on the responses of speech language pathologists in this study. Based on the responses, job responsibility, pay level, size of caseload, needed a job, and administrative support are the five most influential factors in the recruitment of a speech language pathologist in a Texas school. However, respondents reported contributions to society, district size, and clerical assistance as the three least influential in the recruitment process.

Table 17. Summary of the Means and Standard Deviations for Recruitment Factors of Speech Pathologists

Recruitment	Mean	SD
Job Responsibilities	5.69	.599
Pay Grade/Level	5.59	.764
Size of Caseload	5.56	.746
Needed a Job	5.39	.947
Administrative Support	5.25	.890
Stipends	5.23	1.152
Benefits Offered	5.04	1.017
Location of School District	4.98	1.027
Available Induction/Support/Mentor	4.81	1.157
Hiring/Signing Bonuses	4.50	1.550
Computer-Generated Scoring	4.48	1.379
Contributions to Society	4.48	1.240
District Size	4.27	1.188
Clerical Assistance Provided	4.21	1.398

Of the recruitment factors mentioned above, several have been identified as being currently used in school districts to recruit speech pathologists. Table 18 shows that the three most frequently used recruitment tools are benefits, administrative support,

and higher pay levels. Respondents responded 100%, 87.4%, and 86.2% respectively.

However, clerical support was identified as the least used recruitment method in school

districts.

Table 18. Summary of the Frequency and Percentages of Districts or Co-ops Utilizing Recruitment Factors

| Factor	Frequency	Percent
Benefits	253	100.0
Administrative Support	221	87.4
Higher Pay Level	218	86.2
Computer Assisted Soft	213	84.2
Extra Duty Stipends	203	80.2
Induction/Mentoring	199	78.7
Hiring/Signing Bonuses	125	49.4
Clerical Support	76	30.0

Retention Factors

#1: Retention Bonus

When speech pathologists were asked how important is a retention bonus in your

decision to continue to work in a school district, 64 (25.3%) responded very important,

49 (19.4%) responded important, 85 (33.6%) responded somewhat important, 38 (15%)

124

responded somewhat unimportant, 12 (4.7%) responded unimportant, and 5 (2%)

responded very unimportant. This information can be viewed in Figure 15.

Figure 15. Percentages of Retention Responses Regarding Retention Bonuses for Speech
Pathologists.
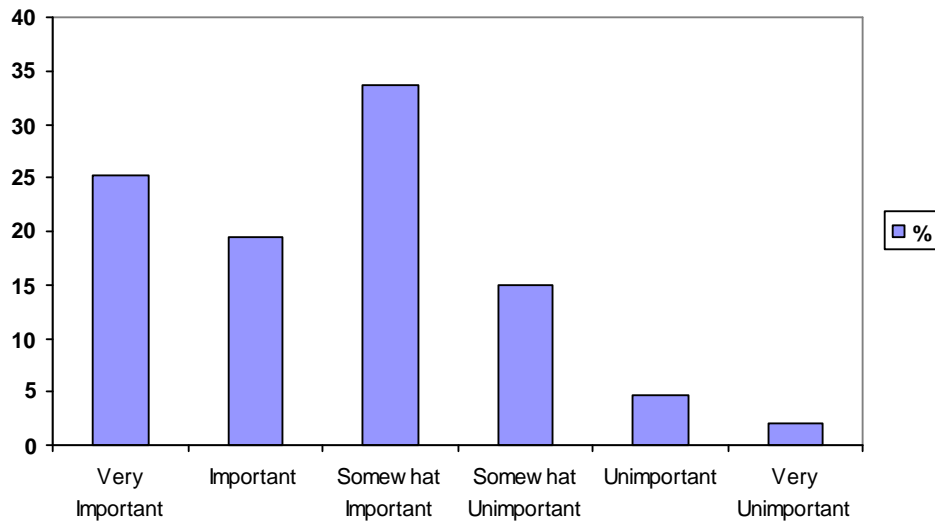
#2: Pay Grade/Level

Figure 16 shows that 169 (66.8%) of respondents reported that pay grade/level

are important in the retention of speech pathologists in Texas school districts. Fifty-one

or 20.2% of respondents reported that pay grade/level are important in the retention of

speech pathologists, whereas 11.5% or 29 of respondents reported pay grade/level as

being somewhat important in the retention of speech pathologists. Furthermore, less than

2% of respondents reported pay grade/level as somewhat unimportant (.8%) and

unimportant (.8%).

Figure 16. Percentages of Retention Responses Regarding Pay Grade/Level for Speech Pathologists.
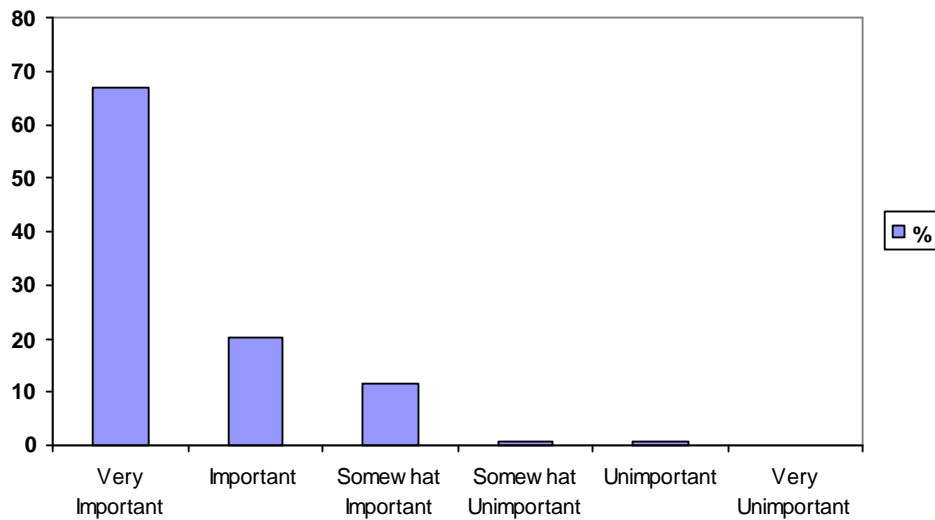
#3: Benefits

Figure 17 shows that 114 (45.1%) of speech pathologists in this study reported that benefits are a very important part of retention. Similarly, 68 (26.9%) and 59 (23.3%) of the respondents in this study reported benefits to be important and somewhat important to retention, respectively. Moreover, less than 5% of respondents in this study felt that benefits were somewhat important or unimportant.

Figure 17. Percentages of Retention Responses Regarding Benefits for Speech
Pathologists.
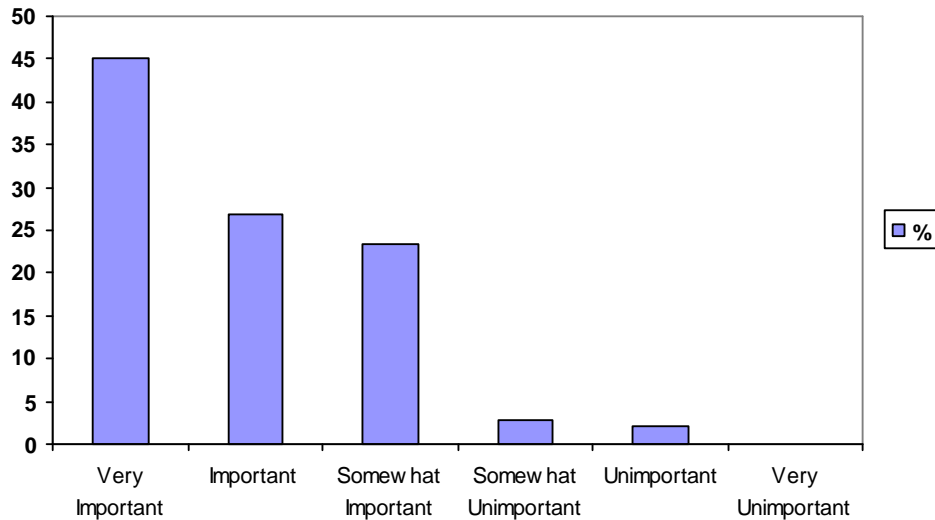
#4: Retention Stipend

As reported in Figure 18, 52 (20.6%) of the respondents in this study reported

that retention stipends serve a very important retention factor for speech pathologists.

Fifty or 19.8% of respondents reported retention stipends were important in the retention

of speech pathologists and 91 or 36% of respondents reported retention stipends as a

somewhat important factor of retention. The remaining respondents reported retention as

a somewhat unimportant retention factor (44 or 17.4%), unimportant retention factor (12

or 4.7%), or a very unimportant retention factor (4 or 1.6%).

Figure 18. Percentages of Retention Responses Regarding Stipends for Speech Pathologists.
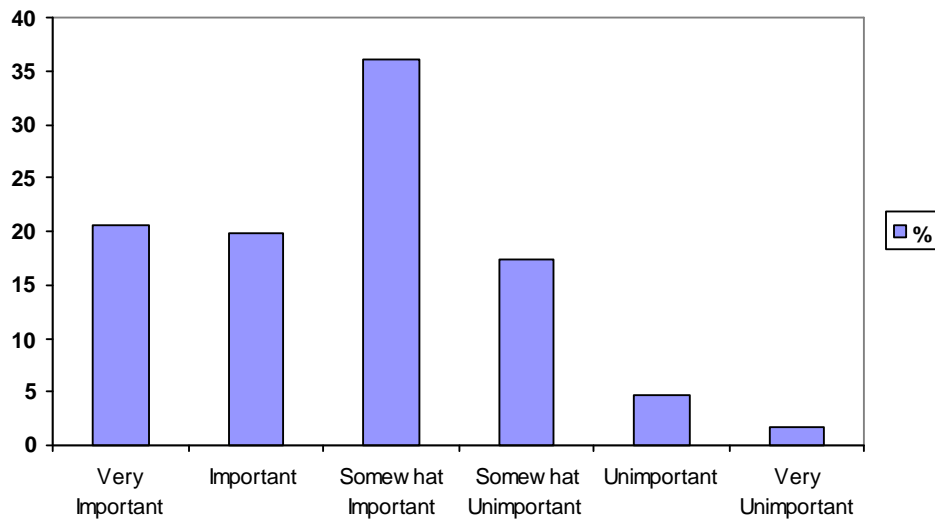
#5: Career Advancement/Development Opportunities

Figure 19 shows that according to respondents, 49 (19.4%) believe that opportunities for career advancement are very important to the retention of speech pathologists. Other respondents (78 or 30.8% and 84 or 33.2%) reported opportunities for career advancement as important and somewhat important to retention. Furthermore, 29 or 11.5% reported opportunities for career advancement as somewhat unimportant, 12 or 4.7% reported opportunities for career advancement as unimportant, and 1 or .4% reported opportunities for career advancement as very unimportant.

Figure 19. Percentages of Retention Responses Regarding Career Advancement/ Development Opportunities for Speech Pathologists.
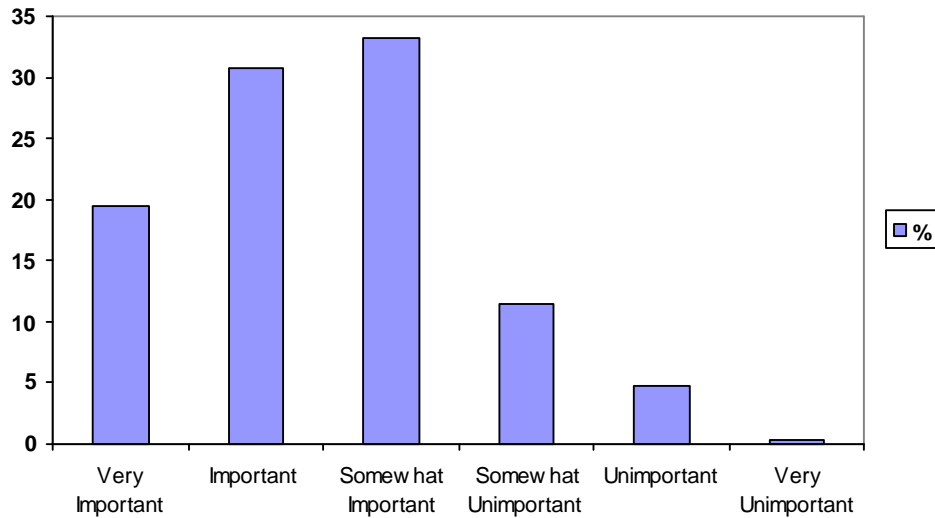
#6: Job Satisfaction

Figure 20 shows that 219 or 86.6% of respondents report job satisfaction as being a very important part of the retention of speech pathologists. Furthermore, 30 or 11.9% of respondents reported job satisfaction as an important criteria for retention, whereas 4 or 1.6% of respondent report job satisfaction as being somewhat important in the retention process.

Figure 20. Percentages of Retention Responses Regarding Job Satisfaction for Speech Pathologists.
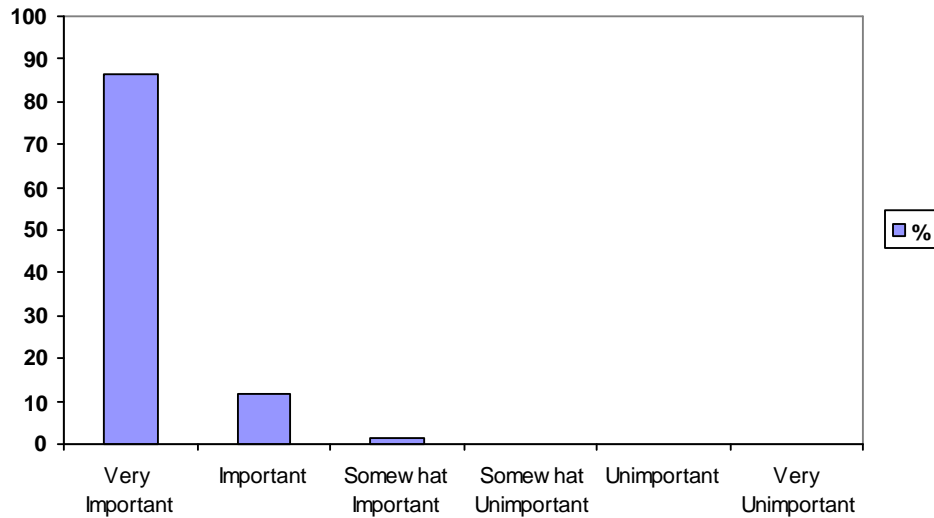
#7: Part of Decision-Making Process

Figure 21 shows that based on the data collected, 142 (56.1%) respondents considered being apart of the decision-making process as a very important part of retention. Seventy-six or 30% of respondents considered being a apart of the decision-making process important to the retention of speech pathologists. Furthermore, 31 or 12.3% of respondents considered being a part of the decision-making process a somewhat important factor related to the retention of speech pathologists, whereas less than 2% (4) of respondents   recognized being apart of the decision-making process as a somewhat unimportant retention factor.

Figure 21. Percentages of Retention Responses Regarding Being Part of Decision-Making Process.
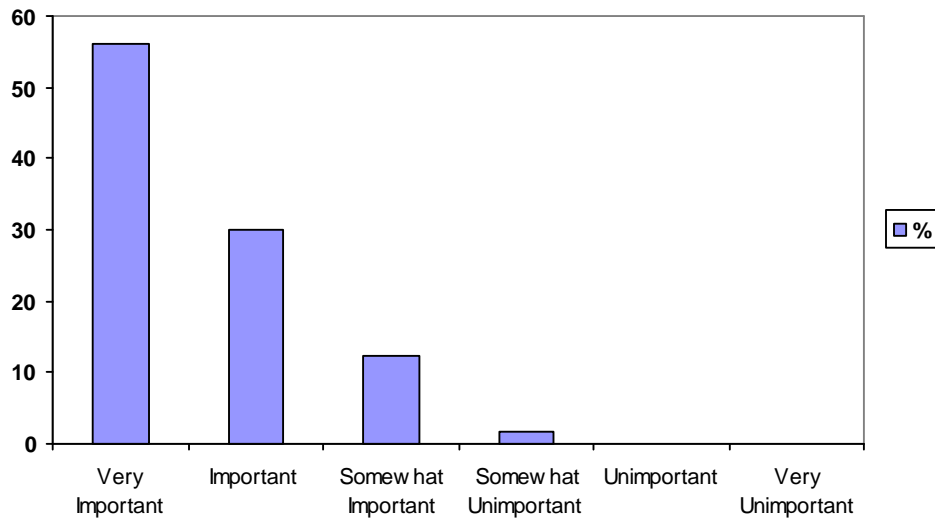
#8: Induction/Support/Mentoring Programs

According to respondents, Figure 22 shows that 94 (37.2%) considered induction/support/mentoring programs a very important retention factor for speech pathologists, 80 (31.6%) considered induction/support/mentoring programs an important part of the retention of speech pathologists, 53 (20.9%) of respondents considered induction/support/mentoring programs a somewhat important retention factor for speech pathologists, 15 (5.9%) of respondents considered induction/support/mentoring programs a somewhat unimportant factor of retention for speech pathologists, 9 (3.6%) of respondents considered induction/support/mentoring programs an unimportant factor of retention for speech pathologists, while less than 1% (2) respondents considered induction/support/mentoring programs a very unimportant factor in the retention of speech pathologists.

Figure 22. Percentages of Retention Responses Regarding Induction/Support/Mentoring for Speech Pathologists.
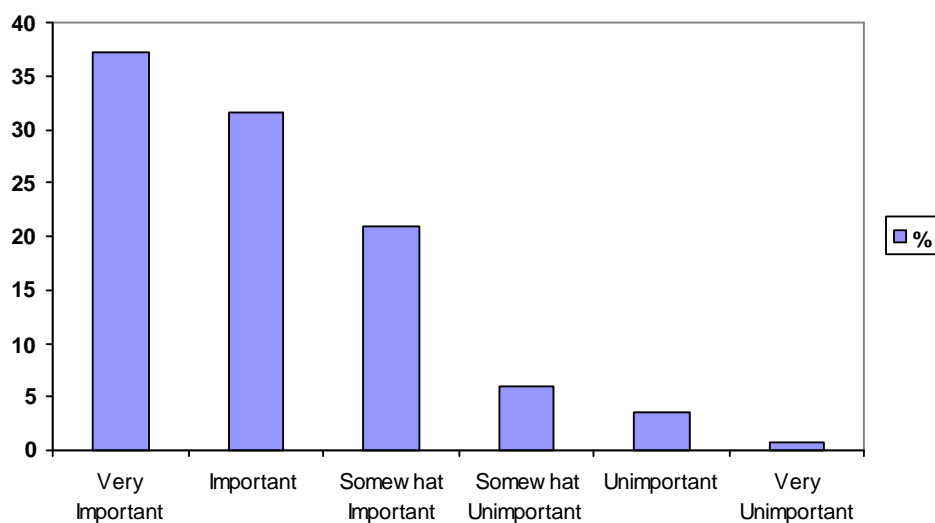
#9: Location of School District

Retention factor number nine examines how much the location of a school district influences the retention decisions of speech pathologists in a Texas school. Based on the responses given by the participants, 104 (41.1%) felt like location of school district was very important in the retention of speech pathologists. Furthermore, 63 (24.9%) felt location was important, 78 (30.8%) reported it was somewhat important, 6 (2.4%) reported location to be somewhat unimportant, and 2 (.8%) of participants reported location of district to be an unimportant factor of retention for speech pathologists. This information can be found in Figure 23.

Figure 23. Percentages of Retention Responses Regarding Location of School District for Speech Pathologists.
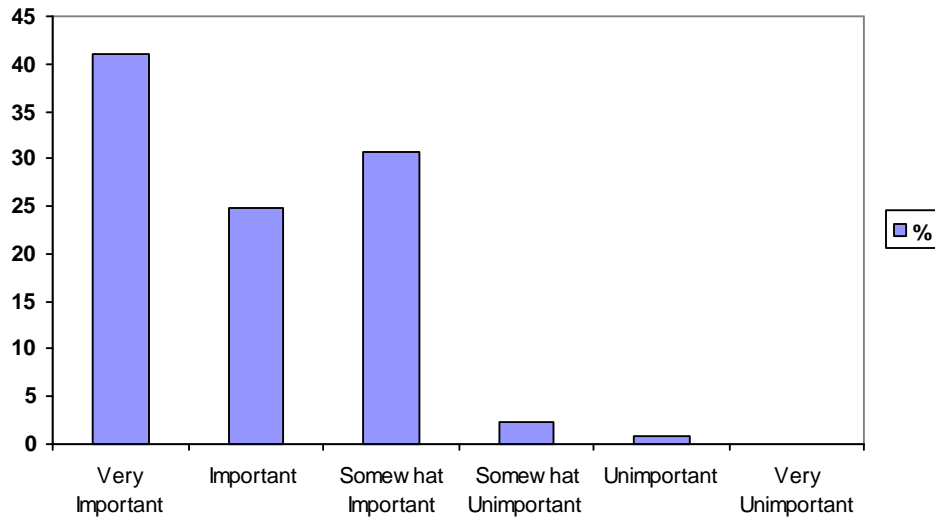
#10: Administrative Support

Based on data collected, Figure 24 shows that 137 (54.2%) of the participants in this study felt as if administrative support was a very important retention factor for speech pathologists. Additionally, 85 (33.6%) reported administrative support to be an important retention factor in influencing speech pathologists to continue to work for their organization. In addition, 23 (9.1%) of respondents reported this factor to be somewhat important, with the remaining respondents (6 or 2.4% and 2 or .8%) reporting administrative support to be somewhat unimportant and unimportant, respectively.

Figure 24. Percentages of Retention Responses Regarding Administrative Support for Speech Pathologists.
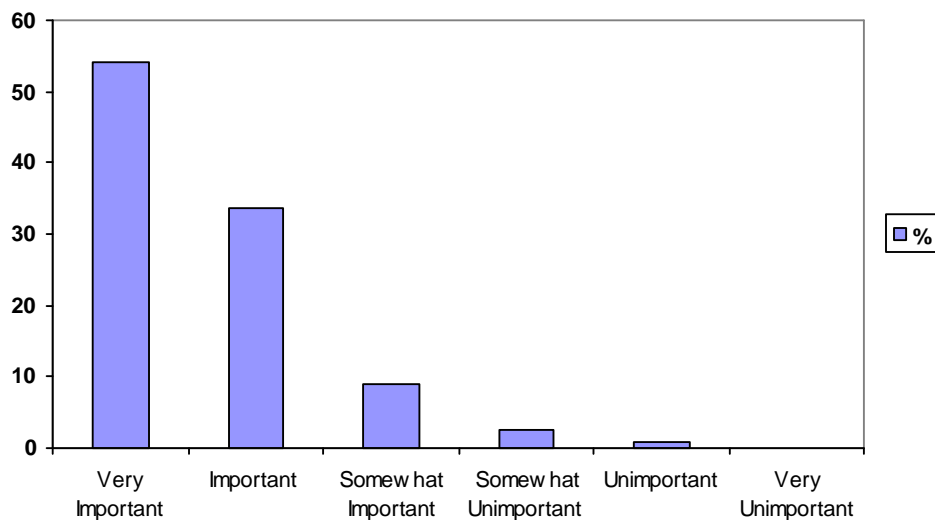
#11: Professional Development

Figure 25 shows that according to the compiled data, 166 (65.6%) participants in this study feel that professional development is a very important retention factor for speech pathologists. Additionally, 61 (24.1%) respondents reported that professional development as an important retention factor. Twenty-four or 9.5% of respondents reported that professional development was a somewhat important retention factor for speech pathologists. However, less than 2% of the respondents stated that professional development was a somewhat unimportant and unimportant retention factor for speech pathologists.

Figure 25. Percentages of Retention Responses Regarding Professional Development for Speech Pathologists.
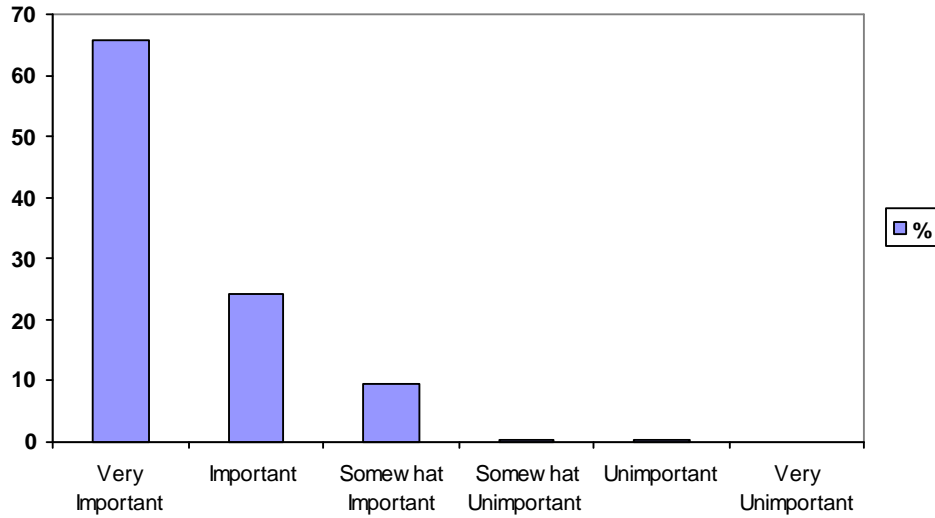
#12: Job Security

According to the respondents in this study, 186 (73.5%) identified job security as a very important retention factor for speech pathologists. Moreover, 47 or 18.6% identified job security as an important retention factor, whereas 17 (6.7%) and 3 (1.2%) of respondents believed that job security was somewhat important and somewhat unimportant, respectively (see Figure 26).

Figure 26. Percentages of Retention Responses Regarding Job Security for Speech Pathologists.
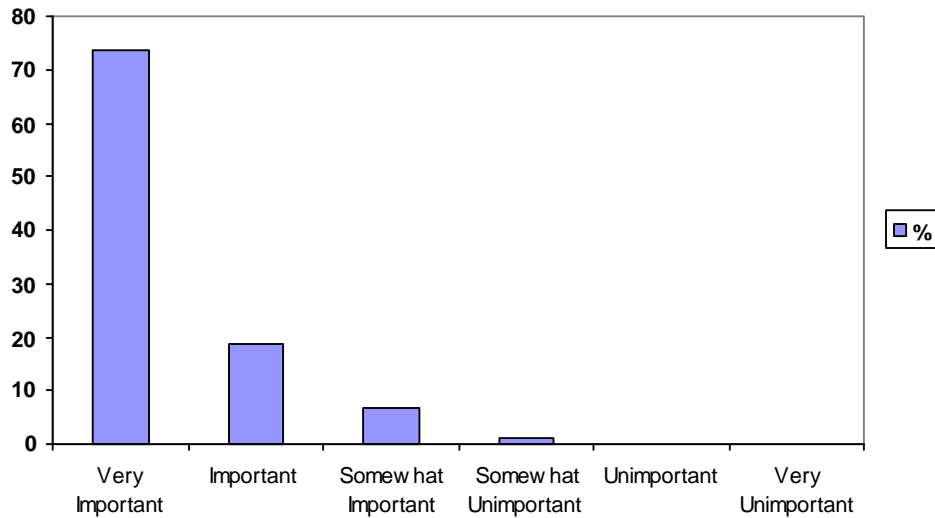
#13: Caseload

Figure 27 shows that out of 253 respondents, 193 (76.3%) agree that caseload has a very important influence on the retention of speech language pathologists in Texas schools. Furthermore, 45 (17.8%) of respondents reported that size of caseload is an important factor in retention. Of the remaining respondents, relating to size of caseload, 11 (4.3%) responded somewhat important, 3 (1.2%) responded somewhat unimportant, and 1 (.4%) reported size of caseload to be an unimportant factor of retention for speech pathologists.

Figure 27. Percentages of Retention Responses Regarding Caseload for Speech Pathologists.
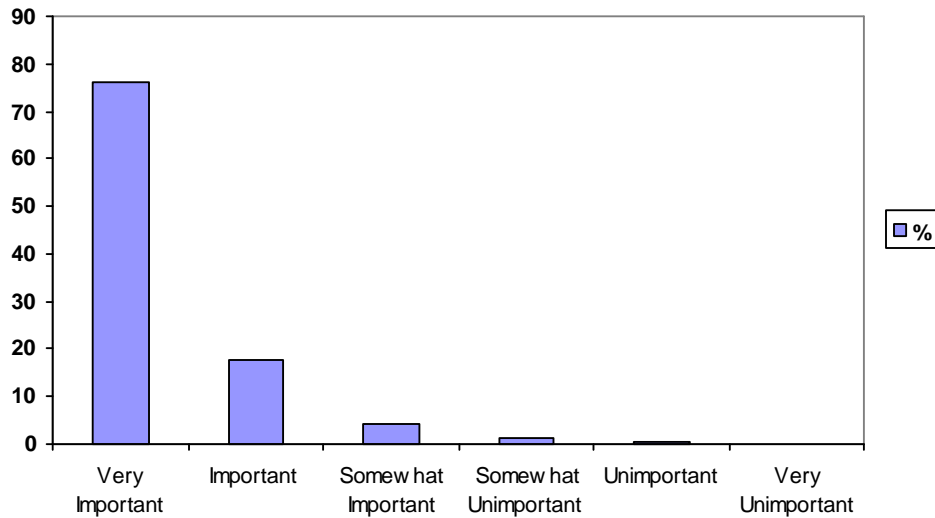
#14: Contributions to Society

      Contributions to society were found to be a very important retention factor to 26.9% (68) of the respondents in this study. Moreover, 60 (23.7%) of respondents and 80 (31.6%) of respondents reported contributions to society as an important and somewhat important factor of retention for speech pathologists. All remaining respondents reported contributions to society as a somewhat unimportant (39 or 15.4.3%) or unimportant (6 or 2.4%) factor of retention for speech pathologists. This information can be found in Figure 28.

Figure 28. Percentages of Retention Responses Regarding Contributions to Society for Speech Pathologists.
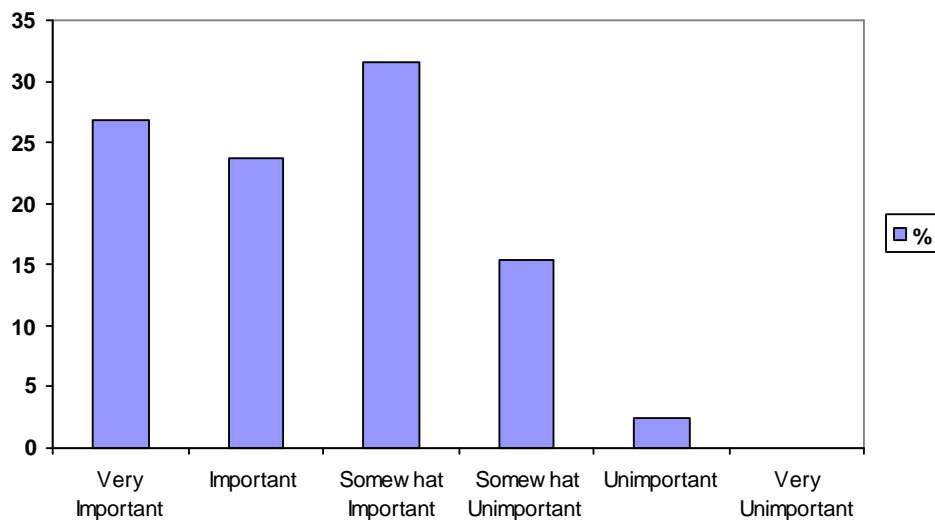
#15: Clerical Assistance

Figure 29 shows that 62 or 24.5% of respondents felt that clerical assistance was very important in the retention of speech pathologists in Texas schools. Moreover, data revealed that 55 (21.7%) respondents felt that clerical assistance was important, 71 (28.1%) felt that clerical assistance was somewhat important as a retention factor, 52 (20.6%) of respondents felt that clerical assistance was somewhat unimportant in the retention of speech pathologists, 4% (10) of respondents identified clerical assistance as being unimportant in influencing speech pathologists to remain in a school district, with less than 2% (3) acknowledging clerical assistance as a very unimportant retention factor.

Figure 29. Percentages of Retention Responses Regarding Clerical Staff for Speech
Pathologists.
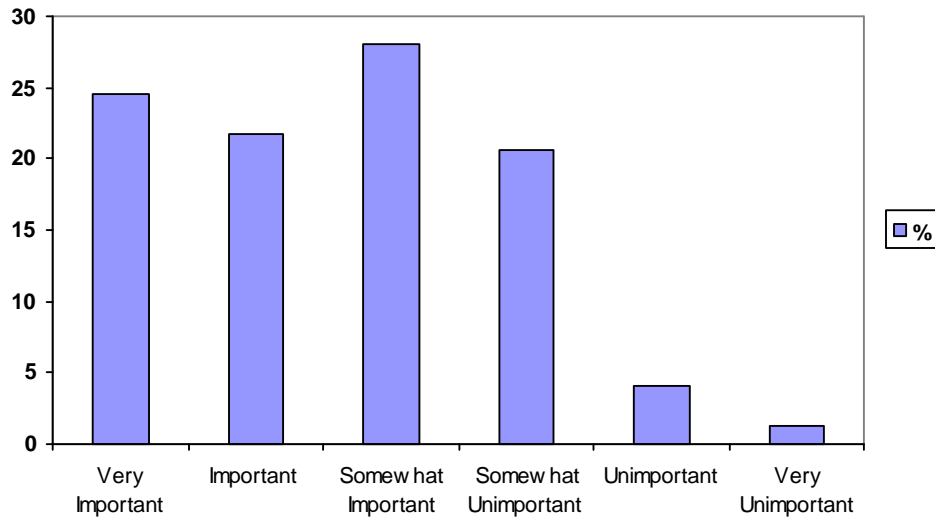
#16: Technology Usage in ARDs/Report

Figure 30 shows that according to the research participants in this study, 101

(39.9%) reported that use of technology in ARDs/Reports as a very important factor of

retention for speech pathologists. Furthermore, 30.4% (77) and 18.6% (47) of

participants found technology usage in ARDs/reports both important and somewhat

important, respectively. Moreover, 7.1% (18) reported technology use as somewhat

unimportant, 3.6% (9) reported technology use as unimportant, and .4% (1) reported

technology as very unimportant

Figure 30. Percentages of Retention Responses Regarding Technology Usage in ARD Report for Speech Pathologists.
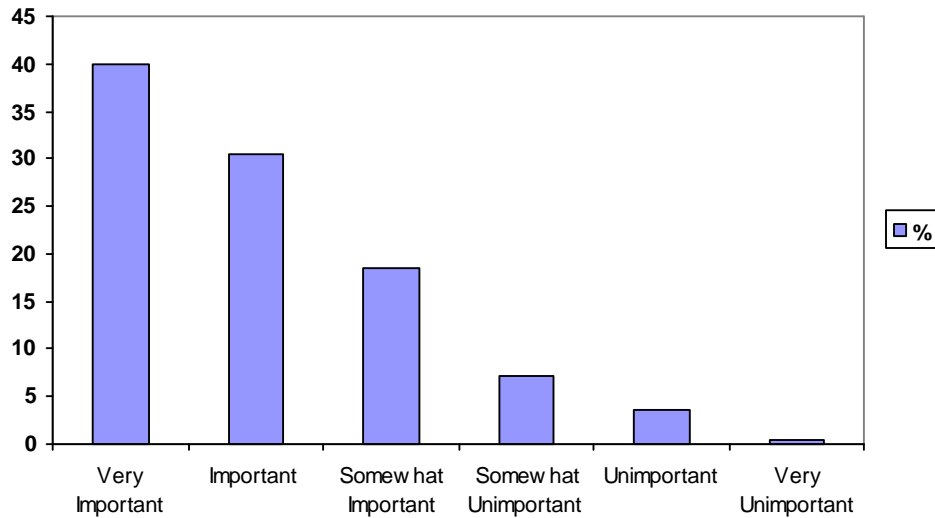
Table 19 provides a summary of the means and standard deviations of retention factors based on the responses of the speech language pathologists in this study. Based on the respondents, job satisfaction, pay caseload, size of caseload, and job security are the three most influential factors in the recruitment of a speech language pathologist in a Texas school. However, respondents reported, with regard to retention, retention bonuses, clerical assistance, and retention stipends as the three least influential in the recruitment process.

Table 19. Summary of the Means and Standard Deviations for Retention Factors of
Speech Pathologists

Retention Factors	Mean	SD
Job Satisfaction	5.85	.400
Caseload	5.68	.651
Job Security	5.64	.661
Professional Development	5.54	.715
Pay Grade/Level	5.51	.790
Part of Decision-Making Process	5.41	.764
Administrative Support	5.38	.811
Benefits	5.10	.983
Location of School/District	5.03	.942
Technology Usage in ARD/Report	4.95	1.120
Induction/Support/Mentoring	4.91	1.123
Contributions to Society	4.57	4.570
Career Advancement Opportunity	4.47	1.097
Retention Bonus	4.40	1.254
Clerical Staff Assistance	4.39	1.234
Retention Stipend	4.29	1.202

Of the retention factors mentioned above, several have been identified as being currently used in school districts to retain speech pathologists. Table 20 shows that the three most frequently used retention tools are benefits, professional development opportunities, and administrative support. Respondents responded 98%, 96.8%, and 85.8% respectively. However, a retention stipend was the least used retention method.

Table 20. Summary of the Frequency and Percentages of Districts Utilizing Retention Factors for Speech Pathologists

Retention Factors	Frequency	Percent
Benefits	248	98.0
Professional Development Opportunities	245	96.8
Administrative Support	217	85.8
Technology Assistance for ARD/Paperwork	215	85.0
Induction/Mentoring	189	74.7
Pay Grade/Level incentive	155	61.3
Clerical Assistance	84	33.2
Career Advancement Opportunity	77	30.4
Retention Bonuses	46	18.2
Retention Stipend	32	12.6

Means and Standard Deviation and Correlation Analysis Results

of Variables in Regression Model

Means and Standard Deviation Analysis

Presented in Table 21 were the mean and standard deviation results of the independent and dependent variables. The variable career commitment was measured by the career commitment scale developed by Blau (1989) in his work entitled "Testing Generalizability of a Career Commitment Measure and Its Impact on Employee Turnover." This scale consisted of six items with each having six responses. Each of the response on the scale was scored 1 to 6. The score of 6 was given to the response that indicated a high degree of career commitment, and a score of 1 was assigned to the response indicating a low degree of career commitment. Three of the items were stated positively and three were stated negatively. The scale was scored by totaling the responses and the higher the score, the more career commitment a speech pathologist has toward his/her profession. The highest possible score for the Career Commitment Scale was 36. Inasmuch as three items were in reversed a mean score of 28.40 (sd = 6.65) was computed for the Career Commitment Scale. Thus, it appeared that as a group, the speech pathologists had a high degree of career commitment.

The variable turnover intention was used to determine the speech pathologists' intent of searching for another job. It was measured by three items modified from the turnover intention scale developed by Seashore, Lawler, Mirvis and Camman (1982). This variable was scored on the basis of six responses, which the highest score representing a high intent of finding another job and lowest score representing a low

intent of finding another job. A mean score of 10.39 (sd = 4.19) was calculated for this variable. As a result, the speech pathologists as a group have a somewhat high intention of searching for another job.

Moreover, for the variable organizational commitment, an average score of 12.25 (sd = 2.89) was computed from the sample population. This variable was measured by these items from the organizational commitment scale developed by Balfour and Wechster (1996). Each of the choices on this scale was scored 1-6, which the highest score representing a strong commitment to the school district and the lowest score representing a weak commitment to the district. Two items were stated positively and one item was stated negatively. Therefore, the data suggested that the average speech pathologist working in school district in Texas had a somewhat strong commitment to his/her school.

Additionally, the variable job satisfaction was used to determine how satisfied a speech pathologist was with his/her job. It was measured by three items from the job satisfaction measures developed by Camman, Fichman, Jenkins, and Klesh (1983). These items were scored 1-6 with the high score representing a high degree of job satisfaction and a low score representing a low degree of job satisfaction. Two items were scored positively and one item was scored negatively. A mean score of 12.79 (sd = 2.83) was computed for this scale. As a result of this analysis, speech pathologists as a group were somewhat satisfied with their job.

Furthermore, job overload was measured with 10 items from the "Job Overall Scale" developed by Caplan, Cobb, French, Van Harrison, and Pinneau (1980). These

items were scored 1-6, with six representing a high degree of job overload and 1

representing a low degree of job overload. All 10 items were stated positively with a

summated score ranging from 10 to 60. A mean score of 47.23 (sd = 6.43) was computed

for this scale. It appeared as a group; speech pathologists have somewhat of a high

degree of job overload.

Further, the scale recruitment was factorially analyzed and was measured by four

variables. The five variables were used to determine the major factors involved in

recruiting speech pathologists to work in school districts in Texas. These factors

(variables) were scored on a six-point scale with the high score representing a variable

that was very important in recruiting and a low score representing a variable not very

important in recruiting. A mean score of 19.79 (sd = 3.82) was computed for

Recruitment Scale. Thus, the data suggested that a group, speech pathologists felt that

the recruitment factors pertaining to hiring/signing bonuses, stipends, pay/grade level,

and computer-generated scoring/reporting were important to recruitment.

Finally, for the scale retention, the average score of 22.01 (sd = 2.22) was

computed from the sample of speech pathologists in the state of Texas. The scale

retention was factorially analyzed and was measured by four variables. The four

variables: (a) part of decision-making process, (b) administrative support, (c)

professional development, and (d) caseload were used to determine the factors speech

pathologists felt were important to their decision to continue to work at their current

location. These factors (variables) were scored from 1 to 6, where 6 represented very

important and 1 represented not very important with respect to the decision of speech

pathologists to continue to work at their present job. Thus, as a whole, speech

pathologists felt that these variables were important in their decision to continue to work

at their current location.

Table 21 shows the means and standard deviations of each instrument used in

this study.

Table 21. Means and Standard Deviation of the Independent and Dependent Variables

Variables	M	SD
Career Commitment	28.40	6.65
Turnover Intent	10.39	4.19
Organizational Commitment	12.25	2.89
Job Satisfaction	12.79	2.83
Job Overload	47.23	6.43
Recruitment 1	19.79	3.81
Retention 1	22.01	2.22

Correlation Analysis

Correlation analyses were conducted to determine relationships between all

variables in the research questions. Pearson Product Moment Correlation was used to

describe the relationships between variables. This statistical technique was used to assess

the inter-correlation coefficients among two continuous variables. The variables

included in this analysis were recruitment, retention, career commitment, organization

commitment, job overload, job satisfaction, and turnover intention. The results of these

analyses are presented in Tables 22. Additionally, regression analyses were run to

identify and examine the relationship and predictive power of the criterion variables.

Table 22 shows the relationships between all variables in this study. Specifically,

turnover intent was found to have a positive significant relationship to recruitment ($r =$

.429), retention ($r=$ .249), and job overload (.129). However, in contrast, a significant

negative relationship was found between turnover intent and career commitment ($r =$ -

.649), organizational commitment (-.616), and job satisfaction ($r=$-.704).

Table 22. Variable Correlations

Variable	(1)	(2)	(3)	(4)	(5)	(6)	(7)
(1) REC	1.00						
(2) RET	.482***	1.00					
(3) CC	-.348***	-.202**	1.00				
(4) TI	.429***	.249***	-.649***	1.00			
(5) OC	-.373***	-.025	.616***	-.616***	1.00		
(6) JS	-.355***	-.212**.	803***	-.704***	.654***	1.00	
(7) JO	.112	.184**	-.086	.129*	-.083	-.091	1.00

Note. (*) Denotes correlation is significant at the 0.05 level (2-tailed: $p< .05$); (**)
Denotes correlation is significant at the 0.01 level (2-tailed: $p< .01$); (***) Denotes
correlation is significant at the 0.001 level (2-tailed: $p< .001$); Scale: (REC) =
recruitment, (RET) = retention, (CC) = career commitment, (TI) = turnover intent (OC)
= organizational commitment, (JS) = job satisfaction, and (JO)= job overload.

Examination of Hypotheses

Several regression equations were estimated to test the linear relationships

formulated in the null hypotheses. The following is a discussion of the results relating to

each null hypothesis

HO$_1$: There is no statistically significant relationship between recruitment and

turnover intent.

A linear regression was performed with turnover intent as the dependent variable

and recruitment as the independent variable (see Table 23). When the predictor variable

recruitment entered into the equation, it resulted in a correlation coefficient (R) of .43.

Furthermore, r-squared was .184, suggesting that recruitment accounted for 18% of the

variance in the dependent variable (turnover intent). A significant linear relationship was

found between recruitment and turnover intent [F = (1,251) = 56.77; p < .001]. Thus,

Hypothesis 1 was rejected.

Table 23. Linear Regression Results Regarding the Relationship Between Recruitment
and Turnover Intent

Variable	B	SEB	Beta	t	P
(Constant)	1.064	1.260			
Recruitment	.471	.063	.429	7.534	.000***

Note. Bi-variate R= .429; R Square =.184; Standard Error =3.78; df= 1/251; F= 56.767; P=.000;
***P< .001.

HO$_2$: There is no statistically significant relationship between retention and

turnover intent.

Employing linear regression analyses (see Table 24) the variable retention was entered into the equation resulting in a bi-variate correlation (R) of .249. This variable accounted for 6% of the variance in the criterion variable (turnover intent). A significant linear relationship was found between retention and turnover intent [$\underline{F}$= (1/251) = 16.615; p< .001) at the .001 level. Therefore, Hypothesis 2 was rejected.

Table 24. Linear Regression Results Regarding the Relationship Between Retention and Turnover Intent

Variable	B	SEB	Beta	T	P
(Constant)	.064	2.546			
Retention	.469	.115	.249	4.076	.000***

Note. Bi-variate R = .249; R square = .062; Standard Error = 4.06; df =1/251; F = 16.615; P = .000; ***P < .001.

HO$_3$: There is not statistically significant relationship between career commitment and turnover intent.

Reported in Table 25 was the linear regression analysis calculated for the relationship between the predictor career commitment and criterion variable turnover intent. This variable resulted in a linear correlation (r) of .65 career commitment accounted for 42% of the variance in turn over intent. A statistically significant relationship was found to exist between career commitment and turnover intent [$\underline{F}$ = (1, 251) = 182.94; p < .001] at the .001 level. Consequently, Hypothesis 3 was rejected.

Table 25. Linear Regression Results Regarding the Relationship Between Career Commitment and Turnover Intent

Variable	B	SEB	Beta	T	P
(Constant)	21.992	.881			
Career Commitment	- .409	.030	- .649	- 13.525	.000***

Note. Bi-variate R = .649; R square = .422; Standard Error = 3.19; df = 1/251; F = 182.936; P = .000***; *** P < .001

HO4: There is no statistically significant relationship between organizational commitment and turnover intent.

Shown in Table 26 were the regression analysis estimates computed for the relationship between organizational commitment and turnover intent. The predictor variable (organizational commitment) resulted in a linear correlation coefficient (r) of .62. This variable accounted for 38% of the variance in turnover intent. A significant relationship was found between organizational commitment and turnover intent [$\underline{F}$ = (1,251) = 153.90; f < .001]. Accordingly, Hypothesis 4 was rejected.

Table 26. Linear Regression Results Regarding the Relationship Between Organizational Commitment and Turnover Intent

Variable	B	SEB	Beta	T	P
(Constant)	21.294	.905			
Organizational Commitment	-.891	.072	- .616	- 12.377	.000***

Note. Bivariate R = .616; R square = .379; Standard Error = 3.31; df = 1/251; F = 153.190; P = .000***; *** P < .001

HO$_5$: There is no statistically significant relationship between job satisfaction and

turnover intent.

A bivariate regression (see Table 27) was computed to determine the relationship

between job satisfaction and turnover intent. The variable job satisfaction resulted in a

correlation coefficient of .70. It accounted for 50% of the variance in turnover intent. A

statistically significant relationship existed between job satisfaction and turnover intent

[$\underline{F}$ = (1,251) = 246.16; $\underline{P}$.001] at the .001 level. Therefore, Hypothesis 5 was rejected.

Table 27. Linear Regression Results Regarding the Relationship Between Job
Satisfaction and Turnover Intent

Variable	B	SEB	Beta	T	P
(Constant)	23.684	.868			
Job Satisfaction	- 1.039	.066	- .704	- 15.690	.000***

Note. Multiple R = .704; R square = .495; Standard Error = 2.98; df = 1/251; F = 246.163; P =
.000***; *** P < .001.

HO$_6$: There is no statistically significant relationship between job overload and

turnover intent.

Indicated in Table 28 were the linear regression results computed for the

relationship between the independent variable job overload and the dependent variable

turnover intent. Job overload resulted in a linear correlation ($\underline{r}$) of .13. This variable

accounted for 2% of variance in turnover intent. A significant relationship was found to

exist between job overload and turnover intent [$\underline{F}$ (1, 251) = 4.27; $\underline{P}$ < .05) at the .05

level. Based on the above results, Hypothesis 6 was rejected.

Table 28. Linear Regression Results Regarding the Relationship Between Job Overload and Turnover Intent

Variable	B	SEB	Beta	T	P
(Constant)	6.410	1.943			
Job Overload	.084	.041	.129	2.066	.040*

Note. Multiple R = .129; R square = .017; Standard Error = 4.16; df = 1/251; F = 4.267;   P = .040*; *P < .05.

HO$_7$: There is no statistically significant relationship between recruitment,

retention, career commitment, organizational commitment, job satisfaction, job

overload, and turnover intent

A multiple regression (see Table 29) was performed between the predictors

recruitment, retention, career commitment, organizational commitment, job satisfaction,

job overload, and the criterion variable turnover intent. When these variables were

entered into the equation, they resulted in a multiple correlation coefficient (R) of 758.

The predictor variables accounted for 58% (56% adjusted) of the variance in turnover

intent. A significant linear relationship was found among recruitment, retention, career

commitment, organizational commitment, job satisfaction, job overload, and turnover

intent [F = (6/246) = 55.434; P= .000]. Furthermore, four of the six variables

recruitment, career commitment, organization commitment, and job satisfaction

contribute significantly to turnover intent with t-values of 2.353, -2.082, -3.860, and -

4.979, respectively. Thus Hypothesis 7 was rejected.

Table 29. Summary Results of the Multiple Regression Analysis for Recruitment, Retention Career Commitment, Organizational Commitment, Job Satisfaction, Job Overload and Turnover Intent

Variables	B	SEB	Beta	T	P-value
(Constant)	17.512	2.410			
Recruitment	.135	.057	.123	2.353	.019*
Retention	.129	.094	.068	1.365	.174
Career Commitment	-.094	.045	-.149	-2.082	.038*
Organizational Commitment	-.333	.086	-.230	-3.860	.000***
Job Satisfaction	-.550	.110	-.372	-4.979	.000***
Job Overload	.024	.028	.037	.879	.380

Note. Multiple $\underline{R}$ =;.758; R Square = .575; F = 55.434; df 6/246; P = .000***; * P< .05; **P< .01; ***P< .001.

HO$_8$: There is no statistically significant relationship between recruitment, retention, turnover intent, organizational commitment, job satisfaction, job overload and career commitment.

Multiple regression analysis (see Table 30) was employed to test significantly the relationship between the independent variables recruitment, retention turnover intent, organizational commitment, job satisfaction, job overload, and the dependent variable career commitment. When the six independent variables were entered into the equation, a multiple correlation ($\underline{R}$) of .82 was calculated. These variables together accounted for 67% (66% adjusted) of the variance in career commitment. A significant linear relationship was found among recruitment, retention, turnover intent, organizational

commitment, job satisfaction, job overload and career commitment [$\underline{F} = (6,246)=82.518$; P <.000]. Furthermore, three of the six variables turnover intent, organizational commitment, and job satisfaction contribute significantly to turnover intent with t-values of -2.082, 2.462, and 10.984 respectively.

Table 30. Summary Results of the Multiple Regression Analysis for Recruitment, Retention, Turnover Intent, Organizational Commitment, Job Satisfaction, Job Overload, and Career Commitment

Variables	B	SE(B)	Beta	T	P-value
Constant	10.252	3.671			
Recruitment	-.021	.081	-.012	-.265	.792
Retention	-.097	.133	-.032	-.727	.468
Turnover Intent	-.185	.089	-.116	-2.082	.038*
Organizational Commitment	.303	.123	.132	2.462	.015*
Job Satisfaction	1.464	.133	.624	10.984	.000***
Job Overload	.004	.039	.004	.096	.923

Note. Multiple $\underline{R}$ =.817; R Square= .668; f= 82.518; df=6,246, P =.000; * P< .05; **P< .01; ***P< .001.

HO$_9$:   There is no statistically significant relationship between recruitment, retention, career commitment, turnover intent, job satisfaction, job overload and organizational commitment

Presented in Table 31 were the multiple regression findings relative to the relationship between the predictors recruitment, retention, career commitment turnover intent, job satisfaction, job overload, and the criterion variable organizational

commitment. These variables resulted in a multiple correlation ($\underline{R}$) of .735. Additionally, combined, the predictors accounted for 54% (53% adjusted) of the variance in organizational commitment. A linear relationship was found between the variables recruitment, retention, career commitment, turnover intent, job satisfaction, job overload, and organizational commitment [$\underline{F}$ = (6/246)= 48.192; f=.000]. Also, five independent variables, recruitment, retention, career commitment, turnover intent and job satisfaction were found to contribute significantly toward organizational commitment with t-values of -3.905, 4.890, 2.462, -3.860, and 3.886 respectively. Accordingly, Hypothesis 9 was rejected.

Table 31. Summary Results of the Multiple Regression Analysis for Recruitment, Retention, Career Commitment, Turnover Intent, Job Satisfaction, Job Overload, and Organizational Commitment

Variables	B	SE($\underline{B}$)	Beta	T	P-value
Constant	4.479	1.887			
Recruitment	.-.157	.040	-.208	-3.905	.000***
Retention	.318	.065	.244	4.890	.000***
Career Commitment	.079	.032	.182	2.462	.015*
Turnover Intent	-.172	.044	-.249	-3.860	.000***
Job Satisfaction	.314	.081	.308	3.886	.000***
Job Overload	-.013	.020	-.028	-.643	.521

Note. Multiple $\underline{R}$ =.735; R Square= .540; f=48.192; df=6/246, P =.000***; * P< .05; **P< .01; ***P< .001.

HO_{10}: There is no statistically significant relationship between recruitment, retention, career commitment, turnover intent, organizational commitment, job overload, and job satisfaction.

Reported in Table 32 were the multiple regression results computed with regard to the relationship between the independent variables recruitment, retention, career commitment, turnover intent organizational commitment, job overload, and the job satisfaction The six predictor variables resulted in a multiple correlation of .848. The independent variables accounted for 72% (71% adjusted) of the variance in job satisfaction. A linear relationship was found between the predictors and the dependent variable job satisfaction [F= (6/246=105.131; $\underline{p}$= .000]. Moreover, career commitment, turnover intent, and organizational commitment contribute significantly to job satisfaction with t-values of 10.984, -4.979 and 3.886. Consequently, Hypothesis 10 was rejected.

Table 32. Summary Results of the Multiple Regression Between Recruitment, Retention, Career Commitment, Turnover Intent, Organizational Commitment, Job Overload, and Job Satisfaction

Variables	B	SE(B)	Beta	T	P-value
Constant	6.814	1.395			
Recruitment	.022	.032	.030	.699	.485
Retention	-.070	.052	-.055	-1.357	.176
Career Commitment	.225	.020	.527	10.984	.000***
Turnover Intent	-.166	.033	-.246	-4.979	.000***

Table 32 (continued)

Variables	B	SE(B)	Beta	T	P-value
Organizational Commitment	.184	.047	.188	3.886	.000***
Job Overload	.004	.015	.009	.256	.798

Note. Multiple R =.848; R Square= .719; f= 105.131; df 6/246; P =.000***; ***P< .001.

HO$_{11}$: There is no statistically significant relationship between recruitment, retention, career commitment, turnover intent, organizational commitment, job satisfaction, and job overload.

Reported in Table 33 were the regression results computed with regard to the relationship between the independent variables recruitment, retention, career commitment, turnover intent, organizational commitment, job satisfaction, and the criterion variable job overload. When these variables were entered into the equation, they resulted in a multiple correlation coefficient (R) of .207. The predictor variables accounted for 4% (2% adjusted) of the variance in job overload. A significant linear relationship was not found among recruitment, retention, career commitment, turnover intent, organizational commitment, job satisfaction, and job overload [F = (6/246) = 1.056 p= .092]. Furthermore, only one of the six variables, retention (2.389), contributed significantly to job overload. Thus, the researcher failed to reject Hypothesis 11.

Table 33. Summary Results of the Multiple Regression Between Recruitment, Retention,
Career Commitment, Turnover Intent, Organizational Commitment, Job Satisfaction,
and Job Overload

Variables	B	SEB	Beta	t	P-value
Constant	35.583	5.682			
Recruitment	-.030	.133	-.018	-.223	.824
Retention	.515	.216	.178	2.389	.018*
Career Commitment	.010	.105	.010	.096	.923
Turnover Intent	.129	.147	.084	.879	.380
Organizational Com	-.131	.204	-.059	-.643	.521
Job Satisfaction	.068	.267	.030	.256	.798

Note. Multiple R= .207; r-squared = .043; F= 1.83; df 6/246; p = .092; * p<.05; ** p<.01; ***p<.001.

HO$_{12}$: There is no statistically significant relationship between organizational actions and turnover intent.

A linear regression was performed with turnover intent as the dependent variable and organizational actions as the independent variable (see Table 34). When the predictor variable organizational actions entered into the equation, it resulted in a correlation coefficient (R) of .42. Furthermore, r-squared was .174, suggesting that organizational actions accounted for 17% of the variance in the dependent variable (turnover intent). A significant linear relationship was found between organizational actions and turnover intent [F = (1,251) = 52.744; p < .001]. Thus, Hypothesis 12 was rejected.

Table 34. Linear Regression Results Regarding the Relationship Between Organizational Actions and Turnover Intent

Variable	B	SEB	Beta	t	P-value
(Constant)	-3.467	1.923			
Recruitment	.331	.046	.417	7.263	.000

Note. Bi-variate R= .417; R Square =.174; Standard Error =3.81; df= 1/251; F= 52.744; P=.000; *** P< .001.

HO$_{13}$: There is no statistically significant relationship between job satisfaction, organizational commitment, career commitment, and job overload.

Reported in Table 35 were the regression results computed with regard to the relationship between the independent variables job satisfaction, organizational commitment, career commitment, and the criterion variable job overload. When these variables were entered into the equation, they resulted in a multiple correlation coefficient ($\underline{R}$) of .097. The predictor variables accounted for less than 1% of the variance in job overload. A significant linear relationship was not found among job satisfaction, organizational commitment, career commitment, and job overload [$\underline{F}$= (3/249) = .793 p= .499]. Furthermore, only one of the six variables, retention (2.389), contributed significantly to job overload. Thus, the researcher failed to reject Hypothesis 13.

Table 35. Summary of Results of the Multiple Regression Computed With Regard to the Relationship Between the Independent Variables Job Satisfaction, Organizational Commitment, Career Commitment, and the Criterion Variable Job Overload

Variables	B	SEB	Beta	t	p-value
(constant)	50.282	2.019			
Career Commitment	-.027	.104	-.028	-.262	.793
Organizati Com	-.080	.189	-.036	-.425	.671
Job Satisfaction	-.101	.255	-.044	-.395	.693

Note. Multiple R = .097; r-squared = .009; F= .793; df 3/249; p = .499; * p<.05; ** p<.01; ***p<.001.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS,

AND RECOMMENDATIONS

In this chapter, five major sections will be addressed. In the first section, a summary of the current study is reviewed. In the second section, the null hypotheses and related findings are discussed. In the third section, the conclusions and limitations of the study are provided. In the fourth section, the implications of the current study as they relate to HRD research and practice are discussed, and in the fifth and final section, recommendations and directions for future research are provided.

Summary

As the demand for speech language pathologists in schools continues to increase, understanding the incentives that influence the recruitment and retention of these professionals, as well as the work-related factors that affect their intent to turn over becomes vital. Moreover, understanding why these employees intend to turn over is important because research has shown that turnover intent as a good predictor of actual turnover. Given this, the main purpose of this study was to investigate the relationships between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and the turnover intent of speech language pathologists in Texas schools. Additionally, this study sought to identify factors that influence the recruitment and retention of speech pathologists.

Data for each variable in this study were collected using a survey questionnaire constructed using several pre existing instruments discussed in Chapter III of this study.

Job Satisfaction was measured using a three-item scale developed by Cammann et al. (1983). Career commitment was measured using Blau's (1989) seven-question scale. Job overload was measured by Caplan et al.'s (1980) 11-item scale, organizational commitment was measured with Balfour and Wechsler's (1996) OCS. Turnover intent was measured using a three-item measure developed by Seashore et al. (1982). Likewise, a modified version of Simpson's (2002) recruitment and retention scales were used in this study, consisting of 14 and 16 items, respectively. Reliability was completed for each instrument and found to be acceptable.

A random sample of 500 speech language pathologists was determined to be appropriate for this study. Each participant was identified as holding the Certificate of Clinical Competence, the highest speech endorsement of the American Speech Language and Hearing Association. A demographic breakdown was provided for gender, years experience, academic level, age, work environment, caseload, and vacancies.

Data analyses were conducted using SPSS 14 software and included descriptive statistics, such as means, frequencies, and standard deviations, as well as inferential statistics such as linear and multiple regression analysis and Pearson correlations.

<div align="center">**Discussion**</div>

As previously stated, the main emphasis of this research study was to investigate the impact of affective factors related to work on the turnover intent of speech pathologists working in Texas schools. The research questions related to these variables were described by 13 statistical hypotheses. In the following section, an explanation of

descriptive statistics and results concerning each of the hypotheses formulated to address them were discussed.

Discussion of Descriptive Statistics

Gender

In this study, a disproportionate number of females versus males were reported, specifically, 250 (98.8%) females and 3 (1.2%) males. Although these numbers may appear a bit skewed, they adequately reflect the population in the profession. This has been supported in previous studies of speech language pathologists who have reported similar breakdowns in gender. Blood et al. (2002) reported a sample that consisted of 96.3% female and 3.7% male. Similarly, in a study of the job satisfaction of speech language pathologists, Pezzei and Oratio (1991) reported samples of 97% female and 3% male. ASHA (2004a) reports that there continues to be a shortage of male speech pathologists, finding that 95.5% of SLPs are females and 4.5% are male.

Age

In this study, the average age of participants was between 45-49. This was in line with findings of previous studies. ASHA (2004b) reported that the average age of speech pathologists is 45-54, followed by 34 and younger. In support of this finding, Blood et al.'s (2002) sample of speech pathologists had a mean age of 45.1. These findings have several implications for organizations pursuing speech pathologists. The profession appears to have an aging population. What is more discouraging is that is has been reported that during the 2000-2001 academic year, of the 15,464 students who applied

for a master's program in communication disorders, only 6,665 (43%) were admitted.

Furthermore, of this number, only 3,733, actually enrolled (Edgar & Rosa-Lugo, 2007).

Experience

In this study, years of experience of speech pathologists were collected in the

data. The majority of participates (23.2%) had between 6-10 years' experience.

However, it is noteworthy that 17.1% (43) of participants had between 11-15 years'

experience. The average years of experience in this study was 14.91. Given this, it

appears that of those in the professions, experience is moderate.

Academic Degree

In this study, information regarding a speech pathologist's academic degree was

collected. Ninety-eight percent of speech pathologists have master's degrees, 1.2%

reported having bachelor's degrees, and .4% reported having a doctorate degree. The

skewness of academic level was not extraordinary in that the American Speech

Language and Hearing Association's current standards for the Certificate of Clinical

Competence (CCC) requires an applicant to have at least a master's degree.

Furthermore, in other studies of speech pathologists in schools, Pezzei and Oratio (1991)

reported a sample with 265 masters' degrees, 4 bachelors' degrees, and 2 Ph.D.s. and

Blood et al. (2002) reported 98% of participants with master's degrees. These findings

imply that most speech pathologists are well educated.

Vacancies

In this study, 71% of all districts and/or co-ops reported at least one vacancy for a speech language pathologist in Texas. This finding appears to be in alignment with the literature that suggests that there is a shortage of speech language pathologists (Condon, Simmons & Simmons, 1986; Kaegi, Svitich, Chambers, Bakker, & Schneider, 2002; Neeley, Diebold & Dickinson, 1994).

Average Caseload

The finding in this study reported that speech language pathologists in Texas schools have an average caseload of 60.94. This finding is significant in that ASHA recommends that caseloads not exceed 40. Specifically, ASHA suggests that those working with special populations have a maximum of 25 (Edgar & Rosa-Lugo, 2007). Furthermore, both Indiana and Florida reported the high caseload average, reporting 75 and 64 respectively. These were considered to be among the highest in the states (ASHA, 2004a).

With average caseloads of speech pathologists above national recommendations, speech pathologists in Texas could be predisposed to burnout (Miller & Potter, 1982). In support of this, research has found that SLPs may be subject to increased levels of stress as a result of large caseloads, minimal facilities and resources, and being isolated professionally (Wisniewski & Gargiulo, 1997). This has many implications for organizations that encourage high caseloads. Caseload has been found to be a predictor of job satisfaction (Kaegi et al., 2002).

Recruitment Incentives

Speech pathologists identified job responsibilities, pay grade level, size of caseload, need for a job, and administrative support as the most influential recruitment incentives. The review of literature supported these findings.

A number of researchers have found related job responsibilities to have a significant impact on employee turnover intent. Morvant et al. (as cited by Billingsley, 2004) found that only half of special educators in their study felt that their workload was manageable. Furthermore, Westling and Whitten (1996) linked job design factors with an individual's intent to stay, citing that clearly defined responsibilities and adequate time to complete paperwork, planned instruction and materials as factors that influence an employee's turnover intention.

Boe et al. (1997) suggested that school districts could enhance the recruitment of special education personnel by offering salary as high as possible. Additionally, pay incentives were found to influence speech pathologist's decisions to join an organization. ASHA (2004b) listed increased salary as a possible strategy to attract more speech pathologists.

Furthermore, Schnorr (1995) found that the amount of paperwork, high caseloads, and number of required meetings were deterrents to potential special education teachers. Similarly, Potter and Lagace (1995) found a significant positive relationship between caseload and degree of burnout in speech pathologists, as well as in caseload and job dissatisfaction.

With regard to the incentive of "need a job," Billingsley (2004) stated that personal finances may influence whether teachers stay or leave. Specifically, those who are the primary money makers in a household would be more likely to stay (Westling & Whitten, 1996). Given this, a person in this position would most likely be recruited faster than someone not in need of a job.

Moreover, administrative support has been cited in the literature as having a significant impact on an individual's employment with an organization. Research suggests that teachers are more likely to depart when there is no support from administration (Billingsley, 2004). This finding was supported by Boe, Barkanic, & Leow (as cited by Billingsley 2004), who reported that teachers who stayed in there organization had strong perceptions of administrative support.

In general, with regard to the identified recruitment incentives, it appears that public schools could attract more speech pathologists to their organization by addressing the amount of work given, pay, and support. It appears that an organization that can develop a plan that will allow an effective balance of these elements will be successful in their recruitment attempts.

Retention Incentives

In this study, speech pathologists identified job satisfaction, caseload, job security, professional development, and pay grade level as the five most influential retention incentives.

In several research studies, speech pathologists have been found to be, in general, satisfied with their jobs. This appears to be the consensus among the profession.

Furthermore, Pezzei and Oratio (1991) found caseload to be the strongest predictor of job satisfaction. Additionally, opportunities for professional development have been cited as influential in the retention of special education educators. Researchers have suggested that organizations offer to pay for continuing education and licensure, as incentives to retain speech pathologists. Moreover, when comparing lists, pay grade and caseload size appear in the top five of each. With regard to caseload, Russ et al. (2001) reported that high caseloads correlated to teachers leaving special education. Furthermore, this was supported by Billingsley (2004), which stated that the increased trend of caseloads and more responsibilities has significantly contributed to high attrition rates.

Furthermore, Miller et al. (1999) also found that special education personnel with higher paying jobs were more likely to stay than those with lower paying jobs. Furthermore, low pay has been linked to stress and attrition (Fore, Martin, & Bender, 2002). Boe et al. (1997) suggest that school districts offer full-time employment with a high salary to enhance recruitment and retention.

<center>*Discussion of Research Hypothesis*</center>

In general the correlation results revealed that a significant relationship existed among turnover intent and the six predictor variables. Furthermore, three of the predictor variables, career commitment, organizational commitment and job satisfaction, were found to be negatively related to turnover intent. However, job overload, recruitment, and retention were found to have a positive relationship on turnover intent. Moreover, career commitment was found to be significantly positive related to recruitment,

retention, organizational commitment, and job satisfaction. Similarly, job satisfaction was also found to be significantly positive related to recruitment, retention, and organizational commitment.

Null Hypothesis 1

Null Hypothesis 1 assessed the relationship between the influence of recruitment incentives and turnover intention among speech pathologists in the state of Texas. The data revealed that a significant positive relationship existed between the predictor variable recruitment incentives and the dependent variable turnover intention. Consequently, Hypothesis 1 was rejected. Given this, these findings suggest that as the influence of recruitment incentives increased, turnover intent increased. No support for this research finding was found in the literature; however, one plausible explanation of this relationship could be that when an employee is recruited, it is generally from an organization outside of his/her current organization. Given this, this finding appears to be logical, in that, as an outside organization's recruitment incentives become more attractive/or appealing to a potential candidate, the more they influence this candidate, hence, potentially increasing his/her intent to turn over from their current organization. Under this assumption, the intent to turn over is a result of another organizations ability to successfully influence a candidate with attractive recruitment incentive packages.

Additionally, it is noteworthy that the variable recruitment incentives explained 18% of the change in turnover intent in speech language pathologists in Texas schools. Furthermore, even though the relationship between recruitment and turnover intention

was significant, it was only a .43. This suggested a weak moderate relationship between these variables.

Null Hypothesis 2

Similarly, Null Hypothesis 2 examined the effect of the influence of retention incentives on the turnover intent of speech pathologists. The data indicated that a significant positive relationship was found between perceived retention incentives and turnover intention (.249). Furthermore, the variable perceived retention incentives accounted for 6% of the variance in turnover intention. Hence, Hypothesis 2 was rejected.

This finding suggests that as the influence of retention incentives increase, turnover intention increases. As with the previous variable, limited research has been completed to support this finding. However, a reasonable explanation for this significant positive relationship could be that while retention incentives in a SLP's current organization may be attractive and indeed influential, there may be an unfavorable factor such as decreased job satisfaction, organizational commitment, job overload, etc., in the organization, playing a more significant role in influencing an individual's intent to turn over. Additionally, the employee may be aware of similar retention incentives in another organization that he/she finds more attractive, further influencing his/her intent to turn over from their current organization. Consequently, the retention efforts of the organization become ineffective at decreasing turnover intent. Moreover, Brownell et al. (1997) suggest that some opportunities or events can not be prevented by retention

strategies or better policy. Given this, some employees leave for better opportunities or factors unrelated to the job.

Null Hypothesis 3

In Null Hypothesis 3, the variable career commitment was analyzed to determine if it was statistically related to the turnover intention among speech pathologists. A significant negative relationship was found between career commitment and turnover intention of speech pathologists in school districts across the state of Texas. As a result of these findings, Hypothesis 3 was rejected. The independent variable career commitment explained 42% of the change in turnover intention, thus concluding that as career commitment in speech language pathologists in Texas schools increased, turnover intent decreased.

Previous research has provided support for a negative relationship between career commitment and turnover intent. These studies revealed that as career commitment increased, turnover intent decreased (Aryee & Tan, 1992; Billingsley & Cross, 1992; Blau, 1985; Kuei-Yun Lu et al., 2002). As stated, the results of this study showed a negative relationship between these variables. It reveals that turnover intent can be a result of decreased career commitment.

Null Hypothesis 4

Furthermore, Null Hypothesis 4 addressed the relationship between organizational commitment and turnover intention among speech pathologists. The findings revealed that a significant negative relationship existed between organizational commitment and turnover intentions. Therefore, Hypothesis 4 was rejected. The data

suggested that as organizational commitment decreased, turnover intent increased. The predictor organizational commitment accounted for 38% of the change in turnover intention among speech pathologists.

Previous research has provided support for a significant negative relationship between organizational commitment and turnover intention. These studies revealed that as organizational commitment increased, turnover intent decreased (Chang et al., 2006; DeConinck & Bachmann, 1994; Fields, 2002; Loi et al., 2006). As stated in the results of this study, overall, organizational commitment is significantly negatively correlated with turnover intent (Mowday et al., 1982; Parasuraman, 1982; Reichers, 1985). As in Null Hypothesis 3, results from this hypothesis reinforce the consequences of decreased commitment, in this case, organizational commitment.

Null Hypothesis 5

Null Hypothesis 5 investigated the relationship between job satisfaction and turnover intent. The results of the data revealed that a significant negative relationship existed between job satisfaction and turnover intention among speech pathologists employed in school districts across the state of Texas. Given this, Hypothesis 5 was rejected. Furthermore, the less satisfied speech pathologists were with their current jobs with a school district in Texas, the more likely they will leave their position. In this study, job satisfaction accounted for 50% of the variance in turnover intention.

These findings provided support for previous literature that also reported job satisfaction to have a significant negative relationship to turnover intent (Egan et al., 2004; Kacmar, et al., 1999; Muchinsky & Morrow, 1980; Siegall & McDonald, 1995;

Trevor, 2001). Based on these findings, a dissatisfied worker will more likely depart from an unfavorable work environment than a more satisfied worker. Hence, turnover intent can be seen as an outcome of low job satisfaction.

Null Hypothesis 6

Moreover, Null Hypothesis 6 ascertained the relationship between job overload and turnover intent among speech pathologists. As reported in the results section, a linear relationship was found between the variables job overload and turnover intention. Specifically, a positive relationship was found between job overload and turnover intention. Hence, Hypothesis 6 was rejected. It appeared that the more excessive the demands on speech pathologists in school districts, the more likely they will leave the district. However, it is noteworthy that job overload accounted for 2% of the variance in turnover intention.

The present findings parallel those of Pines and Maslach (1978) and Billingsley (1993). The researchers found positive correlations between turnover intent and job overload, suggesting that as the workload or demands on a worker increased, turnover intent increased. Moreover, Billingsley (1993) related specifically to the population in this study. The researcher cited that teachers who work with students with speech impairment will more likely depart for opportunities outside of education. These departures are thought to be connected to the high demands and responsibilities associated with the position. Therefore, the result of this research brings focus and supports the harmful consequences of job overload.

Multiple Regressions

Null Hypothesis 7

Null Hypothesis 7 addressed the relationship behavior between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent. A significant linear relationship was found between the six predictors and turnover intention. Career commitment, organizational commitment, and job satisfactions were negatively related to turnover intent whereas recruitment, retention, and job overload were positively related to turnover intention. There were no research studies found in the literature that examined the effect of all of these independent variables together on turnover intention; however, as previously stated, the single effect of career commitment (Aryee & Tan, 1992), organizational commitment (Chang et al., 2006), job satisfaction (Trevor, 2001), and job overload (Fields, 2002) on turnover intention has been well documented. In these studies, career commitment, organizational commitment, and job satisfaction were found to have a negative relationship to turnover intent. However, job overload was found to have a positive relationship to turnover intent. Moreover, in this regression model, four of the six predicators contributed significantly to turnover intent (recruitment, career commitment, organizational commitment, and job satisfaction).

It should be noted that the six predictor variables together accounted for 58% of the variance in turnover intention. In general, the data seem to suggest that recruitment incentives along with other affective factors will be helpful in explaining turnover intent among speech pathologists.

Null Hypothesis 8

Null Hypothesis 8 examined the relationship between recruitment, retention, turnover intent, organizational commitment, job satisfaction, job overload, and career commitment. A significant linear relationship was found between recruitment, retention, turnover intent, organizational commitment, job satisfaction, job overload, and career commitment. Hypothesis 8 was rejected. The predictors combined, accounted for 67% of the variance in career commitment.

Furthermore, the variables turnover intent, organizational commitment, and job satisfaction independently contributed significantly to career commitment. Organizational commitment and job satisfaction were found to be positively related to career commitment whereas turnover intent was found to be negatively related to this variable. These findings were not a surprise, due to available literature supporting the above relationships between the significant variables in this multiple regression. Previous research suggests that employees who are committed to their organizations and satisfied with their jobs are more committed to their career and less likely to turn over.

Null Hypothesis 9

Null Hypothesis 9 addressed the relationship between recruitment, retention, career commitment, turnover intent, job satisfaction, job overload, and organizational commitment. A significant correlation was found between the linear combination of the predictor variables recruitment, retention, career commitment, turnover intent, job satisfaction, job overload, and the criterion variable organizational commitment.

Hypothesis 9 was rejected. The predictor variables combined accounted for 54% of the variance in organizational commitment.

Moreover, five predictors were found to contribute independently to organizational commitment. Job satisfaction, recruitment and career commitment were found to be positively related to organizational commitment. The variables retention and turnover intent were found to be negatively related to organizational commitment. The present findings correspond with those of DeCotiis and Summers (1987), DeConinck and Bachmann (1994), Fields (2002), Kacmar et al. (1999), and Mathieu and Zajac (1990). The above researchers found that relationships did exist between organizational commitment and three of the significant predictors. However, empirical studies to date have not examined the independent effect of the influence of recruitment and retention incentives on organizational commitment.

Null Hypothesis 10

Null Hypothesis 10 investigated the relationship between recruitment, retention, career commitment, turnover intent, organizational commitment, job overload, and job satisfaction. A significant relationship was found between the combination of the variables recruitment, retention, career commitment, turnover intent, organizational commitment, job overload, and job satisfaction. Hypothesis 10 was rejected. The independent variables together explained 72% of the variance in job satisfaction. Based on previous literature, it can be expected that job satisfaction was found to be positively related to career commitment and organizational commitment and negatively related to turnover intent. These findings were supported by the work of George (1995),

McLain (1995), Zingeser (2004), Siegall and McDonald (1995), and the negative

findings were supported by the work of Fields (2002) as well as those of Siegall and

McDonald (1995).

Null Hypothesis 11

Null Hypothesis 11 examined the relationship between recruitment, retention,

career commitment, turnover intent, organizational commitment, job satisfaction, and

job overload. A significant relationship was not found between the predictor variables

recruitment, retention, career commitment, turnover intent, organizational commitment,

job satisfaction, and job overload. Hence, Hypothesis 11 was accepted (failed to reject).

The independent variables together explained a negligible amount (4%) of variance in

job overload, with only one variable significantly contributing to job overload, retention.

A possible explanation for this finding could be that SLPs entering the profession

and currently working in the profession have a different view of work overload, than

those in other professions. Given this, SLPs may be more tolerable to overload than

other professions, which means that their workload would have to get extremely

unbearable before strongly significantly relationships are recognized.

Null Hypothesis 12

Null Hypothesis 12 examined the relationship between organizational actions and

turnover intent. A significant positive relationship was found between organizational

actions and turnover intent. Hypothesis 12 was rejected. The independent variable

explained 17% of the variance in turnover intent. Although there was no literature found

that collectively addressed organizational actions and its relationship to turnover intent,

as previously stated, a reasonable explanation for this relationship could be twofold (a) organizational actions of another organization are facilitating an increased intent to turnover in an employee's current organization or (b) although increased organizational actions are observed in a SLPs current organization, other factors such as decreased job satisfaction, job overload, decreased organizational commitment, etc., are playing a more dominant role in their intent to turn over.

Null Hypothesis 13

Null Hypothesis 13 examined the relationship between job satisfaction, organizational commitment, career commitment, and the criterion variable job overload. A significant relationship was not found between the predictor variables job satisfaction, organizational commitment, career commitment, and job overload. Hence, Hypothesis 13 was accepted (failed to reject). The independent variables together explained a negligible amount (less than 1%) of variance in job overload, with only one variable significantly contributing to job overload, retention.

As stated in Hypothesis 11, this may be a result of SLP's perception of job overload. SLPs in this study appear to have been minimally impacted by job overload.

Discussion of Nonresponse Error

According to Dooley and Lindner (2003), "sampling error is a result of measuring a characteristic in some, but not all, of the units in the population of interest…nonresponse error exists to the extent that subjects included in the sample fail to provide useable responses and are different from those who do respond on the characteristics of interest in the study" (p. 101). Addressing this error supports the

researcher in ensuring that the results of the study can be generalized to the target population. Furthermore, Dooley and Lindner (2003) suggest that procedures for handling nonresponse error be used when response rate is more than 50% and less than 85%. In this study, a response rate of 51% was achieved. Based on this, nonresponse error was addressed through t-tests (see Appendix B). Tests compared the first through third rounds of respondents versus the fourth round, as well as the first 50% of respondents versus the second 50% of respondents. Based on results, a statistically significant difference was found between early and late responders. Given this, caution should be used when generalizing the findings beyond the data.

Conclusions and Limitations

The study examined the relationships between the recruitment and retention of speech language pathologists and career commitment, job overload, and other affective reactions related to work using two regression analyses techniques, as well as correlation and descriptive procedures. This was done to better assess the prediction and explanation of the variables in the regression model. In general, it appeared that turnover intention among speech pathologists in the state of Texas was negatively correlated with career commitment, organizational commitment, and job satisfaction. On the other hand, turnover intent was found to be positively correlated with job overload, retention, and recruitment. Overall, findings suggest that turnover intention can lead to a critical shortage of speech pathologists in some organizations if these factors are not properly addressed. Recruitment accounted for 18% of the variance in turnover intent revealing the significant impact this variable may have on organizations offering recruitment

incentives. Similarly, retention accounted for 4% of the variance in turnover intent.

Additionally, the high percentages of variance accounted for in turnover intent on the

part of career commitment, organizational commitment, and job satisfaction (32, 38, and

50%, respectively) indicated the influence of workplace conditions on retaining and

recruiting of speech pathologists in Texas schools.

The regression equation, computed using all the predictors with regard to

turnover intention was y = 24.35 + (- .31) (organizational commitment + (-.57) (job

satisfaction) + .03 (job overload) + (-.16) (recruitment) + (-.03) (retention) + (-.10)

(career commitment). Thus, any regression model used to explain turnover intention of

speech pathologists in the state of Texas should include the aforementioned variables.

Another notable conclusion is that career commitment, organizational

commitment, and job satisfaction were highly correlated with one another. A significant

relationship was found among these variables at the .01 level or .001 level pointing to

the impact that these variables had on speech pathologists remaining in the educational

setting in Texas. Finally, to retain and recruit speech pathologists, educational officials

must create a more acceptable working environment conductive to career advancement.

Based on these findings, school districts seeking to recruit and retain speech

pathologists should take a more proactive approach. Specifically, with regard to

perceived recruitment activities, perceived retention activities, career commitment,

organizational commitment, and job satisfaction, a school organization should build

recruitment and retention strategies based on these concepts. Specifically, these districts

should seek to identify those aspects of their districts that are viewed as positive by

speech pathologists and improve them. Additionally, job overload was found to have a positive relationship on turnover intent. As speech pathologists are often overburdened with paperwork and increased caseload, districts should seek to develop more innovative ways of minimizing job overload.

Conclusions

The study explored the relationship between recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent, using descriptive, correlation, and regression techniques. Overall, results suggest that in a bivariate regression model, with turnover intent as the dependent variable, all independent variables were significant at the .05 level or better. Specifically, results found that a positive relationship existed between recruitment, retention, job overload, and turnover intent. However, a negative relationship was found between career commitment, organizational commitment, and job satisfaction. Several of these relationships have been well documented in the literature. However, the influence of recruitment and retention activities on other affective work-related variables has not been researched sufficiently. Based on the findings of the research hypothesis and the review of literature, some conclusions can be drawn concerning recruitment and retention of speech language pathologists and how affective factors related to work impact their intent to turn over.

- Some speech pathologists turn over because recruitment incentives in other districts are very attractive.

- Although retention incentives in organizations may increase, speech pathologists may still turn over due to other factors within or outside the organization that play a more dominant role.

- The more committed a speech pathologist is to his/her career, the less likely he/she will turn over.

- The more committed a speech pathologist is to his/her organization, the less likely he/she will turn over.

- The more satisfied a speech pathologist is with his/her job the less likely he/she will turn over.

- The more workload a speech pathologist has, the more likely he/she will turn over.

- Several affective factors related to work can predict an employee's intent to turn over.

Limitations

As identified in Chapter I of this research, several limitations of this study were identified.

1. The scope of this study was limited to speech pathologists in selected school districts and co-ops in Texas and, therefore, may not be generalized to a broader population.

2. This study only included participants who hold the American Speech Language and Hearing Associations Certificate of Clinical Competence.

3. This study was limited to the information acquired from the literature review and survey instruments.

4. This study relied upon participants' honest responses to all survey items.

5. The survey questionnaire may be considered lengthy and may have impeded the likelihood of obtaining a higher response rate. Given this, this could affect the generalization of the results of this study beyond the data.

Implications

Implications for HRD Practice

Research has found that high attrition can be costly and damaging to organizations. Specifically, these costs include the cost of hiring and training new personnel, which can lead to organizational ineffectiveness. These events can lead to disconnects throughout an organization, hence, increasing the potential for process and systems breakdowns. Given this, understanding employee behaviors has many practical implications for HRD professionals. As previously stated, several significant relationships between recruitment incentives, retention incentives and affective factors related to work, and their impact on turnover intent, were found in this research study. Many of these findings have been well documented and gave support to prior research conducted across professions. These findings can aid HRD professionals in more effective decision-making and in enhancing the performance or effectiveness of individuals and/or organizations, particularly those in the helping professions (i.e., hospitals, rehabilitation companies, education, etc.).

Furthermore, based on this research, HRD professionals can promote and communicate the potential importance of building meaningful incentive programs, as well as the importance of developing work environments that implement programs that promote job satisfaction, organizational commitment, and strategic job design, which endorse manageable workloads.

Moreover, HRD professionals can also create awareness, as well as address career development as a vital part of an organization's effectiveness, given its impact on turnover intent. Furthermore, this research offers HRD professionals, with regard to career development, insight into the impact of the collective effect of affective factors, along with recruitment and retention incentives and the role they play in an employee's career commitment.

Given that affective work-related variables impact most organizations by influencing the behaviors of their employees, HRD practitioners may choose to make some inferences from these findings in building a plan and research agendas for other organizational settings (i.e., corporations, etc.). Additionally, HRD professionals will gain information from this study that will be beneficial in assisting organizations in developing better strategies and policies with regard to career development and organizational development. Understanding the role of affective factors related to work is vital to better understanding individual and organizational behavior.

Implications for HRD Research

With regard to research in HRD, this study offers a foundation from which future studies can be modeled and enhanced. Additionally, this study offers a wealth of

information on the importance of recruitment, retention, career commitment, organizational commitment, job satisfaction, job overload, and turnover intent in a public school context. The information in this study offers HRD researchers a better understanding of how this population feels about certain work factors and gives support to other work-related research.

Recommendations for Future Research

The following recommendations are proposed for future research:

- First, future research should employ alternative methodologies in studying the variables identified in this study. Although well studied, these variables seem to lack an abundance of qualitative perspectives. A mixed-method approach to this study may offer a deeper perspective as to why speech pathologists responded as they did in this study. This may also offer very meaningful information, in that respondents voluntarily e-mailed the researcher offering additional input related to the study.

- Second, future studies should seek to further define this study within Texas. For example, data can be collected from various regions (southern, northern, etc.), locations (rural, suburban, urban), in Texas. Additionally, researchers should replicate this study between states, as well as nationally. This will assist researchers in drawing additional conclusions and recommendations with regard to a specific demographic of the population.

- Third, a longitudinal study could provide valuable information in understanding the relationship between variables over time. Specifically,

related to the population and variables addressed in this study, no

longitudinal analysis was identified. Furthermore, the relevance of a

longitudinal study can be recognized because major events often affect how

individuals feel about a given situation (i.e., economic downturn,

reorganization of schools, policy changes, etc.).

- Fourth, although the Certificate of Clinical Competence is viewed as the

  mhighest credential that a speech pathologist can hold, future research may

  choose to include speech pathologists who do not hold this credential. This

  sample may include those speech pathologists who are only Texas Education

  Agency (TEA) certified, Certified by the Texas State Board of Examiners,

  and/or speech pathologists' assistants. Many of these professionals, though

  not as highly credentialed, are hired to work in various school settings in a

  limited capacity, both public and private.

- Fifth, future research to identify other variables that impact and/or interact

  with the variables in this study is needed. Understanding how these variables

  interact with other variables can provide more interesting information with

  regard to the recruitment and retention of speech language pathologists.

- Sixth, future research should run this same study on other professionals in

  different settings to see if the outcomes and relationships remain consistent or

  vary across groups.

REFERENCES

Abelson, M. A. (1987). Examination of avoidable and unavoidable turnover. *Journal of Applied Psychology, 72*, 382-386.

Agho, A. O., Mueller, C. W., & Price, J. L. (1993). Determinants of employee job satisfaction: An empirical test of a causal model. *Human Relations, 46*(8), 1007-1027.

Allen, D. G., Scotter, J. R. V., & Otondo, R. F. (2004). Recruitment communication media: Impact on prehire outcomes. *Personnel Psychology, 57*, 143-171.

Allen, N. J., & Meyer, J. P. (1990). The measurement and antecedents of affective, continuance and normative commitment to the organization. *Journal of Occupational Psychology, 63*, 1-18.

American Speech-Language-Hearing Association (ASHA). (2000). *Schools survey: Report.* Rockville, MD: Author.

American Speech-Language-Hearing Association (ASHA). (2003, November 18). Policy on SLP Assistants Revisited [Electronic Version]. *The ASHA Leader*, p. 2.

American Speech-Language-Hearing Association (ASHA). (2004a). *American Speech-Language-Hearing Association summary membership and affiliation counts January 1 through December 31, 2004*. Retrieved from http://www.asha.org/NR/rdonlyres/F9922D9B-9BA2-4DDC-8C66-CFA545714CDC/0/04memcountsTbl4.pdf

American Speech-Language-Hearing Association (ASHA). (2004b). *Schools survey report: Workforce.* Retrieved from

http://www.asha.org/NR/rdonlyres/71AFA996-E50D-422A-B6B5-

9BECCB9F4BF9/0/Schools04Workforce.pdf

American Speech-Language-Hearing Association (ASHA). (2005). *2004 schools survey: Executive summary.* Rockville, MD: Author.

American Speech-Language-Hearing Association (ASHA). (2006a). *Professional roles and activities*. Retrieved May 20, 2006, from

http://www.asha.org/docs/html/SP2007-00283.html#sec1.5

American Speech-Language-Hearing Association (ASHA). (2006b). *Schools survey report.* Retrieved from http://www.asha.org/members/slp/schools/

resources/schools_resources_data.htm

Arnold, J. (1990). Predictors of career commitment: A test of three theoretical models. *Journal of Vocational Behavior, 37*, 285-302.

Aryee, S., & Tan, K. (1992). Antecedents and outcomes of career commitment. *Journal of Vocational Behavior, 40*, 288-305.

Bacharach, S. B., Bamberger, P., & Conley, S. (1991). Work-home conflict among nurses and engineers: Mediating the impact of role stress on burnout and satisfaction at work. *Journal of Organizational Behavior, 12*, 39-53.

Baggerly, J., & Osborn, D. (2006, February). School counselors' career satisfaction and commitment correlates and predictors. *American School Counselor Association, 9*(3), 197-205.

Balfour, D. L., & Wechsler, B. (1990). Organizational commitment: A

reconceptualization and empirical test of public-private differences. *Review of Public Personnel Administration, 10*(3), 23-40.

Balfour, D. L., & Wechsler, B. (1996). Organizational commitment: Antecedents and outcomes in public organizations. *Public Productivity and Management Review, 29*, 256-277.

Barrick, M. R., & Zimmerman, R. D. (2005). Reducing voluntary, avoidable turnover through selection. *Journal of Applied Psychology, 90*(1), 159-166.

Bartlett, K. R. (2001). The relationship between training and organizational commitment: A study in the health care field. *Human Resource Development Quarterly, 12*(4), 335-352.

Becker, H. S. (1960). Notes on the concept of commitment. *The American Journal of Sociology, 66*(1), 32-40.

Bedian, A. G., Ferris, G. R., & Kacmar, K. M. (1992). Age, tenure, and job satisfaction: A tale of two perspectives. *Journal of Vocational Behavior, 40*, 33-48.

Billingsley, B. S. (1993). Teacher retention and attrition in special and general education: A critical review of the literature. *The Journal of Special Education, 27*, 137-174.

Billingsley, B. S. (2004). Special education teacher retention and attrition: A critical analysis of the research literature. *The Journal of Special Education, 38*(1), 39-55.

Billingsley, B. S., & Cross, L. H. (1992). Predictors of commitment, job satisfaction, and intent to stay in teaching: A comparison of general and special educators. *The Journal of Special Education, 25*(4), 453-471.

Bishop, R. C., & Solomon, E. (1989). Sex differences in career development: Locus of control and career commitment effects. *Psychological Reports, 65*, 107-114.

Blau, G. (1989). Testing the generalizability of a career commitment measure and its impact on employee turnover. *Journal of Vocational Behavior, 35*, 88-103.

Blau, G. (1990). Exploring the mediating mechanisms affecting the relationship of recruitment source to employee performance. *Journal of Vocational Behavior, 37*, 303-320.

Blau, G. J. (2007). Does a corresponding set of variables for explaining voluntary organizational turnover transfer to explaining voluntary occupational turnover? *Journal of Vocational behavior, 70*, 135-148.

Blau, G. J. (1985). The measurement and prediction of career commitment. *Journal of Occupational Psychology, 58*, 277-288.

Blau, G. J. (1988). Further exploring the meaning and measurement of career commitment. *Journal of Vocational Behavior, 32*, 284-297.

Blau, G. J., & Lunz, M. E. (1998). Testing the incremental effect of professional commitment on intent to leave one's profession beyond the effects of external, personal, and work-related variables. *Journal of Vocational Behavior, 52*, 260-269.

Blood, G. W., Ridenour, J. S., Thomas, E. A., Qualls, C. D., & Hammer, C. S. (2002). Predicting job satisfaction among speech-language pathologists working in public schools. *Language, Speech, and Hearing Services in Schools, 33*, 282-290.

Boe, E. E., Bobbitt, S. A., Cook, L. H., Whitener, S. D., & Weber, A. L. (1997). Why didst thou go?: Predictors of retention, transfer, and attrition of special and general education teachers from a national perspective. *The Journal of Special Education, 30*(4), 390-411.

Boe, E. E., & Cook, L. H. (2006). The chronic and increasing shortage of fully certified teachers in special and general education. *Exceptional Children, 72*(4), 443-460.

Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: The relationship between individual initiative and role overload, job stress, and work-family conflict. *Journal of Applied Psychology, 90*(4), 740-748.

Boudreau, J. W., & Rynes, S. L. (1985). Role of recruitment in staffing utility analysis. *Journal of Applied Psychology, 70*(2), 354-366.

Breaugh, J. A. (1981). Relationship between recruiting sources and employee performance, absenteeism and work attitudes. *Academy of Management Journal, 24*, 142-147.

Breaugh, J. A. (1992). Recruitment: Science and practice. Boston: PWS-Kent.

Breaugh, J. A., & Mann, R. (1984). Recruiting source effects: A test of two alternative explanations. *Journal of Occupational Psychology, 57*, 261-267.

Brewer, E. W., & Clippard, L. F. (2002). Burnout and job satisfaction among student

    support services personnel. *Human Resource Development Quarterly, 13*(2),

    169-186.

Brown, M., & Benson, J. (2005). Managing to overload?: Work overload and

    performance appraisal process. *Group and Organization Management*, *30*(1), 99-

    124.

Brown, M. E. (1969). Identification and some conditions of organizational involvement.

    Administrative Science Quarterly, 346-356.

Brown, R. B. (1996). Organizational commitment: Clarifying the concept and

    simplifying the existing construct typology. *Journal of Vocational Behavior, 49*,

    230-251.

Brown, S. P., Jones, E., & Leigh, T. W. (2005). The attenuating effect of role overload

    on relationships linking self-efficacy and goal level to work performance.

    Journal of Applied Psychology, 90(5), 972-979.

Brownell, M. T., Bishop, A. M., & Sindlear, P. T. (2005). NCLB and the demand for

    highly qualified teachers: Challenges and solutions for rural schools. *Rural

    Special Education Quarterly, 24*(1), 9-15.

Brownell, M. T., Hirsch, E., & Seo, S. (2004). Meeting the demand for highly qualified

    special education teachers during severe shortages: What should be considered.

    Journal of Special Education, 38, 56-61.

Brownell, M. T., Smith, S. W., McNellis, J. R., & Miller, M. D. (1997). Attrition in special education: Why teachers leave the classroom and where they go. *Exceptionality, 7*(3), 143-155.

Buchanan, B., II. (1974). Building organizational commitment: The socialization of managers in work organizations. *Administrative Science Quarterly, 19*, 533-546.

Cable, D. M., & Turban, D. B. (2001). *Research in personnel and human resources management* (Vol. 20). Greenwich, CT: JAI Press.

Cammann, C., Fichman, M., Jenkins, D., & Klesh, J. (1983). *Assessing the attitudes and perceptions or organizational members*. New York: Wiley.

Caplan, R. D., Cobb, S., French, J. R. P., Jr., Harrison, V., & Pinneau, S. R. (1980). *Job demands and worker health*. Ann Arbor, MI: University of Michigan, Institute for Social Research.

Carlson, K. D., Connerley, M. L., Ross L., & Mecham, I. (2002). Recruitment evaluation: The case for assessing the quality of applicants attracted. *Personnel Psychology, 55*, 461-490.

Carson, K. D., & Bedeian, A. G. (1994). Career commitment: Construction of a measure and examination of its psychometric properties. *Journal of Vocational Behavior, 44*, 237-262.

Chang, H.-T., Chi, N.-W., & Miao, M.-C. (2006). Testing the relationship between three-component organizational/occupational commitment and organizational/ occupational turnover intention using a non-recursive model. *Journal of Vocational Behavior*, (article in press), 1-17.

Charles, C. M. (1995). *Introduction to educational research* (2nd ed.). White Plains, NY: Longman.

Chatman, J. A. (1991). Matching people and organization: Selection and socialization in public accounting firms. *Administrative Science Quarterly, 36*, 459-484.

Chen, X.-P., Hui, C., & Sego, D. J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of Applied Psychology, 83*(6), 922-931.

Chmelynski, C. (2005, January 18). Schools are having a hard time finding enough speech pathologists. *School Board News.* Retrieved July 20, 2007, from http://www.nsba.org/sbn

Clark, A., Oswald, A., & Warr, P. (1996). Is job satisfaction U-shaped in age? *Journal of Occupational and Organizational Psychology, 69*, 57-81.

Cohen, A. (1996, June). On the discriminant validity of the Meyer and Allen measure of organizational commitment: How does it fit with the work commitment construct? *Educational and Psychological Measurement, 56*(3), 494-503.

Cohen, L., & Manion, L. (1994). *Research methods in education* (4th ed.). London; New York: Routhledge.

Colarelli, S. M., & Bishop, R. C. (1990). Career commitment: Functions, correlates, and management. *Group and Organization Studies, 15*(2), 158-176.

Collins, C. J., & Han, J. (2004). Exploring applicant pool quantity and quality: The effects of early recruitment practice strategies, corporate advertising, and firm reputation. *Personnel Psychology, 57*(3), 685-716.

Condon, M., Simmons, J., & Simmons, E. (1986). Rural school system recruitment and retention of speech-language pathologists. *Rural Special Education Quarterly, 7*(3), 14-16.

Cordes, C. L., & Dougherty, T. W. (1993). A review and an integration of research on job burnout. *The Academy of Management Review, 18*(4), 621-656.

Cramer, D. (1996). Job satisfaction and organizational continuance commitment: A two-wave panel study. *Journal of Organizational Behavior, 17*, 389-400.

Cranny, C. J., Smith, P. C., & Stone, E. F. (1992). *Job satisfaction*. New York: Lexington.

Cronis, T. G., & Ellis, D. N. (2001). Issues facing special educators in the new millennium. *Education, 120*(4), 639-648.

Cross, L. H., & Billingsley, B. S. (1994). Testing a model of special educators' intent to stay in teaching. *Exceptional Children, 60*, 411-421.

Daley, E. M., McDermott, R. J., Brown, K. R. M., & Kittleson, M. J. (2003, March/April). Conducting web-based survey research: A lesson in internet design. *American Journal of Health Behavior, 27*(2), 9.

Darling-Hammond, L. (1999). *Solving the dilemmas of teacher supply, demand, and standards.* New York: National Commission on Teaching and America's Future.

Decker, P. J., & Cornelius, E. T. (1979). A note on recruiting sources and job survival rates. *Journal of Applied Psychology, 64*, 463-464.

DeConinck, J. B., & Bachmann, D. P. (1994, Summer). Organizational commitment and turnover intention of marketing managers. *Journal of Applied Business Research, 10*(3), 87-95.

DeCotiis, T. A., & Summers, T. P. (1987). A path analysis of a model of antecedents and consequences of organizational commitment. *Human Relations, 40*(7), 445-470.

Demerouti, E., Nachreiner, F., Bakker, A. B., & Schaufeli, W. B. (2001). The job demands-resources model of burnout. *Journal of Applied Psychology, 86*(3), 499-512.

Deppe, J., & Boswell, S. (2005). Texas clinicians defeat effort to lower standards for school SLPs. *The ASHA Leader, 10*(9), 1-14.

Dooley, L. M., & Lindner, J. R. (2003, Spring). The handling of nonresponse errors. *Human Resource Development Quarterly, 14*(1), 99-110.

Dowden, P., Alarcon, N., Vollan, T., Cumley, G. D., Kuehn, C. M., & Amtmann, D. (2006). Survey of SLP caseloads in Washington state schools: Implications and strategies for action. *Language, Speech, and Hearing Services in Schools, 37*, 104-117.

Dunham, R. B., Grube, J. A., & Castaneda, M. B. (1994). Organizational commitment. *Journal of Applied Psychology, 79*(3), 370-380.

Dwyer, D. J., & Ganster, D. C. (1991, December). The effects of job demands and control on employee attendance and satisfaction. *Journal of Organizational Behavior, 12*(7), 595-608.

Edgar, D. L., & Rosa-Lugo, L. I. (2007, January). The critical shortage of speech-language pathologists in the public school setting: Features of the work environment that affect recruitment and retention. *Language, Speech, and Hearing Services in Schools, 38*, 31-46.

Egan, T. M., Yang, B., & Bartlett, K. (2004). The effects of organizational learning culture and job satisfaction on motivation to transfer learning and turnover intention. *Human Resource Development Quarterly, 15*(3), 279-301.

Eichinger, J. (2000). Job stress and satisfaction among special education teachers: Effects of gender and social role orientation. *International Journal of Disability, Development and Education*, *47*(4), 397-412.

Eisenberger, R., Fasolo, P., & Davis, L. V. (1990). Perceived organizational support and employee diligence, commitment, and innovation. *Journal of Applied Psychology, 75*(1), 51-59.

Fields, D. L. (2002). *Taking the measure of work*. Thousand Oaks, CA: Sage.

Fore, C., Martin, C., & Bender, W. N. (2002, October/November). Teacher burnout in special education: The causes and the recommended solutions. *The High School Journal*, 36-44.

Fournet, G. P., Distefano, M. K., & Pryer, M. W. (1966). Job satisfaction: Issues and problems. *Personnel Psychology, 16*, 55-67.

Frederick Schneiders Research. (1998). *Results of a survey and focus groups with audiology and speech-language hearing students and recent graduates.* Washington, DC: Author.

Gall, M. D., Gall, J. P., & Borg, W. R. (2003). *Educational research: An introduction* (7th ed.). Boston: Allyn and Bacon.

Gannon, M. J. (1971). Sources of referral and employee turnover. *Journal of Applied Psychology, 55*, 226-228.

Gerhart, B. (1990). Voluntary turnover and alternative job opportunities. *Journal of Applied Psychology, 75*(5), 467-476.

George, J. M. (1995). Leader positive mood and group performance: The case customer service. *Journal of Applied Social Psychology, 25*(9), 778-794.

Gersten, R., Keating, T., Yovanoff, P., & Harniss, M. K. (2001). Working in special education: Factors that enhance special educators' intent to stay. *Exceptional Children, 67*(4), 549-567.

Glisson, C., & Durick, M. (1988). Predictors of job satisfaction and organizational commitment in human service organizations. *Administrative Quarterly, 33*, 61-81.

Golembiewski, R.T. (2001). *Handbook of organizational behavior.* New York: Marcel Dekker.

Gould, S. (1979). Characteristics of career planners in upwardly mobile occupations. *The Academy of Management Journal, 22*(3), 539-550.

Goulet, L. R., & Singh, P. (2002). Career commitment: A re-examination and an extension. *Journal of Vocational Behavior, 61*, 73-91.

Greenhaus, J. H. (1971). An investigation of the role of career salience in vocational behavior. *Journal of Vocational Behavior, 1*, 209-216.

Grusky, O. (1966). Career mobility and organizational commitment. *Administrative Science Quarterly, 10*(4), 488-503.

Hackett, R. D., Lapierre, L. M., & Hausdorf, P. A. (2001). Understanding the links between work commitment constructs. *Journal of Vocational Behavior, 58*, 392-413.

Hall, D. T., & Schneider, B. (1972). Correlates of organizational identification as a function of career pattern and organizational type. *Administrative Science Quarterly, 17*(3), 340-350.

Hatcher, T. (1999). How multiple interventions influenced employee turnover: A case study. *Human Resource Development Quarterly, 10*(4), 365-382.

Health Careers Center. (2007). Retrieved September 26, 2007, from http://www.mshealthcareers.com/careers/speechlanguagepathologist.htm

Herzberg, F., Mausner, B., & Snyderman, B. (1959). *The motivation to work.* New York: Wiley.

Hinkle, D., Wiersma, W., & Jurs, S. G. (2003). *Applied statistics for behavioral sciences*. Boston: Houghton Mifflin Company, College Division.

Hoff, D. F. (2001). Urban districts employing more aggressive hiring tactics. *Education Week, 21*(5), 17-19.

Hom, P. W., Caranikas-Walker, F., Prussia, G. E., & Griffeth, R. W. (1992). A meta-analytical structural equation analysis of a model of employee turnover. *Journal of Applied Psychology, 77*, 890-909.

Hoy, W. K., & Miskel, C. E. (1996). *Educational administration: Theory, research, and practice* (5th ed.). New York: McGraw-Hill.

Hunt, S. D., & Morgan, R. M. (1994). Organizational commitment: One of many commitments or key mediating constructs. *Academy of Management Journal, 37*(6), 1568-1587.

Iaffaldano, M. T., & Muchinsky, P. M. (1985). Job satisfaction and job performance: A meta analysis. *Psychological Bulletin, 97*(2), 251-273.

Jaros, S. J., Jermier, J. M., Koehler, J. W., & Sincich, T. (1993). Effects of continuance, affective, and moral commitment on the withdrawal process: An evaluation of eight structural equation models. *Academy of Management Journal, 38*(5), 951-995.

Jex, S. M., & Thomas, J. L. (2003). Relations between stressors and group perceptions: Main and mediation effects. *Work & Stress, 17*(2), 158-169.

Judge, T. (1993). Does affective disposition moderate the relationship between job satisfaction and voluntary turnover? *Journal of Applied Psychology*, *78*(3), 395-401.

Judge, T. A., Bono, J. E., Thoresen, C. J., & Patton, G. K. (2001). The job satisfaction-job performance relationship: A qualitative and quantitative review. *Psychological Bulletin*, *127*(3), 376-407.

Kacmar, K. M., Bozeman, D. P., Carlson, D. S., & Anthony, W. P. (1999). An examination of the perceptions of organizational politics model: Replication and extension. *Human Relations*, *52*(3), 383-416.

Kaegi, S., Svitich, K., Chambers, L., Bakker, C., & Schneider, P. (2002, Fall). Job satisfaction of school speech-language pathologists. *Journal of Speech-Language Pathology and Audiology*, *26*(3), 126-137.

Karasek, R. A. (1979). Job demands, job decision latitude, and mental strain: Implications for job redesign. *Administrative Science Quarterly, 24*, 285-308.

Kemske, F. (1998). HR 2008: A forecast based on our exclusive study. *Workforce, 77*, 46-48.

Kossar, K., Mitchem, K., & Ludlow, B. (2005). Impact of No Child Left Behind: A study of its impact on special education in rural schools. *Rural Special Education Quarterly, 24*(1), 3-8.

Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*, 607-610.

Kuei-Yun Lu, P.-L. L., Wu, C.-M., Hsieh, Y.-L., & Chang, Y.-T. (2002). The relationships among turnover intentions, professional commitment, and job satisfaction of hospital nurses. *Journal of Professional Nursing, 18*(4), 214-219.

Ladebo, O. J. (2005). Effects of work-related attitudes on the intention to leave the profession. *Educational Management Administration & Leadership, 33*(3), 355-369.

Levine, S., Curry, A., Sobel, R., Gilgoff, D., Mulrine, A., Pethokoukis, J. M. et al. (2002). Careers to count on [Electronic Version]. *U.S. News and World Report, 132*, 1-4.

Locke, E. A. (1976). The nature and causes of job satisfaction. In M. D. Dunnetee (Ed.), *Handbook of industrial and organizational psychology* (pp. 1293-1349). Chicago: McNally.

Loi, R., Hang-yue, N., & Foley, S. (2006). Linking employees' justice perceptions to organizational commitment and intention to leave: The mediating role of perceived organizational support. *Journal of Occupational and Organizational Psychology, 79*, 101-120.

London, M. (1983, October). Toward a theory of career motivation. *The Academy of Management Journal, 8*(4), 620-630.

Major, V. S., Klein, K. J., & Ehrhart, M. G. (2002). Work time, work interference with family, and psychological distress. *Journal of Applied Psychology, 87*(3), 427-436.

March, J. G., & Simon, H. A. (1958). *Organizations*. New York: Wiley.

Marsden, P. V., Kalleberg, A. L., & Cook, C. R. (1993). Gender differences in organizational commitment. *Work and Occupations, 20*(3), 368-390.

Maslach, C., & Jackson, S. E. (1982). The measurement of experienced burnout. *Journal of Occupational Behavior, 2*, 99-113.

Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.

Mathieu, J. E., & Farr, J. L. (1991). Further evidence for discriminant validity of measures of organizational commitment, job involvement, and job satisfaction. *Journal of Applied Psychology, 76*(1), 127-133.

Mathieu, J. E., & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates, and consequences of organizational commitment. *Psychological Bulletin, 108*(2), 171-194.

McClave, J. T., Benson, P. G., & Sincich, T. (2001). *Statistics for business and economics* (8th ed.). Upper Saddle River, NJ: Prentice Hall.

McLain, D. L. (1995). Responses to health and safety risks in the work environment. *Academy of Management Journal, 38*(6), 1726-1746.

McDonnell, L. (1994). Assessment policy as persuasion and regulation. *American Journal of Education, 102*, 394-420.

McGee, R., & Ford, N. (1987). Two (or more?) dimensions or organizational commitment: A re-examination of the affective and continuance commitment scales. *Journal of Applied Psychology, 72*, 638-641.

McGinnis, S. K., & Morrow, P. C. (1990). Job attitudes among full-and part-time employees. *Journal of Vocational Behavior, 36*, 82-92.

McLeskey, J., Tyler, N. C., & Flippin, S. S. (2004). The supply and demand for special education teachers: A review of research regarding chronic shortage of special education teachers. *The Journal of Special Education, 38*(1), 5-21.

McMurray, A. J., Scott, D. R., & Pace, R. W. (2004). The relationship between organizational commitment and organizational climate in manufacturing. *Human Resource Development Quarterly, 15*(4), 473-488.

Melamed, S., Shirom, A., Toker, S., Berliner, S., & Shapira, I. (2006). Burnout and risk of cardiovascular disease: Evidence, possible causal paths, and promising research directions. *Psychological Bulletin, 132*(3), 327-353.

Menlove, R., Garnes, L., & Salzberg, C. (2004). Why special educators leave and where they go. *Teacher Education and Special Education, 27*(4), 373-383.

Meyer, J. P., & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of Applied Psychology, 69*(3), 372-378.

Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review, 1*(1), 61-89.

Meyer, J. P., Allen, N. J., & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology, 78*(4), 538-551.

Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Thousand Oaks, CA: Sage.

Meyer, J. P., Stanley, D. J., Herscovitch, L., & Topolyntsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior, 61*, 20-52.

Michaels, C. E., & Spector, P. E. (1982). Causes of employee turnover: A test of the Mobley, Griffeth, Hand, and Meglino model. *Journal of Applied Psychology, 67*(1), 53-59.

Miller, M. D., Brownell, M. T., & Smith, S. W. (1999, Winter). Factors that predict teachers staying in, leaving, or transferring from the special education classroom. *Exceptional Children, 65*(2), 201-218.

Miller, M. M., & Potter, R. E. (1982, March). Professional burnout among speech-language pathologists. *American Speech Language and Hearing Association,* 177-181.

Mitchell, A. A., & Olson, J. C. (1981). Are product attribute beliefs the only mediator of advertising effects on brand attitudes? *Journal of Marketing Research, 18*, 318-332.

Mitchell, T. R., Holtom, B. C., Lee, T. W., Sablynski, C. J., & Erez, M. (2001). Why people stay: Using job embeddedness to predict voluntary turnover. *Academy of Management Journal, 44*(6), 1102-1121.

Mobley, W. H. (1977). Intermediate linkages in the relationship between job satisfaction and employee turnover. *Journal of Applied Psychology, 62*, 237-240.

Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin, 86*, 493-522.

Mobley, W. H., Horner, S. O., & Hollingsworth, A. T. (1978). An evaluation of precursors of employee turnover. *Journal of Applied Psychology, 63*, 408-414.

Morrow, P. C. (1993). *The theory and measurement of work commitment*. Greenwich London: Jai Press.

Morrow, P. C., & Goetz, J. F. (1988). Professionalism as a form of work commitment. *Journal of Vocational Behavior, 32*, 92-111.

Morrow, P. C., & Wirth, R. E. (1989). Work commitment among salaried professionals. *Journal of Vocational Behavior, 34*, 40-56.

Mowday, R., Porter, L., & Steers, R. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.

Mowday, R. T., Steers, R. M., & Porter, L. W. (1979). The measurement of organizational commitment. *Journal of Vocational Behavior, 14*, 224-247.

Muchinsky, P. M., & Morrow, P. C. (1980). A multidisciplinary model of voluntary employee turnover. *Journal of Vocational Behavior, 17*, 263-290.

Mueller, C. W., Boyer, E. M., Price, J. L., & Iverson, R. D. (1994). Employee attachment and noncoercive conditions of work: The case of dental hygienists. *Work and Occupations, 21*(2), 179-212.

Naquin, S. S., & Holton, E. F. (2002). The effects of personality, affectivity, and work commitment on motivation to improve work through learning. *Human Resource Development Quarterly*, *13*(4), 357-376.

Neeley, R. A., Diebold, M. H., & Dickinson, G. (1994). Factors impacting the employment and retention of speech-language pathologists in rural public schools. *Rural Special Education Quarterly, 13*(2), 3-11.

O'Driscoll, M. P., & Beehr, T. A. (1994). Supervisor behaviors, role stressors and uncertainty as predictors of personal outcomes for subordinates. *Journal of Organizational Behavior, 15*(2), 141-155.

O'Reilly, C., & Chatman, J. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization on prosocial behavior. *Journal of Applied Psychology, 71*(3), 492-499.

O'Reilly, C. W., Chatman, J., & Caldwell, D. F. (1991). People and organizational culture: A profile comparison approach to person-organization fit. *Academy of Management Journal, 34*, 487-516.

Parasuraman, S. (1982). Predicting turnover intentions and turnover behavior: A multivariate analysis. *Journal of Vocational Behavior, 21*, 111-121.

Paul-Brown, D., & Goldberg, L. R. (2001). Current policies and directions for speech-language pathology assistants. *Language, Speech, and Hearing Services in Schools, 32*, 4-17.

Petty, M. M., McGee, G. W., & Cavender, J. W. (1984). A meta-analysis of the relationships between individual job satisfaction and individual performance. *Academy of Management Review, 9*, 712-721.

Pezzei, C., & Oratio, A. R. (1991, July). A multivariate analysis of the job satisfaction of public school speech-language pathologists. *Language, Speech, and Hearing Services in Schools, 22*, 139-146.

Pines, A. M. (1981). *Changing organizations: Is a work environment without burnout an impossible goal?* Beverly Hills, CA: Sage.

Pines, A., & Maslach, C. (1978). Characteristics of staff burnout in mental health

    settings. *Hospital and Community Psychiatry, 29*, 233-237.

Podsakoff, N. P., LePine, J. A., & LePine, M. A. (2007). Differential challenge stressor-

    hindrance stressor relationships with job attitudes, turnover intentions, turnover,

    and withdrawal behavior: a meta-analysis. *Journal of Applied Psychology, 92*(2),

    438-454.

Porter, A. (1994). National standards and school improvement in the 1990's: Issues and

    promise. *The American Journal of Education, 102*(4102), 421-449.

Porter, L. W., Lawler, E. E., & Hackman, J. R. (1975). *Behavior in organizations.* New

    York: McGraw-Hill.

Potter, R. E., & Lagace, P. (1995, September). The incidence of professional burnout

    among Canadian speech-language pathologists. *Journal of Speech-Language

    Pathology and Audiology, 19*(3), 181-186.

Quarstein, V. A., McAfee, R. B., & Glassman, M. (1992). The situational occurrences

    theory of job satisfaction. *Human Relations, 45*(8), 859-873.

Randall, D. M., & Cote, J. A. (1991). Interrelationships of work commitment constructs.

    Work and Occupations, 18(2), 194-211.

Randall, D. M., Fedor, D. B., & Longenecker, C. O. (1990). The behavioral expression

    of organizational commitment. *Journal of Vocational Behavior, 36*, 210-224.

Randolph, D. S., Doisy, E., & Doisy, M. (2005). Predicting the effect of extrinsic and

    intrinsic job satisfaction factors on recruitment and retention of rehabilitation

    professionals. *Journal of Healthcare Management, 50*(1), 49-60.

Rau, B. L., & Hyland, M. M. (2002). Role conflict and flexible work arrangements: The

    effects on applicant attraction. *Personnel Psychology, 55*, 111-136.

Rednova News. (2005). Retrieved June 2, 2005 from

    http://www.rednova.com/modules/news/tools.php?tool=print&id=115157

Reichers, A. E. (1985). A review and reconceptualization of organizational commitment.

    Academy of Management Journal, 10, 465-476.

Reid, G. L. (1972). Job search and the effectiveness of job-finding methods. *Industrial*

    and Labor Relations Review, 25, 479-495.

Reilly, N. P., & Orsak, C. L. (1991). A career stage analysis of career and organizational

    commitment in nursing. *Journal of Vocational Behavior, 39*, 311-330.

Rhoades, L., Eisenberger, R., & Armeli, S. (2001). Affective commitment to the

    organization: The contribution of perceived organizational support. *Journal of*

    Applied Psychology, 86(5), 825-836.

Rhodes, S. R., & Doering, M. (1983). An integrated model of career change. *The*

    Academy of Management Journal, 8(4), 631-639.

Robinson, S. L., Kraatz, M. S., & Rousseau, D. M. (1994). Changing obligations and the

    psychological contract: A longitudinal study. *Academy of Management Journal,*

    37(1), 137-152.

Robinson, S. L., & Wolfe-Morrison, E. (1995). Psychological contracts and OCB: The

    effect of unfulfilled obligations on civic virtue behavior. *Journal of*

    Organizational Behavior, 16, 289-298.

Rocco, J. M. L., Pugh, W. M., & Gunderson, E. K. E. (1977). Identifying determinants of retention decisions. *Personnel Psychology, 30*, 199-215.

Rosa-Lugo, L. I., Rivera, E. A., & McKeown, S. W. (1998). Meeting the critical shortage of speech-language pathologists to serve the public schools-collaborative rewards. *Language, Speech, and Hearing Services in Schools, 29*, 232-242.

Rowden, R. W. (2002). The relationship between workplace learning and job satisfaction in U.S. small to midsize businesses. *Human Resource Development Quarterly, 13*(4), 407-425.

Rowden, R. W., & Ahmad, S. (2000). The relationship between workplace learning and job satisfaction in small to mid-sized businesses in Malaysia. *Human Resource Development International, 3*(3), 307-322.

Russ, S., Chiang, B., Rylance, B. J., & Bongers, J. (2001). Caseload in special education: An integration of research findings. *Council for Exceptional Children, 67*(2), 161-172.

Rynes, S. L. (1991). Recruitment, job choice, and positive consequences. In *Handbook of industrial and organizational psychology* (2nd ed., pp. 399-444). Palo Alto, CA: Sage.

Rynes, S. L., & Barber, A. E. (1990). Applicant attraction strategies: An organizational perspective. *Academy of Management Journal, 15*(2), 286-310.

Sack, J. L. (1999). All classes of special education teachers in demand throughout the nation. *Education Week, 18*, 1-5.

Sanchez, J. I., Kraus, E., White, S., & Williams, M. (1999). Adopting high-involvement human resources practices. *Group and Organization Management, 24*(4), 461-478.

Sargent, L. D., & Terry, D. J. (1998, September). The effects of work control and job demands on employee adjustment and work performance. *Journal of Occupational and Organizational Psychology, 71*, 219-236.

Schein, E. H. (1980). *Organizational psychology*. Englewood Cliffs, NJ: Prentice Hall.

Schnorr, J. M. (1995). Teacher retention: ACSPD analysis and planning model. *Teacher and Special Education, 18(1)*, 22-38.

Schuh, A. J. (1967, Summer). The predictability of employee tenure: A review of the literature. *Personnel Psychology, 20*(2), 133-152.

Seashore, S., Lawler, E., Mirvis, P., & Camman, C. (1982). *Observing and measuring organizational change: A guide to field practice*. New York: Wiley.

Shaw, J. D., Delery, J. E., Jenkins, G. D., & Gupta, N. (1998). An organization-level analysis of voluntary and involuntary turnover. *Academy of Management Journal, 41*, 511-525.

Sheldon, M. E. (1971). Investments and involvements as mechanisms producing commitment to the organization. *Administrative Science Quarterly, 16*(2), 143-150.

Siegall, M., & McDonald, T. (1995). Focus of attention and employee reactions to job change. *Journal of Applied Social Psychology, 25*(13), 1121-1141.

Simpson, C. (2002). *Factors influencing the recruitment and retention of educational diagnosticians as perceived by directors of special education*. Unpublished doctoral dissertation, Texas A&M University, College Station.

Singer, J. D. (1992). Are special educators' career paths special? Results from a 13-year longitudinal study. *Exceptional Children, 59*, 262-279.

Singh, K., & Billingsley, B. (1996). Intent to stay in teaching: Teachers of students with emotional disorders versus other special educators. *Remedial and Special Education, 17*, 37-47.

Smith, P. L., Smits, S. J., & Hoy, F. (1998). Employee work attitudes: The subtle influence of gender. *Human Relations, 51*(5), 649-666.

Snarr, C. E., & Krochalk, P. C. (1996). Job satisfaction and organizational characteristics: Results of a nationwide survey of baccalaureate nursing faculty in the united states. *Journal of Advanced Nursing, 24*, 405-412.

Society for Human Resource Management (SHRM). (2001). Retrieved April 24, 2005, from http://www.shrm.org/foundation/04teleconference.asp

Somech, A., & Bogler, R. (2002, October). Antecedents and consequences of teacher organizational and professional commitment. *Educational Administration Quarterly, 38*(4), 555-577.

Somers, M. J. (1995). Organizational commitment, turnover and absenteeism: An examination of direct and interaction effects. *Journal of Organizational Behavior, 16*, 49-58.

Spector, P. E. (1997). *Job satisfaction: Application, assessment, cause, and consequences*. Thousand Oaks, CA: Sage.

Steffy, B. D., & Jones, J. W. (1988). The impact of family and career planning variables on the organizational, career and community commitment of professional women. *Journal of Vocational Behavior, 32*, 196-212.

Swanson, R., & Holton, E. (2001). *Foundations of human resource development*. San Francisco: Berrett-Koehler.

Swaroff, P. G., Bass, A. R., & Barclay, L. A. (1985). Recruiting sources: Another look. *Journal of Applied Psychology, 70*(4), 720-728.

Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology, 33*, 1-30.

Tansky, J., & Cohen, D. (2001). The relationship between organizational support, employee development, and organizational commitment: An empirical study. *Human Resource Development Quarterly, 12*(3), 285-300.

Taylor, M. S., & Bergmann, T. J. (1987). Organizational recruitment activities and applicants' reactions at different stages of the recruitment process. *Personnel Psychology, 40*, 261-285.

Tett, R. P., & Meyer, J. P. (1993). Job satisfaction, organizational commitment, turnover intention, and turnover: Path analyses based on meta-analytic findings. *Personnel Psychology, 46*, 259-293.

Texas A&M University Office of Research Compliance. (2007). *Regulations and policies*. Retrieved September 29, 2007, from http://www.researchcompliance.tamu.edu/irb/regulations-policies

Texas State Board of Examiners for Speech Pathology (TSBESP). (2007). *Education and Experience Required for License.* Retrieved September 26, 2007, from http://www.dshs,state.tx.us/speech/sp_req.shtm

Thompson, D. P., McNamara, J. F., & Hoyle, J. R. (1997). Job satisfaction in educational organizations: A synthesis of research findings. *Educational Administration Quarterly, 33*(1), 7-37.

Trevor, C. O. (2001). Interactions among actual ease-of-movement determinants and job satisfaction in the prediction of voluntary turnover. *Academy of Management Journal, 44*(4), 621-638.

Turban, D. B., & Cable, D. M. (2003). Firm reputation and applicant pool characteristics. *Journal of Organizational Behavior, 24*, 733-751.

Urban Teacher Collaborative. (2000). *The urban teacher challenge: Teacher demand and supply in the great city schools.* Washington, DC: Council of the Great City Schools. Retrieved July 23, 2007, from http://www.rnt.org

U.S. Bureau of Labor Statistics. (2005). Occupational employment projections to 2014. Retrieved from http://www.bls.gov/opub/ooq/2005/winter/art02.pdf

U.S. Office of Special Education Programs. (2000). *Study of personnel needs in special education.* Retrieved from http://www.spense.org

U.S. Department of Education. (2002). No Child Left Behind. Washington, DC: Author.

Vroom, V. H. (1964). *Work and motivation.* New York: Wiley.

Wanous, J. P., & Lawler, E. E. III. (1972). Measurement and meaning of job

satisfaction. *Journal of Applied Psychology, 56*(2), 95-105.

Westling, D. L., & Whitten, T. M. (1996). Rural special education teachers' plans to

continue or leave their teaching positions. *Exceptional Children, 62*, 319-335.

Whitaker, S. (2000). Mentoring beginning special education teachers and the

relationship to attrition. *Exceptional Children, 66*(4), 546-566.

Wisniewski, L., & Gargiulo, R. M. (1997). Occupational stress and burnout among

special educators: A review of the literature. *The Journal of Special Education,
31*(3), 325-346.

Witt, L. A., & Nye, L. G. (1992). Gender and the relationship between perceived

fairness of pay or promotion and job satisfaction. *Journal of Applied Psychology,
77*, 910-917.

Wright, J. D., & Hamilton, R. F. (1978). Work satisfaction and age: Some evidence for

the 'job change' hypothesis. *Social Forces, 56*, 1140-1158.

Wright, T. A., & Cropanzano, R. (1998). Emotional exhaustion as a predictor of job

performance and voluntary turnover. *Journal of Applied Psychology, 83*(3), 486-
493.

Zingeser, L. (2004, November 2). Career and job satisfaction: What ASHA surveys

show. *The ASHA Leader*, (4-5), 13-20.

APPENDIX A

INFORMATION SHEET

INFORMATION SHEET

The Impact of Job Overload on the Recruitment, Retention, and Affective

Reactions of Speech Language Pathologists

You have been asked to participate in a research study investigating the recruitment and retention of speech language pathologists and their relationship to other work related variables. You were selected to be a possible participant because you met the following criteria: 1.) You are a speech pathologist working in a Texas public school and 2.) You hold the Certificate of Clinical Competence issued by the American Speech Language and Hearing Association. A total of 500 people have been asked to participate in this study. The purpose of this study is to investigate the relationships between the recruitment and retention of speech language pathologists and career commitment, job overload and their feelings toward other work related variables. Research questions will seek to identify those factors of recruitment and retention that influence the recruitment and retention of speech language pathologists, as well as how identified affective reactions relate to them. Understanding these relationships will provide information on factors that may influence the recruitment and retention of speech language pathologists in Texas public schools. This study will take approximately nine months to one year to complete. This study is being completed as a research project in Human Resource Development, with emphasis on organizational development.

If you agree to be in this study you will be asked to fill out a Likert-typed scale survey instrument. Participants involvement will consist of filling out a survey that will take approximately 8 - 10 minutes. The risks associated with this study are minimal, and relate only to discomfort that may be caused by filling out the survey instrument. There are no benefits of participating in this study.

This study is confidential. The names of identified participants will not appear on survey or e-mail headers that will be identifiable to any other participant, etc. The records of this study will be kept private. No identifiers linking you to the study will be included in any sort of report that might be published. Research records will be stored securely and only Mr. Johnny R. O'Connor, Jr. – investigator and Dr. Toby Egan – co-investigator, will have access to the records. Your decision whether or not to participate will not affect your current relations with Texas A&M University. If you decide to participate, you are free to refuse to answer any of the questions that make you uncomfortable. You can withdraw at anytime without your relations with the University, job, benefits, etc. being affected. You can contact Johnny R. O'Connor, Jr. at 832 414 9701, P.O. Box 535, Channelview, TX, oconnorj@tamu.edu or Dr. Toby Egan at 979-458-3585, Texas A&M University - MS 4226, egan@tamu.edu with any questions about this study.

This research study has been reviewed by the Institutional Review Board – Human Subjects in Research, Texas A & M University. For research-related problems or questions regarding subjects rights, you can contact the Institutional Review Board through Ms. Angelia M. Raines, Director of Research Compliance, Office of the Vice President for Research at (979) 458-4067, araines@vprmail.tamu.edu.

Please be sure you have read the above information, asked questions and received answers to your satisfaction. You will be given a copy of the consent form for your records.

Section I: Respondent Demographic Information

1. Gender:_____a. Male _____ b. Female

2. Age: _____   under 20

   _____   25 – 29

   _____   30 – 34

   _____   35 – 39

   _____   40 – 44

   _____   45 – 49

   _____   50 – 54

   _____   55 – 59

   _____   60 – 64

   _____   over 65

3. Years of experience as a Speech Pathologist:_____

4. Highest academic degree earned: ____a. Bachelors ____b. Masters ____c. Doctorate

5. Number of speech pathologists in your district: _____

6. Number of speech pathologists vacancies in your district: _____

7. Number of students in caseload of Speech Pathologist: _____

8. Do you work in a district or Co-Op? _____

*Section II: Recruitment Factors

When you were recruited or applied for your current job, *how important* were the following factors in your decision to work at your current location as a speech language pathologist? Choose yes or no for those things that are being offered by your school district today.

6 = very important 5 = important 4 = somewhat important 3 = somewhat unimportant 2 = unimportant 1 =

very unimportant

9a. Hiring/Signing bonuses (Decision to work importance)

   6   5   4   3   2   1

9b. Are hiring/signing bonuses currently offered by your district today?

   _____ Yes _____ No _____ Not Sure

10a. Stipends (Decision to work importance)

   6   5   4   3   2   1

10b. Are extra duty/or credential stipends (ex: CCC) offered by your district?

   _____ Yes _____ No _____ Not Sure

11a. Pay grade/ Level (Decision to work importance)

      6   5   4   3   2   1

11b. Are SLPs paid more in your district than employees that work in other instructional capacities? (teachers, etc.):

     _____ **Yes**   _____ **No** _____ **Not Sure**

12a. Benefits Offered (Decision to work importance)

      6   5   4   3   2   1

12b. Does your district offer benefits (medical, disability, etc.)?

     _____ **Yes**   _____ **No** _____ **Not Sure**

13. District Size (Decision to work importance)

      6   5   4   3   2   1

14. Size of Caseload (Decision to work importance)

      6   5   4   3   2   1

15a. Available induction/Support/Mentoring programs (Decision to work importance)

6   5   4   3   2   1

15b. Is induction/support/mentoring programs provided by your district?

     _____ **Yes**   _____ **No** _____ **Not Sure**

16. Location of District (Decision to work importance)

6   5   4   3   2   1

17a. Administrative support offered (Decision to work importance)

      6   5   4   3   2   1

17b. Is Administrative support offered to speech pathologist in your district?

     _____ **Yes**   _____ **No** _____ **Not Sure**

6 = very important 5 = important 4 = somewhat important 3 = somewhat unimportant 2 = unimportant 1 = very unimportant

18a. Clerical assistance staff provided (Decision to work importance)

       6   5   4   3   2   1

18b. Is Clerical Support offered to speech pathologists in your district today?

     _____ Yes _____ No _____ Not Sure

(Recruitment Continued)

19a. Computer generated report writing/scoring (Decision to work importance)

       6   5   4   3   2   1

19b. Is computerized report/scoring offered in your district today?

     _____ Yes _____ No _____ Not Sure

20. Job Responsibilities (Decision to work importance)

       6   5   4   3   2   1

21. Needed a job (Decision to work importance)

       6   5   4   3   2   1

22. Contributions to society (Decision to work importance)

       6   5   4   3   2   1

Section III

Retention Factors

Thinking about your current job, *how important* are the following factors in your decision to continue to work at your current location as a speech language pathologist? Choose yes or no for those things that are being offered by your school district today.

6 = very important 5 = important 4 = somewhat important 3 = somewhat unimportant 2 = unimportant 1 = very unimportant

23a. Retention bonus (Continue to work importance)

       6   5   4   3   2   1

23b. Are retention bonuses currently offered by your district today?

     _____ Yes _____ No _____ Not Sure

24a. Pay Grade/Level (Continue to work importance)

      6   5   4   3   2   1

24b. Does you district currently offer Pay/Grade Level incentives for retention?

      _____ Yes _____ No _____ Not Sure

25a. Benefits (Continue to work importance)

      6   5   4   3   2   1

(Retention continued)

25b. Does your district offer benefits (medical, disability, etc.)

      _____ Yes _____ No _____ Not Sure

26a. Retention stipends (Continue to work importance)

      6   5   4   3   2   1

26b. Are retention stipends offered by your district today?

      _____ Yes _____ No _____ Not Sure

6 = very important 5 = important 4 = somewhat important 3 = somewhat unimportant 2 = unimportant 1 =

very unimportant

27a. Career advancement opportunities (Continue to work importance)

      6   5   4   3   2   1

27b. Does your district offer Career Advancement/Development Opportunities? (Ex: tuition reimbursement, etc.):

      _____ Yes _____ No _____ Not Sure

28. Job satisfaction (Continue to work importance)

      6   5   4   3   2   1

29. Part of decision making process (Continue to work importance)

      6   5   4   3   2   1

30a. Induction/Support/Mentoring programs (Continue to work importance)

      6   5   4   3   2   1

30b. Does your district offer ongoing Induction/Support/Mentoring Programs?

_____ Yes _____ No _____ Not Sure

6 = very important 5 = important 4 = somewhat important 3 = somewhat unimportant 2 = unimportant 1 =

very unimportant

31. Location of school/district (Continue to work importance)

    6   5   4   3   2   1

32a. Administrative support (Continue to work importance)

    6   5   4   3   2   1

(Retention continued)

32b. Is Administrative support offered to speech pathologist in your district today?

_____ Yes _____ No _____ Not Sure

33a. Professional development (Continue to work importance)

    6   5   4   3   2   1

33b. Does your district currently offer professional development opportunities?

_____ Yes _____ No _____ Not Sure

34. Job security (Continue to work importance)

    6   5   4   3   2   1

35. Caseload

    6   5   4   3   2   1

36. Contributions to society

    6   5   4   3   2   1

37a. Clerical staff assistance (Continue to work importance)

    6   5   4   3   2   1

37b. Is Clerical Assistance offered to speech pathologist in your district today?

_____ Yes _____ No _____ Not Sure

38a. Technology usage in ARD meetings/report writing (Continue to work importance)

6   5   4   3   2   1

38b. Does your district currently offer Technology Assistance for ARDs/Reports?

_____ Yes   _____ No _____ Not Sure

Section IV

Career Commitment as a speech language pathologist

Responses are obtained using a 6 point Likert-type scale where 6 = strongly agree 5 = agree 4 = somewhat agree 3 = somewhat disagree 2 = disagree 1 = strongly disagree

39. I like this career too well to give it up

          6   5   4   3   2   1

40. If I could go into a different profession, which paid the same, I would probably take it

          6   5   4   3   2   1

(Career Commitment continued)

41. If I could do it all over again, I would not choose to work in this profession

          6   5   4   3   2   1

42. I definitely want a career for myself in this profession.

          6   5   4   3   2   1

43. If I had all the money needed without working, I would probably still continue to work in this profession

          6   5   4   3   2   1

44. I am disappointed that I ever entered this profession

          6   5   4   3   2   1

45. This is the ideal profession for a life's work

          6   5   4   3   2   1

Section V

Responses are obtained using a 6 point Likert-type scale where 6 = strongly agree 5 = agree 4 = somewhat agree 3 = somewhat disagree 2 = disagree 1 = strongly disagree

Turnover intention

46. I am likely to search for a new job within a year.

          6   5   4   3   2   1

47. I often think of quitting.

          6   5   4   3   2   1

48. I will probably look for a new job in the next year.

    6   5   4   3   2   1

Section VI

Organizational commitment

Responses are obtained using a 6 point Likert-type scale where 6 = strongly agree 5 = agree 4 = somewhat agree 3 = somewhat disagree 2 = disagree 1 = strongly disagree

49. I feel a strong sense of belonging to this organization (school/district).
    6   5   4   3   2   1
50. I feel like "part of the family" at this organization (school/district).
    6   5   4   3   2   1
51. The people I work for do not care about what happens to me.

    6   5   4   3   2   1

Section VII

Job satisfaction

Responses are obtained using a 6 point Likert-type scale where 6 = strongly agree 5 = agree 4 = somewhat agree 3 = somewhat disagree 2 = disagree 1 = strongly disagree

52. All in all, I am satisfied with my job.

    6   5   4   3   2   1

53. In general, I don't like my job

    6   5   4   3   2   1

54. In general, I like working here.
    6   5   4   3   2   1

Section VIII

Job Overload

Responses for items 55 to 58 are obtained on a 6-point Likert-type scale where 6 = very often 5 = often 4 = fairly often 3 = sometimes 2 = occasionally 1 = rarely

55. How often does your job require you to work very fast?
    6   5   4   3   2   1
56. How often does your job require you to work very hard?
    6   5   4   3   2   1
57. How often does your job leave you with little time to get things done?
    6   5   4   3   2   1

58. How often is there a great deal to be done?

       6   5   4   3   2   1

Responses for items 59 to 65 are obtained on a 6-point Likert-type scale where 6 = a great deal 5 = a lot 4 = some 3 = a little 2 = hardly any 1 = close to none

59. How much slowdown in the workload do you experience?

       6   5   4   3   2   1

60. How much time do you have to think and contemplate?

       6   5   4   3   2   1

61. How much workload do you have?

       6   5   4   3   2   1

62. What quantity of work do others expect you to do?

       6   5   4   3   2   1

63. How much time do you have to do all your work?

       6   5   4   3   2   1

64. How many projects, assignments, or tasks do you have?

       6   5   4   3   2   1

65. How many lulls between heavy workload periods do you have?

       6   5   4   3   2   1

APPENDIX B

NONRESPONSE ERROR TESTS

				Std.	Std. Error
Variables	Responders	N	Mean	Deviation	Mean
CC	1.00	209	29.0909	6.87850	.47580
	2.00	44	25.1364	4.16849	.62842
TI	1.00	209	10.0239	4.31170	.29825
	2.00	44	12.1136	3.02098	.45543
OC	1.00	209	12.5167	2.98570	.20652
	2.00	44	10.9545	1.97607	.29790
JS	1.00	209	13.0431	2.87781	.19906
	2.00	44	11.6136	2.30486	.34747
JO	1.00	209	46.7990	6.24791	.43218
	2.00	44	49.2955	6.94021	1.04628
REC	1.00	209	19.2201	3.81412	.26383
	2.00	44	22.5227	2.41592	.36421
RET	1.00	209	21.7799	2.27431	.15732
	2.00	44	23.1136	1.57326	.23718

Groups Statistics

Note: CC=Career Commitment, TI = Turnover Intention, OC = Organizational Commitment, JS = Job Satisfaction
JO = Job Overload, REC = Recruitment, RET = Retention; 1 = Early Responders (1 – 3 rounds), 2 = Late responders (Last round).

		F	Sig.	T	df	Sig. 2 tailed	Mean Diff.	Std. Error Diff.	95% CI of Diff Lower	95% CI of Diff Upper
CC	EVA	17.160	.000	3.671	251	.000	3.95455	1.07731	1.8328	6.0762
	EVAN			5.017	99.659	.000	3.95455	.78822	2.3906	5.5184
TI	EVA	10.843	.001	-3.058	251	.002	-2.08971	.68327	-3.4353	-.7440
	EVAN			-3.839	84.574	.000	-2.08971	.54440	-3.1722	-1.0072
OC	EVA	17.817	.000	3.318	251	.001	1.56220	.47079	.63500	2.48940
	EVAN			4.310	89.969	.000	1.56220	.36249	.84205	2.28236
JS	EVA	6.226	.013	3.091	251	.002	1.42943	.46244	.51866	2.34019
	EVAN			3.570	74.205	.001	1.42943	.40045	.63155	2.22731
JO	EVA	2.329	.128	-2.362	251	.019	-2.49641	1.05688	-4.57790	-.41493
	EVAN			-2.205	58.573	.031	-2.49641	1.13202	-4.76192	-.23090
REC	EVA	14.193	.000	-5.511	251	.000	-3.30263	.44973	-4.19551	-2.40975
	EVAN			-7.344	94.582	.000				
RET	EVA	6.745	.010	-3.705	251	.000	-1.33373	.35999	-2.04272	-.62475
	EVAN			-4.686	85.728	.000	-1.33373	.28461	-1.89954	-.76792

Independent Sample Tests

Note. EVA = Equal Variances Assumed; EVAN = Equal Variances Not Assumed

Variables	Responders	N	Mean	Std. Deviation	Std. Error Mean
CC	1.00	125	31.4080	6.80381	.60855
	2.00	128	25.4688	5.00856	.44270
TI	1.00	125	8.3920	4.13267	.36964
	2.00	128	12.3359	3.21972	.28459
OC	1.00	125	13.4320	3.27585	.29300
	2.00	128	11.0859	1.84445	.16303
JS	1.00	125	14.0960	2.81821	.25207
	2.00	128	11.5234	2.21294	.19560
JO	1.00	125	46.1440	5.43985	.48656
	2.00	128	48.2969	7.12913	.63013
REC	1.00	125	18.0320	3.90396	.34918
	2.00	128	21.5156	2.82838	.25000
RET	1.00	125	21.1760	2.58427	.23114
	2.00	128	22.8281	1.39238	.12307

Note. CC=Career Commitment, TI = Turnover Intention, OC = Organizational Commitment, JS = Job Satisfaction
JO = Job Overload, REC = Recruitment, RET = Retention; 1 = Early Responders (1st 50%), 2 = Late responders (2nd 50%).

Independent Sample Tests

		F	Sig.	t	df	Sig. 2 tailed	Mean Diff.	Std. Error Diff.	95% CI of Diff Lower	95% CI of Diff Upper
CC	EVA	16.346	.000	7.920	251	.000	5.93925	.74988	4.46239	7.41611
	EVAN			7.892	227.705	.000	5.93925	.75254	4.45642	7.42208
TI	EVA	8.259	.004	-8.479	251	.000	-3.94394	.46514	-4.86002	-3.02786
	EVAN			-8.454	234.220	.000	-3.94394	.46650	-4.86301	-3.02487
OC	EVA	53.296	.000	7.040	251	.000	2.34606	.33324	1.68976	3.00236
	EVAN			6.997	194.465	.000	2.34606	.33530	1.68477	3.00736
JS	EVA	9.347	.002	8.086	251	.000	2.57256	.31816	1.94597	3.19916
	EVAN			8.063	235.071	.000	2.57256	.31906	1.94399	3.20114
JO	EVA	.825	.365	-2.696	251	.007	-2.15288	.79862	-3.72573	-.58002
	EVAN			-2.704	237.219	.007	-2.15288	.79612	-3.72124	-.58451
REC	EVA	14.922	.000	-8.142	251	.000	-3.48363	.42786	-4.32627	-2.64098
	EVAN			-8.112	225.780	.000	-3.48363	.42945	-4.32986	-2.63739
RET	EVA	32.770	.000	-6.350	251	.000	-1.65213	.26016	-2.16449	-1.13976
	EVAN			-6.309	189.409	.000	-1.65213	.26187	-2.16867	-1.13558

Note. EVA = Equal Variances Assumed; EVAN = Equal Variances Not Assumed

VITA

Johnny R. O'Connor, Jr.
P.O. Box 535
Channelview, TX, 77530

EDUCATION

2007	Doctor of Philosophy, Educational Human Resource Development, Texas A&M University, College Station, Texas
2002	Master of Business Administration, Business Administration, Texas Southern University, Houston, Texas
1998	Master of Education, Special Education (Communication Disorders), Southern University and A&M College, Baton Rouge, Louisiana
1996	Bachelor of Science, Speech Pathology and Audiology, Southern University and A&M College, Baton Rouge, Louisiana

CERTIFICATIONS/LICENSURES

- Texas State Board of Examiners Licensure in Speech Pathology
- American Speech Language and Hearing Association (ASHA) Certificate of Clinical Competence

PROFESSIONAL EXPERIENCE

2004-Present	Special Education Supervisor, North Forest Independent School District, Houston, Texas
2006	Adjunct Professor, Jesse H. Jones School of Business, Texas Southern University, Houston, Texas
1999-2004	Lead Speech Pathologist, North Forest Independent School District, Houston, Texas
2001-2004	Mathematics Instructor, Adult Learning Program, Houston Community College, Houston, Texas
1998-1999	Clinical Fellow, Houston Independent School District, Houston, Texas

This dissertation was typed and prepared by Marilyn M. Oliva at Action Ink, Inc.