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# Indicators and Precipitators of Special Educator Satisfaction: The Role of Certification and Advanced Coursework

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**Indicators and Precipitators of Special Educator Satisfaction:
The Role of Certification and Advanced Coursework**

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## Abstract

Special education teachers are leaving the education field at a higher rate than other education professionals. The annual attrition rate for special education teachers is estimated to be between 8-10% of special educators across the United States. These attrition rates are concerning, as they contribute to the shortage of quality special educators. Considering that an estimated 50% of special educators leave their positions within their first five years, researchers have conducted studies examining criteria centered on teacher retention and attrition. This study examined the findings of such studies, and explored the role of how teachers' certifications and obtaining advanced degrees influence special education teachers' sustainability and satisfaction levels.

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**Chapter 1: Introduction and Overview**

Special education teachers are departing the education field at a more rapid rate than their general education colleagues (Collie, Shapka, & Perry, 2012; Hughes, 2012; Lee, Patterson, & Vega, 2011; Ruetzel & Clark, 2011). Schools in the United States are currently facing the challenge of retaining qualified and skilled special education teachers.  Estimations of teachers leaving the education field are approximately 50% within the first five years of teaching, with the annual departure rate averaging 13-15% (Hughes, 2012).  Within the first three years in their profession, it is estimated that 30% of special education teachers are likely to leave their career. Special educators who are in their first year are 2.5 times more likely than their general education peers to leave their position (Plash & Piotrowski, 2006; Smith & Ingersoll, 2004).  The annual attrition rate for special education teachers is estimated to be between 8-10% percent of special educators across the nation.  Such attrition rates are concerning, as they contribute to the shortage of quality special educators.

In recent years, there has been a teacher shortage averaging nearly 29,000 certified special education teachers (Wasburn-Moses, 2005).  Hiring and training new teachers can be very costly for school districts and that cost is amplified even further when it comes to the preparation of special educators.  "The annual financial costs of recruiting, hiring, and training new teachers is staggering, with estimates of a total national replacement cost of $2.2 billion per year" (Hughes, 2012, p. 245).  In addition, teacher burnout rates are alarmingly high in special education, contributing to the shortage of special educators.  Although definitions and results from attrition studies differ, special educators are more likely to exit the profession at higher rates than general

education teachers (Boe, Bobbitt, & Cook, 1997; Thornton, Peltier, & Medina, 2007).  Beginning special educators are particularly at-risk for leaving (Brownell, Sindelar, Bishop, Langley, & Seo, 2002).  Special education teachers transferring to general education positions is also a problem for schools and districts (Muller & Markowitz, 2003).

High numbers of special educators leaving the profession have led to studies of their job satisfaction levels.  Some of these studies have examined factors likely to keep teachers in the education field.   Hughes (2012) discusses the correlation between demographics and teacher retention in the education field as a whole.  His findings state that women, who make up the majority of the teaching workforce, are more likely to leave the field; and men, who make up the minority, are more likely to stay.  Furthermore, Caucasian educators are 1.36 times more likely to leave their professional positions than non-Caucasian educators.   In regards to setting, elementary teachers tend to stay in the profession longer than secondary teachers.  Mathematics and science teachers, along with teachers with graduate degrees, are less likely to remain (Hughes, 2012).

Researchers have studied factors and variables related to teacher satisfaction levels.  Data have shown that certain variables directly relate to the motivation, engagement, and commitment to teaching. Collie, Shapka, and Perry (2012) gathered information on factors that negatively impact job satisfaction, such as workload stress.  A noted variable is the importance of the role the principal plays in the special education teacher's level of satisfaction.  However, teachers' perceptions of students' motivation and behavior were reported to have the most profound impact.

Leah Wasburn-Moses (2005) studied the importance of the role the principal plays in a special education teacher's level of satisfaction. Her findings included that those educators, who felt supported by their administrator, were more likely to stay in the education field.  Beginning or novice teachers were reported to be especially susceptible to the demands of being new to the profession (Clark, 2012).  Ruetzel and Clark (2011) stated that, "Many novice teachers enter the field of teaching with wide-eyed optimism, only to have their idealism dashed" (p. 96).  They concluded that school leaders who invest in long-term training, support, and development in their profession encounter stronger retention rates among their faculty.

Multiple environmental factors that might lead to "teacher attrition" include role ambiguity, excessive paperwork, lack of resources, and unmanageable workloads. All of these can lead to excessive stress and the possibility of teacher attrition (Coman et al., 2012).  A distinctive type of stress relating to the challenging demands of special educators is known as "teacher burnout", and is prevalent within the field of special education.  "Burnout is the endpoint in the process of coping unsuccessfully with chronic stress" (p.345).  This psychological syndrome can be visible across occupations that are known to carry extreme amounts of stress, such as positions in healthcare, human services, and in various positions in the educational field.   There are three components of teacher burnout:

1) Emotional Exhaustion takes place when emotional resources are withdrawn, and educators feel like they can give no longer give of themselves;

2) Depersonalization happens when educators withdraw from their students and/or the work associated with teaching, and begin to embrace negative or cynical feelings toward their students; and

3) Personal Accomplishment, that diminishes as teachers feel less effective in their influence on students (Coman et al., 2012).

When teachers experience high levels of burnout, they often feel less sympathetic toward their students, and are more likely to experience problems with their personal well-being, their health, and their commitment to work (Fernet, Guay, Senecal, & Austin, 2012; Hakanen, Bakker, & Schaufeli, 2006; Swider & Zimmerman, 2010).

Researchers have determined that burnout rates are higher for special education teachers compared to general education teachers.  In a study of 1,576 special education educators, 21% reported having left the education field entirely.  Many of these participants indicated high levels of stress, which contributed to their decision to leave the education field.  Other participants had similar thoughts about leaving their jobs at one time or another.  Other factors associated with teacher burnout can include regular or frequent absenteeism, becoming less positive about the profession, attending less to instructional tasks, and withdrawing from students and other staff members throughout the school setting (Coman et al., 2012).

International studies around the globe report similar results of unpleasant emotions and feelings, leading researchers to believe that this problem is more common than in isolated areas or countries (Collie, Shapka, & Perry, 2012).  Emphasized in current organizational studies, employees that have a more positive affect and well-being

are more likely to demonstrate stronger loyalty and dedication to their jobs, reducing the amount of burnout and quitting rates (Hamama, Ronen, Shachar, & Rosenbaum, 2013).

Job satisfaction in the education field can refer to a sense of gratification and fulfillment.  More importantly, it can describe the degree to which the individual feels his or her needs are being met within their work.  If teachers are experiencing a higher amount of job satisfaction, an increase is noticed in their overall well-being, motivation, and commitment to their teaching (Collie, Shapka, & Perry, 2012).  Teachers who reported a larger network of support communicated higher satisfaction rates.  In one study, 89% of teachers said they were very satisfied or satisfied with the instructional facets of their position.  However, 67% also state their strong dissatisfaction or dissatisfaction with the non-instructional aspects of teaching. The amount of unwanted paperwork associated with teaching was mentioned by 47% of teachers who labeled themselves as dissatisfied or strongly dissatisfied (Berry, 2012).  Although many studies have investigated the factors of teacher retention and career sustainability, there are few studies that have focused on the impact of attaining greater professional, special education preparation.  We do not know much about teacher satisfaction levels and their correlation to teacher preparation and/or advanced coursework (Blanton, 2011).

**Problem Statement**

Researcher Christopher Day (2012) suggests that teacher attrition is the single largest factor contributing to high rates of teacher shortages, especially in mathematics, science, and special education.  Most special education pre-service teachers enter the field with inadequate exposure to students with disabilities and with limited teaching experience.  This indicates that the role of teacher preparation programs should be

analyzed with a more critical lens towards the education of all students.  Teachers' self-confidence in understanding the skills needed as special education teachers seems to be highly connected to their apparent teaching efficacy (Lee, Patterson, & Vega 2011).   Within Bandura's (1997) social cognitive theory, self-efficacy is emphasized as one of the most important predictors of human motivation, and is defined as "people's beliefs about their capacities to produce designated levels of performance and exercise influence over events that affect their lives" (Bandura, 1994, p. 71). Self-efficacy tries to explain and predict how people acquire and maintain certain patterns of behavior.  As a set of beliefs where people create their ability to master desired outcomes, efficacy predicts how people choose activities and peoples' persistence to engage in activities when obstacles are presented, or there is a resilience to adversity (Bandura, 1997).

General educators with special education certification are more likely to be confident in their ability to teach students with learning or behavior difficulties in the general education classroom (Kearns, 1996).  These teachers are less likely to request assistance in developing adaptations and are less likely to refer students for the evaluation process that qualifies students with a disability.  Stainback and Stainback (1987) found the reverse to also be true.  To strengthen the caliber of special education teachers, they need to have experiences in the understanding of regular classroom curriculum and methodology (Stainback & Stainback, 1987).

When it comes to finding relationships of attrition to degrees earned or the quality of teacher preparation, there are few studies available, so few conclusions can be drawn (Billingsley, 2004).  Some researchers have discovered that few studies focus on the level of academic degrees to leaving or exiting the field.  There are a couple of studies that

found that teachers who have more training were more likely to indicate they intended to leave (Cross & Billingsley, 1994; Westling & Whitten, 1996).  Cross and Billingsley (1994) state that teachers with higher degrees viewed greater employability in professions that were nonteaching related, and therefore, concluded they were more likely to leave.

The same lack of research can be found in regards to those special education teachers who possess general education certification as well.  In a survey given by McManus and Kauffman (1991), 402 teachers of students with qualifying disabilities found that nearly have of the teachers considered taking a job in general education during the previous years.  As schools fail to make Adequate Yearly Progress (AYP) because of their special education populations, there is pressure to meet the demands of the state and federal requirement, which could lead to more and more special education teachers requesting to transfer to regular education positons or leave the field.  Furthermore, there are currently many teachers in regular or general education positions who also hold a special education certification.  Administrators and district leaders should explore the reasons why these teachers did not select to focus on special education (Thornton, Peltier, & Medina, 2007).

This study sought to identify the relationships of teachers who experience greater job satisfaction in their current roles with their certification and have completed advanced coursework.  The data collected illustrated the importance or lack of importance the role of dual-certification and advanced degrees have within the teacher field, and whether special education teachers who attain a greater amount of professional education demonstrate the strongest career satisfaction.

**Conceptual Framework**

With the enactment of landmark legislation that impacted general education, as well as special education: *The Individuals with Disabilities Education Act (IDEA,* 2004*), The No Child Left Behind Act (NCLB,* 2001*),* and *The Every Student Succeeds Act (ESSA,* 2015*),* the U.S. Department of Education emphasized the importance of educators working to further the practice of being highly qualified to teach in subject areas, including achieving dual certification in both general and special education, or to advance their own coursework to broaden their depth of teaching knowledge. *IDEA* (2004) outlined the importance of students with disabilities receiving their education, as much as possible, within the general education setting, with access to the general education curriculum. The *No Child Left Behind Act* of 2001 called for teachers to be "highly qualified" in the areas they taught. *ESSA* (2015), the most recently passed education law, stresses the importance of helping all students make progress, regardless of disability. To fully participate in the implementation of these requirements, it is necessary for teachers to pursue more coursework during pre-service and further professional development during their teaching careers. Both Stainback and Stainback (1987) and Kerns (1996) found that successful special educators have ample experiences and knowledge of general education classrooms, including curriculum, programs, and methodology. Stainback and Stainback (1987) also suggested that higher education institutions had the opportunity to guide educators in the collaboration process. When a more unified and comprehensive educational system is designed, then the individual needs of all students can be met, whether at the elementary or secondary level of school-based education.

In regards to merging general education and special education programs at the

college and university level, Stainback and Stainback (1987) highlighted four major

points.  First, if the faculty knew the importance of preparing educators to work with

students of all abilities, that is, those who are disabled and those non-disabled, a

universal, teacher preparation goal would be for them to prepare the best educators who

can teach all students. Second, institutions that only require one certification impede the

integration of elementary and secondary schools.  Preparing educators only in general

education, or only in special education, ultimately leads to teachers being responsible for

only those students for whom they have certification to teach.  Educators who are dually

certified are more capable in creating the Individualized Education Plans (IEP) that

students in special education receive yearly.  IEPs are created by professionals in

education, along with parents, and guide the students to achieve his/her established goals.

In determining the setting for students with disabilities, the school staff may be more

prepared to place children in the least restrictive environment (LRE), the agreed-to, best

in-school placement, when more teachers are dually certified, or have had further

coursework (Stainback & Stainback, 1987).

Pre-service teachers who are better prepared to provide instruction across all types

of educational areas are strongly influenced about what they experience, and will be

better able to apply those instructional insights in the settings where they will soon be

teaching (Kent & Giles, 2016; Stainback & Stainback, 1987).  Kerns (1996) parallels

these findings with ideas about existing barriers between special education and general

education.  She reports that time is wasted on the student's IEPs if strategies expressed in

the document cannot be met due to the general education teacher's lack of experience

working with children with special needs.  If both education fields focus on implementing

effective strategies for diverse populations, further coursework that follows such focus

will be a goal of those working with all learners.  Kerns states, "Both general and special

educators will need to become interdependent -- sharing knowledge and skills to benefit

all students" (p. 308).  The majority of special education teachers in today's schools are

expected to work alongside with general education teachers in effort to support students

from diverse backgrounds, while also providing specialized instructions for students with

significant needs (Shepherd et al., 2016).

One way to ensure that the double-knowledge base is captured by all educators is

to begin the pursuit of dual certification.  Both parties would be more likely to feel more

confident in their teaching skills if they received such training.  General educators would

feel more comfortable having students with disabilities in their classroom, and special

educators would have knowledge and experiences of the general classroom that would

benefit the students they serve (Kerns, 1996).

**Purpose Statement**

The purpose of this study was to discover if there is a relationship impact between

the satisfaction levels of teachers identified within certification status, including those

who have a single, special education certification, and those who have obtained dual

certification.  The same satisfaction data were also gathered and analyzed among special

education teachers who have advanced levels of coursework and/or preparation.  The

overall satisfactory levels of current teacher-level staff were measured using a Likert-type

self-assessment.

**Research Questions**

Surveys were developed by the researcher in an attempt to gather information about the role of teachers' preparation and coursework.  The researcher gauged career sustainability and job satisfaction levels by examining: 1) the influence on pre-service preparation; 2) the influence of post-graduate education; and 3) the implications of having dual certification.

The research questions for the study were the following:

1. Are special educators with certification in both general education and special education more satisfied than those special educators with only a special education certification?

2. Concerning those teachers who have dual certification, did they obtain their general education certification by completion of a traditional program at a college or university during the same time they received their special education certification? Was it obtained at a later time through completion of a post-graduate program?  Or, was it obtained through an alternative certification process, such as a state-approved assessment?

3. Is the attainment of higher professional degrees (M.Ed., Ed.S., Ed.D., Ph.D.) associated with stronger job satisfaction levels among special educators in their current field?

**Significance of the Study**

This research sought to find specific answers as to why some special education teachers leave their school-based positions, and other special education teachers stay in that environment focusing on the variables of certification and advanced

coursework.  This study identified characteristics of teachers who experience greater job satisfaction in their current roles.  Understanding what leads to job satisfaction among special educators, including how the role of certification and advanced coursework may play a part in teacher retention, will lead to more effective strategies to prepare educators. The findings from this study may guide colleges and universities in identifying the path to rethink or re-emphasize educator dual certification.  These data could inform school districts in the hiring process. Also, districts could use these data to offer new ways for educators to receive further education and coursework to benefit their current professional placement.

**Delimitations**

The submission and approval from the dissertation committee and IRB was expected within one to two months.  The study duration took about one month, since the responses were collected via electronic survey.  After these data were collected, one to two months of analyzing the findings took place, along with communicating the results.  The location of the study took place across multiple school districts in geographically Midwest, suburban counties across a metropolitan area.  The sample of the study included teacher-level, special education staff from a variety of schools and educational settings in these areas.

A survey was designed using a Likert Scale to gather information on teacher satisfaction, along with answering dichotomous "yes" and "no" questions to help determine education level and when that education took place.  Teachers surveyed were of random ages, genders, years of experience, classroom setting, and ethnicities.  The survey was designed to differentiate between self-contained and resource teachers.

**Assumptions**

The researcher assumed that:

- the data collected from participants was offered freely, and without pressure.

- the participants answered honestly and completely.

- the participants represented various educational settings and levels.

- the participants came from a range of socio-economic educational settings.

- the participants were working with students of various cultural backgrounds.

- the participants would experience fatigue while taking the survey, as questions were be limited.

- there were no errors in data entry.

- the research findings could be generalized to include all special education teachers in like geographic areas

**Explanation of Terms and Educational Acronyms**

*Co-teaching:* This describes a classroom situation where a special education teacher works collaboratively with a general educator in the general education classroom.

*Disability***:**  IDEA lists 13 disability categories under which 3- through 21-year-olds may be eligible to receive special education and related services. The disability categories listed in the IDEA are autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairment, specific learning disability, speech or language impairment, traumatic brain injury, and visual impairment (including blindness).

*Education for All Handicapped Children Act (EAHCA):* This federal legislation mandated that students with disabilities should be educated, to the maximum, appropriate level possible, with their non-disabled peers.

*Every Student Succeeds Act (ESSA):* Signed into law December 10, 2015, it requires all participating states to submit a plan that includes educational components of: challenging state standards, academic assessments, accountability systems, and support and improvement opportunities.

*Free Appropriate Public Education (FAPE):* This concept requires that all students with disabilities are entitled to a free appropriate public education with no costs incurred by the students' families, for an education that is deemed to confer meaningful, educational benefit for the student.

*Individual Education Plan (IEP):* created by professionals in education along with parents, and guide the students to achieve his/her established goals.

*Individuals with Disabilities Education Act (IDEA) of 1997*: This federal legislation provided local and state school districts with funding for specialized individualized, education for students with disabilities.

*Inclusion:* This concept ensures that children have access, when appropriate, to the general education curriculum and within the general education classroom among their non-disabled peers.

*Job satisfaction:* Collie, Shapka, and Perry (2012) describe *job satisfaction* "as a sense of fulfillment or gratification where job-related needs are being met." They also emphasize that workload stress and teaching efficacy are both "directly related to teachers' sense of job satisfaction" (Collie et al., 2012). Satisfaction can be linked to any type of working

condition, where support relates to the job and to related student issues (Lee, Yeunjoo, Patterson, Philip, & Vega, 2011).

*Least Restrictive Environment (LRE)*:  This principle states that any student with a disability is entitled to be educated with non-disabled peers, to the greatest extent appropriate.  *Least restrictive environment* does not always mean placing the student in the general education curriculum, but rather, in an environment that is inclusive to the greatest extent possible for the student, and in one that confers the most meaningful, educational benefit.

*No Child Left Behind (NCLB):* This federal law reauthorized the Elementary and Secondary Education Act (ESEA).  It included Title I, a program supporting standards-based education reform, and focused on setting high standards and establishing measurable goals, both assessed by individual states and reported to the federal Department of Education.

**Organization of the Study**

The first chapter is a brief overview about special education teachers and the problem of retaining them in the education field.  The remainder of this study is presented in four chapters, along with a reference section and appendices.  Chapter 2 offers a comprehensive literature review.  Chapter 3 describes the research design and methods that implement the data collection process.  The methodology used in this study includes tools used to gather these data, as well as a description the sample chosen for the study.  Additionally, Chapter 3 focuses on data analysis, and the validity and reliability of the study.  Chapter 4 presents an analysis of the compiled data; emergent themes are discussed.  Finally, Chapter 5 presents and discusses the study's findings and includes

conclusions and recommendations based upon the results of the data analysis.  The

appendix section will feature documents created for this study, including a copy of the

questionnaire, the introductory message to solicit study participants, and the IRB

documents.

**Summary**

The purpose of this study was to examine specific criteria related to career

satisfaction levels among special education teachers, including the role of dual

certification and advanced coursework, and the relationships these have on teacher

satisfaction levels. This study examined the impact between these variables from

participants within multiple Midwest, suburban school districts across a large

metropolitan area.  Participants consisted of teacher-level staff from a variety of special

education settings and levels, and the data collected electronically through anonymous

surveys.  This research could provide future educators, colleges, universities, and school

districts information worthy of their consideration to enhance their knowledge of how

educators' certifications and obtaining advanced degrees influence special education

teachers' sustainability and satisfaction levels.

**Chapter Two: Literature Review**

**Introduction**

Teachers choose the education field for a variety of reasons, such as working conditions, health insurance, vacation time, and the intrinsic value of helping students.  Once in their positions, teachers continually assess the benefits of teaching to the more undesirable aspects of their positions.  Teachers leaving the field (or transferring to another school or district) is a form of turnover that other organizations only experience on a smaller scale (Hughes, 2012).

The most challenging aspect about the special education field is building a qualified workforce, and developing a work environment that keeps teachers involved and committed.  For the last couple of decades, matters regarding special education teacher shortages and attrition have been worrisome to the administrators who recruit and supervise teachers. This shortage problem has dire implications for students with disabilities.  The effects can also impact students taught, providing insufficient educational experiences and reduced levels of achievement for students (Billingsley, 2004).  Hochbein and Carpenter (2017) conclude, "Understanding that teachers are the most important school factor associated with student achievement, researchers have devoted a considerable amount of resources to studying them." (p. 464).

In the past, and currently in some districts, special education continues to function as a segregation-based model, where the majority of students with disabilities are removed from the general education classroom.  These students also have less access to general education curricula for at least part of the academic school day.  This was based on the assumption that many students with disabilities may not benefit from complete

participation in public education.  Advocates have embraced the advances of the 1960's civil rights' movement, including initiating legislation to enforce a more restrictive model.  Due to the advocacy, a well-built movement has risen in the field of education to appropriately include students with disabilities in general education settings to the fullest extent possible. For example, around 55% of high school students with disabilities now spend 80% or more of the school day in the general education classroom.  Higher education institutions that are preparing future teachers and administrators should vigorously research and consider these trends, continuously assess, and reconfigure programs to best meet the needs of the profession, so that teachers and students both receive benefits (Orr, 2009).

**Attrition**

The causes for special education teacher shortages are complicated.  There are several types of attrition, such as leaving the teaching profession all together, or transferring to other educational positions.  This could include teachers moving into the general education realm. Reasons special education teachers provided for leaving the field have been classified in the following areas:

- Employment issues: including superior salaries, job design or certification status

- Personal issues: including family, social and relocations

- Support:  lack of administration and peers, lack of professional development

- Student:  low motivation levels, disciplinary concerns, classroom behaviors

- Other:  better job offers, retirement (Billingsley, 2004).

Special education teachers transferring to a general education teaching position are nearly 9 times higher than the reciprocal transfer process.  Special education teachers leave for reasons similar to those of general education teachers.  Both groups follow a U-shaped pattern associated with teaching experience, with those higher attrition rates seen at the beginning of the teacher's career and at retirement, although special education rates of leaving the profession are higher (McLeskey, Tyler, & Flippin, 2004).

**Preparation-Certification**

Developing highly-effective teachers is an overwhelming undertaking (Shepherd et al., 2016; Delano, Keefe, & Perner, 2008). Teacher preparation programs face many challenges and scrutiny across the nation for their alleged inability to affect student achievement through successful teacher training.  Some government officials question the relevance of teacher education, and suggest the possibility for alternative/more efficient means of increasing the supply of teachers, which could include alternative certification options or lessening the amount of time required to receive certification (Delano, Keefe, & Perner, 2008).

Inconsistency of content in teacher preparation programs is a major concern (Shepherd et al., 2016; Scott, 2017). Mainly, this is due to the variances in state certification requirements.  For instance, instead of completing a university's teacher preparation program, individuals with a bachelor's degree may elect to complete a shorter alternative certification program through a state-certified school district.  Some states might require a class or two, while others might require ten.  This inconsistency is visible at both the undergraduate and graduate levels of certification (Shepherd et al., 2016; Delano, Keefe, & Perner, 2008).  The problem of teachers fleeing the field has prompted

some colleges and universities to offer dual certification enrollment programs, or to offer a broader depth of classes; however, some states do not require certifications, other than special education, to graduate (Oyler, 2011).

Many states have the choice for alternate teacher certification, so universities need to respond by establishing alternative or shortened certification programs, or otherwise take the chance of losing their students.  It may be complicated for a university to preserve the essential resources to carry on a teacher preparation program that provides content past the minimum content required by the state providing that alternative certification.  Since the passage of *No Child Left Behind* (NCLB), the expansion of alternative certification options has had a remarkable impact on teacher preparation.  Individuals often begin taking their coursework while they are already teaching or have only completed the minimal amount of coursework before entering their position (Delano, Keefe, & Perner, 2008).  In 2003, Katsiyannis, Zhang, and Conroy encouraged policymakers to educational leaders to use caution when it came to offering alternative methods to obtaining teacher certification.  They stated these methods might become "an institutionalized alternate to a comprehensive teacher education program" (p. 246).  A study of thirteen alternative certification track progrsm found that they were faster than traditional programs but did not adequately prepare teachers for the classrooms (More, Johnson, & Birkeland, 2006).

Another pressing issue for teacher education programs is the makeup of certifications awarded by each state.  For example, some states utilize a categorical system, where special education teachers attain certification to teach students with specific disabilities, as opposed to other states that require teachers to become certified in

general education before they can teach in special education classrooms.  These

variations lead to vast differences among preparation programs throughout the United

States (Scott, 2017; Delano, Keefe, & Perner, 2008).

**Preparation and Programming**

Successful special education programs stress the importance of well-supervised,

well-planned, and extensive field experiences, much like their general education

counterparts.  Higher education faculties also stress the value of collaboration between

school personnel, faculty, and pre-service teachers.  It is predicted that preparation

programs that facilitate a high degree of collaboration between faculty members, and

focus on instructional methods and information for addressing student diversity, will

produce better outcomes for beginning special education teachers (Brownell, Ross,

Colón, & McCallum, 2005).  There is strong evidence that teachers trained effectively

report less stress and exhaustion (Scott, 2017). General and special education teachers

working in collaborative settings would both contribute to the responsibility of being role

models of implementing inclusive attitudes (Dingle, Falvey, Givner, & Haager, 2004). As

a result, a partnership between special educators and general educators would improve

educators' capability of supporting access to the general education curriculum for all

students.  Pre-service teachers in both special education and general education should

have ample chances in their coursework to collaborate, arrange and deliver instruction

together (Shepherd et al., 2016; Delano, Keefe, & Perner, 2008).

Teachers need varying types of knowledge in order to be effective.  Teacher

educators should be aware of these different types of knowledge. It is best if pre-service

teachers are well-informed in many areas, including content knowledge, curricular

knowledge and pedagogical knowledge.  Ideally, teachers should know the content they

teach, how the lessons they create lead to student learning, as well as the curriculum of

their specific levels. Teachers ought to be aware of the interrelationships of content, and

how to best incorporate them for effective instruction with all students, regardless of

disability or learning needs.  Pre-service special education teachers should also be

required to have an extensive understanding of information associated with federal laws,

especially the IEP process.  They should widen their skills to select developmentally-

appropriate adaptations in order to provide effective instruction (Morewood & Condo,

2012).

Educator preparation programs are charged with training future teachers to

implement evidence- and research-based practices with fidelity, as well as to thoughtfully

communicate and validate these practices for parents, general education partners, and

various administrators (Delano, Keefe, & Perner, 2008). Isenberg (2003) states:

> Recent research has documented some of the important ways that teachers'
>
> knowledge of the subjects they teach shapes their instructional
>
> practices.  The more deeply teachers grasp the content they are teaching,
>
> the more they tend to emphasize conceptual, problem-solving and inquiry
>
> aspects of their subjects.  On the contrary, the less knowledgeable teachers
>
> are of the content they are teaching, they tend to emphasize facts and
>
> procedures. (p. 16)

McLeskey, Tyler, and Flippin (2004) found that, for every general education

elementary school teaching position available for entering teachers, 1.68 teachers

graduated from teacher preparation programs.  However, for every entering teacher

position in special education, only .86 teachers were adequately prepared.   Despite

current state and federal legislation having an enormous impact on teacher preparation

programs, universities must make certain that this impact is not just mere compliance to

the latest and ever-changing policies, but one that encourages preparation considered both

substantial and of high quality.  These preparation programs are expected to pass the

compliance requirement mandated by individual state education departments. The

programs must also address the challenge of guaranteeing that the next generation of

teachers are able to provide students with the utmost quality of educational experiences

by making sure students also have access to general education.  Such knowledge of

general education practices and pedagogy ought to be part of teachers' training at the

college or university level, and not something educators eventually find out while on the

job (Scott, 2017; Delano, Keefe, & Perner, 2008).

**Merging and Integrating Programs**

There is still a major need to understand if, or how, opportunities to obtain

subject-matter knowledge influence future special educators.  General education research

implies that teachers with greater subject-matter preparation achieve superior student

outcomes when compared to graduates who lack that preparation.  Special education

researchers found that effective special educators are those who put into practice

research- or evidence-based validated interventions (Brownell et al., 2005, p. 249).

In teacher education programs across the country, discussions are taking place

between general and special education faculty about the characteristics and competencies

required by both special and general educators in order to effectively instruct and reach a

varied population of students.  This discourse has, in some cases, evolved into designs of

new or modified programming of teacher preparation for both general and special

education teachers (Shepherd et al., 2016; Dingle, Falvey, Givner, & Haager, 2004).

Teacher education operates with a standards-driven focus, just like elementary

and secondary education.  Teacher preparation programs develop curriculum around

mandatory competencies or standards identified as essential for teachers in specific fields

of knowledge.  The lines between general and special education have become blurred,

both in terms of implementation and teacher education.  There is a need for a more-

synchronized and mutual effort in the design and delivery of teacher education

programs.  Shared coursework for all teacher candidates, in both general and special

education programs, is one way to address these common standards to benefit both types

of professionals throughout their careers (Shepherd et al., 2016; Dingle, Falvey, Givner,

& Haager, 2004).

Many teacher education programs commit to providing pre-service teachers with

knowledge of the general education curriculum, and instruct them on skillfully

facilitating student progress in core content areas. Providing field experiences and

coursework that enable pre-service teachers to expand skills in executing efficient

instruction is not enough.  Special education teacher programs should also offer

experiences that will allow pre-service teachers to foster an understanding of general

education teaching methods, and the scope and sequence of the general education

curriculum.  A way to accomplish this goal is by intensifying or adding to the content of

methods courses that focus on both general and special education fields.  "As researchers

identify strategies that are effective in teaching core content to students with extensive

support needs in the general education settings, teacher education programs will need to

incorporate these practices into coursework and field experience" (Delano, Keefe, &

Perner, 2008, p. 234).

Some universities have redesigned their programs and are now offering a merged

model for preparation in both general and special education simultaneously.   Merged and

integrated program models typically have two approaches.  In a merged program model,

faculty in special and general education collaborate to design one program in which all

teacher candidates obtain licensure in both areas.  Merged programs begin through the

extensive and thoughtful collaboration of faculty to revamp the teacher education

curriculum and field experiences.  The merged program style is seen more at the

elementary school level of instruction, and is less frequently practiced by

middle/secondary pre-service teachers. The integrated model has separate special and

general programs, but the university faculty work together to develop sets of courses and

field experiences where special education pre-service teachers can learn about general

education coursework and vice versa.  Students majoring in elementary and secondary

education, and those majoring in special education, are coordinated so that they can

easily add other licensures to their program of study (Fullerton, Ruben, McBride, & Bert,

2011).  "Teacher training programs that continue to perpetuate segregation between

general and special education by placing teachers on separate preparatory tracks with

little prospect for collaboration fail today's pre-service teachers" (Orr, 2009, p. 237).

A teacher education program that incorporates technology, ELL and special

education across the general education curriculum guarantees a program of consistency

and connectivity.  Given a growing movement for teacher preparation programs to move

toward integrated or infused curriculum models, it is important for programs to have a

way to collect data on and analyze the scope and strength of content integration to maintain program reliability and consistency (Sands, Duffield, & Parsons, 2006).

Higher education could make a profound impact on special education if merging programs in fields of special education and general education, as touted by Sarason (1982):

> School personnel are graduates of our colleges and universities.  It is there that they learn there are at least two types of human beings and if you choose to work with one of them you render yourself legally and conceptually incompetent to work with the others....What we see in our public schools is a mirror image of what exists in colleges and universities. (p. 258)

There are foreseeable advantages to merging programs.  All university staff could be brought together into a more integrated and cohesive system.  Additionally, all elementary and secondary students could have their educational and related needs met in the mainstream of regular education, as much as their general education peers, because of the integrated coursework in their teachers' preparation. In a merged system, all school staff would be equipped to work with any student, whether they were gifted or disabled (Kent & Giles, 2016; Stainback & Stainback, 1987).

**Graduate Degrees**

When compared to typical undergraduate pre-service special education teachers, returning graduate students are more-capable critical thinkers (Zascavage, Masten, Schroeder-Steward, & Nichols, 2007).  Teachers registering for advanced degrees often

begin their coursework in master's programs with various backgrounds. These backgrounds could include years of experience and the variety of academic settings (White, Fox, & Isenberg, 2011).

Problems stemming from the purpose of the master's degree programs in education have been highly-debated in the United States, since the first master's degree in education was granted at Harvard College roughly 140 years ago. Perspectives on the purpose of master's study for teachers are changing, and are now starting to focus on the degree possibilities to be a means for more thoughtful methods of classroom practice and subsequent implications for career-long professional development, paving the way for it becoming a national priority (Haines et al., 2017; Selke, 2001).

There are multiple types of master's degree programs offered by universities nationwide. The master's of arts in teaching degree often has students enrolled who are seeking initial or additional content licenses, and are often professionals with a bachelor's degree in a content field. Traditional education master's degrees don't necessarily provide initial certification, but are designed for teachers already holding a teaching license. Generally, these students seek additional areas of certification, or hope to deepen their content area expertise (Selke, 2001).

A key focal point of the educational reform movement is advanced quality teaching that will develop the learning of the students. Improving the quality of teaching and teachers means reconceptualizing advanced professional development at the higher education level (Isenberg, 2003). The conditions, linked with the design of master's degree programs for practicing teachers, have been altered significantly over the years. For example, every teacher is responsible to new education standards set by local,

state and national organizations, as these agencies have also created new emphases on teaching content and professional expectations. Educator effectiveness is measured by what students are able to master, and teacher quality is determined by both content and pedagogical knowledge (Haines et al., 2017; Isenberg, 2003).

Educator learning and professional development illustrate that the most influential "learning opportunities for teachers are anchored in student learning, include high standards, are content focused, develop ongoing collaboration and networks across teachers, share common norms of beliefs, and provide in-depth, focused learning experiences that relate closely to the classroom" (Isenberg, 2003, p. 13).  Teachers' personal experiences, as the origin for their professional development, offer important opportunities for them to learn to think in new and different ways.  Authentic and engaging professional development for teachers provides opportunities for substantive intellectual discourse about research and theory associated with their teaching practice. "When these ideas are clear and compelling, teachers can apply them to their own classroom settings; when the ideas are too far removed from their practice, teachers will not use them to think differently" (Isenberg, 2003, p. 14).

The master's degree is a route by which teachers can redefine their roles as educators, and build finely-tuned expectations of succeeding professional development.  Currently, working educators need to be producers as well as consumers of information. If teachers do not pursue effective professional development, education as a whole is at risk of becoming irrelevant when driven mainly by researchers who are no longer directly associated to the sphere of classroom learning and teaching (Haines et al., 2017; Selke, 2001).

Another way of enhancing the quality of teaching is to embed further certification into a master's degree program.  Teachers taking graduate level classes could go beyond the requirements of initial certification, and gain more from opportunities to connect with university faculty who model collaboration techniques and teaching methods.  Additionally, after initial certification, an option for certified teachers to obtain advanced training should also be considered.  This is imperative, as there is a need for teachers with advanced training to become mentors to beginning teachers, and to provide better collaboration techniques with educational counterparts.  Offering other certificate programs in additional areas provides enhancing skills and concepts over those taught in more basic initial certification coursework (Delano, Keefe, & Perner, 2008).

Teachers' skills can also be enhanced with advanced professional development.  This can cover knowledge in the academic area educators are teaching, universal suitable pedagogy for the learners they are instructing, and comprehensive discipline strategies to make content knowledge accessible to students.  Educational knowledge includes what teachers know and consider about teaching and learning that is not specific to a specific subject matter.  Professional development occurrences that expand teachers' pedagogical knowledge need to be grounded in genuine teaching practices, and be reflective and collaborative.  Developing inquiry-based practices and reflection are central to creating great professional knowledge.  The ideal picture of professional teachers is one that encourages them thinks systematically about their craft, while maintaining focus on educational research and the experience of others.  This will aid them while they work innovatively and collaboratively as a member of a professional learning community (Isenberg, 2003).

**Conclusion**

Teachers receiving more or advanced coursework, either as an undergraduate or graduate student, can produce a variety of benefits, that include learning new skills, and expounding upon abilities they have previously developed that will have a direct impact on their students.   Higher education faculty, working together, could change perceptions, and identify all students as unique individuals, rather than members of a categorical group, such as a special education or a general education student.  Working together with local and state education agencies to update certification and hiring practices might improve the process of having a more unified school system.  In turn, these would make the task of developing strong higher education teacher preparation programs a workable reality (Stainback & Stainback, 1987).

Several studies have focused on stress and job dissatisfaction as factors motivating teachers to stay or leave their careers (Sutton & Huberty, 1984).  The connection between satisfaction and job stressors has been a focus of research with special education (Eichinger, 2000).   However, there seems to be some basic questions we still need to ask regarding special educator satisfaction.  The first question is: Which group of teachers are most dissatisfied?  If there is a clear pattern of difference, then a follow up, second question is: What are the sources of such dissatisfaction.  There is little research completed on these questions especially in relation to the topics of this study (Stempien & Loeb, 2002).

The purpose of this study was to investigate at special education teachers' job satisfaction levels, coupled with their degree of education, including completion of additional coursework at the undergraduate or graduate level.  This chapter outlined the

research methods used in collecting and interpreting data centered on the research

questions previously presented in Chapter 1.  It described the research design

implemented, development of the data collection instrument, the population and sample

selection, how the instrument was distributed, and data analysis procedures used.

This study addresses these three research questions:

1) Are special educators with certification in both general education and special

education more satisfied than those special educators with only a special

education certification?

2) Concerning those teachers who have dual certification, did they obtain their

general education certification by completion of a traditional program at a college

or university during the same time they received their special education

certification? Was it obtained at a later time through a completion of post-

graduate program?  Or, was it obtained through an alternative certification process

such as a state approved assessment?

3) Is the attainment of higher professional degrees (M.Ed., Ed. Specialist, Ed.D.

or Ph.D.) associated with stronger job satisfaction levels among special educators

in their current field?

**Chapter 3: Methodology**

**Participants**

The study group for this research project was comprised of special education, teacher-level, school-based staff currently employed across neighboring, Midwest suburban counties within a large metropolitan area.  Of the participants, most were currently teaching in a self-contained or resource setting (193, or 61%).  Over 60% (202) had been teaching 15 years or less.  More than 68% of the survey participants were also certified in a general education area.  Optional demographic information of the participants was also recorded.  The majority of participants were female and Caucasian. All participants contributed voluntarily and with complete anonymity.  Table 1 (see below) displays the demographic information of the participants.

Table 1

*Demographic Characteristics of Participants (n = 316)*

| Demographic | *n* |
|---|---|
| Gender (*n* = 313) | |
| Male | 44 |
| Female | 261 |
| Prefer not to answer | 8 |
| | |
| Ethnicity (*n* = 312) | |
| African-American | 12 |
| Asian | 1 |
| Caucasian | 283 |
| Native Hawaiian or Other Pacific Islander | 1 |
| Other | 3 |
| Multiple Ethnicities | 3 |
| Prefer not to answer | 9 |
| | |
| Current Professional Setting (*n* = 313) | |
| Resource | 83 |

| | |
|---|---|
| Self-Contained | 110 |
| Co-Teaching | 34 |
| Facilitator/Coach | 27 |
| Other | 59 |
| | |
| Years of Teaching Experience (*n* = 316) | |
| 1-5 | 69 |
| 6-10 | 56 |
| 11-15 | 77 |
| 16-20 | 60 |
| 21-25 | 32 |
| 26-30 | 13 |
| 31+ | 9 |
| | |
| Primary Socio-Economic Status of School (*n* = 325*) | |
| (*Participants were allowed to select more than one option) | |
| Low | 167 |
| Middle | 124 |
| High | 34 |
| | |
| Primary School Level of Participants (*n* = 337*) | |
| (*Participants were allowed to select more than one option) | |
| Elementary | 103 |
| Middle | 63 |
| High | 116 |
| Multiple Levels | 55 |

Electronic surveys were provided to and completed by the special education professionals using a random sampling format.  The special educators work within multiple school districts across a geographical county.  Random sampling is regarded as the best way to acquire a representation of a sample.  Although no technique can guarantee a true representation, this procedure has a higher probability than others.  Random sampling can also aide in making proportionate and meaningful comparisons between sub-groups (Gay, 1987).

This study used one of the most well-known research designs, called the "one-shot design-one," where one group of participants is studied at a single time.  The

advantages of this design are its efficiency and the minimal cost in both resources and time needed to implement the study.  As such, there was no need to track the participants over time, or to initiate the survey and data collection again (Vanderstoep & Johnston, 2009).

**Measure**

This survey was comprised of Likert-type questions, yes/no questions, and text boxes for participants to respond to questions regarding the yes/no questions associated with that item.  For identifying and evaluating job satisfaction levels, a Likert scale was developed based on the work of Munir and Khatoon (2015).  These researchers designed a 5-point job satisfaction scale with a final form of 20 statements that contained both positive and negative dimensions of job satisfaction. The scale yielded a split-half reliability of 0.84 and Cronbach's alpha of 0.86.  Of these 20 statements, 19 items were kept, and wording was changed to a positive format (See Appendix A).

Single questions on the survey are consistent with being identified as Likert-type items, where participants will be given a scale to select a response that mostly identifies with their self-assessed answer.  This survey was comprised of Likert-type items, instead of being described as a Likert-scale, because the researcher was not planning to combine the responses to form a composite measure.  A Likert-scale was comprised of a sequence of four or more Likert-type items that were pooled together into a single combined score during the data analysis process.  Collectively, these items were used to offer a quantitative measure of a temperament, character, or personality trait.  Normally, the researcher was only interested in the composite score that represented the character or personality trait within most Likert-scales (Boone & Boone, 2012).

**Procedures**

Questionnaires may consist of open or closed questions that collect facts from attitudes of the respondent, as well as assessing other factors, such as a feeling or personality trait (Thomas, 2009). "The questionnaire is a versatile tool and is used in a number of different kinds of research designs.  It can be tightly structured, but can also allow the opportunity for a more open and discursive response if required" (Thomas, 2009, p 174).  Basic considerations to creating a good questionnaire are:

1.  Keep everything as short as possible while still trying to gather important information. If possible, limit your questions, as the number of people who respond to questions will decrease proportionally with its length.

2.  Be precise about what you are asking.  Asking for one piece of information at a time is important.

3.  Be precise.  The only clarification the respondent will have is on the form in front of them.  You need to be clear about what you are asking.  For example, asking, "do you read newspapers?" as one question and "How often?" as another is better than just asking "How often do you read newspapers?"

4. Collect all the details, even if you think you might not need them. Sometimes factors that might seem important could have an added dimension with a little extra effort.  These results could be beneficial especially in the analyses section.

5. Be aware of bias. You don't want respondents assuming there is any type of right answer.  Most people want to look good, but you don't want your respondents to assume a right answer (Thomas, 2009).

Survey questions can be organized in a number of ways.  Closed questions are often dichotomous or multiple-choice.  Dichotomous questions, two-way questions, are usually answered yes and no. Given that, they can be used as tools for screening questions.  Screening questions can help sort respondents or question items into groups. Multiple-Choice Questions contain two or more answers where respondents are able to pick one, or many options, as directed.  These types of questions are helpful when it relates to facts surrounding the respondent (e.g., years of experience, demographic information).  Rating Scale questions require the respondent to rate an attribute, attitude, experience, or something else along a continuum; only one box should be checked by the respondent per question.  Scales are a set number of items and responses (Thomas, 2009).

The researcher collected all data from the electronic surveys.  In order to maintain consistency and to increase the validity of the collection, the survey could have been accessed and completed using common internet browsers and all types of computer hardware, including mobile devices, such as smart phones and tablets.

Data collection began in January 2018, and was open for two weeks.  This period was chosen so that teachers were able to begin and settle into the academic year.  An email went out with a description of what the research was focusing on, and why data were being gathered.  If teachers chose to participate, they were able to select a hyperlink that took them to the survey.  Respondents were reassured of their anonymity in the original email.  This, hopefully, helped them feel safer in responding more honestly about their opinions, and they could have participated in a location of their choice.  The anonymity of web-based surveys potentially eliminates unneeded apprehension (Granello

& Wheaton, 2004).  No email addresses, names or ISP information were collected.  The surveying tool was developed within the Qualtrics management platform, and the link assigned to the survey was shortened to a tinyurl in the invitation to participate.

As volunteers, none were compensated for completing survey information, but did have an opportunity to enter into a drawing for one of four $25 Target® gift card.

The Institutional Review Board of the University of Missouri- St. Louis approved this research. The data were collected by self-administered questionnaires using the survey platform Qualtrics.  The following methods of data collection were used:

1. The survey was sent out internally to special education teachers (grades K-12) for the largest district surveyed.

2. Email addresses of special education teachers were collected from five other neighboring public district sites, and the invitation to participate was sent to each of them.

3. Compiled data collection from online surveys.

4. Sorted data by degree of teacher and certification.

5. Review responses for completeness.

6. Completed data analysis using factor analysis, MANOVA, and other methods specified.

Respondents were able to skip questions. The survey was sent out to 1,541 special education teachers across six school districts and was open for participation for two weeks.  Of those surveys sent, 19 returned due to a wrong address or having a full mailbox.  A total of 316 (20.5%) special education, teacher-level staff participated.

## Chapter 4: Results

For this study, larger sets of variables were broken down into smaller sets of data by using factor analysis. Factor analysis simplifies interrelated measures by using mathematical procedures to discover patterns in a set of variables (Yong & Pearce, 2013). Factor analysis is based on the idea that measurable and observable variables can be reduced to fewer latent variables (Bartholomew, Knott, & Moustaki, 2011).  Factor analysis is useful in studies that have multiple variables, especially from questionnaires, to get an underlying concept and to interpret results (Yong & Pearce, 2013).  Multivariate analysis of variance (MANOVA) was then used to compare the means of the variables between the defined groups to answer the Research Questions.

To assess the factor structure of the survey instrument, the Kaiser-Meyer-Olkin Measure of Sampling Adequacy (KMO) was calculated.  Values close to 1.0, which are considered high, usually indicate that a factor analysis may be helpful in data analysis.  If the value is less than 0.70, the factor analysis might not be useful (Field, 2009). The KMO value ($p < .001$) for this survey instrument was 0.851.  In addition, Bartlett's Test of Sphericity was $\chi^2$ ($df$) = 276.37 which indicated that sampling value was adequate (Field, 2009).

Factor analysis takes a larger set of data and reduces it into unique variable sets that are more manageable and easier to understand.  It is recommended that factor analysis be conducted if the sample size is over 300, and the number of original variables or measured items is at least 5 (Comrey & Lee, 1992).  Exploratory factor analysis was considered in this study, as there were no preconceived notions as to the number of dimensions or sets of variables.

Exploratory factor analysis focuses on observed variables, and how they potentially measure in each factor, the goal was to calculate if there were relationships, or which variables might be linked to each other (MacCullum, 2000; Cattell, 1973).  Each variable was standardized with the maximum variance of 1.0.  The proportion of variance is explained in the eigenvalue.  Kaiser's Criterion is a method used in SPSS, and is the most highly utilized method for identifying the number of components to use while conducting a factor analysis (Conway & Huffcut, 2003).

With the Kaiser Criterion, only factors with an eigenvalue larger than 1.00 were kept.  In regards to the job satisfaction survey, four factors with an eigenvalue of at least 1.0 were loaded, with a shared variance of over 60%.  Factor loadings less than 0.4 were not considered.  The higher the loading, the higher the item correlates with its assigned factor.  Seventeen of nineteen items loaded onto four components.  The four initially emerged from the principle factoring and were confirmed by a follow-up parallel analysis.  These components were labeled: Opportunities and Recognition, Relationships with Colleagues, Benefits of Teaching, and Working Conditions.  Two items did not load on any factor (items 5 and 6).  (See Table 2).

The first component to appear was labeled Opportunities and Recognition, and 4 items (1, 2, 3, 4) loaded on this component (see Rotated Factor Matrix).  Items were associated with recognition and opportunities for advancement and promotion.  The second component contained 6 items (7, 8, 9, 10, 11, 12), which were items centered around "enjoying people with whom they work," "getting along with colleagues," and "maintaining those relationships," and is labeled Relationships with Colleagues. The third component, Benefits of Teaching, incorporates items focusing on "teaching skills and

creativity," "providing students with an opportunity to learn" and "getting along with students" (13, 14, 15, 16, 17).  Working Conditions, the last component, is comprised of working conditions in the school (18, 19).

Table 2

*Rotated Factor Matrix*

|  | 1 | 2 | 3 | 4 |
|---|---|---|---|---|
| 1. Teaching provides a good opportunity for advancement. | **.904** | .155 | .091 | .027 |
| 2. Teaching provides an opportunity for promotion. | **.842** | .169 | .161 | .038 |
| 3. Teaching provides me with an opportunity to advance professionally. | **.665** | .113 | .194 | .085 |
| 4. I receive recognition for my successful teaching. | **.461** | .156 | .150 | .315 |
| 5. Teaching provides a secure future. | .392 | .067 | .356 | .198 |
| 6. The work of a teacher is pleasant. | .300 | .253 | .271 | .176 |
| 7. My colleagues stimulate me to do better work. | .196 | **.680** | .227 | .140 |
| 8. I like the people with whom I work. | .037 | **.641** | .331 | .202 |
| 9. I get along well with my colleagues. | -.025 | **.608** | .233 | .116 |
| 10. My colleagues provide me with suggestions or feedback about my teaching. | .303 | **.588** | .084 | -.029 |
| 11. My interests are similar to those of my colleagues. | .194 | **.573** | .070 | .081 |
| 12. I have made listening friendships among my colleagues. | .078 | **.552** | .171 | .122 |
| 13. Teaching is very interesting work. | .147 | .200 | **.723** | .073 |
| 14. Teaching provides me with the opportunity to help my students learn. | .151 | .170 | **.679** | .164 |
| 15. Teaching provides an opportunity to use a variety of skills. | .288 | .139 | **.606** | .163 |

| | | | | |
|---|---|---|---|---|
| 16. I get along with my students. | .026 | .193 | **.544** | .040 |
| 17. Teaching encourages me to be creative. | .189 | .256 | **.487** | .096 |
| 18. Working conditions in my school are comfortable. | .121 | .176 | .186 | **.926** |
| 19. Working conditions in my school are good. | .149 | .215 | .184 | **.820** |

Extraction Method: Principal Axis Factoring
Rotation Method: Varimax with Kaiser Normalization
    a.   Rotation converged in 5 iterations.

After completing the factor analysis, a parallel analysis was conducted to ensure data for the four factors were legitimate.  The parallel analysis verified the existence of four factors. The cumulative explained variance of the four factors shared values of over 60%, with factor 1 at 16.72%, factor 2 at 16.50%, factor 3 at 15.764%, and factor 4 at 11.18%.  With eigenvalues being compared, the four factors of Opportunities and Recognition, Relationships with Colleagues, Benefits of Teaching, and Working Conditions were confirmed.

A correlation matrix was performed to analyze the correlations of all the factors with each other to ensure the factor analysis was meaningful.  Each factor should have correlations with other factors, but should not correlate too highly with each other (Netemeyer et al, 2003).  This information is provided in Table 3 (see below).

Table 3

*Descriptive Statistics, Cronbach's Alpha, and Scale Correlations for the Teacher Satisfaction Scale (n = 316)*

| Component | Number of Items | *M* | *SD* | α | OR | RC | BT | WC |
|---|---|---|---|---|---|---|---|---|
| Opportunities and Recognition | 4 | 3.38 | .34 | .83 | 1.00 | | | |
| Relationships with Colleagues | 6 | 4.06 | .35 | .80 | .38* | 1.00 | | |
| Benefits of Teaching | 5 | 4.50 | .12 | .78 | .40* | .48* | 1.00 | |
| Working Conditions | 2 | 3.91 | .06 | .92 | .33* | .36* | .37* | 1.00 |

*Note*. Abbreviations denote subscales: OR = Opportunities and Recognition, RC = Relationships with Colleagues, BT = Benefits of Teaching, WC = Working Conditions
*Note*. Subtest correlations are Pearson Product-Moment Coefficients.
** $p < .01$.

**Research Question #1**

*Are special educators with certification in both general education and special education more satisfied than those special educators with only a special education certification?*

Table 4 displays the means and standard deviations on teacher satisfaction for special education teachers with and without general education certification. (See below).

Table 4

*Means and Standard Deviations on the Teacher Satisfaction Scale for Participants with*

*Special Education Certification Only and Special Education/General Education*

*Certification*

|  | Special Education Only ($n = 98$) | | Special + General ($n = 215$) | |
| --- | --- | --- | --- | --- |
|  | *M* | *SD* | *M* | *SD* |
| Opportunity & Recognition | 3.49 | .80 | 3.58 | .85 |
| Relationships with Colleagues | 4.03 | .58 | 4.07 | .57 |
| Benefits of Teaching | 4.51 | .41 | 4.49 | .49 |
| Working Conditions | 3.95 | .94 | 3.90 | .96 |

The MANOVA was used (despite having unequal number of respondents) and consisted of one between-group factor (Special Education Only vs Special + General Education) and one-within group factor (Opportunities & Recognition vs. Relationships with Colleagues vs. Benefits of Teaching vs. Working Conditions). The *Pillai's trace* value was $F (1, 308) = .67 (ns)$. The MANOVA indicated there was no significant effect.

**Research Question #2**

*Concerning those teachers who have dual certification, did they obtain their general education certification by completion of a traditional program at a college or university during the same time they received their special education certification? Was it obtained at a later time through completion of a post-graduate program? Or was it obtained through and alternative certification process, such as a state-approved assessment?*

The majority (71%) of participants with general education certification completed coursework at a college or university level in that general education field as opposed to just taking a state approved certification endorsement area.

Table 5 displays the means and standard deviations on teacher satisfaction for special education teachers with and without general education certification (see below).

Table 5

*Means and Standard Deviations on the Teacher Satisfaction Scale for Participants with General Education Certification from Additional Coursework and those Receiving Certification from an Assessment Only*

|  | Additional Coursework ($n = 123$) | | No Coursework/Test Only ($n = 91$) | |
|---|---|---|---|---|
|  | *M* | *SD* | *M* | *SD* |
| Opportunity & Recognition | 3.53 | .90 | 3.62 | .78 |
| Relationships with Colleagues | 4.09 | .57 | 4.04 | .58 |
| Benefits of Teaching | 4.54 | .41 | 4.41 | .58 |
| Working Conditions | 3.93 | .99 | 3.84 | .93 |

A separate MANOVA was calculated for Research Question #2.  The MANOVA consisted of one-between group factor (Additional Coursework vs. No Coursework/Test Only) and one-within group factor (Opportunities & Recognition vs. Relationships with Colleagues vs. Benefits of Teaching vs. Working Conditions).  The *Pillai's trace* value was $F (1, 209) = .14$(*ns*).  The MANOVA indicated there was no significant effect.

Of the four factors, all means were comparable across the groups (those with coursework completed and those without any coursework completed).  Opportunities & Recognition, Relationships with Colleagues, Benefits of Teaching, and Working Conditions were not statistically different from one another.

**Research Question #3**

*Is the attainment of higher professional degrees (M.Ed., Ed.S., Ed.D., Ph.D.) associated with stronger job satisfaction levels among special educators in their current field?*

All degree levels were represented in the data with the highest number of participants having the highest degree of a masters.  The data did not include those participants who indicated they were currently in progress of another advanced degree.  For the purposes of this research question, only those completed degrees were counted.  Although the degree level groupings were not normally distributed, their means were relatively close. Table 6 provides the means and standard deviations of the various levels of degrees (See below).

Table 6

*Means and Standard Deviations on the Teacher Satisfaction Scale for Participants with Various Levels of Educational Degrees*

| | *Highest Degree Level* | *M* | *SD* | *N* |
|---|---|---|---|---|
| Opportunity & Recognition | Bachelor | 3.67 | .66 | 48 |
| | Master | 3.53 | .87 | 233 |
| | Ed. Specialist | 3.55 | .83 | 22 |
| | Doctorate | 3.55 | .788 | 10 |
| | Total | 3.55 | .83 | 313 |

| | | | | |
|---|---|---|---|---|
| Relationships with Colleagues | Bachelor | 4.04 | .57 | 48 |
| | Master | 4.08 | .56 | 233 |
| | Ed. Specialist | 3.90 | .61 | 22 |
| | Doctorate | 3.85 | .81 | 10 |
| | Total | 4.06 | .58 | 313 |
| Benefits of Teaching | Bachelor | 4.46 | .41 | 48 |
| | Master | 4.49 | .49 | 233 |
| | Ed. Specialist | 4.49 | .37 | 22 |
| | Doctorate | 3.85 | .81 | 10 |
| | Total | 4.50 | .47 | 313 |
| Working Conditions | Bachelor | 3.85 | .92 | 48 |
| | Master | 3.91 | .966 | 233 |
| | Ed. Specialist | 3.97 | .906 | 22 |
| | Doctorate | 4.10 | 1.17 | 10 |
| | Total | 3.91 | .95 | 313 |

The MANOVA was used again and consisted of one-between group factor (Bachelor's Degree vs. Master's Degree vs. Ed. Specialist Degree vs. Doctorate Degree) and one-within group factor (Opportunities & Recognition vs. Relationships with Colleagues vs. Benefits of Teaching vs. Working Conditions).  The *Pillai's trace* values found were $F (3, 924) = 1.26(ns)$. The MANOVA indicated there was no significant effect.

**Summary**

This chapter introduced an overview of the procedures used in the data analysis of the survey results.  A factor analysis was conducted with the survey items that loaded the four main factors of Opportunities and Recognition, Relationships with Colleagues,

Benefits from Teaching, and Working Conditions.  The main focus of the study was to determine if there was any significance between specified groups of special educators.

The data analysis indicated there were no statistically significant differences in job satisfaction between those special educators with general education certification and those without.  There were no statistically significant differences among special educators that received general education certification from only taking an assessment and those who also took advanced coursework.  Furthermore, in regards to special educators with advanced degrees, there were no statistically significant differences among various degree levels.  With all of the research questions, Levine's Test was never significant, thus indicating equal variances despite unequal sample sizes.

## Chapter 5: Conclusion and Discussion

**Research Questions**

The research questions for this study are the following:

1. Are special educators with certification in both general education and special education more satisfied than those special educators with only a special education certification?

2. Concerning those teachers who have dual certification, did they obtain their general education certification by completion of a traditional program at a college or university during the same time they received their special education certification? Was it obtained at a later time through completion of a post-graduate program?  Or, was it obtained through an alternative certification process, such as a state-approved assessment?

3. Is the attainment of higher professional degrees (M.Ed., Ed.S., Ed.D., Ph.D.) associated with stronger job satisfaction levels among special educators in their current field?

   Researches have spent significant time studying factors related to educator satisfaction levels (Collie, Shapka, & Perry, 2012; Wasburn-Moses, 2005; Hughes, 2012).  Special education teachers are departing from the field at a more rapid rate than their general education peers (Collie, Shapka, & Perry, 2012; Hughes, 2012; Lee, Patterson, & Vega, 2011; Ruetzel & Clark, 2011).   Although there are numerous studies relating to teacher job satisfaction, this research focused on job satisfaction levels of special educators in regards to attained certification and degree level as there is a lack of this information available (Billingsley, 2004).

Although the factors had been identified previously, this study focused on how special education teachers rate their own satisfaction levels.  Given a Likert scale focusing on four main themes, *Opportunities and Recognition, Relationships with Colleagues, Benefits from Teaching,* and *Working Conditions*, teacher-level special education staff were able to report their satisfaction levels.  The study yielded the following conclusions:

1) Special education teacher-level staff that also have their general education certification do not report themselves as having higher satisfaction levels than their colleagues that do not have general education certification;

2) With regards to those teachers with general education, those taking extra coursework for certification do not report higher satisfaction levels than their peers that only took an assessment for such certification; and

3) Teachers with various degree levels (Bachelors, Master, Educational Specialist, Doctorate) do not report higher satisfaction levels in any of the specified levels, or across any of these groups.

**Summary of the Study**

Schools cope with teachers leaving the education field, and researchers have spent significant time studying factors related to educator satisfaction levels (Collie, Shapka, & Perry, 2012; Wasburn-Moses, 2005; Hughes, 2012).  Special education teachers are departing from the field at a more rapid rate than their general education peers (Collie, Shapka, & Perry, 2012; Hughes, 2012; Lee, Patterson, & Vega, 2011; Ruetzel & Clark, 2011).   Although there are numerous studies relating to teacher job satisfaction, this study explored on job satisfaction levels of special educators in regards to certification

and degree level.

Studies on teacher retention, and findings related to data on that subject suggested that there were a variety of factors relating to educator dissatisfaction.  Data have shown that certain variables directly relate to the motivation, engagement, and commitment to teaching (Collie, Shapka, & Perry, 2012).  The literature offered the common reasons for educator dissatisfaction include the role administration plays in supporting the teacher, student behaviors, and unmanageable workloads including factors such as excessive paperwork and lack of resources (Coman et al., 2012).  Studies regarding advanced coursework for educators, including advanced degrees and additional certification, suggested that when determining the setting for students with disabilities, the school staff may be more prepared to place children in the least restrictive environment (LRE), the agreed-to, best in-school placement, when more teachers are dually certified, or have had further coursework (Stainback & Stainback, 1987).

**Findings**

The study surveyed 316 special education teacher-level staff comprised of K-12 special education classroom teachers and instructional coaches.  All participants were currently employed in suburban, public school settings, and come reported a variety of demographical backgrounds.

The study found that there were no statistical significances among any of the independent and dependent variables in any of the research questions.  Ultimately, each research question regarding job satisfaction levels were answered:

1)  There is no significant relationship between those special education teachers with

and without general education certification.

2) Of those special educators with additional certification in a general education area, there was no significant relationship between those who received general education certification from only taking a certification assessment and those who also took advanced or additional coursework.

3) Regarding special educators, there was no statistical significance between those teachers with advanced degrees and those without, including multiple levels of advanced degrees.

Thus, it was determined that there was no statistical significance when comparing responses between groups identified in each research question.  Of note, are the relatively high levels of job satisfaction levels by participants overall.  Within each group, regardless of the factor, teachers rated themselves within high levels of satisfaction, exceeding the middle or neutral ranking.

**Findings Related to the Literature**

As the literature reviewed discussed numerous factors related to educator satisfaction and retention, the analysis of this study, found no significant differences between groups studied.  However, as a self-administered educator satisfaction scale, there was no measurement of topics that explored the effectiveness of impact that survey participants were experiencing in the classroom.

The results of this study have implications for future research in the area of educator job satisfaction, on both individual and organizational levels.  Individually, teachers self-reported their satisfaction levels, and the researcher acknowledges that each teacher has a specific sphere of influence.  At an organizational level, district

administrator could use these data to look at trends across many teachers.  This research was based on Stainback and Stainback's (1987) work around determining the setting for students with disabilities, focusing on the school staff being more prepared to place children in the least restrictive environment (LRE), when more teachers are dually certified, or have had further coursework (Stainback & Stainback, 1987). The results of this study indicate that special education teachers report similar satisfaction levels regardless of certification status or degree level.  However, there are many other factors that could impact satisfaction levels among these educators.

**Surprises**

The number of participants completing the survey was very encouraging.  The response rate was only 20.5%, however, a total number of 316 professionals responded to the questionnaire.  Although there was only a response rate close to a quarter of those receiving an invitation, currently educators receive many different types of surveys, and they could be tired from completing them.  Another, more poignant surprise was the actual outcome of the data, in that it showed there was no distinction between satisfaction levels in the survey groupings.

**Uncontrolled Variables**

Regarding the question on the survey pertaining to advanced degrees, there were a few participants who likely misunderstood the meaning of an Educational Specialist degree.  In their answers, they selected that they had this degree, but noted an area of certification or endorsement as the type.  Thus, such responses were only given the highest status of a Master's Degree because there was not an actual Specialist Degree completed.

**Limitations**

Although there were few threats to validity, possible internal validity threats could include the maturation of participants.  Teachers might have been more inclined to report more or less job satisfaction as they become more experienced in the teaching profession. There might also be a difference based upon the teacher's current educational setting.

 Possible external validity threats might have included interaction of history and treatment effects. Teachers generally experience "burn-out" at various times of the year, and the data could reflect their attitudes toward their jobs during these times.  For example, teachers might report more satisfaction with their positions right before summer break, or at the beginning of the school year (Thorndike, 1997). To limit this, these data were collected through a two-week period of time in the middle of the school year. Although these threats are acknowledged as only possibilities, other internal and external validity concerns were not predicted by the researcher. There was minimal risk for participants in the study. The study was conducted anonymously, at will, and offered non-threatening questions. Confidentiality and privacy are extremely important as to ensure honest responses.  To minimize unpredicted problems, a pilot study was completed with a smaller group of teachers, so that alterations could be made to the survey before the main study commenced.  Data analysis was also conducted in the pilot to anticipate the survey questions accurately measuring data centered on the research questions.

Self-reported data are collected by inviting participants to answer questions individually on their own time.  This is usually done by carrying out a questionnaire or survey.  The primary advantage of the self-report approach is the efficiency with which

data can be collected.  The main drawback of an all self-reported measure is that the researcher must rely on the participants' reports of their own attitudes, thoughts, or behaviors.  Researchers have been aware for a long time that people have an inclination to report their behaviors and manners in a positive light and are faced with the chance that self-reports will generate inaccurate responses.  However, self-reporting is an influential and flexible way to collect information that allows researchers to assess many aspects of a person's world (Vanderstoep & Johnston, 2009).

An additional limitation is that only two items loaded within the Working Conditions factor.  Further research could include additional items added to the scale to enhance this category.

**Conclusions**

Although there was no significant difference found among groups studied, there were quite a few options for additional research.  For example, it could be beneficial to use the data collected to breakdown satisfaction levels between educator demographics (i.e., ethnicity, years of experience) or the setting in which they teach (i.e., elementary vs. secondary, self-contained vs resource).  Another option for additional research would be to develop a survey that would focus deeper into the four loaded factors from the data collected.  For example, developing a survey based solely on Working Conditions or the Benefits of Teaching, might give more insight into those factors.  Lastly, this scale only measured self-assessed job satisfaction levels.  Further research could be conducted comparing these data to actual educator or student performance.  Although there is no statistical significance among these groups in relation to their job satisfaction levels, there is a possibility that the factors in this study might play a role in the variables studied by

other researchers.  Finally, the literature provides factors such as "excessive paperwork"

and "lack of administrator support", among others, which are areas not included in this

study.  Additional research could combine or add to this existing scale questions or

statements regarding these factors.  An example might be adding a statement to the Likert

scale such as "I feel supported by my administrator" to include in the satisfaction data

analysis.  This information, along with the teachers' satisfaction scales, could provide a

better understanding of teacher attrition or retention, and the major contributions to

teachers leaving the field.

     Based on these findings, there remain questions regarding the satisfaction levels

of those with advanced degrees and additional certification. Such questions remain, as

this study showed no significant difference between the groups surveyed, other variables

might be introduced that would show something different.  Some of these variables could

include education setting (both building level and classroom setting), student socio-

economic status, number of years of teaching experience, race or gender of the teacher,

and so on.  Higher education leadership, school administration, and boards of education

would benefit from knowing that this study was only a small portion of the research

dedicated to better understanding around special educator job satisfaction levels.

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## Appendix  A

COPY of Email Invitation to Participate

*Dear Special Education Teacher,*
*I am a special education facilitator/coach for Special School District in St. Louis County in Missouri and a current doctoral student at University of Missouri-St. Louis.  I am working on my research to complete my doctoral requirements, which is centered around teacher satisfaction levels.*

*I am inviting you to participate by completing an online survey, which our field-testing found takes an average of under 5 minutes to complete. The survey contains opinion questions and requests some demographic information.  Your voluntary participation will be completely anonymous. By clicking on the link at the end of this email, you agree to participate in this study.*


Research Questionnaire

1. Please enter your bachelor(s) degree(s) area(s): (e.g., Elementary Education, Teaching Social Science-Secondary)
[Text box]

2. If you have a master's degree, please indicate area(s). (Leave blank if none).
[Text box]

3. If you have an educational specialist degree, please indicate area(s). (Leave blank if none).
[Text box]

4. If you have a doctoral degree, please indicate type (Leave blank if none). (e.g/., Ph.D. E.D.)
[Text box]
Please list the doctoral degree area. (Leave blank if none).
[Text box]

5. Please indicate the areas of **general education certification(s)** you possess. List multiple if applicable.
[Text box]

6. Please indicate the area(s) of  **general education certification(s)** you possess (from list above) that was/were granted from only taking a educational test such as the Praxis, and not from a college or university preparation program
[Text box]

7.  Did you work as a Paraprofessional or teacher assistant prior to working as a certified teacher?
(Check box)
Yes
No


8.  The following items allow you to comment on job satisfaction.  Please respond to them using the following scale.
SD-strongly disagree
D-disagree
U- undecided
A- agree
SA- strongly agree

| | SD | D | U | A | SA |
|---|---|---|---|---|---|
| Teaching provides me with an opportunity to advance professionally. | | | | | |
| Teaching provides an opportunity to use a variety of skills. | | | | | |
| Teaching provides for a secure future. | | | | | |
| I receive full recognition for my successful teaching. | | | | | |
| I get along well with my colleagues. | | | | | |
| Working conditions in my school are comfortable. | | | | | |
| Teaching provides me with the opportunity to help my students learn. | | | | | |
| I like the people with whom I work. | | | | | |
| Teaching is very interesting work. | | | | | |
| My colleagues stimulate me to do better work. | | | | | |
| Teaching provides an opportunity for promotion. | | | | | |
| My colleagues provide me with suggestions or feedback about my teaching. | | | | | |
| Teaching encourages me to be creative. | | | | | |
| The work of a teacher is pleasant. | | | | | |
| Teaching provides a good opportunity for advancement. | | | | | |

| | | | | | |
|---|---|---|---|---|---|
| My interests are similar to those of my colleagues. | | | | | |
| I have made lasting friendships among my colleagues. | | | | | |
| Working conditions in my school are good. | | | | | |
| I get along well with my students. | | | | | |
| | | | | | |

9. Please Indicate Your Current Professional Setting
Check box
Resource
Self-contained
Co-teaching
Facilitator/Coach

Other [Text box]

10. Please Indicate Your Years of Professional Teaching Experience (teacher-level only, not including teaching assistant, paraprofessional and other non-teacher level positions)
Check box

1-5     6-10    11-15  16-20  21-25  26-30  31+

11. Please check the following descriptors that BEST describe the students with whom you work. (You may check more than one.)
Check box
Socio-Economic Status
___ low
___ middle
___ high
___multiple schools or districts with various status

Schools in which you Work
___ elementary
___ middle
___ high
___ multiple levels

This last section contains demographic questions concerning yourself.

Gender (optional)
___Male
___Female
___Prefer not to answer

Ethnicity (optional)
___African American
___Asian
___Caucasian
___Native American or Alaska Native
___Native Hawaiian or Other Pacific Islander
___Other
___ Multiple Ethnicities
___Prefer Not to Answer




After survey is complete...link to:
If you would like to enter your first name and email address for a chance to win a $25 dollar gift card, please do so here:  (this information will not be able to be traced to your answers)
Link
[Text box]