

A CLUSTER-ANALYTIC APPROACH TO UNDERSTANDING THE LIFE VALUES OF
NORTH CAROLINA PUBLIC ALTERNATIVE SCHOOL TEACHERS

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ABSTRACT

ADAM W. JORDAN: A Cluster-Analytic Approach to Understanding the Life Values of North Carolina Public Alternative School Teachers
(Under the direction of Dr. Melissa Shaffer Miller)

Public alternative schools are often a significant defense against school dropout (Souza, 1999). However, little empirical research focused on alternative schools was found. Empirical research focused on the teachers who teach in these settings is even scarcer. The purpose of this descriptive study is two-fold. First, as an initial step in understanding alternative school teachers, their values profiles were explored through the online version of the Life Values Inventory (Crace, 2011). Cluster analysis was used to explore potential subgroups in a meaningful way. Results suggested the values of the alternative school teachers in this sample are quite similar. The values of Respect, Achievement, and Concern for Others were dominant. Second, demographic information on a sample of public alternative school teachers in the state of North Carolina was collected through survey methods. The information gathered is used to suggest potential improvements to alternative school teacher preparation and development.

DEDICATION

To my ladies
Kasey, Adeline, and Annabelle

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This section could easily be longer than the actual dissertation. To be respectful, I will attempt to be succinct, but to all who are mentioned here, please know that I cannot put enough words on paper to thank you enough.

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Amazing Grace, how sweet the sound

that saved a wretch like me!

I once was lost, but now I'm found

was blind but now I see.

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CHAPTER ONE: AN INTRODUCTION TO ALTERNATIVE SCHOOLS AND TEACHER PURPOSE

Alternative Schools

School dropout is often a major concern of public school districts. With research suggesting that students in poverty, in particular, are dropping out at alarming rates (Chapman, Laird, Ifill, & KewalRamani, 2011), school systems must develop methods to reach these students and create an avenue for them to persist. Public alternative schools are often a school system's major defense against scholastic dropout (Souza, 1999). However, little is known about these institutions.

The history of alternative schooling is complex, but the schools that most resemble the alternative schools of today emerged during the 1960s. These schools appeared as private schools formed by parents and stakeholders who wished to provide an alternative to the public school system, but soon public school systems were also developing alternative schools (Raywid, 1999). These early schools took on many forms and served a number of diverse purposes. As time passed, alternative schools increased in popularity and were used as an "answer to juvenile crime and delinquency, a means of preventing school vandalism and violence, a means of dropout prevention, a means of desegregation, and a means of heightening school effectiveness" (Raywid, 1999, pp. 47-48).

Despite increasing alternative school populations, few researchers have focused on alternative education (Gable, Bullock, & Evans, 2006; Souza, 1999). Perhaps the biggest

obstacle to modern alternative education research is the lack of a formal definition (Conley, 2002; Foley & Pang, 2006; Lehr & Lange, 2003; Raywid, 1990). As Conley (2002) stated, “There are probably as many different definitions of alternative education as there are alternative programs” (p. 4). This inconsistency has plagued practitioners and researchers seeking to take part in a consistent, clear conversation about alternative education.

Raywid (1994) attempted to provide some clarity to the definition problem by typing alternative schools as either type I, II, or III. Type I schools were schools making innovative attempts to create a more challenging environment for all types of students. Type II schools were intended to serve students who were disaffected and struggling in the traditional environment. These schools were designed with the intent to “remove disruptive youngsters” (Raywid, 1994, p. 27). According to Raywid, these schools were typically a student’s last chance before expulsion and took a “remediation” approach to schooling. Type III schools were schools focused on responding to the needs of youth considered at-risk. These schools had a dropout prevention focus, and while still serving struggling and disaffected youth, these schools were less punitive in nature than type II alternative schools.

While Raywid’s classification of alternative schools contributed much to bridging the gap in conversation, no formal definition of alternative education officially existed as recently as the late 2000s (Lehr, Tan, & Ysseldyke, 2009). However, as alternative education continues to grow and find a place in mainstream education, most agree that discussing alternative education means discussing schools and programs devoted to serving “students who are at risk for school failure within the traditional educational system” (Lehr, Tan, & Ysseldyke, 2009, p. 19). The United States Department of Education has even begun to define an alternative school as a public school that, “addresses needs of students that typically cannot be met in a regular school, provides

nontraditional education, serves as an adjunct to a regular school, or falls outside the categories of regular, special education, or vocational education” (United States Department of Education, 2011, p. C-1). Still, alternative school literature should be approached with caution as researchers often have various interpretations of the definition of alternative education and alternative schools.

Alternative School Teachers

While little is known about alternative schools in general, almost no formal research has focused on alternative school teachers. Wide-scale demographic information is missing from the professional literature. Essentially, almost nothing is known about who alternative school teachers are, why they choose to be in the profession, how they became alternative school teachers, or what drives their daily decisions. Without this information, both university schools of education and state departments of education are limited in their ability to make data-driven decisions regarding the teacher training and professional development of alternative school teachers. While public alternative schools may indeed be a school district’s most significant defense against school dropout, very little is known about the critically important teachers who make up these institutions.

Even though data regarding alternative school teachers are lacking, it is evident that these teachers are teaching in challenging environments. Conley (2009) described public alternative schools as institutions serving a school system’s “outcasts” (p. 9), thus raising the question of why teachers would choose to teach in these environments. There does not seem to be evidence suggesting that these teachers receive any type of preferential treatment or increased pay that would attract them to alternative education. In fact, some research suggests these teachers actually feel they are pushed to the fringe of professional circles (Kim & Taylor, 2008, pp. 213-

215). Research focused on explaining why alternative school teachers may choose to persist in their profession despite challenging work environments seems to be missing from the professional literature.

North Carolina Alternative Schools and Programs

The North Carolina Department of Public Instruction (NCDPI) oversees alternative schools and programs in the state of North Carolina. NCDPI has described alternative learning programs and schools as follows:

Alternative Learning Programs and Schools (ALPS) are safe, orderly, caring [sic] and inviting learning environments that assist students with overcoming challenges that may place them "at-risk" of academic failure and disruptive behavior so that they can learn, graduate and become productive community contributors. The goal of each program and school is to promote high quality and rigorous academic and safety programs through the development of individual student strengths, talents [sic] and interests. Effective alternative learning programs and schools encompass the following seven principles: Clear Mission, Leadership, Culture and Climate, Professional Development, Parent/Community Involvement, Curriculum and Instruction, and Monitoring and Assessment (North Carolina Department of Public Instruction, 2012).

In North Carolina, public educational alternatives are typified as programs or schools. According to NCDPI (2012), alternative programs are associated with a traditional school whereas alternative schools meet the criteria for assigning an official school code as judged by NCDPI standards (p. 3). There are currently 179 public educational alternative schools and programs in the state of North Carolina. One hundred and two of these are considered alternative programs and 77 are considered to be separate alternative schools. Information

regarding the total number of North Carolina alternative educators is lacking. By tallying data available through North Carolina School Report Cards (2012), it can be estimated that there may be as many as 942 alternative school teachers in North Carolina. However, this number must be considered with caution as it could vary greatly under differing classification parameters. Furthermore, the structure of alternative schools may fluctuate greatly from year to year depending on budgetary constraints and administrative decisions. Information on alternative programs is not available since the data from these programs are reported as part of an overseeing traditional school. Nevertheless, both alternative programs and alternative schools in North Carolina share a common mission and common student population. The distinction is merely organizational. Still, little is known about who alternative school teachers are or what drives their daily decision-making.

The Role of Values

One potential avenue for better understanding alternative school teacher decision-making is through an examination of values. Research indicates that values influence decision making in regards to both career and personal choices (Brown, 1995; Brown & Crace, 1996; Dawis & Lofquist, 1984; Judge & Bretz, 1992; Knoop, 1991; Ravlin & Meglino, 1987). Everyone has his or her values system that underlies decision-making. Brown and Crace (1996) defined values as, “cognized representations of needs that, when developed, provide standards for behavior, orient people to desired end states (Rokeach, 1973), and form the basis for goal setting” (pp. 211-212).

Brown’s Holistic Values-Based Theory of Life Role Choice and Satisfaction (Brown, 1996; Brown & Crace, 1995) is a major theory underpinning much of modern values research. Brown’s work draws heavily from the work of Rokeach (1973) as well as some of the work of

Super (1990). The basic principles as described by Brown and Crace (2002) in the Facilitator's Guide to the Life Values Inventory are as follows:

1. Each person develops a relatively small number of values that are organized into a dynamic values system.
2. Crystallized, highly prioritized values are the most important determinant of life role choices so long as values-based information regarding the choices is available.
3. Values are the dominant factor in the decision-making process, but other factors influence decision making as well.
4. Because of the diverse sources of information and experiences that influence values development, it is likely that each person will have values conflicts.
5. Because of differences in their socialization process and the values laden information they receive, males and females and people from various cultural backgrounds are apt to develop differing values systems.
6. Life satisfaction will be more than the sum of the products of the life roles filled taken separately.
7. Life roles interact in characteristic fashions.
8. The salience of a single role can be determined by the extent to which that role satisfies crystallized, highly prioritized values.
9. Success in a life role will be dependent upon (1) the congruency between the individual's values and those of others in the role; (2) role-related skills the person has developed prior to entering the role; (3) the aptitudes possessed by the person in the role to change as the demands of the role change; and (4) the nature of the interaction of the role with other roles occupied by the individual.

10. Several types of values-based problems develop that require therapeutic interventions (pp. 2-4).

It is evident that values are an important part of the decision-making processes of adults. Given the nature of the teaching profession, it is fair to conclude that teachers must make values-based decisions on a daily basis. Research considering the role of values in teacher decision-making is therefore timely and important research.

Considering the challenging nature of alternative education, it may be beneficial to better understand the values profiles of individuals who have chosen alternative education as a profession. Rarely do pre-service teacher education or teacher professional development programs consider a research-based analysis of the role of values in job satisfaction and performance. These values, however, are a determinant factor in job satisfaction and performance. By taking the first step of better understanding the values profiles of current alternative school teachers, university teacher education programs as well as professional development opportunities for teachers may be better tailored to suit the needs of educators.

Purpose and Research Questions

The purpose of this descriptive study was two-fold. Primarily, the results of this study offer a better understanding of the values profiles of alternative school teachers. North Carolina alternative school teachers were asked to complete the online version of the Life Values Inventory (LVI) (Crace, 2011). This information may be the first known quantitative approach to understanding the life values of alternative school teachers and may pave the way for future research regarding alternative school teacher preparation and professional development. Asking teachers to complete the online version of the LVI allows for the collection of values profiles for a sample of the population of alternative school teachers in North Carolina. The LVI can be

found in the appendix in Appendix 1. According to Brown and Crace (2002), the LVI is a “decision-making aid by people who are grappling with decisions regarding work, education, relationships, and leisure” (p. 1). While the LVI has yet to be used to describe teachers, Brown and Crace have described the LVI as an “attempt to promote holistic thinking in the decision-making process” (p. 1).

The LVI utilizes Brown’s Holistic Values-Based Theory of Life Role Choice and Satisfaction (Brown, 1996; Brown & Crace, 1995) as its theoretical underpinning and consists of 42 Likert-type questions that measure 14 different values. These values are “Achievement, Belonging, Concern for the Environment, Concern for Others, Creativity, Financial Prosperity, Health and Activity, Humility, Independence, Interdependence, Objective Analysis, Privacy, Responsibility, and Spirituality” (Brown & Crace, 2002, p. 3). After completing the 42 Likert-scaled items and scoring the 14 values, the 14 values are ranked according to importance. Then, an individual completing the LVI will be asked to place these 14 values into one of the following categories: High Priority, Over-Attention, Under-Attention, and Medium/Low Priority. The information gleaned is then used to create a values profile for work/academics, relationships, and leisure/community activities. Finally, suggested strategies for attaining “optimal values expression” are introduced.

Both those individuals interested in alternative schools and those interested in the values-based decision making of teachers could benefit from better understanding the demographics and values systems of current alternative school teachers. Essentially, being able to describe a sample of the alternative school population in terms of their underlying values systems could lead to innovations in the way alternative school teachers are trained and developed.

Furthermore, although the sample size may be small, the results of this study offer a first step in describing the alternative school teacher population in North Carolina in terms of professional demographics. Due to the disjointed reporting of alternative program data coupled with a desire to better understand educators who seek a separate alternative environment, only alternative school teachers as identified by the North Carolina Department of Public Instruction were included in this study. Demographic information on this population has yet to be presented in an organized manner. Some basic demographic information, though not entirely reliable, is available through North Carolina Report Cards (2012), but thorough descriptive data are missing from the professional literature. A sample of alternative school teachers as identified by the North Carolina Department of Public Instruction were surveyed in order to obtain information regarding age, sex, race, years of experience, highest degree obtained, job satisfaction, and plans to continue as an alternative school teacher. This information will allow both future researchers and current school districts and departments of public instruction to better understand the population of alternative educators in North Carolina.

Two research questions guided this research:

1. What are the values profiles of current North Carolina alternative school teachers and are there subtypes?
2. What are the demographics of North Carolina alternative school teachers with regard to age, sex, race, college education, job satisfaction, years of teaching experience in alternative schools, total years of teaching experience, and plans to continue in alternative education?

In order to answer these questions, the online version of the Life Values Inventory (LVI) (Crace, 2011) was used along with additional demographic questions administered through Survey

Monkey (See Appendix 2). Descriptive statistics were produced in order to describe the sample. Cluster analysis, employing both hierarchical agglomerative techniques and a k-means approach, were used in order to determine if alternative educators collectively share common values profiles. The results of this descriptive study fill a large gap in the alternative education literature as well as provide a foundation for future work with alternative educators.

CHAPTER TWO: LITERATURE REVIEW OF ALTERNATIVE SCHOOLS AND HUMAN VALUES

Articles specifically focused on alternative school teachers seem to be lacking from the professional literature. In fact, literature focused on alternative schools in general is limited. However, in order to begin to understand alternative school teachers, it is imperative that a clear understanding of the rationale and effectiveness of alternative schools is presented. While the motives of alternative school teachers are currently unknown, it is important to understand the purpose of alternative schools as well as the effectiveness of these schools. First, in order to better understand alternative schools, an overview of their history and rationale as well as a description of the population served is presented. Next, an overview of alternative school effectiveness based on literature focused on school climate, achievement and motivation, as well as delinquency and dropout prevention is provided. Finally, attention is given to outlining the challenges of teaching in an alternative school, including pedagogical decision-making.

Alternative Schools History, Rationale, and Population Served

The original rationale for the creation of alternative schools was quite simply to offer an alternative to the traditional school system, specifically for those students who were not succeeding in traditional schools. Most researchers agree that the modern alternative schools movement began in the politically tumultuous 1960s and was more commonly referred to as the free schools movement (Conley, 2002; Neumann, 2003). As much of public life was under debate and being rearranged in 1960s America, so were schools. As Miller (2002) put it,

“Education is the social institution in which a culture makes its core values and vision of the future most explicit, and when there is significant cultural tension, there must inevitably be controversy over educational ideology and practice” (p. 2). The free school movement was quite clearly formed out of a rebelliousness and disdain for mainstream education (Miller, 2002).

Many point to A.S. Neill’s *Summerhill: A Radical Approach to Child Rearing*, published in 1960, as being the flagship example of the original alternative school (Deal & Nolan, 1978). Summerhill was a school founded decades earlier in 1921 by Neill in England. Neill’s book published in 1960, however, seemed perfectly timed. In a decade remembered partially for its anti-establishment tone, Neill’s words resonated with a subset of the population seeking an educational option outside of the traditional public school. Neill (1960) wrote, “Obviously, a school that makes active children sit at desks studying mostly useless subjects is a bad school” (p. 4). Neill even took his disdain for traditional schooling a step further by stating that such a school is “a good school only for those who believe in *such* a school, for those uncreative citizens who want docile, uncreative children who will fit into a civilization whose standard of success is money” (p. 4). Neill’s approach to education involved allowing students great freedom in managing their own education. While some educators in the United States tried to replicate Neill’s Summerhill, few were successful. While the Summerhill model did work for some students, it was not a successful model for all students (Deal & Nolan, 1978).

Due to the freedom offered to students in these early alternative schools these schools were commonly referred to as “free schools”. The free schools movement, however, would be short lived. These schools declined during the 1960s. Free schools were most always private and depended on external funding to remain operational. Additionally, they were not formed using any certain set of criteria. Providing data on the number of free schools that emerged is

nearly impossible (Miller, 2002). Their importance was not in their direct impact on the educational system as much as it was their ability to establish the precedent that alternatives to the traditional public school system were possible. Free schools were able to bring educational alternatives into mainstream discourse. In doing so the free schools movement eventually branched off into three distinct factions: community-based schools, home schools, and what is understood today as the public alternative schools movement (Miller, 2002).

It is at this point that determining a singular rationale for alternative schools becomes difficult due mostly to the lack of a commonly accepted, formal definition of an alternative school. Certainly the free schools movement gave birth to an alternative schools movement, but despite intertwining histories the two have grown starkly different. The early alternative schools movement that followed the free schools movement represented schools that developed with the purpose of offering a democratic and participatory form of schooling (Neumann, 2003). These schools existed both within and outside of public education and offered a choice. It became obvious that a disdain for traditional public education was growing. The national report *A Nation at Risk* was a landmark example of a public becoming increasingly dissatisfied with status quo public schooling that lacked purpose and direction (Conley, 2002, p. 6).

Today, many of the schools that emerged early in the alternative schools movement would be considered charter schools or magnet schools. Those types of institutions remain within the loosely defined realm of alternative education. Admittedly, some researchers still group charters, magnets, and public alternative schools as well as residential facilities and other educational alternatives (Bullock, 2006; Kim & Taylor, 2008). However, the phrase “alternative school” has a distinct meaning to practitioners and researchers today (Conley, 2002; Lehr, Tan, & Ysseldyke, 2009). Today’s alternative schools are a product of both a demand for school

choice and a demand for more orderly schools aimed at serving disadvantaged and struggling students (Conley, 2002). These schools usually exist in the public domain, are usually secondary schools, and do not attract students who are successful in the traditional setting (Conley, 2002). Often, these schools are depicted negatively and even described as “dumping grounds” for troubled students (Kim & Taylor, 2006, p. 207). Frankly, Conley (2002) may have presented the most honest depiction of today’s alternative schools by stating, “our publicly funded alternative schools have become the exclusive preserve of public education’s outcasts” (p. 9).

While early alternative schools may have been designed to offer choice, it is clear that the alternative schools of today serve the purpose of educating disadvantaged and struggling youth within the public school system. They remain an educational choice, but this is no longer their main rationale for existence. The rationale for modern alternative schools is a far cry from that of the early free and alternative schools. Despite their complex and often difficult history, the rationale for modern alternative schools is to prevent school dropout (Souza, 1999) and serve disadvantaged and struggling students in the public school system (Conley, 2002). Students may still attend alternative schools by student or parental choice, but students often attend alternative schools as a result of mandatory assignment (Lehr, Tan, & Ysseldyke, 2009).

When considering the student body demographics of alternative schools, it is important to consider the demographics of struggling students. It is clear that not all students are successful in traditional schools, and the dropout rate among disadvantaged students is disproportionately higher than that of their peers. Recent dropout data suggested that approximately 3.4 percent of high school students enrolled in public or private high school in October of 2008 had dropped out by October of 2009 (Chapman, Laird, Ifill, & KewalRamani, 2011). Students from lower income families had a dropout rate nearly five times the rate of students from higher income

families with rates of 7.4 and 1.4 percent respectively (Chapman et al., 2011). These are the students that are likely to end up in alternative schools.

These grim statistics are discouraging, but they also help to understand the population of students being served in alternative schools. Large-scale demographic information regarding the current alternative school population is lacking. However, it is obvious that these students are at-risk for dropout. The population of alternative school students likely consists of students from backgrounds of lower socioeconomic status and single-parent homes (Lehr & Lange, 2003). Students with disabilities are twice as likely to drop out of high school thus increasing the likelihood that these students may be served by alternative schools (Lehr & Lange, 2003). Students with behavioral disabilities are also likely candidates for alternative schools. As Simonsen, Britton, and Young (2010) have stated, “Students with disabilities who exhibit chronic and high-intensity (i.e., dangerous) problem behaviors are frequently educated in alternative education settings...” (p. 180).

The struggle with school dropout in the United States indicates that alternative schools are a relevant force in the struggle to educate all students. The history of alternative schooling suggests that this is not a new trend. This history also suggests that alternative schools may have always served as a significant defense against school dropout and a disdain for the traditional mainstream schooling experience. However, how successful alternative schools are at fulfilling their rationale is yet to be determined.

The Effectiveness of Alternative Schools

In order to begin to understand alternative school teachers and the jobs they must perform, it is important to not only understand the rationale for alternative schools but also their effectiveness. After all, it has been suggested that how a teacher is learning and making

decisions is one of the most critical factors of a school's success (Feiman-Nemser, 2001).

Feiman-Nemser (2001) stated student learning is, “directly related to what and how teachers teach; and what and how teachers teach depends on the knowledge, skills, and commitments they bring to their teaching and the opportunities they have to continue learning in and from their practice” (p. 1013). Feiman-Nemser went on to suggest that, if we plan to create schools that profoundly impact student learning, we must provide more powerful and dynamic opportunities for teachers to learn (p. 1014). In order to begin this process, it is imperative to understand, in the case of alternative education, how alternative schools are currently performing. Admittedly, even the introduction of the word “performing” can be problematic and complex, but it is through this lens that one particular glimpse of the state of alternative educators is presented. Understanding teachers and their decision-making processes must include an evaluation of school effectiveness, even if it only offers one particular frame of reference.

According to Lange and Sletten (2002), even though alternative schools “have been in existence for many years, there is still very little consistent, wide-ranging evidence for their effectiveness or even an understanding of their characteristics” (p. 2). Research has lacked an outcome focus. This lack of consistent evidence could be a result of the definition problem. Without clear expectations and standards it is difficult to deem alternative schools effective or ineffective. However, as Gable, Bullock, and Evans (2006) suggested, the lack of outcome-focused research might be due to the fact that alternative schools, “serve extremely homogeneous populations of children and youth in extremely diverse settings” (p. 8). This creates difficulty when trying to generalize alternative school research.

Despite minimal outcome evidence, researchers such as Raywid (2001) have still boldly suggested that alternative schools can serve as models for traditional schools. Raywid cited the

autonomy of the alternative school teacher, the satisfaction of parents, and the improvement of student behavior, motivation, and academics. However, these claims often came with little supporting evidence, and this has been a significant stumbling block in determining the effectiveness of alternative schools and the success of the students who attend them. To complicate the fact that there are already few available studies, most of these studies according to a meta-analysis conducted by Cox, Davidson, and Bynum (1995) did not utilize “true experimental research designs and lack extended follow-ups” (p. 230). The reality is that most outcome-based literature has been focused on one specific alternative school or has offered little in the way of credible evidence (Lange & Sletten, 2002).

Nevertheless, it is evident that alternative schools are a relevant force in the schooling of students at-risk and determining their effectiveness is an important task. Despite a disjointed and shallow literature base, a few researchers have attempted to determine the overall effectiveness of alternative schools. However, measures and definitions of effectiveness varied across studies. Most of the literature in the field is multifaceted with various approaches to determining alternative school effectiveness. The majority of researchers have attempted to define alternative school effectiveness in a broad stroke. Others have focused primarily on delinquency and motivation. Academic achievement has generally existed as a secondary focus of most studies. Other researchers, however, have simply conducted exploratory work intended to describe a successful alternative school climate, but again, the standards for success are loosely defined at best. In order to present a more concise and accurate depiction of the scholarly literature focused on student success in alternative schools, major influential works will be discussed in three sections based on the author’s focus: school climate, achievement and motivation, and finally, dropout and delinquency prevention. While the types of schools considered as alternative

schools fluctuate, major literature focused primarily on the schooling of at-risk students in the public sector has been selected.

School climate. Raywid (1984) produced an early comprehensive review of alternative school effectiveness. While Raywid took a multifaceted approach to both defining alternative schools and determining their effectiveness, school climate was at the forefront of her findings. Many of Raywid's claims were based on her unpublished 1982 survey of alternative schools. In her synthesis of alternative schools, Raywid reported that alternative schools were primarily effective due to their small student to teacher ratio, respectful school climates, reported mutual respect among students and staff, and student and teacher autonomy (Raywid, 1984). Alternative schools were not generally obligated to follow a specific curriculum, but rather teachers were offered choice in both subject matter selection as well as instructional strategy. Additionally, students were allowed to proceed at more individualized paces made possible by the small student to teacher ratio. Raywid reported that alternative schools in general allowed students to improve socially, behaviorally, and academically.

Raywid's work supported the findings of other, previous researchers. Arnove and Strout (1980) reported that the positive school climate created in alternative schools offered a "set of conditions conducive to warm interpersonal relations, academic success, positive images of the future, and enhancement of self-concept" (p. 467). However, many of these claims were based on the self-reporting of alternative school students and staff and should therefore be considered with caution.

More current researchers have indicated the importance of positive school climate (Quinn, Poirier, Faller, Gable, & Tonelson, 2006). Quinn et al. (2006) recognized the definition problem in alternative education as well as the lack of quality research in the field. They

attempted to fill this gap in the literature by identifying the essential components of effective alternative schools (p. 13). In order to do so, three urban alternative schools were selected and the Effective School Battery (ESB) was used in order to assess school climate. The ESB is a “scientifically developed instrument that is used to assess school climate and identify school strengths and areas for improvement” (Quinn et al., 2006, p. 14). The most interesting finding from Quinn et al.’s work was that the alternative school student responses on the ESB were high or very high in comparison to the norm on scales that considered belief in rules, fairness in rules, planning and action, and respect for students. Quinn et al. concluded that troubled students tend to thrive in alternative schools when they “believe that their teachers, staff, and administrators care about and respect them, value their opinion, establish fair rules that they support, are flexible in trying to solve problems, and take a non-authoritarian approach to teaching” (p. 16).

Lagana-Riordan, Aguilar, Franklin, Streeter, Kim, Tripodi, and Hopson (2011) supported the claim that school climate and sense of school membership are indicative of student success in alternative schools. Lagana-Riordan et al. conducted a study in a public alternative high school using qualitative interviewing as well as quantitative survey techniques. Their findings indicated that alternative school students expressed having poor teacher relationships, a feeling of lack of safety, and a perception of overly rigid authority figures in the traditional school setting (Lagana-Riordan et al., pp. 108-109). In contrast, however, these students felt that alternative school allowed them to develop positive teacher relationships, improve their maturity and responsibility, better understand social issues, and form more positive peer relationships in a more supportive atmosphere (Lagana-Riordan et al., pp. 109-110). Students felt that alternative school offered reasonable flexibility and more individualized attention as well as supported student strengths instead of focusing on student weaknesses (Lagana-Riordan et al., p. 112).

Other researchers such as Poyrazli, Ferrer-Wreder, Meister, Forthun, Coatsworth, and Grahame (2008) offered an exploratory approach to understanding what a successful alternative school program may look like. Their approach was more multifaceted, but school climate was still an indicator of alternative school student success. The purpose of their cross-sectional study was to “contribute to the small yet increasingly important evidence base on alternative school students by exploring the relation of academic achievement, employment, gender, and age to students’ experience of alternative school” (p. 550). This study was conducted in a high-needs school district where only 29 percent of students who started middle school eventually graduated from high school. Students attending the alternative school had typical characteristics such as “classroom behavior problems, aggression, poor attendance, academic difficulties, and poverty” (Poyrazli et al., 2008, pp. 550-551).

One hundred and two alternative school students ($n = 102$) were selected for Poyrazli, Ferrer-Wreder, Meister, Forthun, Coatsworth, and Grahame’s (2008) study. While the findings were multifaceted, the most significant results indicated that students’ sense of school membership correlated with their perception of teachers ($r = .52, p < .01$), counselors ($r = .44, p < .01$), and administrators ($r = .42, p < .01$). This result seemed promising as other studies reported increased academic achievement as a result of a positive sense of school membership (Gold & Mann, 1982; Souza, 1999). Unfortunately, Poyrazli et al. did not find a relationship between academic achievement and sense of school membership, but still claimed that, “student’s perceived relationships with school personnel seem to be a key ingredient in defining a positive alternative school environment” (p. 553). This suggests that teachers should have building positive student-teacher relationships as a foundation of their pedagogical decision-making.

Since alternative schools are designed to serve struggling student populations, it is logical to assume that alternative school teachers and staff must find ways to increase a sense of school membership among their student populations in order to combat school apathy and encourage student success. Souza (1999) reasoned that an increased sense of school membership may result in fewer absences and may increase a student's desire to attend school, which in turn may affect academic achievement. However, Souza admitted that further research is needed to evaluate this possibility. Furthermore, extensive research focused on whether or not alternative schools are actually increasing students' sense of school membership is lacking from the literature.

It should be noted that the research on alternative school climate is limited and generally focused on specific settings. However, it is reasonable to assume, based on the existing literature that struggling students may be more successful in alternative schools that promote a positive, supportive environment. Teachers and administrators should consider the impact of school climate. In a qualitative case study of one alternative high school conducted by Kim and Taylor (2008), both teachers and students discussed the positive benefits of an alternative school and expressed a desire to remain in alternative school instead of traditional school. However, both teachers and students also expressed frustrations. Most notably, both groups felt "left out" (pp. 213-215). Alternative school teachers felt they were treated with less respect than their traditional counterparts. Alternative school students, despite having aspirations to attend college, felt that the view of the alternative school was simply to get them through high school with the assumption that most students would not want to, as the principal stated, be "nuclear engineers" (p. 214). Educators and administrators must carefully consider the multifaceted approach to establishing a positive school climate and must attempt to avoid stereotyping.

Student achievement and motivation. Two other areas of focus that share a connection in the alternative school literature are student achievement and motivation. Often, these two areas are discussed together, as one is often seen as a complement to the other. Alternative school students often lack motivation and struggle academically. However, little is known about how effective alternative schools are at bolstering student motivation and achievement. Cox, Davidson, and Bynum (1995) used a meta-analytic approach to investigate the connection between alternative schools and student motivation and achievement. They also considered the effects of alternative schools on diminishing delinquency. Cox et al. reviewed the literature in the field of alternative schooling and used meta-analysis to produce a quantitative summary of prior empirical research in the area of alternative schooling. They included a broad range of alternative school literature, including unpublished papers. Cox et al. recognized the conflicting findings of many alternative school studies as well as acknowledged the expanding state of the modern alternative school movement.

After surveying the literature on alternative schooling and delinquency, 57 studies ($n = 57$) were included in the meta-analysis. Focus was given to the overall effectiveness of alternative schools, delinquency, school performance, school attitude, and student self-esteem. The meta-analysis was conducted using two methods, vote counting and effect sizes. The studies were categorized as either being a comparison or pre-post design. Despite commonalities, the findings differed by method. The vote counting method revealed that 63% of studies with a comparison research design and 50% of studies with a pre-post research design indicated a positive effect on school attitude. It is difficult to consider the strength of other variables (e.g. delinquency, school performance, and self-esteem) as results varied considerably across methods and research designs.

When considering the effect size method, however, it appears that alternative schools generally have overall positive effects. Studies were grouped into two groups based on research design: pre-post design and studies that used a comparison group. Cox et al. calculated effect sizes using formulas developed by Hunter and Schmidt (1990). Significance was assessed using 95% confidence intervals. According to Cox et al. (1995), “If the confidence interval includes zero, the null hypothesis cannot be rejected, meaning the intervention had not effect on changing the outcome variable” (p. 225). With the exception of delinquency, the mean effect sizes for all outcomes across both research designs produced mean effect sizes greater than zero, thus indicating a positive effect. Mean effect sizes and 95% confidence intervals for each variable and research design are indicated in Table 1.

Table 1

Cox, Davidson, and Bynum (1995) Meta-Analysis Mean Effect Sizes and Confidence Intervals

Variable	Research Design	Mean Effect Size	95% Confidence Interval	
			Lower Limit	Upper Limit
Overall	Comparison	.11	.04	.12
	Pre-post	.36	.23	.43
Delinquency	Comparison	.00	-.05	.11
	Pre-post	.40	-.20	.66
School Performance	Comparison	.06	.00	.11
	Pre-post	.34	.17	.37
School Attitude	Comparison	.22	.08	.31
	Pre-post	.38	.31	.62
Self-Esteem	Comparison	.09	.02	.11
	Pre-post	.34	.14	.42

Note. Adapted from “A Meta-Analytic Assessment of Delinquency-Related Outcomes of Alternative Education Programs,” by S. Cox, W.S. Davidson, and T. Bynum, 1995, *Crime and Delinquency*, 41, p. 228.

One of the most intriguing findings of Cox et al.'s (1995) meta-analysis lies in the claim that the methodology of alternative school studies plays a significant role in the outcome. Cox et al. (1995) claimed that alternative school literature lacked "true experimental research designs and lack extended follow-ups" (p. 230). In fact, they recognized the significant lack of alternative school research in general and cited the lack of published studies as "the majority of studies included in the meta-analysis were found in ERIC as unpublished final reports" (p. 230). They concluded that little is known regarding the success of alternative schools (p. 230).

Cox (1999) continued his work with alternative schools by focusing on an alternative school for middle school students in a large Midwestern city. It should be noted that the alternative school was run by a non-profit organization and not the local school system. Nevertheless, there are strong similarities in the structure of this school and typical public alternative schools. The student sample consisted of 83 middle school students ($n = 83$) identified as at-risk. Through random assignment, 41 of these students were selected for the treatment group. These students attended the alternative school for one semester and then returned to the traditional school. The other 42 comprised the control group. These students remained in the traditional school environment. Cox incorporated a treatment and control design and data were collected from student interviews as well as from official school records that included student grade point average, standardized academic achievement tests, and school absence reports.

Cox (1999) investigated grade point averages, attendance, standardized test scores, attitudes towards school, self-esteem, attendance, and self-reported delinquency. Cox found that there were no differences between those students who attended alternative school and those who remained in the traditional school in the areas of self-reported delinquency, attitudes toward

school, or on standardized achievement test scores. Perhaps one semester was too weak of a treatment to affect these areas. Nevertheless, he did find, that self-esteem, grade point averages, and attendance were positively affected by alternative school enrollment. Students who attended the alternative school showed increased self-esteem, improved grade point averages, and improved attendance. The positive effects of the alternative school, however, dissipated when students returned to their traditional schools and Cox attributed this to the possibility of differing grading practices and a more relaxed alternative school environment. Cox's study, while localized, suggested that alternative schools could have a positive effect on student success, but once again, this research must be considered cautiously as it is only a representation of one particular alternative school, and several possible explanations for student success exist.

Other researchers have focused more directly on alternative schools and motivation. Nichols and Utesch (1998) conducted a pilot study that was continued in the work of Nichols and Steffy (1999). The focus of this research was to determine the impact of alternative schooling on student motivation and self-esteem. The findings of each study are nearly identical and are equally important in understanding the effectiveness of alternative schooling on student motivation and academic achievement.

Nichols and Utesch (1998) acknowledged the difficulties in researching alternative schooling while maintaining that alternative school could be a potential avenue for increasing student achievement based on research linking student motivation and self-esteem with school success (Meece, Blumenfeld, & Hoyle, 1988; Nichols, 1996; Nichols & Miller, 1994; Pintrich & DeGroot, 1990). Research by Nichols and Utesch as well as Nichols and Steffy (1999) was conducted in a large urban school district in the Midwest. Self-efficacy, goal orientation, and self-esteem were specifically investigated. Self-efficacy was defined as, "an individual's

personal evaluation or confidence in his or her performance capability on a specific task” (p. 273). Goal orientation was defined by considering individuals with performance goals, or individuals who “are concerned with positive evaluations of their abilities in comparison with others” (p. 273). Self-esteem was defined as “the value that each of us places on our own abilities and behaviors” (p. 273).

The participants in both the Nichols and Utesch (1998) and Nichols and Steffy (1999) studies were students in an alternative school designed to help students develop academically and socially while increasing self-esteem. The alternative program was intended to “provide a short-term alternative instructional program for those students in grades 6-12 who have lost the privilege of attending their home school” (Nichols & Utesch, 1998, p. 273). Both studies used a Likert-type questionnaire in order to assess student motivation and self-esteem. The survey was administered to the students as they entered the program and again as they exited the program twelve weeks later. Nichols and Utesch (1998) claimed that students who completed this alternative learning program showed considerable increases in extrinsic motivation $t(38) = 4.92$, $p < .01$, persistence $t(38) = 2.60$, $p < .05$, home self-esteem $t(38) = 3.33$, $p < .01$, peer self-esteem $t(38) = 4.46$, $p < .01$, and school self-esteem $t(38) = 4.8$, $p < .01$, (p. 276). Nichols and Steffy used the results of ANCOVAs to claim that alternative school students showed increases in the learning goal subscale, $F(1, 30) = 2.61$, $p = .015$, self-regulation, $F(1, 30) = 3.91$, $p = .001$, school self-esteem, $F(1, 30) = 2.40$, $p = .026$, and peer self-esteem, $F(1, 30) = 2.19$, $p = .038$ (p. 215). While the general consensus in the literature is that alternative schools can have a positive impact on student academic achievement and motivation, the reality is that this claim must be considered with considerable caution. The primary drawback of the existing research is the fact that the studies are localized. Since alternative schools are by nature extremely diverse,

results may not be transferable to other settings. Additionally, this body of research is becoming dated. Research regarding alternative schools and their impact on student achievement and motivation is lacking within the last decade. Considering the constantly evolving nature of schools, this is troubling.

Dropout and delinquency prevention. Alternative schools are often considered as a means to prevent scholastic dropout (Souza, 1999). Students enrolled in alternative schools are at a high risk for becoming high school dropouts (Ruebel, Ruebel, & O’Laughlin, 2001). Alternative school staff are commissioned not only with the task of teaching and motivating students, but also with the task of keeping students in school and reducing delinquent behavior. Recent research suggested that school disengagement might be a predictor of future dropout probability (Henry, Knight, & Thornberry, 2012). Furthermore, recent research also suggested that continued delinquent behavior that results in an eventual arrest may make a student more than eight times more likely to drop out of high school (Hirschfield, 2009). Surprisingly, however, little research exists with a specific focus on alternative school dropout or delinquency.

Gold and Mann (1982) conducted a longitudinal study considering the effectiveness of alternative schools in improving the behavior of students considered delinquent or disruptive (p. 305). They selected three alternative schools that served the purpose of educating students considered to be behavior problems in the local traditional school setting. The students attending these schools were considered to have problems with “chronic truancy, disruptive behavior, and serious delinquency” (Gold & Mann, 1982, p. 306). Alternative schools that purposefully provided students experiences of success through individualized instruction and assessment were selected. A staff of warm, accepting teachers was also a prerequisite for site selection. Students in the alternative school settings were compared with a comparison group of students in the local

traditional schools who had been identified by school staff as being candidates for alternative placement.

Although Gold and Mann's (1982) study is now thirty years old, it remains relevant and is one of the largest studies of alternative school effectiveness to date with a sample size of 240 students ($n = 240$). One hundred alternative school students and 140 traditional school students were included in this study. Gold and Mann conducted three rounds of interviews and asked students to self-report regarding their perceptions of flexibility and fairness of their schools' policies and rules, their beliefs in their chances of being successful students, how well they were performing academically as students, and their overall attitude towards school (p. 308). Interviews were conducted early in the school year, at the end of the school year, and once more the following fall. The results of Gold and Mann's study provided significant insight into how effective alternative schools are at reducing problem behaviors and delinquency.

Gold and Mann (1982) grouped alternative school students into one of two types: "beset" and "buoyant" (p. 309). Beset students were considered to be students who exhibited high levels of anxiety and depression during the first round of interviews, as opposed to their more "buoyant" peers. About one-third of the students in the study were considered "beset". Gold and Mann found that alternative schools "made a significant difference in the behavior of their more buoyant students, but they had a negligible effect on the more beset students" (p. 309). Buoyant students responded more positively to the alternative school environment than the beset students. This was attributed to the fact that buoyant students tended to express more hope in their academic prospects once they realized the flexible and supportive nature of the alternative school (p. 310). These students spoke highly of the supportive, caring nature of the alternative school. Over the course of the study, the buoyant students began to earn higher grades and

misbehave less in the classroom. These students even showed improved performance after returning to the traditional school setting. The beset students, however, continued to struggle academically and behaviorally with no noted significant improvements over the course of the study. Despite the success of the buoyant students, the continued struggles of the beset students raises the question of how alternative schools should approach the education of the most anxious and depressed students.

Epstein (1992) offered a similar depiction of alternative school students' success by using case study research. Epstein's research was focused on high school dropouts who decide to "drop back in" to alternative schools in order to complete their high school education. In her research, Epstein focused on two students, Luanna and Thomas, who had dropped out of school but eventually attended and graduated from Street Academy, an alternative high school.

The experiences of Luanna and Thomas in the traditional school were markedly similar. Both felt like they were not supported and were judged for either their race or socioeconomic status. They both felt as though no one in the traditional school cared if they succeeded or failed. At Street Academy, however, both reported that caring, supportive teachers were present. When asked why she felt she was successful at Street Academy, Luanna stated, "I think it was the way the teachers taught. They taught in a positive way. Instead of acting like, 'No, you don't know the answer. Oh, my.' That is total humiliation" (Epstein, 1992, p. 58). Similarly, Thomas spoke positively about the care shown by Street Academy staff, but with regard to teachers in the traditional school he stated, "When I did go to class they would laugh and tease me and say, 'You ain't going to make it.' I didn't trip off it. But when the English teacher would tease me in front of other people it made me not go any more" (Epstein, 1992, p. 61).

Several themes in Epstein's (1992) research resonate with other researchers such as Gold and Mann (1982). The students in Epstein's research felt alienated, neglected, and even oppressed in the traditional school. These students fit the typical alternative school student profile as they struggled both academically and behaviorally. The alternative school, however, offered a more nurturing environment with more individualized instruction, and at least for these students, a place to be successful. Researchers such as Tobin and Sprague (2000) have suggested that this type of environment allows teachers to utilize more positive as opposed to preventative behavior management techniques.

Later research conducted by May and Copeland (1998) corroborated the findings of Epstein (1992). Through qualitative interviewing techniques, May and Copeland found that alternative school students most frequently noted site based factors that enabled them to complete their education successfully and avoid dropout (p. 204). Interestingly, students reported the importance of a caring and supporting teacher in the alternative setting (May & Copeland, 1998, p. 205). May and Copeland reported that the relationship between student and teacher in the alternative school setting was vital to students' scholastic persistence (p. 207). These findings coupled with the findings Epstein and Gold and Mann (1982) suggest that alternative school students can find success and avoid dropping out of high school when they are taught in an environment with a caring, supportive teacher.

More recent research on alternative schools and delinquency is sparse. Van Acker (2007) produced what is perhaps the most prominent, recent work regarding alternative schools and delinquent behavior. One of Van Acker's most notable claims was that delinquent behavior in schools could be a result of "ineffective schooling and feelings of frustration and failure" (p. 6). In his synthesis of research on anti-social and delinquent behavior Van Acker recognized that

alternative schools could potentially be a successful avenue for behaviorally struggling students. However, alternative schools often lacked resources and teachers, despite being caring, often lacked specific training (p. 7). Unfortunately, Van Acker also acknowledged the lack of information needed to provide a clear understanding of effective alternative schools (p. 10).

Summary. Once more, it is clear that the current alternative school movement lacks a rich, descriptive literature base that would aid in understanding alternative school purpose and effectiveness. However, a review of the available literature in this area suggests that alternative schools are positively serving students at-risk for dropout. Alternative schools seem to be intent on improving students' educational experiences with a more student-centered approach. At least by some measures of success alternative schools seem to be achieving this goal. Perhaps most interestingly, a large part of this success seems to hinge upon the characteristics of the teachers in these settings. Further research is certainly needed, but the current literature base does provide insight into not only the types of students who are successful in alternative schools, but also the types of teachers who may thrive in these settings. However, the picture is not entirely rosy. Teaching in this type of setting undoubtedly comes with associated difficulties and tough decision-making.

Teaching Challenges and Pedagogical Decisions of Alternative School Teachers

Despite a disjointed literature base, lack of information on alternative school teachers, or even a lack of data on alternative school effectiveness, it does not require a stretch of the imagination to deduce that alternative school teachers face some unique challenges. Alternative schools, by definition, serve students who are struggling academically and behaviorally. Furthermore, as indicated by Simonsen, Britton, and Young (2010), a large percentage of

students in alternative education are students with disabilities. This may be challenging for teachers who may lack training to deal with these issues.

In reality, all teachers are being faced with more diverse student populations and high demands, not just alternative educators. As special education students become a part of mainstream education, as English Language Learners become more prominent, and as schools continue to become more culturally diverse, educators must adapt and make appropriate decisions for the good of their students (Banks, Cochran-Smith, Moll, Richert, Zeichner, LePage, Darling-Hammond, Duffy, & McDonald, 2005). Understanding the challenges that are specific to alternative school teachers is difficult due to a lack of information. However, alternative schools are clearly an intervention for at-risk students. Related research indicated that at-risk students who are placed in lower tracks generally achieved less, had poorer teacher-student interaction experiences, and were presented a less academically challenging, more behavioral focused curriculum (Eckstrom & Villegas, 1991; Gamoran and Mare, 1989; Good & Brophy, 1989; Oakes, 1992). While this may not directly apply to alternative education, it is a reasonable concern given the predominately at-risk population served in alternative schools.

As a result of the changing demographics of schools, researchers (e.g., Banks, Cochran-Smith, Moll, Richert, Zeichner, LePage, Darling-Hammond, Duffy, and McDonald (2005)) have suggested that teachers become more aware and more conscious of their student interactions and pedagogical decisions. Teachers are human beings and are subject to the pitfalls associated with the human brain. For example, some researchers have suggested that teachers may hold more negative attitudes about the potential ability of children of color (Irvine, 1990), or that teachers may hold the misconception that students in special education should only focus on the rote acquisition of skills (Banks et al., 2005).

Hammerness, Darling-Hammond, Bransford, Berliner, Cochran-Smith, McDonald, and Zeichner (2005) have suggested a few ways teachers can prepare to meet the demands of teaching in today's schools. These researchers suggested that teachers begin to think about teaching in ways that are different than their own educational experiences, to put what they already know into action, and to improve decision-making by learning to think systematically (p. 359). While there are numerous and differing approaches to how teachers should be trained to develop these skills, it is important to consider that as teachers develop they begin to develop a professional identity (Hammerness, 2006). This identity is complex and develops alongside teachers' other societal identities. This identity development is an important part of "securing teachers' commitment to their work and adherence to professional norms of practice" (Hammerness et. al, 2005, p. 383).

Alternative school teacher values. As alternative school teachers face difficult decisions and begin to develop the professional identity referred to by Hammerness (2006), it is important to consider how this identity matches what is known about successful alternative school experiences. The idea of an alternative school teacher possessing certain values-based characteristics that help promote student success in alternative schools has yet to be explored in depth, but undertones of the importance of certain values exist in the literature. Students in alternative schools seem to consistently report that they need a teacher who shows them respect and who cares (Epstein, 1992; Gold & Mann, 1982, Lagana-Riordan, Aguilar, Franklin, Streeter, Kim, Tripodi, & Hopson, 2011). It may be possible to better understand this process by considering a broad perspective on the formation of human values systems.

Human Values

While there is little known about alternative schools, there is even less known about the teachers who teach in these settings. However, embedded within student-focused research, a theme of the alternative school teacher as being “different” has emerged. Several researchers have indicated students reporting alternative school teachers as being more caring and helpful than traditional teachers (Epstein, 1992; Lagana-Riordan, 2011, May & Copeland, 1998; Poyrazli, 1999; Quinn, Poirier, Faller, Gable, Tonelson et al., 2006). While this theme has yet to be explored in detail, it seems evident that there may be some characteristic of alternative school teachers that differentiates them from traditional teachers. Given this indication, one area worth exploring is that of human values.

The concept of human values as pertaining to this study is derived largely from the works of Rokeach (1973), Brown (1990, 1996, 2002), and Brown and Crace (1996). Rokeach’s work is particularly important as it underpins the work of Brown and Crace. Rokeach briefly defined a value as, “an enduring belief that a specific mode of conduct or end-state of existence is personally or socially preferable to an opposite or converse mode of conduct or end-state of existence” (p. 5). When these beliefs came together, according to Rokeach, a value system is formed. A value system according to Rokeach is “an enduring organization of beliefs concerning preferable modes of conduct or end-states of existence along a continuum of relative importance” (p. 5).

Rokeach (1973) presented the idea that, although a person’s values can change over time, they also possess an enduring quality. He posited that values are typically taught in an absolute, all-or-nothing manner. As individuals mature they are introduced to various situations that force

them to consider which values they hold most important. To explain this more clearly, Rokeach offered an analogy:

Most parents tend to think they love each of their children in an absolute, unqualified manner. Yet, in a particular circumstance, a parent may nevertheless be forced to show a preference for one child over the others- for the one who is perhaps the most ill or the most needful or frustrated, or the least able in school. Our values are like the children we love so dearly. When we think about, talk about, or try to teach one of our values to others, we typically do so without remembering the other values, thus regarding them as absolute (p. 6).

Given this perception of values, Rokeach (1973) suggested that as individuals develop values, those values become ranked on a continuum of importance. Rokeach stated, “After a value is learned it becomes integrated somehow into an organized system of values wherein each value is ordered in priority with respect to other values” (p. 11). The rankings of values in this continuum may shift over time, but typically the values system formed by this conglomeration of values remains relatively stable over time (p. 11). Furthermore, Rokeach suggested that this conglomeration of values is actually comprised of a relatively small number of core values (p. 11).

The function of these values and values systems is quite simple. As Rokeach (1973) stated, values serve as “standards that guide ongoing activities” and values systems become “general plans employed to resolve conflicts and to make decisions” (p. 12). Rokeach offered that values were actually used to give expression to human needs (p. 12). A person’s values system, then, is the basis for how he or she goes about making the numerous decisions that

accompany daily life. These values essentially guide decision-making in any number of areas. They are the underpinnings of our conscious and unconscious choices.

Brown (1995, 1996) has taken much of Rokeach's (1973) original work on human values and comprised his Values-Based, Holistic Model of Career and Life-Role Choices and Satisfaction. Brown's theory is also, although to a much lesser extent, based on the work of Super (1953, 1970), and to an even lesser extent, Beck (1987). Nevertheless, Brown's theory is unique and though based on previous work it is quite original.

Brown's original theory was introduced in his own 1995 work and again in the work of Brown and Crace (1995), but in 1996 Brown revisited his theory and offered a more concrete and outlined perspective. Essentially, Brown (1996) agreed with Rokeach (1973) and saw values as being "beliefs that have cognitive, affective, and behavioral components" (p. 339). The cognitive component of values, according to Brown, "contains both the destination for life's journey and the means of reaching it" (p. 339). The affective component "activates automatically as people interact with their environment and as they engage in introspective thinking" (Brown, 1996, p. 339). In terms of the behavioral component, Brown offered that values are simply the "cognitive structures that allow individuals to meet their needs in a socially acceptable way" (p. 339). Because our needs are biologically based, they then manifest themselves in specific situations (p. 339). When these situations, whether it be obtaining food, considering financial decisions, or some other needs based activity, our values are activated and guide our decision making. In essence, our values are stable, cognitive structures that allow us to navigate the necessary decision making associated with life.

Values, then, according to Brown (1996), serve a number of basic purposes in the way human-beings function in their worlds (p. 340). They "provide standards against which people

judge their own actions, as well as the behavior of others” (p. 340). Values also allow individuals to rationalize their own behavior. As Brown outlined, someone who does not feel that altruism is an important value and rather ascribes to a materialistic value system can rationalize why they may not be particularly interested in charitable donations (p. 340).

According to Brown (1996), our values develop as “a result of the interaction between inherited characteristics and experience” (p. 340). On a daily basis we are bombarded with messages suggesting we ascribe to certain values. Brown suggested that our values develop in “bits and pieces” and form a “dynamic cognitive chromosome” that will serve to guide our behaviors (p. 341). These values can shift slightly over time with new experiences and as values begin to conflict with one another. Some values, however, become personally relevant to a greater extent and become an active part of cognition. Brown typifies these values as being “crystallized” (p. 341). Other values may have little effect on cognition, but are still important as they may emerge later in life as crystallized based on experiences. When all of these values are combined a “values system” emerges (Rokeach, 1973; Brown, 1996).

Brown’s (1996) theory has been used most heavily when considering career-based decisions. While the tenets of Brown’s (1996) theory remain active today, Brown did slightly revise his theory in 2002. Brown (2002) recognized that with respect to values-based occupational theories, the viewpoints of ethnic and cultural minorities were largely ignored (p. 80). Brown’s theory has thus evolved to “include cultural values and has narrowed to focus strictly on occupational choice, satisfaction, and success” (p. 511). However, the values-related theoretical underpinning remains the same.

A number of researchers have recognized that a person’s values system directly impacts his or her career-related decisions (Brown, 1995, 1996, 2002; Dawis & Loquats, 1984; Judge &

Bretz, 1992; Knoop, 1991, Ravlin & Meglino, 1987). These researchers have suggested that understanding the values system an individual brings to a work environment may impact the way these workers adjust to an environment. As Dawis and Lofquiest (1984) explained, “understanding the nature of the characteristics that individuals bring to work and those that the work environment presents to individuals helps to provide the context for a more formal treatment of work adjustment” (p. 10).

As values are cognitive process, there is importance in understanding one’s values, particularly when considering career-based decisions. As Judge and Bretz (1992) explained, “values are an important determinant of person-organizational fit” (p. 269). Ravlin and Meglino (1987) also concluded that in terms of careers “values act as a guide or standard for decision making” (p. 672). The purpose of this study is to consider the values of alternative school teachers and consider the potential impact of values profiling on future work in regards to teacher career-based decision making.

Why Study Alternative School Teacher Values?

There are a couple of fundamental reasons for studying the values of alternative school teachers. Perhaps at a basic level, this type of information will fill a gap in the professional literature. A description of the values profiles of alternative school teachers is lacking from the literature, yet research indicates that values are an important factor in professional decision-making and career choice. When considering the components needed to create a successful alternative school, it would be naïve to ignore the values of the teachers that make up the school.

At a more complex, and perhaps even more relevant level, preparing and equipping alternative school teachers is an incredibly important task that has been largely ignored in teacher preparation institutions. Teacher turnover among the general population of teachers is

significant. According to the Alliance for Excellent Education (2013) 14% of new teachers leave by the end of their first year, 33% leave within three years, and an alarming 50% leave by the end of their fifth year.

As alternative school teachers consistently face challenging situations with our nation's most at-risk students, it is important to help prepare them for the task ahead as well as offer some information on the values of individuals who work within these systems. A review of the literature reveals a theme of the alternative school teacher being "different". Primarily, a review of the literature suggests that alternative school teachers place importance on the values of respect and caring for others. These are the values described by students like those in the work of Epstein (1992), Gold and Mann (1982) and Lagana-Riordan, Aguilar, Franklin, Streeter, Kim, Tripodi, and Hopson (2011). There is great potential in determining if a sample of current alternative school teachers mirrors these values and if so, exploring ways in which teacher education may be improved to address the role of values in teacher decision-making.

Summary

Little is available in the way of empirical evidence regarding alternative schools and programs. Even less is known about the teachers who teach in these settings. From the information that is available regarding alternative schools and programs it is apparent that these schools and programs are filled with teachers who are being asked to teach a group of students that offers various academic and behavioral challenges. Modern alternative schooling is intended to curb the dropout problem by offering a more appropriate education to students who have consistently experienced scholastic failure.

With regard to values, it is evident that the decision-making of human beings is guided largely by a values system that develops over time as a result of various formal and informal

experiences. Understanding these value systems may be advantageous on an individual level. It is also apparent that the profession of teaching requires constant decision-making paired with considerable self-reflection. It may be particularly advantageous for teacher educators and school district administrative personnel to better understand the values profile of the alternative school teacher population. This information could be used to help develop a more appropriate teacher education and professional development experience. As Shaver and Strong (1982) have suggested, it is imperative that teachers begin to understand their values system and begin to build a framework for professional decision-making. If alternative school teachers share a collective value system, potential opportunities for improving teacher education and professional development could be explored. Regardless, the population of alternative school teachers has been ignored far too long and there is great value in seeking to better understand this group of teachers.

CHAPTER THREE: METHODS AND PROCEDURES

The goal of this study was to better understand the population of North Carolina alternative school teachers through descriptive and exploratory methods. In order to conduct this research, public alternative school teachers from across the state of North Carolina were invited to participate. Data were gathered through a compilation of data available from the North Carolina Department of Public Instruction, demographic survey information, and the online version of the Life Values Inventory (2002). The following provides detailed information regarding participant selection, instruments utilized, data analyses, and procedures. Potential limitations are also discussed.

Participants

Alternative school teachers in the state of North Carolina were invited to participate in this study. According to information provided by the North Carolina Department of Public Instruction (NCDPI), 77 public alternative schools are currently operational in the state of North Carolina. For the purposes of this study, only those teachers teaching in public alternatives that met the criteria put forth by NCDPI to operate as separate alternative schools were considered. While there are approximately 102 alternative programs in addition to the 77 alternative schools across 56 districts that are currently operational in the state of North Carolina, data on these programs is lacking. Furthermore, since these programs do not meet the standards to function as separate alternative schools, little information is available to confirm the target populations of these programs, whether or not they employ certified teachers, or whether or not these teachers

would consider themselves alternative educators. Alternative programs may certainly be a focus of future research, but only public alternative schools were considered for this study.

All North Carolina public school districts that included an alternative school were invited to participate in the study. However, due to extensive locally mandated research protocols, not all districts chose to participate. Principals of all North Carolina alternative schools were contacted via email, informed of the study, and invited to participate on February 18, 2013. Recruitment continued through the end of April, 2013. Through the recruitment process, 18 districts and 18 alternative schools expressed interest in the study. Local research protocols were completed for all of these districts. Sixteen of these districts provided local approval. This resulted in a sample of 136 alternative school teachers from 16 districts in 16 alternative schools across North Carolina.

Instruments

Descriptive statistics. A tallying of information on North Carolina alternative schools as reported by North Carolina School Report Card (2012) suggested that in the 2011-2012 school year there could be as many as 942 alternative school teachers in North Carolina. Based on a calculation of 942 teachers tallied from NC Report Card data from the 2011-2012 school year, 93% of these teachers were considered to be fully licensed teachers and 27% of these teachers reported having “advanced degrees”, meaning a master’s degree or higher. About 18% of these teachers had between zero and three years of teaching experience, 29% had between four and ten years, and 53% reported having more than 10 years of teaching experience.

Beyond this very basic demographic information, little else was known about these teachers. Even these data must be considered with caution. A follow-up examination of this information revealed that several of the schools included in these calculations are not currently

operational. This is typical given the constantly shifting nature of alternative education. Part of the purpose of this study is to begin to better understand a sample of the population of alternative school teachers. For this reason participants were surveyed for demographic information regarding age, sex, race, and more specifics on college education. Furthermore, demographic data were collected regarding whether or not alternative school teachers are satisfied with their jobs as well as whether or not they plan to persist in alternative education. The data were collected through an online survey as well as through the demographic information provided during registration for the online version of the Life Values Inventory (Crace, 2011).

The Life Values Inventory. The values of North Carolina alternative school teachers were explored through the online version of the Life Values Inventory (LVI) (Crace, 2011). Brown and Crace originally developed the LVI in 1996, made slight revisions in 2002, and introduced an online version in 2011. According to Brown and Crace (2002), the LVI is to “be used as a decision-making aid by people who are grappling with decisions regarding work, education, relationships, and leisure” (p. 1). It is also an “attempt to promote holistic thinking in the decision-making process” (Brown & Crace, 2002, p. 1). Brown and Crace recognized a gap in the use of work values inventories to effect life role decision making. The LVI is their attempt at bridging this gap.

Brown and Crace (2002) have used Rokeach’s (1973) definition of values. As Brown and Crace described, values are “standards that not only guide the behavior of the individuals who hold them, but serve as their basis for judging the behavior of others” (pp. 1-2). Brown and Crace also posited that values not only provide individuals with a “basis for judging the appropriateness of their behavior in the present, they provide individuals with a sense of what ends they would like to attain in the future” (p. 2).

As described earlier, Brown's Holistic Values-Based Theory of Life Role Choice and Satisfaction (Brown, 1996; Brown & Crace, 1995) theoretically underpins the LVI. Basically, Brown's (1996) theory suggests that people possess a few, highly prioritized values that guide decision-making. These values are a part of a person's whole life, but they are of particular interest in regards to this study when considering the role values play in professional decision-making. According to Brown and Crace (2002), the LVI consists of "42 items that measure 14 relatively independent values. The values measured by the LVI are Achievement, Belonging, Concern for the Environment, Concern for Others, Creativity, Financial Prosperity, Health and Activity, Humility, Independence, Interdependence, Objective Analysis, Privacy, Responsibility, and Spirituality" (p. 3).

The first step in the LVI involves completing a 42-item Likert-type questionnaire. Each value has three associated Likert-scaled items. Participants rank the items on a scale of one to five based on the importance of the item to the participant. A score of one indicates that the participant considers the value "almost never guides my behavior", a three indicates that the value "occasionally guides my behavior", and a five indicates that a value "almost always guides my behavior" (Brown & Crace, 2002, p. 5). The cumulative scores are used to rank the 14 values in order of indicated importance to the participant. Participants are then asked to rank these 14 values in terms of whether or not they view each value as being a high priority, something they feel they pay too much attention to, something they feel they do not pay enough attention to, or if that value is a low/medium priority. Participants then rank each value within each category they chose to assign. Finally, participants are asked whether or not each value is a part of their Work/Academics, Relationships, Leisure/Community Activities, or Other. A values profile is created from this information.

According to Brown and Crace (2002), the development of the LVI took place in four stages. In the initial stage the LVI was given to 266 university students and 153 community college students ($n = 419$) (Brown & Crace, 2002, p. 5). As Brown and Crace (2002) stated:

The ages of the subjects ranged from 18 to 55 years with 78.7% of the sample ranging from 18 to 22 years ($N = 328$; $M = 22.49$). The sample consisted of 254 females (60.6%) and 159 males (40.0%). Six cases (1.4%) could not be classified according to gender due to missing information. The ethnic distribution of the sample was as follows: Caucasian ($N = 346$, 82.6%), African American ($N = 58$, 13.8%), Native American ($N = 4$, 1.0%), Asian Pacific American ($N = 4$, 1.0), and Hispanic ($N = 3$, 0.7%). Two individuals (0.5%) could not be classified. All inventories were administered in classroom settings (p. 6).

Brown and Crace (2002) indicated that a series of principal axis factor analyses with promax rotation were then completed on the original 141-item inventory (p. 6). It was concluded that a 10-factor structure with 45 items yielded the best solution (Brown & Crace, 2002, p.6). This structure accounted for 57.88% of the total variance (Brown & Crace, 2002, p. 6). Following this factor analysis, the LVI was reduced to 45 items (Brown & Crace, 2002, p. 6).

In stage two of the development of the LVI, “the revised 45-item LVI was administered to 396 university students, 226 technical-community college students, and 225 corporate employees or trainees ($n = 847$)” (Brown & Crace, 2002, pp. 6-7). Brown and Crace (2002) described the demographics of this population as follows:

The ages of the people involved in the study ranged from 18 to 67 years with a mean age of 24.69 years. The sample was comprised of 564 females (66.6%) and 265 males (31.3%). Eighteen cases (2.1%) could not be classified because of missing data. The

ethnic distribution of the sample was as follows: Caucasian (N = 624, 73.7%); African American (N = 153, 18.1%); Asian Pacific American (N = 15, 1.8%); Hispanic (N = 28, 3.3%); and Native American (N = 11, 1.3%). Eleven individuals (1.3%) identified themselves as others and five cases (.6%) could not be classified. Because of missing values, 21 cases were deleted from the sample and thus the data from 826 cases were used (pp. 6-7).

For the purposes of ascertaining reliability data on the LVI it was then given to a smaller, but similar sample of 173 university students ($n = 173$) (Brown & Crace, 2002, p. 7). Brown and Crace (2002) described the demographics of this group as follows:

Their ages ranged from 18 to 23 years old with a mean age of 20.01 years. The sample was comprised of 113 females (65.3%) and 53 males (30.6%). The gender of seven students (4.1%) could not be classified due to missing data. The ethnic distribution of the group that was retested is as follows: Caucasian (N = 133, 76.9%); African American (N = 34, 19.7%); Asian Pacific American (N = 4, 2.3%); and Native American (N = 2, 1.2%). Eleven subjects were deleted from the analysis because of missing values in their responses. Except for the fact that the sample that was retested was younger than the larger sample ($M = 20.02$ versus 24.69), the retested sample was quite comparable on other characteristics to the total group (p. 7).

A confirmatory factor analysis was then conducted on this version of the LVI (Brown & Crace, 2002, p. 8). Goodness of fit analyses yielded a Chi Square of 3109.196 with a corresponding p-value of $p < .0001$ with 900 degrees of freedom (Brown & Crace, 2002, p. 8). Then, a principal axis factor analysis was conducted on the 45-item LVI (Brown & Crace, 2002, p. 8). One previous factor, Independence, did not form a stable factor in this analysis and was

removed (Brown & Crace, 2002, p. 8). This revised version of the LVI contained 31 items and was renamed the LVI-R (Brown & Crace, 2002, p. 8).

Stage three involved further revisions and pilot testing the LVI. Brown and Crace (2002) were not pleased that the LVI-R had failed to “obtain two important Eurocentric values, Independence and Achievement” (p. 9). They also were not pleased with the LVI-R’s apparent lack of cultural sensitivity (Brown & Crace, 2002, p. 9). To account for many of the LVI-R’s shortcomings, several steps were taken. First, the reading level of the LVI was adjusted to about a sixth grade level (Brown & Crace, 2002, p. 9). Next, Brown and Crace “rewrote items on the Independence scale and reconstructed Achievement and Independence Scales based partially on the first two series of analyses” (p. 9). Then, each scale was made to consist of five items (Brown & Crace, 2002, p. 9). Finally, a panel of multicultural reviewers reviewed the LVI-R and recommended the addition of “Loyalty to Family or Group” to the inventory (Brown & Crace, 2002, p. 9).

This revised version of the LVI consisted of 12 scales (Brown & Crace, 2002, p. 9). This version was again submitted to a multicultural panel in order to review for cultural sensitivity (Brown & Crace, 2002, p. 9). After this review, some of the wording of items was shifted to be more culturally sensitive (Brown & Crace, 2002, p. 9). Three additional scales were also added to the LVI: “Humility”, “Responsibility”, and “Concern for the Environment”, thus producing the LVI-15 (Brown & Crace, 2002, pp. 9-10).

Because of the extensive changes that the LVI had undergone, the LVI-15 was again pilot tested (Brown & Crace, 2002, p. 10). It was administered to 237 community college students, undergraduates attending four-year colleges, graduate students and some retirees ($n = 237$) (Brown & Crace, 2002, p. 10). After administering the LVI-15 the Kaiser-Meyer-Olkin Measure

of Sample Adequacy (KMO) (Kaiser, 1974) was deemed meritorious with a coefficient of .837 (Brown & Crace, 2002, p. 10).

Principal axis factor analyses with oblique rotations were then conducted due to correlations among factors (Brown & Crace, 2002, p. 10). The 14-factor solution “offered the best solution based on the scree plot analyses of eigen values and observation [sic]” (Brown & Crace, 2002, p. 10). Based on factor correlational data, three items per scale were included in the revised LVI (Brown & Crace, 2002, p. 10). This factor analysis confirmed previous statistical analyses except for the fact that the “Order factor was replaced in the analysis of the pilot data by a more general factor which was labeled Responsibility” (Brown & Crace, 2002, p. 10).

Measures were then taken to account for internal consistency. Brown and Crace (2002) described:

Cronbach’s alphas were computed for each factor. These ranged from .626 for the Independence scale to .897 for the Spirituality scale, which indicates factor stability is well within an acceptable range. The total variance accounted for by the 14 factor solution with three items per factor was 75.28% (p. 10).

Finally, stage four involved validating the new LVI-14. In an effort to establish construct validity, the scores of the validation sample were compared to the scores on the Rokeach Values Survey (Rokeach, 1973) and the Vocational Preference Inventory, Form B (Holland, 1985) (Brown & Crace, 2002, p. 10). Pearson Product Moment correlations were calculated (Brown & Crace, 2002, p. 10). According to Brown and Crace (2002), the adult sample was also asked to complete the Crown-Marlowe Social Desirability Scale (Crowne & Marlowe, 1960) (p.10). Data from two samples were collected in order to obtain validity data (Brown & Crace, 2002, p. 11). The samples included “334 high school students from a large (1500+) comprehensive high

school in Raleigh, NC” as well as “342 adults from California, Minnesota, Pennsylvania, Georgia, Virginia, and North Carolina” (Brown & Crace, 2002, p. 11).

The results of principal axis factor analyses for each sample proved similar. The adult sample produced a KMO of .78 and principal axis extraction resulted in a 14 factor solution that accounted for 73.2% of the variance (Brown & Crace, 2002, p. 11). Likewise, the high school student sample produced a KMO of .82 and principal axis extraction yielded a 14 factor solution that accounted for 72.2% of the variance (Brown & Crace, 2002, p. 11). The only scale that proved problematic was Independence, which had double loadings in both samples (Brown & Crace, 2002, p. 11). Nevertheless, stability in factor structure was found in this version of the LVI (Brown & Crace, 2002, p. 11).

With regard to convergent validity, the LVI was correlated with the Rokeach Values Survey (RVS) using Pearson Product Moment correlations (Brown & Crace, 2002, p. 12). According to Brown and Crace (2002), “thirty predictions were made regarding the relationships between the LVI and RVS scales for both the high school and adult samples, respectively” (p. 12). Twenty-seven of these correlations were significant for adults and 24 were significant for the high school sample (Brown & Crace, 2002, p. 12). As for discriminant validity, the LVI scores of the adult sample were correlated with the Crowne-Marlowe Social Desirability Scale (Brown & Crace, 2002, p. 12). According to Brown and Crace (2002), “correlations ranged from -.035 to .227” (p. 12). Eleven of 14 correlations were considered to be statistically significant at the .05 level (Brown & Crace, 2002, p. 12). Brown and Crace (2002) noted, however, that “the small size of the correlations suggests that the impact of the social desirability response set is minimal, accounting for a small amount of the variance in LVI scores” (p. 12).

In terms of reliability, Brown and Crace (2002) reported using Cronbach's Alpha to assess the internal consistency of the LVI scales (p. 12). Brown and Crace reported, Coefficients for adults ranged from .55 on the Independence scale to .88 on the Spirituality scale. Coefficients for high school students ranged from .51 on the Independence scale to .81 on the Concern for the Environment scale. Ten of the coefficients for the adult sample exceeded .70 and 12 of the coefficients for the high school sample were at .70 or above, demonstrating adequate internal consistency for both samples (p. 12).

This 1996 version of the LVI was then adopted and put into practice. It would remain unchanged until 2002 when the LVI was again revised. These revisions, based on practitioner input, included changing the wording of the rating scale from "almost never" and "almost always" to "seldom" and "frequently" (Brown & Crace, 2002, p. 15). Additionally, two values scales were renamed in order to more adequately represent intent (Brown & Crace, 2002, p. 15). Loyalty to Family or Group and Scientific Understanding were changed to Interdependence and Objective Analysis respectively (Brown & Crace, 2002, p. 15). Finally, the factor structure of Objective Analysis was revised to more adequately reflect a reliance on logic, analysis, and objective facts in regards to decision making and sections were formatted to improve "parsimony and utility of the values clarification process" (Brown & Crace, 2002, p. 15). In 2011 this version of the LVI was converted to an online format. The online version of the LVI was used for this study.

Procedure

All data for this study were collected electronically. An Excel spreadsheet containing a listing of all current alternative schools in North Carolina was obtained from the North Carolina

Department of Public Instruction. This spreadsheet contained information regarding contact personnel, usually a principal, for all 77 alternative schools in North Carolina. The individual listed was contacted via email and notified of the intentions of the study. The email asked for a reply indicating whether or not the alternative school serves students at-risk for dropout, and if so, if the contact person would be willing to forward information contained in a second follow-up email to the teachers in the school. Only alternative schools with a focus on at-risk youth were included, and only classroom teachers were surveyed in this study.

The recruitment process took place from February through April of 2013. At the end of recruitment, 18 schools across 18 districts met the criteria and expressed interest. Each district required differing local research protocols to be completed before the study could proceed. Local approval was granted by 16 of these schools and districts. At that point, an email was sent to the contact person in schools with an at-risk focus that agreed to participate. This email was forwarded to all teachers and provided an overview of the study containing two separate hyperlinks along with instructions for how to proceed. The first hyperlink linked to a demographic questionnaire produced through Survey Monkey (www.surveymonkey.com). This survey asked for the participant's consent to participate, email address, years of teaching experience, years of experience in alternative schools, level of college education, and fields of certification. Information regarding whether the participant is satisfied with their job was ascertained through a question that asked participants to rank their satisfaction as either extremely dissatisfied, dissatisfied, somewhat dissatisfied, somewhat satisfied, satisfied, or extremely satisfied. Finally, the participant's plans to continue in alternative education were ascertained through a question that offered the responses yes, no, or undecided. In order to lessen the burden on participants, basic demographic information provided during registration for

The Life Values Inventory were used to gather data regarding the age, sex, and race of participants. The results of this survey, along with the demographic information entered in the registration process for the Life Values Inventory were used to produce demographic data.

The second hyperlink linked directly to the electronic version of the Life Values Inventory (Crace, 2011) located at www.lifevaluesinventory.org. The electronic version of the LVI was offered free of charge at the time of data collection. All instructions for completing the LVI were made available. All raw data were collected and returned via an Information Technology specialist working for the creators of the LVI.

Following Institutional Review Board approval, initial recruitment contact with North Carolina alternative schools was made on February 18, 2013. A follow up recruitment email to principals was sent on February 21, 2013. A third and final recruitment email was sent on March 12, 2013. Local research approval was sought in all responding districts from February of 2013 through the end of April 2013.

An email to alternative school teachers in districts providing local approval was sent out on May 1, 2013. This email contained instructions and the described hyperlinks. Along with this email was description of a prize drawing for teachers who complete both the demographic survey and Life Values Inventory. In order to boost survey response rate, a random drawing was held. Three drawing winners received a cash prize of \$100. Dillman (2007) indicated that token financial incentives are one of the most effective ways to boost survey response rates (p. 149). The demographic survey and Life Values Inventory remained available through June 14, 2013.

Demographic information gathered through Survey Monkey was harvested on June 15, 2013. Upon closure of the LVI, IT specialists working for the Life Values Inventory collected all data collected through the LVI. These data were returned in the form of an Excel spreadsheet

containing identifying information that can be used to link respondents in the first survey to their LVI results. The spreadsheet also included the results of each participant's completion of the LVI. Participants were also encouraged to email the PDF file containing their LVI results. This helped to assure that all participants who completed the LVI were included in the study. Data were then analyzed for descriptive statistics and the Likert factors on the LVI were analyzed through cluster analysis.

Analysis

All data analyses were conducted with R version 3.0.1 for Mac (R Core Team, 2013). First, extensive descriptive statistics were calculated based on the results of both the demographic survey and the LVI. Measures of central tendency including the mean, median, and mode were produced for the only quantitative variable, age. The range and standard deviation, as well as skewness and kurtosis values were produced for the age variable as well. A stem and leaf plot represented the age variable graphically. All other nominal and ordinal variables were screened for the mode and represented graphically as frequency distributions.

In order to explore the potential values profiles of North Carolina alternative school teachers, cluster analysis was used. Cluster analysis is an exploratory technique that allows for the investigation of the similarities and differences of cases in a sample. Aldenderfer and Blashfield (1984) explained that a clustering method is “a multivariate statistical procedure that starts with a data set containing information about a sample of entities and attempts to reorganize these entities into relatively homogenous groups” (p. 7). Cluster analysis is simply a broad term used to describe grouping techniques. The results of these techniques should be used as simple “rules of thumb” (Aldenderfer & Blashfield, 1984). The results of these techniques vary based

on the clustering method. However, the results of cluster analytic procedures provide insight into better understanding under-researched groups such as alternative school teachers.

Clustering techniques. When considering cluster analysis as an exploratory technique a number of decisions must be made. These decisions include which clustering approach or approaches is appropriate, how to define similarity based on shape or distance, if distance is chosen how to define distance, and how to decide the number of clusters to be explored. For this research, two approaches to clustering were employed: hierarchical agglomerative clustering and a K-means approach. Similarity was based on Euclidean distance and Ward's method (1963). The decision for the number of clusters to explore was based on a visual analysis of the scree plot.

Hierarchical agglomerative cluster analysis using Ward's Method (1963). One of the most common clustering techniques is hierarchical agglomerative clustering (Aldenderfer & Blashfield, 1984). Essentially, a hierarchical agglomerative approach involves searching for an "N x N similarity matrix (where N refers to the number of entities) and sequentially merging the most similar cases" (Aldenderfer & Blashfield, p. 36). The results are displayed in a linkage diagram, or dendrogram.

One common method for considering the linkage of cases within hierarchical agglomerative cluster analysis is Ward's Method. Ward's method optimizes the minimum variance within clusters (Ward, 1963). According to Aldenderfer and Blashfield (1984), "this objective function is also known as the within-groups sum of squares or the error sum of squares (ESS)" (p. 43). Aldenderfer and Blashfield explained:

At the first step of the clustering process, when each case is in its own cluster, the ESS is 0. The method works by joining those groups or cases that result in the minimum

increase in the ESS. The method tends to find (or create) clusters of relatively equal sizes and shapes as hyperspheres (p. 43).

K-means approach. A second method of cluster analysis is the use of a K-means approach. This version of cluster analysis partitions observations based on cluster means. According to Aldenderfer and Blashfield (1984), “K-means passes, also referred to as the ‘nearest centroid sorting pass’ and the ‘reassignment pass,’ simply involve the reassignment of cases to the cluster with the nearest centroid” (p. 47). This approach is an iterative, centroid-based partitioning method. Aldenderfer and Blashfield (1984) have summarized Anderberg’s (1973) explanation of iterative partitioning methods as follows:

1. Begin with an initial partition of the data set into some specified number of clusters; compute the centroids of these clusters.
2. Allocate each data point to the cluster that has the nearest centroid.
3. Compute the new centroids of the clusters; clusters are not updated until there has been a complete pass through the data.
4. Alternative steps 2 and 3 until no data points change clusters (p. 45).

A K-means approach, as well as other iterative approaches, differs from a hierarchical agglomerative approach in several ways. Two primarily important differences are that iterative approaches work directly with the raw data as opposed to storing an $N \times N$ similarity matrix and they make more than one pass through the data (Aldenderfer & Blashfield, 1984, p. 46). By taking multiple passes through the data, poor initial partitioning may be corrected.

Application in current study. Cluster analysis is particularly appropriate for the current study considering the dearth of available information regarding alternative educators as well as the fact that the LVI seems to have never been used with educators collectively. All cluster

analyses were conducted with R version 3.0.1 for Mac (R Core Team, 2013). The results of the Likert-scaled factors in the LVI were analyzed for each participant. A multifaceted approach to cluster analysis was implemented. Initially, hierarchical agglomerative cluster analysis techniques were used. Groups were considered similar on the basis of Euclidean distance. In order to obtain the minimum amount of variance within clusters, Ward's method was used (Ward, 1963). The results were displayed in cluster dendrograms. The data were also analyzed through a K-means perspective of cluster analysis. Several different cluster groupings were explored. The results of both the hierarchical agglomerative cluster analyses and the K-means procedures were compared and a best fit was determined.

Potential Limitations

This study was not without limitations. There were several issues that must be taken into consideration. First, alternative education is an area that has been largely understudied and although alternative schools are grouped together according to the North Carolina Department of Public Education, alternative schools essentially act autonomously and are subject to the mandates placed upon them by the local education agency. It was difficult to communicate with alternative schools and get them to participate. Local research protocols were restrictive. Two schools reported to be interested in participating, but their districts were not accepting research proposals. Other districts responded positively, but reported a reluctance to allow any research that required time from teachers. This difficulty places limitations on the available sample size and possible representativeness.

Second, survey response rate is always a concern when working with electronic questionnaires. The collection of demographic information was purposefully brief and the LVI is only intended to take approximately 30 minutes to complete. Nevertheless, this is a substantial

amount of time to ask of an already busy educator. Financial incentives were offered, however, to encourage participation.

Third, alternative schools seem to fluctuate and available data can be misleading. As noted earlier, while the information available from NCDPI indicated as many as 942 alternative school teachers were teaching in North Carolina, a follow up examination of this information revealed that several of these schools were no longer operational. Furthermore, NCDPI does not provide stringent classification standards for alternative schools in North Carolina. These schools are broadly stroked as serving “at-risk” students. Given this information, it is important to understand that the alternative school landscape is still subject to interpretation and numbers regarding the total population of teachers must be considered in this light.

Finally, potential threats to external validity as well as the overall lack of empirical research focused on alternative school teachers must be considered. Alternative school teachers are an extremely understudied population. Furthermore, no research seems to exist in which the Life Values Inventory (2002) was used with educators or even with cluster analysis in general. There is no previous research available on which to base any hypotheses regarding the potential values profiles of alternative educators. The results of this study must be considered in light of time and place. While the results could provide a clearer understanding of alternative school teachers as well as provide a framework for conducting future research, the results of this study are merely the first step to better understanding alternative educators in general. The results provide a specific snapshot of a small sample of North Carolina alternative school teachers. Nevertheless, the results of this study are unique and are a first step in filling a large gap in the alternative school literature.

CHAPTER FOUR: RESULTS

The results of this study are encouraging and offer valuable insight into better understanding the population of North Carolina public alternative school teachers. In this chapter, the sampling techniques will be explained and statistical results will be presented. Descriptive statistics are presented, as are the results of both hierarchical agglomerative cluster analyses and k-means cluster analyses. Descriptive statistics are presented in the form of tables and frequency distributions while the results of cluster analyses are presented in the form of tables and dendrograms.

Sample

All North Carolina public school districts with a public alternative school were invited to participate in this study. Eighteen districts responded with interest and 16 of these districts granted research approval. As a result, 136 North Carolina public alternative school teachers ($n = 136$) across 16 North Carolina districts were presented with both an electronic demographics survey issued through Survey Monkey as well as the online version of the Life Values Inventory (2012) on May 1, 2013. Data collection concluded on June 14, 2013. As an incentive to participate, teachers were offered the chance of winning \$100 as a result of a random drawing. Three teachers who completed both measures were selected. Sixty teachers ($n = 60$) responded to the demographic survey for a response rate of 44.1%. Thirty-two of these teachers ($n = 32$) went on to complete the Life Values Inventory for a response rate of 23.5%.

Analyses

Descriptive statistics for demographic data. Descriptive statistics were produced for all demographic data. All analyses were conducted with R version 3.0.1 (R Core Team, 2013). The demographic variables teaching experience, alternative school teaching experience, college degree, job satisfaction, plans to continue in alternative school, and areas of teaching certification were collected through a demographics survey administered through Survey Monkey. Sixty participants ($n = 60$) completed the demographic survey. The data were screened for patterns of missing data and no patterns were found. Three demographic variables, age (*age*), sex (*sex*), and race (*race*) were collected as a part of the Life Values Inventory (LVI) in order to reduce the collection of duplicate information. Thirty-two participants completed the LVI. One participant who completed the LVI chose not to reveal his or her age, sex, and race, leaving a total of 31 participants ($n = 31$) who provided this information. The variables age, sex, and race are based on a sample size of 31 ($n = 31$) and the variables of teaching experience, alternative teaching experience, college degree, job satisfaction, plans to continue in alternative school, and areas of teaching certification are based on a sample size of 60 ($n = 60$).

Age. The only quantitative variable collected was the variable age. All other variables were either nominal or ordinal. Because the variable age is quantitative, measures of central tendency including the mean, median, and mode were calculated along with the range, standard deviation, skewness, and kurtosis. The results are shown in Table 2.

Table 2

Age

Variable	Mean	Median	Mode	Range	Standard	Skewness	Kurtosis
Age	43.9	42	32, 33, 57	30-62	10.7	.22	-1.54

Note. Standard Error of Skewness equals .421 and Standard Error of Kurtosis equals .821.

In order to better represent the data, Table 3 graphically represents the variable age in a stem and leaf plot.

Table 3

Age

Stem	Leaf
3	0112223335669
4	00234
5	00122667778
6	02

Sex. Nineteen participants identified themselves as female (61%) while twelve participants identified themselves as male (39%). The data are represented as a frequency distribution in Table 4.

Table 4

Sex

Sex	Male	Female
Participants	12	19

Race. The majority of participants identified themselves as Caucasian (74%). Five participants identified themselves as African American (16%). One participant identified as multiracial (3%), one self-identified as Iranian (3%), and one participant identified himself or herself as Hawaiian (3%). The data can be seen as a frequency table in Table 5.

Table 5

Race

Race	Caucasian	African	Iranian	Hawaiian	Multiracial
Participants	23	5	1	1	1

Teaching experience. The majority of participants had 15 or less years of total teaching experience (71%). Seven participants had between 0 and 5 years of experience (12%), 23 had between 6 and 10 (38%), 13 had between 11 and 15 (22%), 4 had between 16 and 20 (7%), 6 had between 21 and 25 (10%), 6 had between 26 and 30 (10%), and one participant had over 30 years of teaching experience (2%). These data are represented as a frequency table in Table 6.

Table 6

Total Teaching Experience

Total Years	0-5	6-10	11-15	16-20	21-25	26-30	30+
Participants	7	23	13	4	6	6	1

Alternative school teaching experience. The data focused on the amount of time spent in alternative schools revealed that the participants have spent less time in alternative schools than they have as teachers in general. In fact, the majority of the participants have spent five or less years in alternative schools (68%). Thirteen have spent between five and ten years (22%), four have spent between 11 and 15 years (7%), and two participants have spent between 16 and 20 years in alternative schools (3%). These data are represented in a frequency table in Table 7.

Table 7

Alternative School Experience

Years of Experience in Alternative Schools	0-5	6-10	11-15	16-20
Participants	41	13	4	2

College degree. The vast majority of participants hold either a bachelor's degree or master's degree as their highest level of formal education (93%). In terms of highest college degree held, 28 participants held a bachelor's (47%) and 28 participants held a master's degree (47%). Three participants held a specialist degree or some other post-masters education (5%)

and one participant held a Doctor of Education degree (2%). No participants held a Doctor of Philosophy (PhD). The data are represented as a frequency table in Table 8.

Table 8

Highest College Degree

Degree	Bachelor's	Master's	Specialist or Other Post-Master's	EdD	PhD
Participants	28	28	3	1	0

Job satisfaction. The data concerning job satisfaction are encouraging. Participants were asked to rank their level of job satisfaction on a scale of one to six where one represented extremely dissatisfied, two represented dissatisfied, three represented somewhat dissatisfied, four represented somewhat satisfied, five represented satisfied, and six represented extremely satisfied. Fifty-two of the 60 participants who provided information on job satisfaction revealed that they were at least somewhat satisfied as alternative school teachers (87%). Only eight participants had a negative response (13%). Twelve participants were extremely satisfied (20%), 27 were satisfied (45%), 13 were somewhat satisfied (22%), two were somewhat dissatisfied (3%), four were dissatisfied (7%), and two participants were extremely dissatisfied (3%). These data are represented in Table 9.

Table 9

Job Satisfaction

Level of Job Satisfaction	Extremely Satisfied	Satisfied	Somewhat Satisfied	Somewhat Dissatisfied	Dissatisfied	Extremely Dissatisfied
Participants	12	27	13	2	4	2

Plans to continue in alternative education. The majority of participants plan to continue teaching in alternative schools. Thirty-six participants (60%) indicated that they planned to continue in alternative schools. Nine participants indicated that they did not plan to continue

teaching in alternative schools (15%). Fifteen teachers indicated that they were undecided (25%) as to whether or not they would continue teaching in alternative schools. These data are represented in a frequency table in Table 10.

Table 10

Plans to Continue

Plans to Continue	Continue	Discontinue	Undecided
Number of Participants	36	9	15

Teaching certification areas. Participants represented a wide range of teacher certification areas. Thirty-three of the 60 participants held multiple certifications (55%). Nine participants were certified in Special Education (15%). A plethora of certification areas were represented and are displayed in Table 11.

Table 11

Certification Areas

Certification Area	Number of Participants
High School English	14
High School Social Studies	12
High School Mathematics	11
High School Science	10
Middle School English	9
Middle School Social Studies	9
Special Education	9
Career and Technical Education	8
Middle School Science	6
Middle School Mathematics	5
Health and Physical Education	4
Early Childhood Education	3
Reading	2
Academically or Intellectually Gifted	1
Administration	1
Adolescent Prevention Education and Parenting	1
Art	1
Counseling	1
Media	1
Theater	1

Summary of demographic data. Overall, analyses of the available demographic data for this sample of North Carolina alternative school teachers in terms of age, race, and sex revealed that the sample is diverse in respects to age, predominately female, though not overwhelmingly, and predominately Caucasian. Analyses of the demographic data pertaining to experience, college degree, job satisfaction, plans to continue, and certification levels revealed that while there may be a large range of overall teaching experience among this sample of North Carolina alternative educators, they were much less experienced in alternative education. The majority of teachers held either a bachelor's or a master's degree as their highest college degree. Overall, this sample of North Carolina alternative school teachers reported to be satisfied with their job and generally plan to continue in the profession. The sample represents a diverse mixture of teacher certifications.

When comparing this sample of North Carolina alternative school teachers to overall teacher demographics in the United States, similarities and differences are present. According to teacher demographic data produced by the National Center for Education Information, teaching in general in the United States is still a profession dominated by white females (Feistritzer, 2011). In 2011, 1076 teachers ($n = 1076$) were surveyed. An overwhelming 84% of these teachers were females and 84% were white. The sample was diverse in regards to age, subjects taught, and experience while 43% of teachers held a master's degree in education as their highest college degree. Interestingly, 89% of this sample also reported being satisfied with their jobs. Demographically, the sample of North Carolina alternative school teachers in this study seems to be similar to the demographics of the general population of teachers in the United States with the exception of sex. The sample of North Carolina alternative school teachers in this study represents a more heavy male presence in the teaching force. Of course, when

evaluating these claims and making potential presumptions regarding the total population of North Carolina alternative school teachers, sample size must be considered.

The Life Values Inventory. Thirty-two participants ($n = 32$) completed the online version of the Life Values Inventory (LVI) (2012). The LVI contains 42 Likert-scaled items on a five-point scale and measures 14 independent human values (Brown & Crace, 2002, p. 3). These values include: Achievement, Belonging, Concern for the Environment, Concern for Others, Creativity, Financial Prosperity, Health and Activity, Humility, Independence, Interdependence, Objective Analysis, Privacy, Responsibility, and Spirituality. The data were screened for missing values and no missing data were found.

In order to conduct quantitative analyses, the summed Likert-scaled values scores were used. Each value is assessed based on three questions. Each of the responses to those questions are scored on a one to five scale, therefore scores for each value could range from three to fifteen. The LVI also offers participants the opportunity to self-rank these 14 values, but these measures were not considered in analyses due to the subjective nature of these data. The ranking system shares no association with the summed Likert scores. The summed Likert-scaled value scores were analyzed first for descriptive statistics. Cluster analyses were then conducted on these data.

Descriptive statistics for the LVI. Descriptive statistics were calculated based on the 14 Likert-scaled value scores for each of the 32 participants ($n = 32$). Responses could range from three to fifteen. Particular attention was given to the mean, median, mode, range, standard deviation, skewness, and kurtosis. The results can be seen in Table 12.

Table 12

Descriptive Statistics for the Life Values Inventory

Value	Mean	Median	Mode	Range	Standard Deviation	Skewness	Kurtosis
Achievement	12.5	12	12	9-15	1.5	-.09	-.09
Belonging	8.75	9	9	3-15	2.55	.14	.68
Concern for the Environment	10.8	11.5	12	4-15	2.71	-.49	.11
Concern for Others	12.3	13	13	9-15	1.99	-.33	-1.21
Creativity	10.8	10.5	10	6-15	2.51	.043	-.45
Financial	7.84	8	8, 9, 10	3-12	2.34	-.27	-.79
Health and Humility	10.2	10	9	3-15	3.19	-.13	-.49
Independence	9.53	9	9	3-14	2.84	-.45	.31
Interdependence	11.5	12	12	5-15	2.24	-.6	.82
Objective	10.5	11	11	3-15	2.92	-.49	.13
Privacy	11.4	11	11	3-15	2.59	-.85	2.2
Responsibility	10.5	11	15	3-15	3.48	-.31	-.85
Spirituality	13.9	15	15	11-15	1.34	-.9	-.53
	11.7	12	15	5-15	3.2	-.78	-.48

Note. Possible scores for each value on the LVI range from three to fifteen. Three indicates the weakest response and fifteen represents the strongest response. Standard Error of Skewness equals .414. Standard Error of Kurtosis equals .809.

The most important value to this sample of North Carolina alternative school teachers, based on the mean, seems to be “Responsibility” while the least important value seems to be “Financial Prosperity”. It seems that the values of “Achievement” and “Concern for Others” are also important values to alternative school teachers. While the descriptive statistics provide an overview of the values of this sample of North Carolina alternative school teachers, more detailed information can be gained by further analyses. In order to better understand these results, a series of cluster analyses were conducted.

Results of cluster analyses. Thirty-two cases ($n = 32$) were used to conduct cluster analyses. Each case consisted of 14 sums of Likert-scaled scores; one for each value measured by the online version of the Life Values Inventory (2011). The data were screened for missing

data and no missing data were found. In order to determine a plausible number of clusters, a scree plot was produced using the within groups sum of squares. The scree plot indicated that there may be as many as three clusters, therefore the decision was made to explore both two and three cluster models. The scree plot can be seen in Figure 1.

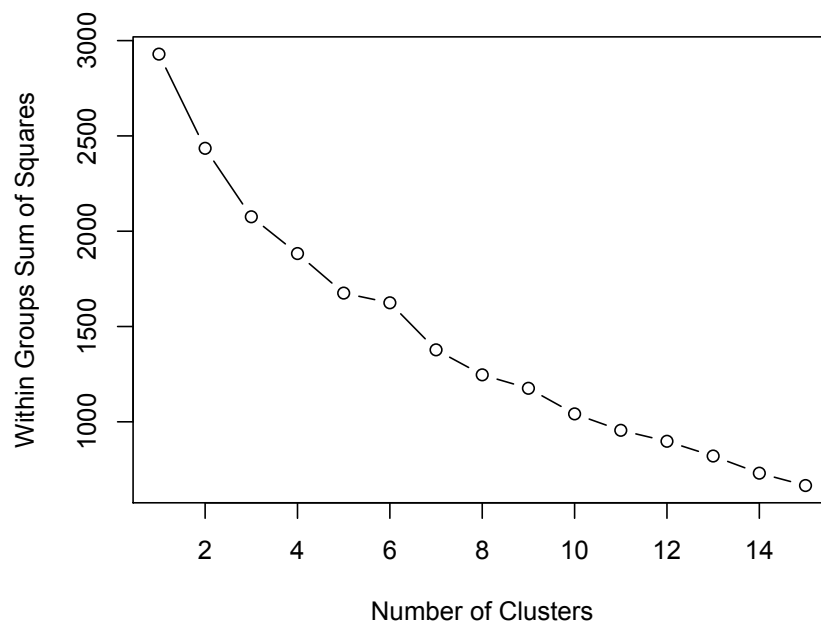


Figure 1. Scree Plot

Hierarchical agglomerative approach. The first method of cluster analysis utilized was a hierarchical agglomerative approach. Once again, this method involves searching for an $N \times N$ similarity matrix and merging similar cases (Aldenderfer & Blashfield, 1984). Similarity was based on Euclidean distance and Ward's Method (1963). Initially, a three-cluster model was produced. The results of the three-cluster model can be seen in Figure 2.

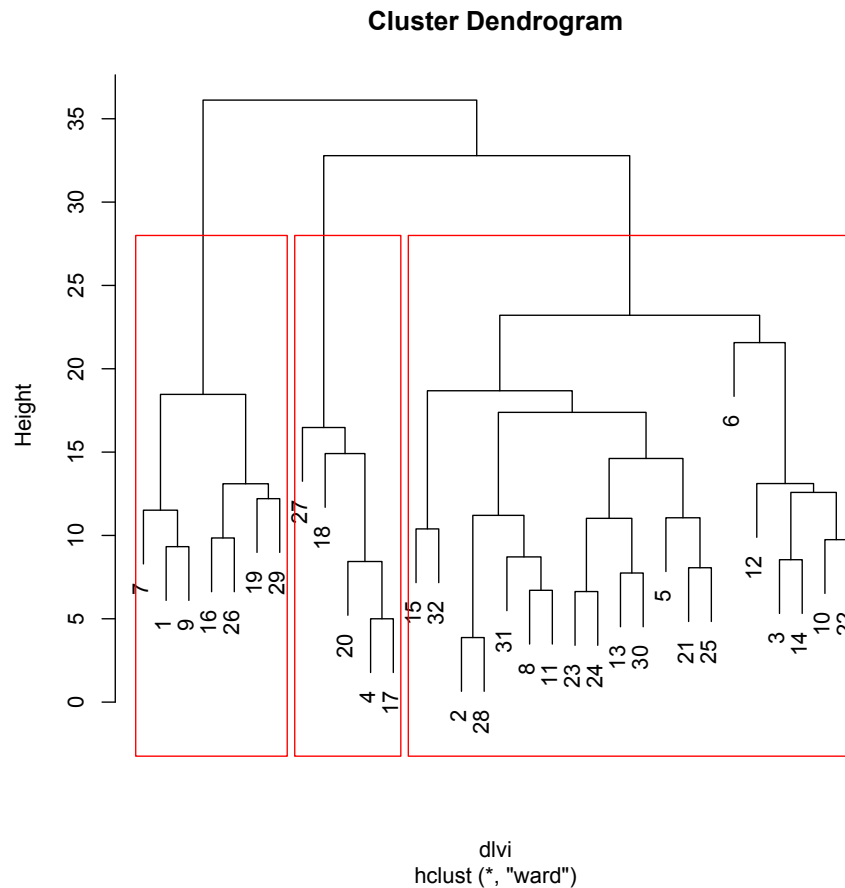


Figure 2. Hierarchical Agglomerative Approach Using Ward's Method: Three-Cluster Solution

The three-cluster solution produced two smaller clusters and one large cluster. In this solution seven cases constituted the first cluster, five cases constituted the second cluster, and 20 cases constituted the third cluster. The clusters are differentiated in Figure 2 by rectangular boxes.

Next, a two-cluster hierarchical agglomerative solution was produced. The results of the two-cluster solution can be seen in Figure 3.

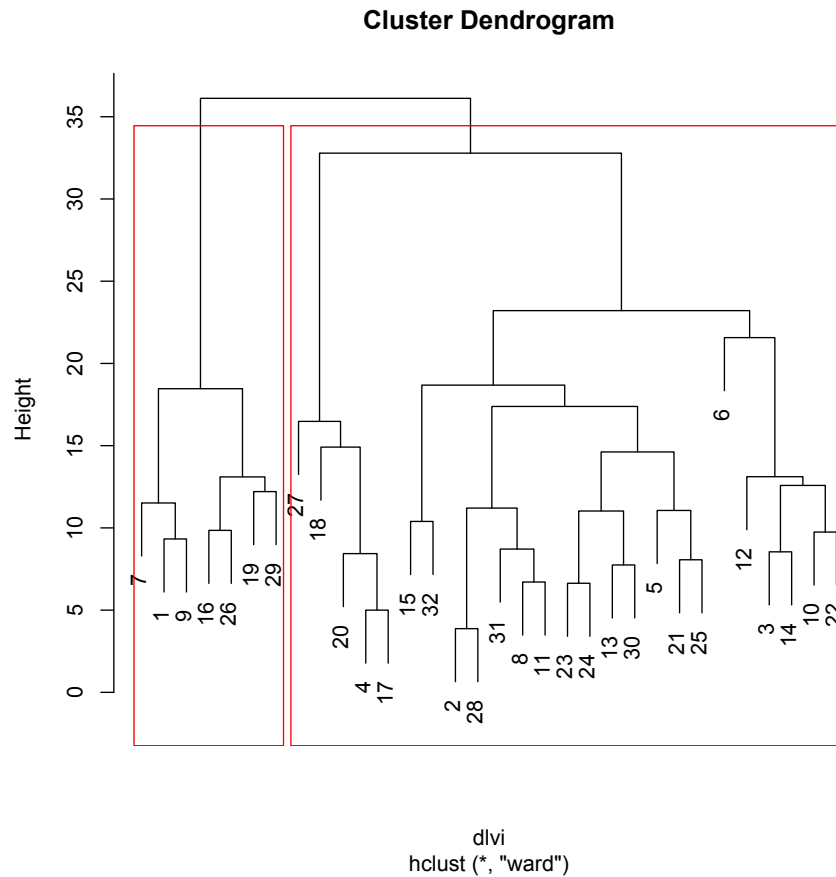


Figure 3. Hierarchical Agglomerative Approach Using Ward’s Method: Two-Cluster Solution

In the two-cluster solution, the first cluster from the three-cluster solution remained intact while clusters two and three from the three-cluster solution were merged to produce one large cluster. Thus, the first cluster in the two-cluster solution contained seven cases while the remaining 25 cases made up the second cluster.

The results of the hierarchical agglomerative cluster analyses using Ward’s method reiterated what the scree plot and an overview of the descriptive statistics of the LVI indicated.

The cases included in this sample appear to be quite similar. In order to further understand the clustering of the data, a K-means approach was utilized.

K-means approach. Both two and three-cluster solutions were also produced utilizing a K-means approach to clustering. The three-cluster solution was explored first. This solution produced clusters of 12, 6, and 14. The mean scores for each cluster can be seen in Table 13.

Table 13

K-Means Approach Three-Cluster Solution

Value	Group 1 (12 cases)	Group 2 (6 cases)	Group 3 (14 cases)
Achievement	11.7	13.3	12.9
Belonging	8.43	9.83	8.58
Concern for the Environment	10.1	12.0	11.0
Concern for Others	11.2	12.5	13.6
Creativity	10.1	13.2	10.4
Financial Prosperity	8.36	7.17	7.58
Health and Activity	7.43	11.67	12.67
Humility	9.79	8.83	9.58
Independence	11.1	13.0	11.1
Interdependence	11.07	6.83	11.75
Objective Analysis	10.3	13.7	11.7
Privacy	11.43	14.67	7.25
Responsibility	13.2	14.0	14.8
Spirituality	10.71	9.67	13.83

Note. Possible scores for each value on the LVI range from three to fifteen. Three indicates the weakest response and fifteen represents the strongest response.

The three-cluster model using the K-means approach is very similar to the three-cluster result using the hierarchical agglomerative approach. There are only minor differences in the models produced by the two methods.

Next, a two-cluster solution was produced using a K-means approach. This solution produced one group of 10 cases and one group of 22 cases. Again, the results are similar to the two-cluster solution using a hierarchical agglomerative approach, but with some variation. The mean scores for each cluster can be seen in Table 14.

Table 14

K-Means Approach Two-Cluster Solution

Value	Group 1 (10 cases)	Group 2 (22 cases)
Achievement	13.0	12.2
Belonging	8.8	8.73
Concern for the Environment	11.4	10.6
Concern for Others	13.9	11.6
Creativity	10.8	10.8
Financial Prosperity	7.0	8.23
Health and Activity	12.3	9.23
Humility	9.6	9.5
Independence	11.1	11.6
Interdependence	12.0	9.86
Objective Analysis	11.8	11.3
Privacy	6.5	12.3
Responsibility	14.8	13.6
Spirituality	14.3	10.5

Note. Possible scores for each value on the LVI range from three to fifteen. Three indicates the weakest response and fifteen represents the strongest response.

Best model. While each clustering method produced slightly different models, it is apparent that the data used in these analyses are quite similar. Based on a review of all cluster analyses as well as the descriptive statistics, a two-cluster solution seems to be the most appropriate, with the understanding that the group as a whole is quite homogenous. A review of the two-cluster model using the K-means approach suggests that the groups are most different in the areas of “Privacy” and “Spirituality”. Group One in this model seems to value “Spirituality” more than Group Two while Group Two seems to value “Privacy” more than Group One. While the difference in groups is interesting, the similarities of the two groups are perhaps even more interesting. A comparison of the overall sample means with the means of the two groups in the two-cluster solution using the K-means approach reveals that the cases in this sample share very similar life values. All of the participants in the sample seem to place values such as “Responsibility”, “Achievement”, and “Concern for Others” as important life values while

devaluing “Financial Prosperity”. In fact, it could be argued that with the life values of “Spirituality” and “Privacy” excluded, the cases in this sample adhere to one common cluster.

Limitations. These results must be considered in context and certain limitations exist. While the sample size is adequate for clustering, it would be interesting to consider a larger sample in future research if access can be obtained. These results are also subject to the constraints of the analytic techniques applied. Cluster analysis is intended to be an exploratory procedure that is subject to interpretation. However, the results are interesting as they suggest strong similarities among the cases. The results of this research are some of the first of their kind and future research may help support these findings. Nevertheless, these results may be used to not only influence future research, but they may be a starting point for rethinking some of the fundamental ways in which teachers are trained and selected.

CHAPTER FIVE: DISCUSSION

The role of values in the decision-making of educators is an under researched area with much potential. Students are usually considered for admission into colleges of education based on their academic prowess. Standardized test scores and grade point averages seem to be the driving factors that determine whether or not a student may be allowed the opportunity to become a teacher. The same can be said for the hiring of beginning teachers. Public schools look for bright applicants who have successfully navigated the academic world. Once these bright applicants become classroom teachers they are still trained in instructional methods, intervention training, and a plethora of other pedagogical techniques and foundations. While all of these measures are appropriate, it is clear that there is more to teaching than academics. There is more to a good teacher than academic prowess. Teaching is a multifactorial, complicated, artful endeavor. Values certainly hold a place in the complex riddle known as a “good teacher”. As teachers go about making daily-decisions, the values frameworks from which those decisions derive deserve attention. In fact, as potential pre-service teachers consider the profession, a thorough understanding of their own personal values profile would be highly beneficial.

Values and Career Choice

As Brown and Crace (2002) pointed out, individuals who make career decisions without first considering their values, “often become dissatisfied with the outcomes of their decisions and endeavor to make changes in their lives” (p. 27). Therefore, there is great benefit in an individual either evaluating his or her own values profile prior to entering a profession or in the

event that they become dissatisfied with their profession. It is possible that the profession is a poor fit for his or her personality type.

The LVI was designed to be a tool to help individuals who are considering career-based decisions. According to Brown and Crace (2002) the LVI can be used to help individuals, “crystallize and prioritize their values, identify the values they hope to have satisfied in their careers and other life roles, identify the locus of intrarole conflicts, estimate the source(s) of interrole conflicts, and determine sources of intrapersonal values conflicts” (p. 28). Often, these processes are taken for granted. Approximately two-thirds of individuals in the work force are only in their current position because of luck, necessity, or outside influence (Brown & Crace, 2002, p. 32). This means that only one-third of workers are in a career because they have consciously made their career choices.

Consider these numbers while contemplating teacher turnover, particularly the number of teachers who leave the profession in the first five years of teaching. It seems that preservice and practicing educators alike largely ignore values when making career based decisions. However, there also seems to be much merit in doing so. Brown and Crace (2002) encourage top-level management in a business to “develop a values profile for the business and to communicate that profile to the employees” (p. 35). As Brown and Crace (2002) pointed out, evidence has shown that when businesses do this simple step they are more likely to attract employees that share these values (Judge & Bertz, 1992) and that these employees are more likely to be satisfied with their jobs (Posner, 1992).

Imagine the possibilities if both university schools of education and K-12 schools ascribed to this model as one method of student and employee screening. Of course, an individual’s values profile should not be viewed as exclusion criteria, but rather inclusion

criteria. In the case of North Carolina alternative schools, for example, imagine the benefit of being able to show a prospective alternative educator that the values profile of North Carolina alternative school teachers who are predominately satisfied with their job is one that embraces the ideas of promoting respect and showing a concern for others but rejects the idea that financial prosperity is a primary motivator. This would allow an individual to evaluate his or her own values profile, compare this profile to the profiles of both alternative school teachers and even the values profiles of a particular school. This could potentially be a clear, quantitative approach to making a more informed career-based decision.

Likewise, currently practicing educators may benefit from a thoughtful evaluation of their profile, particularly if the school is bought in to the concept of evaluating the values of the school, administration, and teaching staff. This evaluation could allow teachers to take a quantitatively supported approach to understanding any internal or external conflict that may be causing job dissatisfaction. This process could be a powerful form of professional development that would respect the time and intellect of working, educated professionals. Clearly teachers have values systems, and in fact, a number of researchers are already tapping into how educators may use these values systems as a part of a multifactorial approach to pedagogical decision-making. By evaluating the efforts of these researchers as well as the results of this study, a more informed approach can be taken in regards to utilizing the values systems of teachers as a quantitative tool for making career choices.

Knowledge gained from the current study. The current study was designed to provide information that will allow for a better understanding and more thorough description of the alternative school population in the state of North Carolina. This is a group that has been largely ignored by the professional literature. Not only is this the first known study to directly survey

alternative school teachers in North Carolina, but it is even one of the first to compile state report card data.

The compiling of available North Carolina state report card data indicated that there could be as many as 942 alternative school teachers in the state. About 27% of these teachers hold advanced degrees. In terms of experience, about 18% had between zero and three years, 29% had between four and ten years, and 53% had greater than ten years of teaching experience. These results, however, must be considered with caution. It seems that the overall population of North Carolina alternative school teachers derived from a compiling of NC School Report Card data may be inflated. Follow up investigations revealed that some of the schools included in the master list of alternative schools are not active. Furthermore, as part of the current study, principals of participating schools were asked to reveal how many certified teachers were in their building so that an overall N could be derived. Rarely did this number match the information available in NC School Report Cards. Schools sometimes reported much lower numbers. This could be the result of a couple of issues: a lag in data availability and the criteria for including teachers.

Nevertheless, the sample surveyed tends to reflect the overall trends present in the compilation of NC School Report Card data. The surveyed sample tended to reflect a higher proportion of advanced degrees with 53% of the 60 respondents indicating the possession of a master's degree or higher. The sample seems to represent the distribution of experience indicated in the compilation of NC School Report Card data quite well. Approximately 50% of the sample had over ten years of overall teacher experience and 38% had between six and ten years.

The demographic survey portion of this study has provided some additional information. Based on the sample, the mean age was 43.9 and ages ranged from 30-62. The sample was predominately female, though not overwhelmingly. While the sample did reflect the compilation of NC School Report Card data in regards to experience, the survey revealed that while these teachers are experienced, they are relatively new at alternative education. The survey also revealed that overall these teachers are satisfied with their jobs in alternative schools. While future studies could benefit from a larger sample size, these results provide new information.

Perhaps the most fascinating finding of this study involves the values profiles of alternative schools teachers. While information is still in its infancy, the results of the current study seem to suggest that North Carolina alternative school teachers may possess a common values profile. While cluster analytic techniques should not be viewed as definitive techniques, cluster analysis is a strong method for exploring similarities within a group. The results of the cluster analyses in this study indicate that the values profile of alternative school teachers is one that values responsibility, achievement, and concern for others. While the results of these cluster analyses may indicate that two groups differ on a couple of values, namely spirituality and privacy, it could be argued that the group as a whole is very similar, particularly among certain values.

These results are encouraging for future research and even immediate application. While little is known about alternative educators, it is fascinating that the little information that is available is consistent. Researchers such as Epstein (1992) as well as May and Copeland (1998) suggested, based on student self-report, that students were successful in alternative schools because they felt like the teachers cared for them. The results of the cluster analyses in the current study provide a quantitative approach to support these qualitative claims. When viewed

through descriptive statistics and cluster analyses, alternative school teachers do in fact place great emphasis on being responsible and demonstrating care for others.

Based on this study, alternative school teachers in North Carolina seem to share common values profiles. While this information is basic and descriptive, it is incredibly valuable. It underpins future research and professional development. Obviously, as this research is intended to be a first step, many more steps must follow. Future research must continue to explore why students are successful in alternative schools, or why they may not be. Based on the information that is available, however, it seems that exploring the caring quality of teachers is an excellent place to start. If teachers are open to new ideas and to exploring their commonalities and differences, it may be pertinent to consider exploring a form of teacher development that considers the role of values in teacher decision-making and development.

The role of values in teacher development. The values of educators in general, much less alternative educators, constitute a grossly under researched area. However, there is one small line of teacher research that considers the values and decision-making processes of educators. This growing body of literature is rooted in the idea that a teacher's values system, along with professional and personal experiences, actually drives his or her decision-making. Researchers have taken slightly different approaches and have used the concepts of a rationale, purpose, vision, and values to describe this process (Dinkelman, 2009; Hammerness, 2006; Hawley, 2010, 2012; Newmann, 1977; Shaver, 1977; Shaver & Strong, 1982). Though the language used is different and some slight variations exist, all of these researchers have focused on how teachers put their values and visions into practice.

Rationale development research is particularly important when considering how teachers enact their values systems. When describing a teacher's rationale, for example, Dinkelman

(2009) explained that it is intended to extend past the “rhetoric of a ‘teaching philosophy’ and towards a practical, vital statement of the aims that direct the very real deliberations teachers engage in as they sort out questions of what is worth knowing and how best to teach it” (p. 92). Rationale development research is particularly instrumental to understanding how values influence teacher decision-making and how this process may be harnessed for teacher education and professional development. The study of rationale development as it pertains to the practice of teaching, is defined as, “the content-related, pedagogical, and professional decisions teachers make in attempting to put their written rationales into practice” (Hawley, 2010, p.299). Values are a critical component to this process (Shaver & Strong, 1982). At its core, the process of rationale development is a formalized process through which teachers consider their values and experiences and the ways in which they impact and justify pedagogical decision making.

Much of the literature focused on values-based teaching and rationale development is rooted in social studies education. The scholarly conversation focused on values and teacher rationale development came to prominence in the 1970s and early 1980s with the work Newmann (1970, 1977), Shaver (1977), and Shaver and Strong (1982). Through qualitative research methods, these authors focused on the development of rationale-based practice for social studies teachers and framed their position in the ideals of democratic education as a vehicle to inform and empower the citizenry.

Newmann (1970) was one of the first researchers to begin the conversation on rationale development. While the idea of a purposeful teacher was in no way a novel idea, Newmann (1970) was one of the first to suggest that teacher purpose must be intentional. Newmann believed that if a society is going to enforce compulsory schooling for at least twelve years of a person’s life, then the professionals working in education must be able to provide a rationale for

teaching that explains the purpose of the given subject (p. 10). For Newmann, teaching had to be done with explicit, thought out purpose. It was not enough to go through the motions. A good teacher had to thoroughly contemplate and express his or her purpose. A considerable component of this contemplation involved a contemplation of values, or “ideals that people favor or and strive to achieve” (p. 43). While this view of values contains more of a morality component than that of later researchers such as Brown (1990, 1996, 2002) and Brown and Crace (1995), the underlying theme remains constant. Individuals have a values system through which they view themselves and the world that impacts decision-making.

Newmann (1977) would continue his earlier work and become even more focused on the idea of a formally produced rationale for teaching, or more specifically in his case, for civic education. Newmann presented the question, “What is wrong with civic education?” (p. 1). He then suggested three possible failures in the field: technical incompetence, lack of consensus on goals, and inadequate rationales (p. 1). For Newmann, a rationale was “a statement that attempts to articulate and to justify a particular approach for civic education” (p.1). He suggested that many of the goals and methods that underlie civic education might not be well clarified or justified and that more systematic rationales were needed (p. 1).

Newmann (1977) intended a rationale to be a complex, comprehensive, intellectual challenge. He knew this was no easy task and even stated, “We must acknowledge and communicate the nature of an *intellectual challenge* which may well be as difficult as explaining the evolution of the universe” (p. 11). Despite the difficulty of rationale development, Newmann presented the process as an ethical responsibility. He stated, “Those to whom power is delegated or those who propose that power be used in particular ways have an obligation to justify their use of power” (p. 31).

Shaver (1977) supported the ideas put forth by Newmann (1970, 1977). He urged social studies teachers to engage in an active, philosophical process of rationale-building that would address the question of “Why?” (p. 98). Too often, Shaver saw teacher education programs lacking the ability to aid students in the formation of a philosophical foundation on which they could base their daily decisions (p. 97). Shaver believed it was fundamentally important that teachers are able to make their beliefs clear and examine them as they constitute their frame of reference (p. 97).

While Shaver believed that rationale-building was important for all types of educators, he placed great importance on rationale-building for public school teachers. In fact, Shaver, a university professor, recognized that without the active involvement of teachers in rationale-building his job would not be possible as teachers were the link between academician and student (p. 99). He recognized the importance of preparing teachers who are engaged in questioning their own practice as they “wrestle with teaching problems first-hand” (p. 99). Like Newmann (1977), however, he recognized that teachers will always be faced with problems and will always have to make important decisions that will impact the lives of their students. For this reason, Shaver suggested that the rationale-development process was never-ending. In fact, Shaver suggested that an individual suggesting his or her rationale was complete and finished should reevaluate, because that would mean that person had “stopped thinking, stopped responding to and learning from experience” (p. 102).

Shaver and Strong (1982) continued the rationale development conversation by emphasizing the importance of developing a framework for practicing teachers to make value related decisions. For Shaver and Strong, values are “our standards and principles for judging worth” (p. 17). Shaver and Strong recognize that values can be viewed from a number of

differing perspectives, but once again, the underlying idea is that teachers have a personal values profile that affects classroom decision making as a function of what values are seen as most important by the teacher.

Shaver and Strong presented a consideration for teaching from a value-based approach for all teachers and recognized that values are a part of every school subject, not just the social sciences. They emphasized the importance of a teacher honing the ability to verbalize the rationale behind pedagogical decisions and suggested that the ability to communicate a rationale to principals and superintendents could be beneficial in gaining support (p. 10). The rationale became an essential component to defending controversial teaching practices. The rationale process for Shaver and Strong, much like the earlier work of Shaver (1977), was never ending, constantly evolving, and always in a state of “becoming” (p. 10).

Unfortunately, the conversation on rationale development seemed to fade away following the initial work of Newmann (1970, 1977), Shaver (1977), and Shaver and Strong (1982). Recently, however, a few researchers have rekindled the conversation. These researchers have focused primarily on the role of rationale development in undergraduate teacher education as well as the impact of rationale development on first year teachers. However, more recent emphasis has been given to the impact of rationale development on more experienced teachers. Of particular importance is the work of Hammerness (2006), Dinkelman (2009), and Hawley (2010, 2012).

Hammerness (2006) did not specifically focus on values, but the underlying idea of a teacher making values-based decisions is evident in her work. Her work has focused on the idea of a teacher’s vision. A teacher’s vision, according to Hammerness, is essentially a “measuring stick that can indicate how far current practice sits from where one wants to be” (p. 7).

Hammerness described teachers' visions as embodying "teachers' hopes for the future and playing a significant role in their lives and work" (p. 1). Hammerness does not discuss values verbatim, but a "vision" in Hammerness' work is essentially the manifestation of a teacher's ideal view of practice, which inevitably is largely influenced by values-based decisions. Hammerness' work was qualitative, consisting primarily of teacher interviews and surveys that sought to understand the visions teachers have for how they go about practicing their profession. For Hammerness, a teacher's vision was complex, yet essential and personal.

One pivotal component to Hammerness' (2006) work involved bridging the gap between a teacher's vision and actual practice. Much like the ideals presented by Shaver and Strong (1982) Hammerness recognized that often a teacher's practice is not in line with the teacher's vision, resulting in difficult but necessary contemplation. This period of difficult contemplation, according to Hammerness, allowed some teachers to contemplate their purpose, shift their vision, and innovate their practice (pp. 7-8). For other teachers, however, the gap between vision and practice may prove to be too great and the difficult contemplation process could result in discouragement, and even leaving the teaching profession (pp. 20-21). These findings are particularly interesting when considering the role of rationale building in teacher education.

Other researchers (e.g., Dinkelman (2009), Hawley (2010, 2012)) have complexly considered both values and visions yet used the language of rationale development. Both Dinkelman and Hawley positioned themselves with Feiman-Nemser (2001) and Darling-Hammond et al. (2005) and saw a teacher's rationale for teaching as "the foundation for teacher decision-making" (Dinkelman, 2009, p. 92). In Dinkelman's major contribution to rationale development he focused not on the literature, but on the voices of preservice teachers in a secondary social studies education program. He noted the importance of rationale development

but recognized the struggle that preservice teachers must undergo in order to articulate their purpose. For Dinkelman, preservice and practicing teachers must be prepared to answer the question, “What are you teaching for?” (p. 91). Dinkelman’s approach to rationale development hinged on the idea that teachers of all levels are constantly engaged in a process of critical reflection. He recognized the difficult nature of rationale development and how it may be frightening and noted the fear that teachers may harbor in accidentally producing a rationale that hinders the learning of students (p. 100).

Following the work of Dinkelman (2009), Hawley (2010) looked at how teacher rationales developed in preservice teacher education programs were used during the first year of teaching. Hawley’s work, situated in a qualitative, social constructivist framework, provided valuable insight into the ways in which practicing teachers formally constructed and adapted their rationales for teaching while encountering the struggles that accompany the first year of teaching. Perhaps the most informing finding in Hawley’s work was the realization that an ever-present gap exists between the “ideals of [teachers’] rationales and pedagogical knowledge” (p. 323). While teachers saw their rationales as a manifestation of their core values as a teacher, they struggled to implement these values once employed as high school teachers.

In later work, Hawley (2012) posited that one potential reason teachers struggle to implement their rationale in practice is because of shortcomings in teacher education programs. Hawley presented the idea that rationale development could be considered “both content and pedagogy of social studies education” (p. 1). However, he recognized that current research on teacher decision-making is limited and is somewhat disjointed. Hawley recognized three distinct paths of current research on teacher decision-making in social studies education. Current research has focused on either teacher education programs that prepare teachers to teach content

as a way of influencing teacher decision-making, the influence of high-stakes testing on teacher decision-making, or finally, research focused on the decision-making of first-year teachers (p. 2). Hawley posited that all of these paths have dismissed the critical component of teacher purpose and rationale development in preparing teachers to make decisions. Hawley suggested following a new path in teacher education; one that considers purpose as both content and pedagogy.

Rationale development work such as the kind suggested by Hawley is entirely qualitative work. This is incredibly valuable, but it is possible that quantitative work, like the work in this study, focused on teacher values could serve as an excellent complement. As teachers attempt to create a rationale for practice having not only a quantitative understanding of their own values profiles, but also the values profiles of their peers could serve as a powerful conversation tool.

This information could be used to begin the process of better developing alternative school teacher preparation programs as well. Qualitative work, such as rationale development research, could be enhanced and complemented with quantitative work such as values research. Schools of education could use this information to help future teachers evaluate their career goals and aspirations. Alternative schools present unique challenges that require unique reflection. Schools of education could infuse values research into their curricula in such a way that students are empowered to reflect in a more informed manner. Of course, the specifics could vary, but the implications are encouraging.

Summary

Limitations

Sample size. The results of the current study are encouraging but they must be considered in context. Several limitations exist within the current work. When evaluating the results of this study sample size must be considered. Gaining access to participants in alternative

schools proved to be an incredibly difficult task. All North Carolina districts with an alternative school were invited to participate in this study. However, only 18 responded positively. Several districts responded with concern and it became apparent that the researcher-practitioner gap is very real in regards to alternative education. Some districts even reported a policy that prohibited research with their teachers due to previous abuse of teacher time and an inability of the researchers to follow-up with meaningful results that helped the school system. Other districts responded that their teachers were simply overwhelmed and they could not give permission to any study that required teacher time, regardless of how little time was needed or how flexible the schedule could be.

When districts did respond positively, lengthy research protocols were typically in place to protect teachers. While these protocols are certainly appropriate, they are restrictive. Some districts only accept applications once per year. Some districts require lengthy applications that are subject to board approval no matter how benign the research request may be. Perhaps the most effective remedy to this situation is the continual pursuit to close the researcher-practitioner gap. School systems must be able to trust university researchers and university researchers must be able to depend on school systems. The relationship should be reciprocal.

Finally, the information available through NC School Report Cards did not match up with the information provided by school districts. While a tallying of NC School Report Card data indicated that there could be as many as 942 public alternative school teachers, information provided by districts revealed a much lower number. Furthermore, upon follow up, several of the schools listed on NC School Report Cards were not currently operational. This makes it difficult to determine an overall population total. This could simply be the result of a lag in data

availability. NC School Report Card data was calculated based on the 2011-2012 school year and information provided by districts was current as of June, 2013.

Technique. The current study must also be considered in light of the statistical techniques implemented. Cluster analysis is not meant to be a decisive quantitative measure. It is an exploratory technique that should only be used to support common sense judgment. Decisions were made based on an overall analysis of the data that included descriptive statistics and multiple clustering approaches. Any other interpretation of the data would be careless and inappropriate.

Measures. Another limitation of this study involved the measures used to gather data. Efforts were made in order to reduce the burden on teachers who chose to participate in this study. One of those efforts was to cut down on the amount of duplicate information teachers would need to provide. The LVI collected some demographic information by default, namely age, sex, and race. Therefore, the demographics survey administered separately in this study only asked teachers to provide information that would be supplemental to what was collected via the LVI. Because the alternative school community is a small community, participants were given the option of whether or not to link their supplemental demographic information to the Life Values Inventory. Many chose not to complete the demographic information, and while this is certainly reasonable, it did reduce the sample size particularly for the variables of age, sex, and race. It also made it impossible to provide a clear description of the specific demographics of those participants who completed the LVI.

Furthermore, the LVI has a very specific protocol for linking participants to researchers. In order to have their information included in this study, participants had to go to a section in the LVI sign-up process and indicate “Adam Jordan Study” in the box dedicated to Organizational

Affiliation. While this was stressed repeatedly in recruitment, it does not seem that all teachers completed this section correctly. The LVI is currently revising the way researchers and participants are linked in order to combat this issue. Overall, however, the sample size, while a potential limitation, was encouraging. The LVI can be time intensive, so it is encouraging that many alternative school teachers took the time to complete the measure in its entirety.

Future directions. While the results of this study are some of the first of their kind, they may be used to guide current practice and future research. The results suggest that there is a commonality among the values of North Carolina alternative school teachers. Future research, both qualitative and quantitative, should continue to evaluate these findings and consider further applications. Perhaps a larger scale study with the capability of offering further incentives to both participating districts and individual teachers could yield a larger sample size. In the meantime, more focused qualitative work could be take the findings of this study and further analyze alternative school teachers and values.

Researchers should seek to partner with school districts in a manner that benefits both groups. Researchers can continue to study and understand the values of alternative school teachers, or any teachers for that matter, while school districts could begin to explore the potential merits and benefits of exploring the values profile of their institution, their teachers, their administrators, and their future applicants. These methods could be used to produce more appropriate, socially valid methods of professional development.

Another potentially useful study would be to evaluate the values profiles of educators in traditional settings. This may serve as an interesting comparison. While traditional educators are much more heavily studied than alternative educators, research seeking to understand the values profiles of traditional educators does not seem to exist. This would be research that

would have to take in a number of different variables, but the results could be both fascinating and informational.

Conclusion. This study was designed to serve as a descriptive study of a sample of a population that has long been absent from the professional literature. It serves as a first step in better understanding North Carolina alternative educators in terms of not only their demographics, but also in terms of their life values. While this study has faced constraints of access and sample size, the findings remain informative and encouraging.

The North Carolina alternative school teachers in this sample seem to be a group of teachers diverse in age and overall experience, predominately white, diversely certified, and relatively inexperienced in regards to alternative education. The group seems to possess a heavy male influence, but is made up primarily of females. The group seems to be well educated with the majority of teachers possessing a master's degree or higher. Overall, alternative school teachers are satisfied with their jobs and they plan to continue doing them.

The results of the values portion of this study indicate that alternative school teachers may in fact possess a common values profile. This values profile is dominated by the values of "Respect" and "Concern for Others". Other values such as "Achievement" were also highly valued. Values such as "Financial Prosperity" seemed to rank low in the values profile of this sample of North Carolina alternative school teachers. While further research is needed, this information can be used as a guide for those considering the profession of alternative school teacher as well as for principals and other administrators who may be involved in the hiring processes of teachers. It is also a starting point for practicing teachers. The LVI is an excellent tool for team building. It is certainly not a magic bullet, but it is a quantitative, research-based

approach to beginning a relevant conversation focused on the values of a school team. When used correctly, professional development opportunities are promising.

Teaching is undoubtedly a difficult profession. Alternative school teachers are commissioned to work with struggling, at-risk students who may present a number of challenges. The alternative school teacher must be able to meet these challenges head on while maintaining job and life satisfaction. An evaluation of life values allows for a more educated approach to achieving and maintaining this satisfaction. While much more research is needed in the area of alternative education, it is clear that alternative school teachers are working to make a difference. This effort should be constantly encouraged and supported in a well-planned, research-based manner. Academics are important and intelligence is paramount, but we must continue to recognize that good teachers are more than achievement measures. Good teachers are complex entities and values must not be ignored.

APPENDIX 1

Online Version of The Life Values Inventory (Crace, 2012)

Item	Associated Value	Question	Seldom Guides My Behavior		Sometimes Guides My Behavior	Frequently Guides My Behavior	
1a	Achievement	Challenging myself to achieve:	1	2	3	4	5
1b		Improving my performance:	1	2	3	4	5
1c		Working hard to do better:	1	2	3	4	5
2a	Belonging	Being liked by others:	1	2	3	4	5
2b		Being accepted by others:	1	2	3	4	5
2c		Feeling as though I belong:	1	2	3	4	5
3a	Concern for Environment	Protecting the environment:	1	2	3	4	5
3b		Preserving nature:	1	2	3	4	5
3c		Appreciating the beauty of nature:	1	2	3	4	5
4a	Concern for Others	Being sensitive to others' needs:	1	2	3	4	5
4b		Helping others:	1	2	3	4	5
4c		Being concerned about the rights of others:	1	2	3	4	5
5a	Creativity	Coming up with new ideas:	1	2	3	4	5
5b		Being creative:	1	2	3	4	5

5c		Discovering new things or ideas:	1	2	3	4	5
6a	Financial Prosperity	Having financial success:	1	2	3	4	5
6b		Making money:	1	2	3	4	5
6c		Being wealthy:	1	2	3	4	5
7a	Health and Activity	Taking care of my body:	1	2	3	4	5
7b		Being in good physical shape:	1	2	3	4	5
7c		Being athletic:	1	2	3	4	5
8a	Humility	Downplaying compliments or praise:	1	2	3	4	5
8b		Being quiet about my success:	1	2	3	4	5
8c		Avoiding credit for my accomplishments:	1	2	3	4	5
9a	Independence	Being independent:	1	2	3	4	5
9b		Giving my opinion:	1	2	3	4	5
9c		Having control over my time:	1	2	3	4	5
10a	Interdependence	Accepting my place in my family or group:	1	2	3	4	5
10b		Respecting the traditions of my family or group:	1	2	3	4	5
10c		Making decisions with my family or group in mind:	1	2	3	4	5

11a	Objective Analysis	Relying on objective facts:	1	2	3	4	5
11b		Relying on logic to solve problems:	1	2	3	4	5
11c		Being analytical:	1	2	3	4	5
12a	Privacy	Having time to myself:	1	2	3	4	5
12b		Having quiet time to think:	1	2	3	4	5
12c		Having a private place to go:	1	2	3	4	5
13a	Responsibility	Being reliable:	1	2	3	4	5
13b		Being trustworthy:	1	2	3	4	5
13c		Meeting my obligations:	1	2	3	4	5
14a	Spirituality	Believing in a higher power:	1	2	3	4	5
14b		Believing that there is something greater than ourselves:	1	2	3	4	5
14c		Living in harmony with my spiritual beliefs:	1	2	3	4	5

Note. Adapted from “Life Values Inventory Online,” by R.K. Crace, 2011, www.lifevaluesinventory.org

APPENDIX 2

North Carolina Alternative School Teacher Demographics Survey

Number	Question
1	Consent to Participate: Yes or No
2	Please enter your email address. This address does NOT have to be your school email address. Please make sure you list the same email address on the Life Values Inventory. This address will be used to link your survey with the LVI. This address will also be placed in the random drawing for the \$100 cash prizes. Winners of the prize will be notified via the email address listed below.
3	How many years of teaching experience do you have? 0-5 6-10 11-15 16-20 21-25 26-30 More than 30
4	How many years have you taught in an alternative school? 0-5 6-10 11-15 16-20 21-25 26-30 More than 30
5	Which category best describes your level of college education? Some college Bachelor's Degree Master's Degree Specialist or Similar Post-Master's Degree Doctor of Education Doctor of Philosophy Other
6	In which fields are you certified to teach? Choose all that apply. High School English High School Mathematics High School Social Studies High School Science Middle School English

Middle School Mathematics
Middle School Social Studies
Middle School Science
Special Education
Career and Technical Education
Other (Please Specify):

- 7 How satisfied are you as an alternative school teacher?
Extremely dissatisfied
Dissatisfied
Somewhat dissatisfied
Somewhat satisfied
Satisfied
Extremely satisfied
- 8 Excluding retirement as a reason, do you plan to continue in alternative education?
Yes
No
Undecided

Note. Administered on www.surveymonkey.com

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