VARIATION IN THE WILLINGNESS OF DIRECTORS OF HUMAN RESOURCES TO SUPPORT HIRING ALTERNATIVELY CERTIFIED PRINCIPALS

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ABSTRACT

In 2006, 19 states had some type of route to alternative principal certification. An additional five states had either proposed or were considering offering alternative routes to principal certification (Education Commission of the States, 2006). These numbers indicate a nation-wide development and are worthy of investigation. In states across the country that have implemented alternative certification routes, the gatekeepers usually are directors of human resources who recruit, screen, rank, and forward applications to the superintendent. As a result, even though local districts may receive a green light from the state to hire alternatively certified principals; that approval does not guarantee they will be hired.

To gain insight into the willingness of directors of human resources to support hiring alternatively certified principals, a two-stage study was conducted. First, 12 purposefully selected directors of human resources nationwide were interviewed. Second, data collected from the interviews in union with a review of the literature on alternative certification was used to identify domains, themes, and items to develop web mail questionnaires consisting of Thurstone and Likert scale statements. The web mail questionnaires were emailed to 689 directors of human resources selected from the directory of the American Association of School Personnel Administrators (AASPA) on November 1, 2005.

Principal components analysis was applied to reduce the number of overlapping variables. Multiple linear regression was the major statistical procedure used to determine

relationships between the predictor variables and the willingness of directors of human resources to support hiring alternatively certified principals. Five of 20 predictor variables were found to be significant, with anticipated concerns by directors of human resources being the strongest predictor. Conditions of the individual (e.g., "right fit," leadership skills), being located in a primarily urban area, district experiencing a shortage in the quality of principals, and more willingness to support hiring alternatively certified assistant principals than principals were the other significant predictors. Candidates seeking employment in states that have alternate routes may experience a little resistance, but directors, on average, fell into the high neutral (more positive) position when it came to supporting hiring alternatively certified principals.

DEDICATION

To my Mom and Dad (Ann and Lewis Hartley)

For your love, sacrifices, support, and direction throughout my life. Thank you for teaching me the meaning of family and how to be a man. When all is said and done, I hope I can say that I was half the parent that you have been.

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my grandparents who now rest in eternal heaven, for they laid the foundation of my

education both emotionally and financially. They always sought for my siblings and me

to be able to do anything we wanted to by being well-educated, hard-working, and

responsible citizens.

I don't have a great motivational story to tell about my upbringing. I was blessed

by growing up in a traditional family where I was told I could do anything I wanted to do if I worked hard, persevered, and never quit anything I started. Many sacrifices were made by my parents so that they could invest in the future of their children. My parents raised us simply to be "tough." Failure was never an option because they would not let us fail. When we got knocked down, they picked us up (as many parents would), but demanded that we get back in the game. In hindsight, I now realize that they were preparing us for the "game of life." I am most gracious to my parents for walking next to me, but never carrying me, even when I may have wanted them to do so.

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Many years ago I came across a quote and posted it on my bulletin board. This quote has been an inspiration in helping me to reach my goals. The quote by Marcus Washling is, "Those at the top of the mountain didn't fall there." I hope one day my children will find this quote to be useful, motivational, and inspirational in their journey.

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THE PROBLEM

One of the pressing issues in education today is how to attract more and better

qualified candidates to the position of principal. Because the principal is considered the

chief administrator in a school building, leading the instructional and operational

programs, it is imperative that this be a person of high quality. To fill the position with

such a person might mean to look outside of the schoolhouse walls.

Considered in this chapter are the current developments and issues associated

with traditionally and alternatively certified principals. Traditionally and alternatively

certified teachers and their job performance are discussed. The theoretical framework was

developed from a review of the literature on alternatively certified personnel over the last

two decades and information gathered from a qualitative study.

Context of the Study

Looking outside the schoolhouse walls to address issues of principal shortages

and quality of candidates for the principalship may not be as easy as it looks. These

alternatively certified candidates will face many challenges in order to gain entry into the

America's public schools. The issue of their being qualified is one thing and whether or

not they can get jobs is another. In a time of high stakes testing and accountability, the

role of the principal is changing quickly to that of an instructional leader. School districts

are seeking those candidates that can take charge of instructional leadership and close

achievement gaps. This may mean a look beyond traditionally certified candidates to

those who are alternatively certified. Therefore, a close examination and understanding of

alternative principal certification is important as some of these candidates may one day

be leading America's public schools.

Why Study Alternative Principal Certification?

What is portrayed as a shortage of candidates by those in a position to hire, may,

in fact, be something rather different. The current reliance on traditional methods of

certification may artificially limit the pool of applicants. Introducing alternative means of

certification or bypassing traditional college or university preparation programs could

enlarge the pool from which principals are selected, thereby helping alleviate the

perceived shortage. Yet, this concept of alternative certification is controversial and

political. McCarthy (2004) believed that the sources of increasing debate in education

today involve principal preparation programs and certification requirements. Farkas,

Johnson, Duffett, Foleno, & Foley (2001) learned in their study that alternative

certification is considered a bad idea. Others, such as the Thomas B. Fordham Foundation

(2003), the Southern Regional Education Board (2003), and the Education Schools

Project (Levine, 2005) are critical of the leadership of today's principals and advocate

major changes in, if not the elimination of, traditional principal preparation programs. A

study of alternative principal certification may provide insight to the employability and

eventual effectiveness of such candidates.

Criticism of Traditional Principal Preparation Programs

Levine (2005) reported that despite increasing competition most schools of

education continue to function as they always have. He called for redesign of educational

leadership programs, strengthening or closing weak programs, and eliminating the doctor

of education degree (Ed.D.) to better educate principals in meeting the challenging

demands of today's schools. Levine believed that courses in administration are not relevant to administrative work and are not rigorous enough to prepare educational leaders. The Thomas B. Fordham Foundation (2003) echoed this belief reporting that instruction in administrative courses has little to do with the problems that school leaders face. Hess (2003) shared that the same kinds of classes (i.e., finance, facilities, and personnel) are taught in education leadership programs, but they are applied broadly and not specific to school leadership needs. The Southern Regional Education Board (2003) added that certification is not proof of quality and this is due to university and state certification practices. Hale and Moorman (2003) expressed,

> Principals across the nation agree that administrator training programs deserve an "F." In a survey of educational leaders conducted by Public Agenda, 69% of the principals responding indicated that traditional leadership preparation programs were out of touch with the realities of what it takes to run today's schools. (p. 9)

Differences Among Advocates of Alternative Certification

There are some differences among advocates of alternative principal certification, as to who should be permitted to become principals. Some believe that school districts should seek candidates that have proven skills and successes from a multitude of career backgrounds and that the gates should be opened for these candidates and the paper credentials eliminated. Among these is Frederick Hess of the Thomas B. Fordham Foundation (Hess, 2003). Others support bypassing traditional certification requirements for candidates with backgrounds in education (i.e., guidance counselors, teachers) with demonstrated and proven leadership ability (Southern Regional Education Board, 2006). These are the main distinctions between the advocates. Both sides agree, however, that

bypassing or overhauling the traditional preparation program for school principals is a necessity.

Alternative Certification Gaining Momentum --Why?

Currently, 19 states allow for some alternative route to principal certification (Education Commission of the States, 2004). An additional five states have either proposed or are considering offering alternative routes to principal certification. This means that nearly 40% of the states in the United States offer nontraditional routes for aspiring principals with the possibility of more to come. These numbers indicate a nationwide development and are worthy of investigation as to why. Herrington and Wills (2005) believed that this development serves to deregulate the profession, therefore, opening doors for more candidates. Changes in education policy, driven by expectations for higher student achievement and increased accountability over the past several years, have opened new doors in searching for principals. Olson (2000) reported, "The increased attention is emanating from policy makers, educators, and a variety of interest groups and results from a recognition of the tremendous influence school leaders exert on the quality of teaching and learning in schools" (p. 181).

Waters and Grubb (2004), using rigorous criteria, examined 69 studies going back to 1970 that claimed to examine relationships between school leadership and student achievement. Meta-analysis was used to produce data on the effect size of leadership on student achievement. They reported an average effect size of .25. It was explained that on norm-referenced tests that one standard deviation in principal leadership improvement was associated with a 10 percentile difference in student achievement. Conversely, it was reported that principals could have a negative impact on student achievement.

Virginia Hops on the Alternative Certification Train

In 2002, the legislature in Virginia recognized the need for quality and quantity in the principalship and developed the *Commission to Review, Study and Reform Educational Leadership* (HJR 20/SJR 58, 2003)*.* The commission called for collaboration among school divisions, institutions of higher education, and professional organizations to craft preparation and professional development programs that improve student achievement through quality leadership (Virginia Department of Education, October 5, 2004). As a result, the 2004 Virginia General Assembly appropriated funds for the development of leadership grants.

According to the Virginia Department of Education (October 5, 2004), a total of $500,000 in grants for fiscal years 2004-2005 and 2005-2006 for a total of $1,000,000 over two years was approved by the General Assembly. The grants were renewable up to two years based on verification of progress. The partnerships listed below received $100,000 grants for leadership development for fiscal year 2004-2005:

- Principalship Education Plan (PEP*)* is a collective project amongst eight southwestern Virginia school divisions. The divisions worked with Radford University, the Western Virginia Public Education Consortium, and the National Association of Secondary Principals to train 35 administrators; at least three per school division.

- The Leadership Preparation Academy (LPA) was a venture between Hopewell, Sussex County, Prince George County, Charles City and Virginia Commonwealth University. The academy prepared 24 teachers seeking administrative endorsements.

- Leadership Academy for Aspiring School Leaders (LAASL) was a plan created by the City of Newport News Public Schools partnering with Old Dominion University, the Urban Learning and Leadership Center, and the Harnessing Optimism and Potential through Education (HOPE) Foundation. For two years the academy trained two groups of 50 leaders and aspiring leaders.

- Aligning Leadership Investment and Growth Now (ALIGN) was a program linking twelve school divisions in Southside Virginia and Longwood University and the University of Virginia. ALIGN matched 36 administrators and potential administrators with successful principals and assistant principals to provide leadership.

- Leaders Mentoring Leaders: Pre-Administrator and Administrator Mentoring was a program consisting of Virginia Beach, Old Dominion University, and the Adele Lynn Leadership Group that provided training and professional development to 90 mentors, administrators, and future leaders.

Additional funding to improve school leadership was added to the General Assembly funded leadership grants. The Virginia Department of Education (April 26, 2004) reported that fifteen states were chosen to take part in the Wallace Foundation's State Action for Educational Leadership Project (SAELP). The foundation awarded Virginia two SAELP grants worth $650,000 to research and develop policies fostering the growth and retention of quality educational leaders. The SAELP-Virginia was launched in 2001 to improve leadership development to best meet the demands of increased accountability placed on schools, including the Standards of Learning for

students, the Virginia State Assessment Program, the Standards of Accreditation, and the Standards of Quality (Meek, 2003).

Prior to the partnerships listed above, Feistritzer (2003) had indicated that Virginia does not offer waivers for school administrators, but this can be misleading because there is a little known process that permits superintendents to hire teachers as principals on a provisional basis. After successful completion of courses consisting of law, finance, and teacher evaluation and working in a position for a year, the state will issue a full certification (Anthes, 2004). The June 28, 2006 minutes from the Virginia Board of Education stated the following requirements for alternative certification route to level I administration and supervision prek-12 endorsement. The candidate must have:

1. Hold [A] master's degree from a regionally accredited college or university;

2. Complete[d] graduate coursework addressing competencies in school law, evaluation of instruction, and other areas of study as required by an employing Virginia school superintendent;

3. Satisfy[fied] the requirements for the school leaders licensure assessment specified by the Board of Education; and

4. Been recommended by a superintendent in an employing Virginia school division. (p. 5)

Examples of National Alternative Principal Preparation Programs

Presently, universities and colleges conduct most of the principal preparation; however, with the emergence of nontraditional providers focused on meeting new demands, this may be changing. According to Hale and Moorman (2003), a focus on meeting today's demands is now common in all of graduate education, not solely

educational leadership. Non-traditional providers claim to utilize the latest models and delivery tools to best prepare principals. Two such organizations are discussed below.

New Leaders for New Schools (NLNS)

The NLNS is a principal preparation program presently working in New York City; Chicago; Baltimore; Memphis; Washington, DC; and the San Francisco Bay Area. It recruits proven leaders from private and public sectors and trains these candidates to effectively lead schools. Colleges and universities in these areas have developed partnerships with NLNS to certify candidates. New Leaders for New Schools (NLNS) recruits a diversity of educators and former business leaders that have a record of quality leadership. The ages of participants range from 26 to 56, and 60% are minority. Principal recruitment and preparation are important goals of NLNS (New Leaders for New Schools, 2004).

The Principal Residency Network (PRN)

The PRN is grounded in the belief that on the job training in the schoolhouse is the most beneficial (Hale & Moorman, 2003). The individualized program partners with small schools tailored to train program participants. The PRN utilizes an apprenticeship model for principal preparation and certification. Aspiring principals are placed in schools that are committed to small size or school redesign that provide rigorous field experience. Candidates in this program meet the Massachusetts certification requirements through fieldwork, seminars, writing, and developing a portfolio of their experiences and work. Certification is provided through arrangements with Northeastern University (Principal Residency Network, n.d.). Although both NLNS and PRN have made arrangements, partnering with colleges or universities is not mandated by the states in

which they operate. But, having certified candidates allows them to be competitive with university-based programs (Hale & Moorman, 2003).

Changing Role of Principals

The emphasis for principals in the past decade, but especially since the implementation of the No Child Left Behind Act (NCLB) (2001), has shifted to student achievement, thereby evolving the principal into an instructional leader. Goertz and Duffy (2001) reported that every state has responded to NCLB by implementing some type of assessment and accountability, which is now the responsibility of the principal. The traditional responsibilities of the principal have not disappeared, but the focus is now on using data and research to drive instructional decision-making (Hess, 2003). McGuire (2002) supported this claim based on a year-long study of school administrators in Michigan. She reported that the position of principal in Michigan has expanded into nine layers of duties requiring expertise. These duties are curriculum, grant writing, school law, marketing and public relations, diplomacy with parents and community, security and safety, special education, education administration, and building management. While these duties have always fallen under the umbrella of the principalship, they are increasing in magnitude concurrently with student achievement accountability. Consequently, McGuire found that fewer educators are willing to take over a position with great accountability. This conclusion was based on free response questions asked of Michigan principals representing all types of schools, grade levels, and locations. However, no data is provided in the report; only a summary of the findings.

Reluctance to Take on Leadership Roles

Some of the most promising quality leaders within schools are choosing to remain

in the classroom. Roza, Celio, Harvey, & Wishon (2003) reported in certain districts and in certain schools, there exists a real difficulty finding people to become principals. They found that certified candidates offered the opportunity to serve in these schools often are not interested, further exacerbating the shortage problem, because these are the schools in most need. Some of the reasons that may deter such leaders from taking the helm are: (a) The salary of principals often is not much more than the best paid teachers, (b) principals face losing their jobs if their students are unable to pass state tests and if the school is not meeting accreditation standards, and (c) the job comes with great stress and is very time consuming (NAESP/NASSP/ERS, 1998). The demands associated with school safety, discipline, special education, facility management, human relations, politics, and evening supervision further diminish job appeal. Accountability standards that tend to increase each year exert more pressure on principals as instructional leaders. It could be that teachers who witness this might wish to remain in the classroom.

How Is a Quality Principal Defined?

Definitions among national education organizations and state and federal requirements tend to vary over the definition of a quality principal. Herrington and Wills (2005) reported that there is no clear understanding or definition of what characteristics make a good principal. However, in 1996, the Interstate School Leaders Licensure Consortium (ISLLC) developed the "Standards for School Leaders" for what principals should understand, believe, and be able to achieve (Hess, 2003). The Educational Testing Service (ETS) had produced the complementary School Leaders Licensure Assessment in 1996 (SLLA) and the ISLLC standards had been incorporated into policy by 35 states by 2002 (Hess). Nonetheless, critics of the current state of education and the traditional

preparation process quickly point only to selective data to make their point of poorly

performing principals, seldom addressing the many other duties of the position.

Consequently, a principal's success is usually based on only hard data – student test

scores. While this is an important component in defining a quality principal, there are

many other skills that should be considered, such as leadership skills and personal skills.

The Principal Shortage: Fact or Fiction?

Data from a comprehensive 2002 nationwide study funded by the DeWitt Wallace

Reader's Digest Fund (DWRDF) showed that, on average, 17 candidates applied for

school-level leadership positions as they became available (Roza et al., 2003). This report

was issued by the Center on Reinventing Public Education (CRPE) whose work is based

on the belief that the current system of educating students does not work as effectively as

it should and that improving schools requires change (Center on Reinventing Public

Education, 2004). The DeWitt Wallace Reader's Digest Fund Incorporated (2002) seeks

to improve the quality of education for all children through fundamental improvements.

Seventeen applications per opening would seem to be sufficient, so is there really a

shortage?

The DeWitt Wallace Reader's Digest Fund data were collected from a survey of

83 districts in 10 regions that were mostly large metropolitan areas, adjacent counties

with high population growth, or locations with reported leadership shortages (Roza et al.

2003). The format of the survey was a written questionnaire consisting of 28 items

comparing current and past applicant pools to the number of openings. The results

indicated a shortage does not exist. However, a focus solely on the number of individuals

who are applying for principal positions can be misleading. One must consider that the

Roza et al. datum is an average; some districts received as few as three applicants per position while others received more than forty. Roza et al. concluded that while some areas struggle to fill principal positions, the nation has more certified principals than vacant jobs.

Contrarily, the National Association of Elementary School Principals (NAESP), National Association of Secondary School Principals (NASSP), and the Educational Research Service (1998) reported that 50% of the school districts they surveyed reported a shortage for K-12 principal positions at all grade levels and locations for positions they tried to fill in the 1997-1998 school year. This information was based on interviews that took place the last week of January, 1998. This disagreement in quantity may be due to the difference between certified applicants and qualified applicants.

Part of the principal shortage may be attributed to the age of principals. An analysis by Gates, Ringel, Santibanez, Ross, and Chung (2003) indicated that principals are an aging group. Some of the reasons they reported are associated with district hiring practices that give value to applicants with experience in the position and a preference to these candidates. This means that the average age of experienced principals is increasing as well as the average age of new principals. The fact that principals in the public sector are eligible to retire at age 55 further exacerbates the problem. Overall, Gates et al. reported that the principalship is a stable profession with little growth or decline. However, individual schools and districts may struggle to recruit and retain principals year after year.

Quality of Applicants: A Mutual Agreement

Quality principals are needed to lead our schools in this age of accountability.

While there is debate over the issue of shortages, one thing resonates loudly and clearly: The principal is ultimately responsible for student achievement. Therefore, every possible effort is made to ensure that the person filling the principalship is a person of high quality. Accordingly, several states have opened the doors to the principalship through a variety of alternative options; other states are considering doing the same. With these alternative routes in place across the country, the crucial step in the process for these aspiring candidates is the opportunity to be hired.

No matter where one stands on the shortage debate; it is clear that quality in principals is a desired characteristic. Respondents in the National Association of Elementary School Principals et al. (1998) survey, who were mainly superintendents, indicated that they were not dissatisfied with the candidates they hired but felt the quality of the pool was getting shallower (National Association of Elementary School Principals, et al. 1998). Roza et al. (2003) indicated that even those in charge of hiring in districts with ample supplies of certified principal applicants complained about the lack of quality aspirants. Therefore, it is hard to designate a number that constitutes a shortage. There may be instances where there are two applicants for a principalship and both are highly qualified. Then again, there could be 20 applicants for a principalship in which none are highly qualified. The school district with two applicants may claim there is no shortage, whereas the district with 20 applicants may claim a shortage of qualified applicants.

Why then is there this concern regarding quality? Could it be the case that perceptions about shortages now reflect the increased pressure for school leaders to improve school performance? If so, district leaders claiming shortages despite having had

the same number of applicants per position as seven years ago are doing so because the stakes are now much higher (Roza et al.).

Traditionally Certified Versus Alternatively Certified Teachers

The philosophy of alternative principal certification has its roots in alternative teacher certification. Therefore, it would be appropriate to examine what the research on traditionally certified versus alternatively certified teachers revealed. According to the National Council on Teacher Quality (n.d.), "There are only a few good studies that compare traditionally certified teachers with an isolated group of alternatively certified teachers" (p. 5). It should be understood that the National Council on Teaching Quality has members from the Progressive Policy Institute and the Fordham Foundation on its Board of Directors who are advocates of alternative certification. The studies reported below were discussed in the National Council on Teaching Quality *Increasing the Odds* publication (n.d.).

Data Supporting Alternatively Certified Teachers

Miller, McKenna, & McKenna (1998) conducted a three-part study that found that 41 teachers who participated in the same alternative certification program were equally as effective as 41 teachers from traditional certification programs after three years of mentoring and experience. Classroom teaching behaviors, student achievement test score results, and the perceptions of alternative and traditionally certified teachers about their teaching abilities were used to assess the claim of teacher effectiveness.

Miller et al. (1998) matched the alternatively certified teachers with traditionally certified teachers who began teaching in the same year and would, therefore, have three years of experience. During the first year, alternatively certified teachers received

intensive coursework, supervision, and monitoring from university and public school faculty. University support ended when teachers began their second year of teaching. Descriptive statistics and multivariate analysis of variance (MANOVA) were the statistical analyses used in this study. Based on their analysis, Miller et al. (1998) concluded that there was no significant difference in the effect of the method of training on student test scores, qualitative differences in perception, and observable disparities in teaching behaviors.

Decker, Mayer, & Glazerman (2004) from Mathematica Policy Research reported that first and second year teachers from its Teach for America (TFA) program produced equal reading scores and slightly better math scores as compared to the more experienced, traditionally certified teachers in the same schools. Students entering targeted grades were randomly assigned to their classes at the start of the academic year. The integrity of class assignments was maintained throughout the year by conducting roster checks. Decker et al. reported that, "Randomization ensured that the classes in the targeted grades were essentially identical with respect to the average characteristics of students assigned to the classes; consequently, any differences in average outcomes can be attributed to differences in the teachers" (p. 7).

Data Supporting Traditionally Certified Teachers

In 1999, Linda Darling-Hammond used data from all 50 states and 65,000 teachers to conclude that states with a higher percentage of fully certified teachers were more likely to increase student test scores. Darling-Hammond used data from a 50-state survey of policies, state case study analyses, the 1993-1994 Schools and Staffing Surveys (SASS), and the National Assessment of Educational Progress (NAEP) to explore how

teacher qualifications and other school variables are linked to student achievement. She reported that teacher certification status and degree in subject taught are significantly and positively correlated with student performance (Darling-Hammond, 2000).

An analysis of the 1990, 1992, 1994, and 1996 reading and mathematics data (administered by the National Assessment of Educational Progress) showed that the proportion of well-qualified teachers is the most highly consistent predictor of student achievement in reading and mathematics (Darling-Hammond, 2000). The variables with the strongest negative relationships with student achievement were the proportion of uncertified new teachers and the proportion of teachers holding no more than a minor in the field they taught (Darling Hammond).

Directors of Human Resources Hesitant About Alternative Principals

Many directors of human resources were hesitant to place alternatively certified candidates into the principalship (Roza et al., 2003). These directors acknowledged that they were not interested in alternatively certified candidates who applied to their districts for vacant principal positions. Most directors (75%) reported that they did not circulate alternatively certified candidates' applications; they were filed away or discarded.

School Leaders' Opinions About Bringing in Outsiders

With a shortage of quality candidates for the position of principal and with the reluctance for those who are certified to lead, bringing in outsiders may be a promising approach. However, Farkas et al. (2001) concluded from their Public Agenda study of 853 superintendents resulting in a 34% response rate and 909 principals resulting in a 23% response rate that there is overwhelming resistance from superintendents and principals to bringing in leaders from other career fields. They found that only 3% of

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superintendents and 1% of principals consider this approach to be "very effective" in solving the quality leadership problem. Fifty-nine percent of superintendents and 70% of principals surveyed believed it is a bad idea. Some reasons given were that outsiders did not understand education and could not choose their raw materials like they did in the business world. There were 20% of superintendents and 13% of principals who felt that selecting capable non-educators was a good idea for failing districts, although no explanation as to why was specified.

Alternatively Certified Principals Struggle in the Job Market

An examination of the New Leaders for New Schools program for potential leaders may indicate employment concerns for alternatively certified candidates. According to Russo (2004), New Leaders fellows have had a difficult time being accepted into conventional public schools, particularly if they lacked contacts or educational experience. Russo reported five of the first 15 graduates of 2002 and approximately half of the 32 graduates in 2003 were hired as principals. Russo noted that this may be due to where New Leaders are currently located (urban areas); principalships are scarce and if a position does open, a candidate with more experience in education is hired. However, there is another factor that possibly has an impact on New Leaders being hired. District leaders and teachers have fully accepted the New Leaders model. The belief that the principal is the instructional leader and needs to have had considerable classroom experience is still strong. There is cultural friction that further complicates the issue. Russo explained that, "Winning trust at a new school—what New Leaders tend to call "gaining entry"—is a key challenge, especially for those who have spent most of their careers outside of school" (p. 4). The validity of bringing in outsiders is often

questioned by those who feel vulnerable and insulted by the concept of programs like New Leaders. Nonetheless, alternative routes are in place across the country with more to come, but the crucial step for alternatively certified principals is getting hired.

Statement of the Problem

States hold substantial power in determining administrator certification requirements, thereby serving as gatekeepers to those wishing to enter the principalship. However, there are instances across the country where the keys have been handed over to local school districts through the implementation of alternative routes to certification. In many cases the gatekeepers are directors of human resources who recruit, screen, rank, and forward applications to the superintendent. The problem is that states can alternatively certify all of the principals they want, but that does not mean that local school administrators, including directors of human resources, are willing to support hiring them. Herrington and Wills (2005) reported, "It remains unknown whether or not opening up the field of educational administration will produce better leaders because it has never, in truth, been fully implemented and studied" (p.197). As a result, even though local districts may receive a green light from the state to hire alternatively certified principals; that approval does not guarantee they will be hired.

Purpose of the Study

The purpose of this study is to determine whether or not alternative certification of principals is a viable solution to reducing principal shortages and an option for bringing in quality principals to lead schools. In this study an attempt was made to identify the variables (personal and environmental) that explain the willingness of directors of human resources to support hiring alternatively certified principals. An

understanding of these variables could serve to change or maintain current screening practices used by directors of human resources. Knowing what these variables are can present an opportunity for manipulation by supporters of alternative principal certification to increase acceptance and help ease alternatively certified candidates into principalships. These variables also could be manipulated by opponents of alternative certification to keep the doors closed to outsiders.

As more states open their doors to alternatively certified candidates, it will be beneficial to determine if these open doors transfer into employability or a restricted path to the principalship. The results may provide insight to policy makers, school leaders, and university professors about directors of human resources' willingness to support hiring alternatively certified principals to address quality and quantity issues. It may result in changes in principal preparation programs, policies, and the human resource director's screening process to accommodate alternatively certified principals and their requirements to become a principal in their district.

<div align="center">Research Question</div>

What variables explain the variation in the willingness of directors of human resources to support hiring alternatively certified principals?

Those in a position to hire or recommend candidates for the principalship may be influenced by several variables: past behaviors of hiring alternatively certified candidates, anticipated concerns about alternatively certified principals, conditions within the school district, specific attitudes toward hiring alternatively certified principals, general attitudes about alternative principal certification, and normative pressures by others. Policy, though not considered as a variable in this study, can have an impact on decision making.

Policy may be so rigid that it does not allow for the consideration of alternatively certified candidates. Then again, policy may permit the consideration of alternatively certified candidates. Currently, nearly 40% of the states in this country already have some alternate route to principal certification with more states looking at the idea (Education Commission of the States, 2006). When policy is flexible, past behaviors, specific attitude, normative pressures, anticipated concerns, conditions within the school district, general attitude, work experience, and the education of directors of human resources might impact their decision to support or limit alternatively certified candidates.

A Theory of Willingness to Support Hiring Alternatively Certified Principals

In this theory, the dependent variable is the expressed willingness of directors of human resources to support hiring alternatively certified principals. The independent variables are past behaviors, anticipated concerns, district conditions, general attitudes toward alternative principal certification, specific attitudes toward alternatively certified principals, normative pressures by others, type of work experience, and type of education of the candidate. Using a theory developed by Kufel, Gaudreau, and Parks (2004), the past behaviors, anticipated concerns, and conditions variables were kept in the researcher's theory. However, the researcher added education and work experience of the directors of human resources as two additional variables and divided attitude into general and specific attitude variables. Normative pressures that the director may experience from those in a position of power were added to complete the theory.

The theory is an explanation for the willingness of directors of human resources to support hiring alternatively certified principals. The assertions within this theory are: (a) Past behaviors of directors of human resources in hiring alternatively certified

teachers and principals predict the willingness of directors of human resources to support

hiring alternatively certified principals. (b) Anticipated concerns that directors of human

resources have about alternatively certified principals predict the willingness of directors

of human resources to support hiring alternatively certified principals. (c) The conditions

within the school district predict the willingness of directors of human resources to

support hiring alternatively certified principals. (d) General attitudes toward alternative

principal certification by directors of human resources predict the willingness of directors

of human resources to support hiring alternatively certified principals. (e) Specific

attitudes that directors of human resources have toward supporting alternatively certified

principals predict the willingness to support hiring alternatively certified principals. (f)

Normative pressures by others (e.g., superintendents, schools board, community)

concerning alternatively certified principals predict the willingness of directors of human

resources to support hiring alternatively certified principals. (g) The type of work

experience of the director predicts the willingness to support hiring alternatively certified

candidates, and (h) The type of education of the directors predicts the willingness to

support hiring alternatively certified candidates. These variables in the theory of

willingness to support hiring alternatively certified principals are in Figure 1.

Past Behaviors, Specific Attitudes, and Willingness to Support Hiring Alternatively
Certified Principals

Past behaviors are a contributing factor when intentions are being formed. Past

behaviors can influence specific attitude toward performing a given behavior in a

negative or positive manner. Ouellette and Wood (1998) reported that frequency of past

behaviors are an indicator of habit strength and can directly influence future behavior.

Future behavior for this theory is the willingness to support hiring alternatively certified
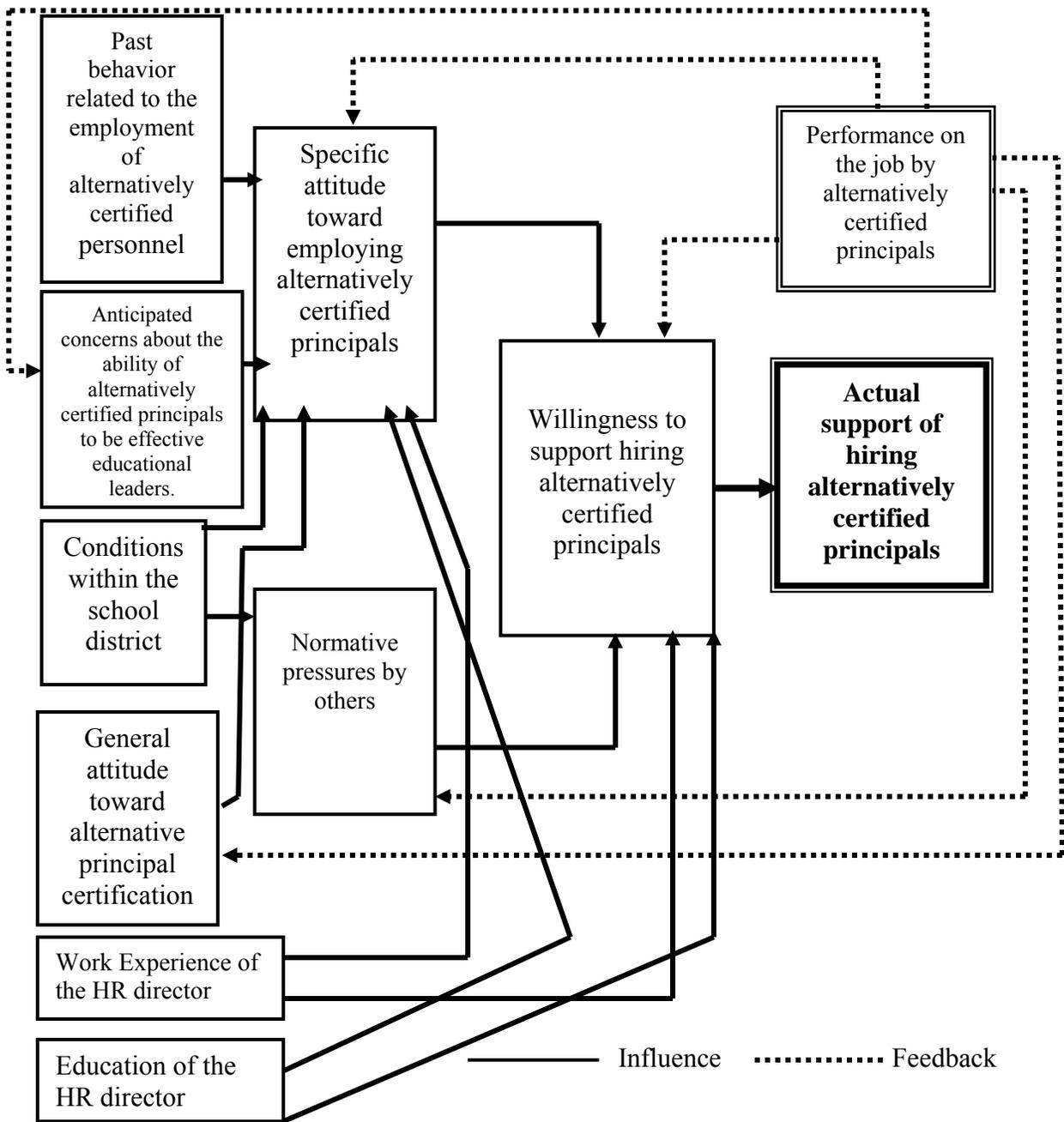
Figure 1. Theory explaining the willingness of directors of human resources to support hiring alternatively certified principals.

Note. From *School superintendents' beliefs about licensure of school principals.* A. P. Kufel, P. A. Gaudreau, and D. J. Parks, 2004. Unpublished manuscript, Virginia Polytechnic Institute and State University. Adapted with permission.

principals. Ouellette and Wood believe intent is positively correlated with habit, meaning that people are likely to develop favorable intentions about their past acts.

Directors of human resources are responsible for recruiting, screening, and rating principal candidates. Their past behaviors in regard to alternatively certified principals may serve as a bias. If directors of human resources have treated alternatively certified teachers or principals with bias in the past, then their specific attitude toward supporting alternatively certified personnel is negative, and it can be predicted that their willingness to support hiring alternatively certified candidates would be low. If directors of human resources have treated alternatively certified teachers or principals favorably in the past, then their specific attitude toward supporting alternatively certified personnel is positive, and it can be predicted that their willingness to support alternatively certified candidates would be high. It is possible that directors may have a neutral attitude toward alternatively certified principals based on a lack of familiarity with them in the past.

Anticipated Concerns, Specific Attitudes, and Willingness to Support Hiring Alternatively Certified Principals

Directors of human resources may have concerns about the job performance of alternatively certified principals, and those concerns may influence their specific attitude toward supporting hiring these candidates. Fishbein and Ajzen (1975) reported that a person's attitude toward performing a given behavior is related to the person's beliefs about the consequences of performing that behavior. Therefore, due to the potential consequences, it can be predicted that the higher the level of concerns the more negative the specific attitude toward supporting alternatively certified principals would be, and the more negative the specific attitude, the less likely directors would be willing to support hiring alternatively certified principals. Contrarily, it can be predicted that the lower the

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level of concerns the more positive the specific attitude toward supporting alternatively certified principals would be, and the more positive the specific attitude, the more likely directors would be willing to support hiring alternatively certified principals. It is possible that directors may take a neutral position regarding alternatively certified principals regardless of anticipated concerns as these concerns may not be strong enough to form an opinion that is positive or negative.

Conditions, Specific Attitudes, Normative Pressures, and Willingness to Support Hiring Alternatively Certified Principals

Eagly and Chaiken (1993) reported that when attitudes toward targets are used as predictors, the importance of non-attitudinal variables (e.g., money, resources, and location) should be considered because they are tangible predictors of behavior. They indicated that the measure of attitude-behavior relations is influenced by such non-attitudinal factors. Certain restraints that an individual is faced with can influence how they will behave. For instance, a person with financial restraints would have to purchase a product of less quality because it is all they can afford. It may not be the product the person wanted, but a financial restraint limited the ability to choose a product of higher quality. In some cases, these non-attitudinal factors may be so strong that they shape specific attitude and normative pressures, that otherwise may have been shaped differently without certain conditions or restraints.

Directors of human resources may be faced with anticipated restraints that may not be associated with their attitude about alternatively certified principals, but are related to conditions outside of their control. These conditions may include the district experiencing a shortage of applicants for the position of principal, their state having alternative routes to certification, school community acceptance, community outside the

school acceptance, and the geographic location of the school district. It could be that conditions are requirements that directors may place upon an alternatively certified principal if he or she were to be supported for the principalship. Such conditions do not deal with restraints of the school district but address what the school district believes is needed for alternative candidates to be supported for hiring (e.g., candidate willing to take courses in education, candidate is the "right fit,")

Furthermore, the conditions of the school district may result in normative pressures being placed on the director of human resources by superiors to support or not support hiring alternative candidates to fill vacancies. Fishbein and Ajzen (1975) reported that a person may or may not be motivated to comply with a given recommendation, but it is a factor influencing intent to perform the behavior. Conditions can influence the director's specific attitude resulting in a more favorable or less favorable intention to support alternatively certified principals. It is predicted that directors of human resources that work in school districts with unfavorable conditions (e.g., principal shortages, not a desirable location), which influence normative pressures by others about alternatively certified principals and which influence specific attitude, are more willing to support hiring alternatively certified principals. It is predicted that directors of human resources that work in school districts with favorable conditions (e.g., abundance of principals, desirable location), which influence normative pressures by others about alternatively certified principals and which influence specific attitude, are less willing to support hiring alternatively certified principals. It is possible that there is no influence from conditions and directors will take a neutral stance.

General Attitude, Specific Attitude, and Willingness to Support Hiring Alternatively
Certified Principals

Attitudes are the general and fairly permanent judgments people maintain of others, objects, or ideas (Petty, Wheeler, & Tormala, 2003). People can possess attitudes about very broad or hypothetical constructs in addition to very concrete constructs. Fishbein and Ajzen (1975) reported that attitude is the total of all evaluative beliefs about an object. According to Olson and Maio (2003), the use of general attitudes to predict specific behaviors has resulted in low correlations in past studies. However, Eagly and Chaiken (1993) point out that attitude toward behavior tends to be a good predictor of specific behavior and that attitudes toward a target tend to be good predictors of general behavior.

A director of human resources may have a negative general attitude toward alternative principal certification, but that attitude may not predict the director's willingness to actually support hiring a particular individual. However, a general negative or positive attitude may influence the specific attitude of performing a given behavior, which in this case is willingness to support hiring alternatively certified principals. This general attitude may be influenced by the education and experience of a director of human resources. A director who came to education from the private sector and holds a degree outside of education may be more likely to support hiring an alternatively certified principal because he or she may consider their situations similar. Directors with a degree in education and experience in education may be more likely not to support hiring alternatively certified principals and view them as unprepared. It could be that regardless of the education or experience that a neutral view is held.

It can be predicted that a negative general attitude of directors of human resources toward alternative principal certification negatively influences their specific attitudes toward alternatively certified principals and thus it is predicted that a director's willingness to support hiring alternatively certified principals would be unfavorable. It can be predicted that a positive general attitude of directors of human resources toward alternative principal certification positively influences their specific attitudes toward alternatively certified principals and it is predicted that a director's willingness to support hiring alternatively certified principals would be favorable. Directors with a neutral general attitude are expected to be open-minded about supporting alternatively certified principals.

Work Experience of the Director, Education of the Director, Specific Attitudes, Normative Pressures, and Willingness to Support Hiring Alternatively Certified Principals

The past history, background, qualifications, experiences, and previous circumstances of directors of human resources are personal antecedents that may help to shape attitude. The type of education and work experience of the directors of human resources may influence the specific attitude of directors of human resources toward their willingness to support hiring alternatively certified principals.

It is believed that directors who have moved into the field of education from the private sector and do not have a degree in education would be more willing to support hiring alternatively certified principals than directors who have worked most of their careers in education and have a degree in education. This is predicted because the director could more easily relate to alternatively certified candidates as they themselves had come from outside of the field of education. It is believed that these directors would

have a more favorable specific attitude toward alternatively certified candidates and would be more willing to support their hiring.

Directors who have a degree in education and work experience in the field of education may be more likely to exhibit a bias against alternatively certified candidates. This is predicted because such directors would not be able to relate to these candidates and may feel that a traditionally certified principal would be a better qualified candidate due to their experience as educators. It could be that the educational backgrounds and previous work experiences of directors may have no influence on their willingness to support hiring alternatively certified principals; resulting in a neutral viewpoint.

Normative Pressures and Willingness to Support Hiring Alternatively Certified Principals

DiMaggio and Powell (1983) reported that normative pressures come from internal and external stakeholders who push an organization to conform to certain norms so that the organization is considered more legitimate. Normative pressures generally push an organization to act in ways that are considered appropriate by society. These pressures may mimic what is going on in other similar organizations

Directors of human resources are faced with pressures from others such as, members of the central office, members of the school board, and members of the community to maintain conformity with groups with which they identify. These pressures can be strong enough to change the mind of a director and can serve as a predictor of their willingness to support hiring. It is possible that the normative pressures may be neutral and have no influence on the directors of human resources.

Willingness to Support Hiring and Actual Support for Hiring Alternatively Certified
Principals

Fishbein and Ajzen (1975) reported that a person's subjective probability of performing a particular behavior is based on the strength of their intent. If they intend to do something, then they are willing to do it, and probably will do it. This can only be measured by observing a relationship between the person and some action. Strength is usually indicated with "I would," "I am willing," and "I agree" type statements. Intent is influenced by specific attitude, normative pressures, work experience, and education of the human resource director combined to develop a level of willingness to behave in a particular way.

In this study the intent is the willingness to support hiring alternatively certified principals. If the intent is weak and normative pressures unfavorable, it can be predicted that directors of human resources would not support hiring alternatively certified principals. If the intent is strong and the normative pressures favorable, it can be predicted that directors would be willing to support hiring alternatively certified principals. It is possible that the willingness to support hiring alternatively principals is neutral because the intent and pressure is nonexistent.

Feedback Loops in the Theory of Willingness to Support Hiring Alternatively Certified
Principals

Inputs result from the environment's influence on a system; outputs are the influence of the system on the environment (Feedback, n.d.). A unit of time separates inputs from outputs during an action. The outputs become inputs to the system in the form of data after each action. New data that produce results in a different direction of previous results is considered negative feedback. New data that produce results in the

identical direction as previous results are considered positive feedback. Negative

feedback tends to balance systems while positive feedback tends to create growth

(Feedback). Therefore, a series of feedback loops have been created to indicate how

outputs are used as new information by the system to make adjustments to the system.

From Performance on the Job to Specific Attitudes

The theory indicates that performance on the job has a feedback loop to specific

attitudes toward alternatively certified principals. This feedback loop was created because

good job performance by alternatively certified principals is expected to increase positive

specific attitudes toward alternatively certified candidates by directors of human

resources.

From Performance on the Job to Normative Pressures

The theory indicates that performance on the job has a feedback loop to normative

pressures from others and the willingness to conform to those views. This feedback loop

was created because good job performance by alternatively certified principals would

create pressure from the superintendent, the school board, and the community to support

hiring alternatively certified candidates. Poor job performance would have the opposite

effect.

From Performance on the Job to General Attitudes

The theory indicates that performance on the job has a feedback loop to general

attitude toward alternative principal certification. Directors of human resources who have

supported hiring alternatively certified principals who have performed well on the job

will have a more positive general attitude toward alternative principal certification.

Therefore, directors of human resources would be more willing to consider supporting hiring these candidates in the future. The opposite is also true.

From Performance on the Job to Anticipated Concerns

The theory indicates that performance on the job has a feedback loop to anticipated concerns. If an alternatively certified principal performs well on the job, then the anticipated concerns of directors of human resources are minimized. Poor performance on the job would increase anticipated concerns of directors of human resources as they consider hiring future candidates thus reducing the chances of future alternatively certified candidates being supported for hiring.

From Performance on the Job to Willingness to Support Hiring

The theory indicates that performance on the job has a feedback loop to willingness to support hiring alternatively certified principals. Good job performance will increase the level of willingness by directors of human resources to support hiring alternatively certified principals. Conversely, if alternatively certified candidates exhibit poor job performance, then the level of willingness to support hiring alternatively certified principals by directors of human resources would decrease.

Willingness to Support Hiring Alternatively Certified Assistant Principals

For many school districts across the nation the assistant or vice principal is responsible for many non-instructional duties. These duties range from student discipline to supervision to building maintenance. The assistant principal is not as directly responsible for student achievement as the principal in this age of high stakes testing and accountability. Furthermore, the position of assistant principal allows one to become acclimated to a leadership position in education and gain valuable experience. Therefore,

it is predicted that directors of human resources would be more willing to support hiring alternatively certified candidates if they were applying for assistant principalships rather than principalships. Directors will be asked at the end of the web questionnaire if they would be more willing to support hiring alternatively certified assistant or vice principals rather than principals.

Definitions

The specific definitions of the variables in this study are in Table 1. Two definitions are specified for each variable: a constitutive and an operational definition. A constitutive definition is the conceptual definition for the variable. The operational definition describes how the variable will be measured.

Overview of the Dissertation

Addressed in chapter one is the current developments and issues associated with traditionally and alternatively certified principals. Traditionally and alternatively certified teachers and their job performance were discussed. The theory of a willingness to support hiring alternatively certified principals was explained. In chapter two, the methodology that was used to complete the study, a description of the setting, participant identification, data collection procedures, and data analysis methods were addressed. The results are reported in chapter three. A discussion of conclusions, implications, recommendations for future practice, and recommendations for further research are covered in chapter four.

Table 1

Definitions of Constructs Used for the Quantitative Study

Construct	Constitutive definition	Operational definition
Willingness to support hiring alternatively certified principals	The level of expressed willingness of a director of human resources to support hiring alternatively certified principals	A director's mean score for the items in which they agreed on the Thurstone willingness to support hiring alternatively certified principals questionnaire, items 65-75 1=disagree, 2=agree Item scores are in Table C4, Appendix C
Past behaviors in hiring alternatively certified candidates	The level of previous support of directors of human resources for hiring alternatively certified personnel	A director's mean score on a Likert scale, questionnaire items 25, 27, 30, 31, 32, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree Items 27, 31, 32 recoded
Anticipated concerns that directors of human resources have about alternatively certified principals	The level of worry of directors of human resources about lack of instructional and operational leadership experience and acceptance by students, staff, and community of alternatively certified principals	A director's mean score on a Likert scale, questionnaire items 17-24, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree
Conditions of the individual and the job affecting the support of directors of human resources for supporting hiring alternatively certified principals	The level of conditional support of directors of human resources for recommending alternatively certified principals	A director's mean score on a Likert scale, questionnaire items 49-64, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree
District conditions	District location (rural, suburban, urban)	Measured with questionnaire item 3, 1= Primarily rural 2= Primarily suburban 3= Primarily urban

(table continues)

Table 1 (continued)

Construct	Constitutive definition	Operational definition
District conditions (continued)	Location 1 v. 2,3 Dummy coded for school district location primarily rural v. primarily urban or suburban	Measured with questionnaire item 3, Primarily rural=1 Primarily urban or suburban=0
	Location 3 v. 1,2 Dummy coded for school district location primarily urban v. primarily rural or suburban	Measured with questionnaire item 3, Primarily urban=1 Primarily rural or suburban=0
	District allows hiring of alternatively certified principals	Measured with questionnaire item 4, 1=Yes 0=No
	District is experiencing a shortage in quantity of principal candidates	Measured with questionnaire item 5, 1=Yes 0=No
	District is experiencing a shortage in quality of principal candidates	Measured with questionnaire item 6, 1=Yes 0=No
General attitudes toward alternatively certified principals	Beliefs, judgments, or feeling that the directors of human resources have about alternative principal certification	A director's mean score on a Likert scale, questionnaire items 10-16, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree Items 10, 12, 15, 16 recoded
Degree held by the human resources director	The director of human resources holds a degree in professional education or not	Measured with questionnaire item 7, 1=Yes 0=No
Work experience of the human resources director	The director of human resources has worked mostly in the field of professional education	Measured with questionnaire item 8, 1=Yes 0=No

(table continues)

Table 1 (continued)

Construct	Constitutive definition	Operational definition
Specific attitude toward supporting hiring an alternatively certified principal	Attitude toward performing a specific behavior such as willingness to support hiring a specific alternatively certified principal	A director's mean score on a Likert scale, questionnaire items 33-40, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree
Normative pressures by others (positive)	Pressures from superiors or others of influence to support hiring alternatively certified candidates	A director's mean score on a Likert scale, questionnaire items 41, 42, 43, and 47, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree
Normative pressures by others (negative)	Pressures from superiors or others of influence not to support hiring alternatively certified candidates	A director's mean score on a Likert scale, questionnaire items 45, 46, and 48, 1=Strongly disagree 2=Disagree 3=Agree 4=Strongly agree
Alternatively certified assistant principals	Director would support hiring an alternatively certified assistant principal rather than a principal	Measured with questionnaire item 76, Yes=1 No=0
Years of experience	Number of years of experience as a Director of Human Resources	Measured with questionnaire item 2, 1= ≤5 2= 6-10 3= 11-15 4= 16-20 5= >20
	Job experience 1&2 v. 3,4,5 Dummy coded for experience of 1 to 10 years v. experience greater than 10 years	Measured with questionnaire item 2, 1-10 years=1 >10 years=0
	Job experience 5 v. 1,2,3,4 Dummy coded for experience over 20 years v. experience ≤ 20 years	Measured with questionnaire item 2, Over 20 years=1 ≤ 20 years=0

(table continues)

Table 1 (continued)

Construct	Constitutive definition	Operational definition
Actual support in hiring alternatively certified principals	The actual behavior of recommending alternatively certified principals to the superintendent for hiring	The actual behavior of recommending alternatively certified principals to the superintendent for hiring was not measured in this study. Only the expressed willingness to do so was measured.
Performance on the job by alternatively certified principals	How well alternatively certified principals performed their given job responsibilities	Performance on the job was not measured in this study.

Note. One half of the participants responded to the survey with the "inside" definition and the other half of the participants responded to the same survey with the "outside" definition of alternative principal certification. See Appendices I and J for questionnaires and items.

CHAPTER 2

METHODOLOGY

There were two parts to this study. Both qualitative and quantitative methods were used to collect, analyze, and interpret data on the willingness of directors of human resources to support hiring alternatively certified principals. The sections that follow include a description of the population, sample, instrumentation, data collection procedures, data management procedures, and analytical procedures for the qualitative and the quantitative study. The qualitative study is discussed first, followed by the quantitative study.

Qualitative Study: Interviews with Selected Directors of Human Resources

The procedures used to conduct the qualitative study are described in this section, including identification of the population and the selection of the sample. The method of managing the data, analyzing the data, conducting the interviews, and the protocols used to gather the data are discussed.

Population

A nationwide population of directors of human resources who met the requirements of the matrix in Table 2 was used for the qualitative study. Twenty-four directors of human resources nationwide were identified based on their geographic location (rural, suburban, urban) and whether or not their state had an alternative certification route for principals. This criterion was used to gather information from as many different representatives of the population as possible. Each of these participants was assigned the inside or the outside definition of alternatively certified principals.

Table 2

Matrix Used to Select Directors of Human Resources for the Qualitative Study

Geographic location	Rural		Suburban		Urban	
Alternate certification routes available for principals	Y	N	Y	N	Y	N
Population[a]	4	4	4	4	4	4
Inside definition of alternatively certified principals[b]	1	1	1	1	1	1
Outside definition of alternatively certified principals[b]	1	1	1	1	1	1
Subsample[c]	2	2	2	2	2	2

[a]Four directors of human resources were included in each cell of the sample matrix to have a reasonable number from which to choose participants. [b]One half of the sample was interviewed with the "inside definition" of alternatively certified principal candidates. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program. [b]The other half of the sample was interviewed with the "outside definition" of alternatively certified principal candidates. These are candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program. [c]The subsample is the total number of participants interviewed. When there were not enough responses from members in the sample to obtain a subsample of two per cell, the researcher started over with the selection process by adding potential interviewees to the sample.

Sample

All 24 directors of human resources from the population of 24 were originally

contacted to participate in a telephone interview in hopes of receiving at least 12

responses. The selection matrix used two variables: geographic location (rural, suburban,

and urban) of the director of human resource's school district and status of alternative

certification in the director of human resource's state (yes, no). Fourteen directors from

11 different states across the nation responded to the researcher's contact and participated

in this study (see Table 3). Specific information about each participant's gender, state

experiencing a principal shortage, district experiencing a principal shortage, director's

classification of locality, and years of experience as a director of human resources is in

Table 4.

Instrumentation and Data Collection Procedures

The development of the interview protocol for directors of human resources and

the methods for assuring reliability and validity of the data are discussed in this section.

The section concludes with a discussion of the data collection procedures.

Construction and Testing of the Interview Protocol

The interview protocols used in this study were originally developed by Kufel,

Gaudreau, and Parks (2004). Permission was granted by the protocol developers to adapt

the protocols as necessary for use with directors of human resources instead of

superintendents. The interview protocol had 12 semi-structured, open-ended questions

that took approximately 15 minutes to discuss (Appendix A). The protocols were adapted

for this study as follows: the paragraphs for both protocols were rearranged to explain the

purpose of the study and the definition of alternative principal certification at the

Table 3

Number of Directors of Human Resources Interviewed for the Qualitative Study by State

State	N
Indiana	1
Illinois	1
Kentucky	1
Maryland	1
Minnesota	1
Missouri	1
Nevada	1
North Carolina	1
Pennsylvania	2
South Carolina	1
Virginia	3
Total = 11 States	14

Table 4

Characteristics of Participating Directors of Human Resources and Their School Districts

| | Group membership | | | | Total | |
| | Outside education definition | | Inside education definition | | | |
	N	*%*	*N*	*%*	*N*	*%*
Number of participants	6	43.0	8	57.0	14	100.0
Gender						
Females	3	50.0	6	75.0	9	64.3
Males	3	50.0	2	25.0	5	35.7
Experiencing statewide principal shortage						
Yes	3	50.0	5	62.0	8	57.1
No	3	50.0	3	38.0	6	42.9
Experiencing district principal shortage						
Yes	1	17.0	2	25.0	3	21.4
No	5	83.0	6	75.0	11	78.6
Years experience as director of human resources						
≤ 5	4	50.0	5	62.5	9	64.3
6 - 10	0	0.0	0	0.0	0	0.0
11 - 15	2	33.3	2	25.0	4	28.6
16 - 20	0	0.0	0	0.0	0	0.0
>20	0	0.0	0	0.0	0	0.0
Missing	0	0.0	1	12.5	1	7.1
Director of human resources classification of locality						
Urban	2	33.3	2	25.0	4	28.6
Suburban	2	33.3	4	50.0	6	42.8
Rural	2	33.3	2	25.0	4	28.6

beginning, the word licensed was replaced with certified, the word teachers was added to the examples section of the inside definition, directors of human resources replaced superintendents, school of education replaced educational leadership department, the time that the tapes would be destroyed was changed from three months to the electronic submission of the dissertation, and some grammatical corrections were made. Kufel, Gaudreau, and Parks developed two protocols because there are two definitions of alternatively certified principals: an inside definition (an educator) and an outside definition (a non-educator).

Used in the most general form, alternatively certified principals are those who have been awarded principal certification by state or local education agencies without having completed a traditional principal preparation program. This general definition is divided into two definitions to offer a more precise comparison of the two during the study:

(1)   The inside education definition of alternatively certified principals refers to candidates who have a master's degree and experience in education but who have not completed a university-based principal preparation program (Kufel et al.).

(2)   The outside education definition of alternatively certified principals refers to candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program (Kufel et al.).

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The revised interview protocol (see Appendix A) was piloted with two directors of human resources purposefully selected from the Henrico and Roanoke public school districts. Feedback was collected on the clarity of the questions, the time it took to conduct the interview, suggested changes from the directors of human resources, and the researcher's interview skills. The information obtained from these pilot interviews was used in making changes in the protocols.

Most of the questions captured what was intended. A few questions required some minor adjustments because they created some hesitation in the dialogue. Question number five was reworded, as the original question was creating some hesitation from the respondents. Previously, question 5 was a follow up to question number four and was stated as follows: <u>Follow up</u>: If not, have you considered hiring an alternatively certified candidate? The new question was worded as follows: In the past have you considered hiring an alternatively certified teacher or principal? The words (acceptance and instructional) were added as prompts to question number six. The words (teachers, parents, students, and school board) were added to question number seven. These additions were made to questions six and seven to provide prompts, as the pilot study respondents asked for examples when these questions were asked.

The first pilot interview was conducted on July 26, 2005, and lasted 12 minutes and 43 seconds. The second pilot interview was conducted on July 27, 2005, and lasted exactly 14 minutes. The interviews were conducted from a graduate assistant's office at the Virginia Polytechnic Institute and State University using a digital tape recorder with a standard tape recorder as a back up.

Reliability of the interview data. Merriam (1998) explained that, "The question is not whether findings will be found again but whether the results are consistent with the data collected" (p. 206). To help assure this consistency, a second researcher should help interpret data to avoid researcher bias. This is known as multiple raters. This was accomplished by having an educational professional along with the researcher analyze the interview data from 14 transcripts. This educational professional is currently a school-level administrator and working on a doctoral degree in educational administration at the College of William and Mary. Additionally, this person was a former high school teacher of the year. We classified the transcripts into themes in accordance with the Maykut and Morehouse (1994) constant-comparison method. Our results were compared to see if we grouped items and labeled categories similarly.

To help assure consistency among multiple raters, inter-rater reliability was established by determining the percentage of times we as raters agreed on an item. This was determined by keeping a log of the number of times a unit of meaning was placed in the same category by the raters (agreement) and the number of times the unit of meaning was placed in a different category (disagreement). The average was determined by dividing the total number of times the two raters agreed by the total number of units of meaning. For example, if we agree 200 times and there are 220 units of meaning, the average would be 91%. The inter-rater reliability for this study was 94% (165 agrees and 11 disagrees). A 90% agreement rate or higher is acceptable for inter-rater reliability.

Validity of the interview data. Validity can be improved in qualitative studies by clearly explaining the instructions to participants. Consistent behavior by the researcher such as following the telephone interview protocol exactly for all participants and treating

all participants the same is important. An emphasis was placed on reading the definition

for alternative principal certification explicitly as it appeared on the interview protocol

and checking with the interviewee to be sure that the definition was understood.

Administering the correct protocol—inside definition or outside definition—to the

intended participant helped to avoid invalid data due to protocol administration error.

Recording and transcribing the interview data minimizes the chances of missing

information or inaccuracies allowing for valid description. Transcribing was

accomplished by color coding the protocol and recording the respondent's code on it. The

use of member checks was used by the researcher when necessary to check

interpretations and rule out misinterpretations from the telephone interviews. Member

checks are a method of soliciting feedback from respondents by showing them a copy of

the transcript and asking if it reflected their intentions (Maxwell, 1996). A copy of the

interview transcript was emailed to the one telephone interview participant asking that he

or she reply in the color red with their agreement or disagreement with the analysis. The

person responded that I had transcribed all responses as intended. The remaining 13

protocols were hand written and sent back to me. In these cases, I was able to type their

answers or copy and paste if sent via email. Additionally, the use of the Maykut and

Morehouse (1994) constant-comparative method provided an audit trail for people to

understand and reconstruct my work in order to judge its integrity.

Administration of the Interview Protocol

Each participant was mailed an invitation to participate in advance of the

interview with a copy of the interview questions and a brief description of the purpose of

the study (see Appendix A). An opportunity was provided to respond in writing if that

was more convenient for those who chose to participate. Thirteen participants selected this method because it was more convenient for their busy schedules. A self-addressed, stamped envelope was provided for those who chose that option.

With permission from the director of human resources who chose the telephone interview it was recorded with a digital voice recorder and a standard tape recorder as back up equipment. The interview was conducted by speakerphone in a secured and quiet location at a time convenient for the participant. The researcher posted a do not disturb sign on the door and called the participant from his office. The interview took approximately 15 minutes using the twelve-question protocol. Notes were taken throughout the interview.

Management of the Interview Data

After the interviews were conducted, the tape recordings and written responses were transcribed. Each line of the transcript was numbered using single spacing with 20-point font on different colored paper for each participant. Each page was coded to recall easily the type of data, the source of the data, and the page number of that specific data set. For example, the first page (1) of a transcript (T) from an interview with Ken Jackson (KJ) on August 1, 2005, would be coded T/KJ-1/8.1.05 in the top right corner. All tapes were played back and compared to the transcripts to check for accuracy. The same process was used for the written responses. Photocopies were made of the transcripts and written responses prior to "unitizing" the data for analysis (Maykut & Morehouse, 1994, p. 128). Tapes will be destroyed after the dissertation is submitted electronically to Virginia Polytechnic Institute and State University.

Procedures for Analyzing the Interview Data

The Maykut and Moorehouse (1994) constant-comparative method was used for thematic mapping of data. The constant-comparative method is a procedure for analyzing qualitative data. This method uses inductive category coding by comparing units of data to all other units.

After the transcripts were typed, coded, reviewed, and photocopied, and the researcher felt comfortable with the content, "unitizing" began. The following steps recommended by Maykut and Morehouse (1994) when analyzing qualitative data were used:

(1)   Lines were drawn across the pages to separate units of meaning.

(2)   A code was recorded in the left margin to indicate where the unit is located.

(3)   A description was recorded under the code of that unit's meaning.

(4)   Units of meaning were cut apart and taped onto separate 5" x 8" index cards.

(5)   Visual displays of the data were hung in a room with plenty of wall space.

(6)   "What are" type questions were used to create a list of recurring patterns, concepts, and themes on a large sheet of paper. This was the first step at determining what stood out in the data; known as the discovery step.

(7)   The discovery sheet was reviewed and overlapping ideas were combined.

(8)   One leading idea was taken from this sheet and written on an index card

         and taped to the left side of a large sheet of paper posted on the wall. This

         served as a provisional category.

 (9)   Unitized data cards were reviewed to see if any fit the provisional

         category. If so, the card was taped under the category card. Before placing

         a second card in a category, it was compared to the first card to see if it

         had similar meaning (looks like, feels like criteria). If so, the card was

         placed under the first card.

(10)   Cards not fitting the first category but listed on the discovery

         sheet were named and placed to the right of that category (this was a

         continuous process).

(11)   Cards not listed on the discovery sheet and not fitting a provisional

         category were placed into a new category and given a tentative

         name.

(12)   As Lincoln and Guba (1985) suggested, the researcher proceeded through

         this process until six to eight cards were accumulated in a category.

(13)   At this time a rule for inclusion for additional cards was established.

         The rule for inclusion shifted the category name from units of meaning

         to collective meaning of the included data. This inclusion rule is known as

         a propositional statement—a statement that expressed the meaning that is

         contained in the data cards (summary) placed collectively under a specific

         category. This rule was used for categorizing all remaining data, and the

         look/feel-alike criteria ceased.

Once all of the unitized data were placed into the appropriate categories,

(1)   A code was developed to mark the cards in that category [e.g., (AC)

T/KJ-1/8.1.05], which means anticipated concerns, transcript, Kim Jones;

page one, from August 1, 2005. This category code was written on the

top of each data card within a category.

(2)   The categories and related data were reviewed to be sure that the data

were clearly related to the category (clearly similar, no overlap, no

ambiguity). Necessary adjustments were made. The miscellaneous pile

was reviewed for possible category placements or new categories.

(3)   Propositional statements were reviewed for those statements that stood

alone and those statements that could be connected to other statements

 with similar meaning (outcome propositions) (Maykut & Morehouse,

1994).

(4)   The final step was integrating the data from the various propositional

statements with supporting units of meaning to provide a detailed

description of the participants' responses with supporting examples,

comments, and direct quotations.

The results of this analysis in union with a review of the literature were used to develop items for the final web questionnaire.

Quantitative Study: A National Survey of Directors of Human Resources

The procedures used to conduct the quantitative study are described in this section, including identification of the population and the selection of potential

participants. The methods of developing and administering the web questionnaires used to collect the data are discussed.

Population and Participants

Directors of human resources who were members of the American Association of School Personnel Administrators (AASPA) on November 1, 2005, were the population for this study (see Appendix B for letter of support from the AASPA). This organization had 1,529 members on that date and was designed for school personnel or human resource administrators, superintendents, principals, personnel support staff, attorneys, business people, and others interested in school personnel administration. This organization has members from the United States and Canada.

Six hundred eighty nine members of AASPA were listed as directors of human resources or personnel, assistant or associate superintendents of human resources or personnel, executive directors of human resources or personnel, or chief human resource or personnel officers. All 689 were selected to participate in the study. The AASPA has six geographic regions, and all members in each region were selected for participation (see Table 5). Members from Canada and those who did not have the above designated titles were excluded. It was expected that approximately 35% (241) of the questionnaires would be returned. Upon emailing the prenotice letter to potential participants, 51 email addresses were returned as undeliverable. Therefore, 638 potential participants received the questionnaire, with 223 expected to be returned after Dillman's (1999) follow up procedures were implemented.

The researcher originally attempted to contact 345 directors of human resources for the inside definition group and 344 directors of human resources for the outside

Table 5

Population and Potential Participants in the Quantitative Study by AASPA Regions and States and by Inside and Outside Definitions

Region	States	AASPA members	Directors of human resources	Directors of human resources	Group membership			
					Inside definition		Outside definition	
		N	*N*	*%*	*N*	*%*	*N*	*%*
1	Alaska, Washington, Oregon, Idaho, Montana, Wyoming, North Dakota, South Dakota	175	46	26.3	23	50.0	23	50.0
2	Minnesota, Wisconsin, Michigan, Iowa, Illinois, Indiana, Ohio	342	164	48.0	82	50.0	82	50.0
3	West Virginia, Pennsylvania, Maryland, Delaware, New Jersey, Connecticut, Rhode Island, New York, Vermont, New-Hampshire, Massachusetts, Maine	321	138	43.0	69	50.0	69	50.0

(table continues)

Table 5 (continued)

Region	States	AASPA members	Directors of human resources	Directors of human resources	Group membership			
					Inside definition		Outside definition	
		N	*N*	*%*	*N*	*%*	*N*	*%*
4	California, Hawaii, Nevada, Utah, Arizona, Colorado, New-Mexico	220	101	45.9	51	50.5	50	49.5
5	Nebraska, Kansas, Oklahoma, Texas, Missouri, Arkansas, Louisiana, Mississippi	236	128	54.2	64	50.0	64	50.0
6	Kentucky, Virginia, Tennessee, North-Carolina, South-Carolina, Georgia, Alabama, Florida	235	112	47.7	56	50.0	56	50.0
Total	50 states	1,529	689	45.1	345	50.1	344	49.9

definition group for a total of 689. These groups were determined by numbering the list of 689 directors alphabetically by region and assigning those with odd numbers to the inside group and those with even numbers to the outside group. Two hundred forty-one directors of human resources responded to the questionnaire and all were usable responses. The inside definition group had 123 (51%) responses and the outside definition group had 118 (49%) responses.

Potential Sources of Error

Dillman, Tortora, and Bowker (1999) reported that four potential sources of error needed to be accounted for to estimate the distribution of a characteristic in a population: (a) Coverage error occurs when some segments of the population you wish to study cannot be part of the sample. Some segments in the population may have multiple chances of being selected while others may not qualify or have no chance at selection. (b) Sampling error occurs when only a portion of the population is surveyed. (c) Measurement error occurs from erroneous answers to questions that are poorly worded, survey mode effects, and the answering behavior of the participant. (d) Nonresponse error occurs when participants selected for the survey do not respond.

Dillman et al. (1999) reported that all four sources of these errors must be kept low to generalize the results to a specific population. Sampling error was controlled by selecting the full population of directors of human resources from the membership directory of the AASPA. Measurement and nonresponse error were reduced by making the survey friendly to respondents. That is, the survey was constructed in such a way that individuals would respond and would respond accurately to the request. The respondent-friendly approach may have helped provide coverage benefits because people with

various types of browsers and computer equipment were able to access and complete the web questionnaire. The researcher used the whole population of directors of human resources to reduce researcher bias in the selection process and to increase the number of potential respondents.

Dealing With Non Respondents

Non respondents threaten the external validity of a study. For the researcher to be able to generalize the study results to the population, it was necessary to take steps to conclude if the non respondents affected the external validity. One way to handle this is to compare early to late respondents. This is because research has shown that there are often similarities between non respondents and late respondents (Ary, Jacobs, & Razavieh, 1996). Breaking respondents down into a group that responded late and a group that responded early allowed comparisons to determine if there were statistical differences between the groups. If no significant differences were found, then the results could be generalized to the population (Miller & Smith, 1983).

For this study, early respondents were defined as respondents 1-73, the first surveys received (N =73). Late respondents were defined as respondents 168-241, the last surveys submitted (N=73). Differences in early and late respondents were determined with independent-samples t tests for the predictor variables because the data were assumed to be interval and with Pearson chi-square tests for independence between categorical variables because the data were nominal.

T-test data for the early and late respondents were similar. As a whole, there were no significant differences found between early and late respondents for the following predictor variables: conditions of the job, specific attitude, general attitude, anticipated

concerns, conditions of the individual, normative pressures-positive, normative pressures-negative, and past behaviors as a whole group. The early inside group had a significant difference for conditions of the job, and anticipated concerns; the late inside group with past behaviors. A review of the chi-square data indicated three significant differences. With both groups combined, a significant difference was found between early and late respondents for gender. There were more females in the late responding group. When early versus late respondents were broken into inside and outside definition groups, a significant difference existed for the categorical variable concerning whether or not directors of human resources would be more willing to support hiring assistant principals instead of principals. This difference was "yes" in the direction of early respondents for the inside definition, and "yes" in the direction of late respondents for the outside definition. For the late outside group, there was a significant difference in the "no" direction of directors of human resources having a shortage in the quantity of principals in their school districts. These differences weren't great enough to cause concern about generalizing to the population. This information is in Tables 6, 7, 8, 9, and 10.

Instrumentation and Data Collection Procedures

The development of the web questionnaire used to survey directors of human resources and the methods to help assure validity and reliability of the data are discussed in this section. The section concludes with a discussion of the data collection procedures.

A Pilot of the Questionnaires

The content of the questionnaires were piloted with a high school principal with a doctorate in educational administration and two school administrators working on their doctoral degrees. One of the doctoral students was an assistant principal, the other was an

Table 6

Comparison of all Early and Late Respondents on the Predictor Variables

Time of return	N	M	SD	df	t	p
Conditions of the job						
Early	72	2.86	.34	116.54[a]	.65	.52
Late	70	2.81	.54			
Specific attitude						
Early	72	2.85	.43	142	-1.63	.11
Late	72	2.96	.38			
General attitude						
Early	73	2.90	.42	144	-1.15	.25
Late	73	2.98	.47			
Anticipated concerns						
Early	73	2.40	.37	144	1.88	.06
Late	73	2.27	.47			
Conditions of the individual						
Early	72	2.91	.44	141	-.43	.67
Late	71	2.94	.52			
Normative pressures-positive						
Early	71	2.24	.49	136	-1.91	.06
Late	67	2.40	.52			
Normative pressures-negative						
Early	70	1.94	.58	138	-1.33	.19
Late	70	2.07	.59			

(table continues)

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Table 6 (continued)

Time of return	N	M	SD	df	t	p
Past behaviors						
Early	73	2.99	.45	142	-.33	.75
Late	71	3.01	.57			

Note. The following scale was used for each item: 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly disagree. [a]Levene's test for homogeneity of variance was significant (*F*=5.41, *p*=.02).

Table 7

Comparison of Early and Late Respondents on Predictor Variables by Inside and Outside Definition Groups

| | Group membership | | | | | | | | | |
| | Inside definition | | | | | Outside definition | | | | |
Predictor variable	*N* Early Late	*M* Early Late	*SD* Early Late	*df*	*t*	*N* Early Late	*M* Early Late	*SD* Early Late	*df*	*t*
Conditions of the job	44 37	2.84 2.74	.34 .64	52.86[a]	.83**	28 33	2.89 2.89	.35 .40	59	.07
Specific attitude	44 37	2.87 2.95	.36 .39	79	-.86	28 35	2.81 2.98	.51 .38	61	-1.44
General attitude	45 38	2.94 3.04	.37 .53	81	-1.04	28 35	2.84 2.92	.49 .39	61	-.76
Anticipated concerns	45 38	2.32 2.23	.30 .46	61.44[b]	1.03*	28 35	2.47 2.69	.44 .48	61	1.86
Conditions of the individual	44 37	2.91 2.93	.46 .60	79	-.16	28 34	2.90 2.95	.42 .43	60	-.51
Normative pressures-positive	43 35	2.22 2.39	.54 .57	76	-1.37	28 35	2.87 2.80	.46 .37	58	-1.30
Normative pressures-negative	42 35	2.02 2.09	.58 .69	76	-.53	28 34	1.82 2.04	.56 .47	60	-1.72
Past behaviors	45 36	2.98 3.10	.43 .65	58.21[c]	-1.02*	28 35	3.01 2.92	.48 .46	61	.70

Note. The scale was 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree.
[a]Levene's test for homogeneity of variance was significant ($F=7.02, p=.01$). [b]Levene's test for homogeneity of variance was significant ($F=4.86, p=.03$). [c]Levene's test for homogeneity of variance was significant ($F=4.82, p=.03$).

*p≤.05, **p≤.01

Table 8

Comparison of all Early and Late Respondents on Personal and District Characteristics

Characteristic	Total		Early return		Late return			
	N	%	N	%	N	%	Chi-square	p
Gender								
Male	62	42.5	37	50.7	25	34.2	4.04	.05*
Female	84	57.5	36	49.3	48	65.8		
Years of experience								
≤5	52	35.6	28	38.4	24	32.9	4.17	.38
6-10	43	29.5	18	24.7	25	34.2		
11-15	23	15.8	13	17.8	10	13.7		
16-20	12	8.2	8	11.0	4	5.5		
>20	16	11.0	6	8.2	10	13.7		
District location								
Rural	27	18.5	16	21.9	11	15.1	1.14	.57
Suburban	90	61.6	43	58.9	47	64.4		
Urban	29	19.9	14	19.2	15	20.5		
Allows hiring								
No	100	69.9	50	68.5	50	71.4	.15	.70
Yes	43	30.1	23	31.5	20	28.6		
Shortage in quantity								
No	101	69.7	50	68.5	51	70.8	.09	.76
Yes	44	30.3	23	31.5	21	29.2		
Shortage in quality								
No	58	40.3	31	43.1	27	37.5	.46	.50
Yes	86	59.7	41	56.9	45	62.5		
Education								
No	17	11.6	8	11.0	9	12.3	.07	.80
Yes	129	88.4	65	89.0	64	87.7		
Work experience								
No	25	17.1	11	15.1	14	19.2	.43	.51
Yes	121	82.9	62	84.9	59	80.8		

(table continues)

Table 8 (continued)

Characteristic	Total		Early return		Late return			
	N	%	N	%	N	%	Chi-square	p
Assistant principal								
No	44	30.8	22	30.6	22	31.0	.00	.96
Yes	99	69.2	50	69.4	49	69.0		

Note. Gender=male or female, Years of experience=years of experience as a director of human resources, District location=primarily rural, suburban, or urban; allows hiring=district allows hiring alternatively certified principals, Shortage in quantity=district has a shortage in quantity of principals, Shortage in quality=district has a shortage in quality of principals, Education=director holds some type of degree in education, Work experience=director has worked mostly in the field of education, Assistant principal=director would be more willing to support hiring an alternatively certified assistant principal than principal.

*p≤.05, **p≤.01

Table 9

Comparison of Early and Late Inside Definition Group Respondents on Characteristics of Human Resource Directors and Their Districts

Characteristic	Total		Early return		Late return		Chi-square	p
	N	%	N	%	N	%		
Gender								
Male	32	38.5	21	65.6	11	34.4	2.73	.10
Female	51	61.5	24	47.1	27	52.9		
Years of experience								
≤5	33	39.8	19	42.2	14	36.8	3.33	.51
6-10	23	27.7	10	22.2	13	34.2		
11-15	13	15.7	7	15.6	6	15.8		
16-20	6	7.2	5	11.1	1	2.6		
>20	8	9.6	4	8.9	4	10.5		
District location								
Rural	21	25.3	13	28.9	8	21.1	1.16	.56
Suburban	45	54.2	22	48.9	23	60.5		
Urban	17	20.5	10	22.2	7	18.4		
Allows hiring								
No	57	69.5	32	71.1	25	67.6	.12	.73
Yes	25	30.5	13	28.9	12	32.4		
Shortage in quantity[e]								
No	57	68.7	34	75.6	23	60.5	2.16	.14
Yes	26	31.3	11	24.4	15	39.5		
Shortage in quality								
No	29	35.4	16	36.4	13	34.2	.04	.84
Yes	53	64.6	28	63.6	25	65.8		
Education								
No	11	13.3	5	11.1	6	15.8	.39	.53
Yes	72	86.7	40	88.9	32	84.2		
Work experience								
No	17	20.5	8	17.8	9	23.7	.44	.51
Yes	66	79.5	37	82.2	29	76.3		

(table continues)

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Table 9 (continued)

Characteristic	Total		Early return		Late return		Chi-square	p
	N	%	N	%	N	%		
Assistant principal								
No	24	29.6	8	18.2	16	43.2	6.05	.01**
Yes	57	70.4	36	81.2	21	56.8		

Note. Gender=male or female, Years of experience=years of experience as a director of human resources, District location=primarily rural, suburban, or urban; allows hiring=district allows hiring alternatively certified principals, Shortage in quantity=district has a shortage in quantity of principals, Shortage in quality=district has a shortage in quality of principals, Education=director holds some type of degree in education, Work experience=director has worked mostly in the field of education, Assistant principal=director would be more willing to support hiring an alternatively certified assistant principal than principal.

*p≤.05, **p≤.01

Table 10

Comparison of Early and Late Outside Definition Respondents on Characteristics of Human Resource Directors and Their Districts

Characteristic	Total		Early return		Late return		Chi-square	p
	N	%	N	%	N	%		
Gender								
Male	30	47.6	16	57.1	14	40.0	1.83	.18
Female	33	52.4	12	42.9	21	60.0		
Years of experience								
≤5	19	30.2	9	32.1	10	28.6	2.51	.64
6-10	20	31.7	8	28.6	12	34.3		
11-15	10	15.9	6	21.4	4	11.4		
16-20	6	9.5	3	10.7	3	8.6		
>20	8	12.7	2	7.1	6	17.1		
District location								
Rural	6	9.5	3	10.7	3	8.6	.77	.68
Suburban	45	71.4	21	75.0	24	68.6		
Urban	12	19.0	4	14.3	8	22.9		
Allows hiring								
No	43	70.5	18	64.3	25	75.8	.96	.33
Yes	18	29.5	10	35.7	8	24.2		
Shortage in quantity								
No	44	71.0	16	57.1	28	82.4	4.74	.03*
Yes	18	29.0	12	42.9	6	17.6		
Shortage in quality								
No	29	47.0	15	53.6	14	41.2	.95	.33
Yes	33	53.0	13	46.4	20	58.8		
Education								
No	6	9.5	3	10.7	3	8.6	.08	.77
Yes	57	90.5	25	89.3	32	91.4		
Work experience								
No	8	12.7	3	10.7	5	14.3	.18	.67
Yes	55	87.3	25	89.3	30	85.7		

(table continues)

Table 10 (continued)

Characteristic	Total		Early return		Late return			
	N	%	N	%	N	%	Chi-square	p
Assistant principal								
No	20	32.3	14	50.0	6	17.6	7.36	.01**
Yes	42	67.7	14	50.0	28	82.4		

Note. Gender=male or female, Years of experience=years of experience as a director of human resources, District location=primarily rural, suburban, or urban; allows hiring=district allows hiring alternatively certified principals, Shortage in quantity=district has a shortage in quantity of principals, Shortage in quality=district has a shortage in quality of principals, Education=director holds some type of degree in education, Work experience=director has worked mostly in the field of education, Assistant principal=director would be more willing to support hiring an alternatively certified assistant principal than principal.

*p≤.05, **p≤.01

Assessment and Compliance Coordinator for testing and remediation. They provided

feedback on clarity, ease of use, grammatical errors, and the amount of time needed to

complete the questionnaire. They suggested that adding the word "support" in front of

hiring for most of the Thurstone statements, where applicable, would be more realistic for

directors of human resources since they do not actually perform the act of hiring school

principals. Upon receiving this feedback, the researcher did add this word to all

Thurstone statements that dealt with hiring. Additionally, the word "consider" was

substituted for the word "hiring" in the Likert scale items to minimize the chance of

having confounding variables. This would create a problem in that the Likert scales items

may be related to the Thurstone scale items. This change helped to minimize the

influence of relationships between the variables.

<p align="center">*Construction and Testing of the Questionnaire*</p>

The questionnaire had the following parts: a Thurstone equal-appearing interval

scale to measure willingness of directors of human resources to support hiring

alternatively certified principals, a set of Likert scales to measure the predictor variables,

and separate items to measure characteristics of directors of human resources and their

school districts.

Thurstone Scale of Willingness to Support Hiring Alternatively Certified Principals

The analysis of the qualitative data assisted in modifying the theory. The

qualitative data indicated a need to create new domains for the theory and adjust existing

domains in the theory. These final domains were used to generate a list of statements for

the web questionnaires. The same definitions used previously for the qualitative study

applied to the quantitative study (alternatively certified principals from inside or outside

the field of education). The questionnaires were the same for the two groups, but the

protocol explaining the

definition was different. The dependent variable (expressed willingness to support hiring

alternatively certified principals) was measured with a Thurstone scale. The following

independent variables were measured with Likert scales:

(1)　　Past behaviors of directors of human resources related to recommending

　　　　alternatively certified personnel.

(2)　　General attitudes of directors of human resources toward alternative

　　　　certification.

(3)　　Specific attitudes of directors of human resources toward alternatively

　　　　certified principals.

(4)　　Conditions related to the job.

(5)　　Conditions related to individual applicants.

(6)　　Anticipated concerns of the directors of human resources about the

　　　　performance of alternatively certified principals.

(7)　　Normative pressures being applied by others on the director of human

　　　　resources.

Thurstone scale construction. The dependent variable (expressed willingness to

support hiring alternatively certified principals) was measured with a Thurstone Scale.

The researcher used the equal-appearing intervals method for this study as suggested by

Trochim (2005). In this method, the difference between any two adjacent locations is the

same as any other two adjacent locations on the scale. Trochim's recommendations were

followed in constructing the Thurstone scale.

(1)   Another education doctoral student and I constructed 97 statements (see

        Table C1, Appendix C). Andy Kufel, a fellow graduate student already

        had some of these items and they were adapted for this study. Both

        doctoral students were familiar with the focus of the statements to measure

        willingness of directors of human resources to support hiring alternatively

        certified principals. The grammar and structure of the sentences were

        similar. The statements were similar to each other but differed in the

        "amount" of expressed willingness to support hiring alternatively certified

        principals. Items were developed to measure a full range of points along a

        continuum from high to low expressed willingness. Each statement

        indicated the expressed willingness in a slightly different amount,

        therefore, giving the scale sensitivity to differences.

(2)   Once the set of statements was developed, the next step was to have

        judges rate each statement on a scale of one (extremely unfavorable) to

        eleven (extremely favorable) toward willingness to support hiring

        alternatively certified principals. This was completed by a group of 25 K-

        12 school administrators. They were asked to rate the amount of

        willingness to support hiring alternatively certified principals; they were

        not to express their opinion about the statements.

(3)   The median and the interquartile range for each statement were computed

        using Statistical Package for the Social Sciences (SPSS). From these data,

        the researcher selected the statements that had the smallest interquartile

        range because these were the statements with the least amount of

variability. The medians were used as each of the 11 interval scale values

(see Table C1, Appendix C). The higher the value on a scale of 1 – 11, the

more favorable the director is toward supporting alternatively certified

principals.

(4)   The statements were reviewed for clarity by the researcher. Any statement

that was confusing was substituted with the next best choice. Twenty-two

statements were initially selected for the test-retest to have enough

questions to ensure reliability of the scale, and to avoid demotivating the

respondent with too many statements. These 22 items represented two

questions from across the range of 11 medians to ensure that least

favorable, neutral, and most favorable attitudes were covered (see Table

C2, Appendix C).

(5)   The list of 22 statements by scale value was randomly scrambled. The

scale was complete and ready to measure a participant's willingness to

support hiring alternatively certified principals. To avoid demotivating the

respondents on the final questionnaire with too many items, the researcher

selected 11 of the 22 Thurstone items covering the range of medians and

covering what the researcher intended to measure (Table C2,

Appendix C).

Thurstone scale content validity. The nature of the items and the method of

construction supported the content validity of the Thurstone scale. Judges familiar with

the field of educational administration classified 97 statements into 11 categories based

on the degree of willingness to support hiring alternatively certified principals. Then the

median and the interquartile range were computed for each statement. The statements that had the smallest interquartile range within each value were selected because they had the least amount of variability. After checking for clarity, 11 statements covering the median range of 1 to 11 were selected for the survey. These statements were then randomly scrambled by scale value before being placed in the survey.vt.edu tool.

Thurstone scale construct validity. The question for construct validity is whether or not the willingness of directors of human resources to support hiring alternatively certified principals is related to the set of variables identified as being related to it in the theory. This was accomplished by examining the data collected in the nationwide survey. This required running multiple linear regression with willingness to support hiring as the dependent variable. If the Thurstone scale has good construct validity, the variables (predictors) should be related to willingness (criterion) in accordance with the established theoretical framework. The researcher checked to see if the theory held true by: (1) specifying the theoretical relationships, (2) examining the empirical relationships between the measures of the constructs, and (3) interpreting the empirical evidence as to how it makes clear the construct validity of the particular tested measure (Construct Validity, 2005). If the theory does not hold true, then there is a problem with the measurement or the constructs selected for the study or the theory is poorly constructed. This is explained in chapter four so that the next researcher understands what parts of the theory were and were not reflected in the data. The theory was revised according to the findings.

Thurstone scale reliability. Reliability for the Thurstone scale was established with the test-retest procedure. Test-retest is appropriate for constructs that do not vacillate

on an hourly, daily, or weekly basis. Test-retest is a correlation between repeated test measures. It indicates if a person obtains a similar location in the distribution of scores when tested at a different time. If the two distributions have a high positive correlation, then test-retest reliability is evident.

Each person's mean score for all items with which he or she agreed was used as a measure of willingness to support hiring alternatively certified principals. A group of K-12 administrators was tested on October 5, 2005, and then retested three weeks later on October 26, 2005. The Thurstone scale of willingness to support hiring alternatively certified principals was considered sufficiently reliable for use in further data analysis. A test-retest correlation coefficient of .881 was obtained (see Table C3, Appendix C).

Thurstone scale scoring. Scoring for the dependent variable (expressed willingness to support hiring alternatively certified principals) was conducted as follows: Each item in the scale had two choices. Respondents chose to agree or disagree with each item. A respondent's total score was computed by averaging the values of the items with which the person agreed.

The Likert Scales for Measuring the Predictor Variables

Likert scale construction, Likert scale reliability, Likert scale validity, and Likert scale scoring are discussed in this section.

Likert scale construction. The independent variables (determined from the literature and the qualitative study) were measured with Likert scales. The following steps recommended by Trochim (2005) were used to construct the scales:

(1)   Concepts were first identified from two specific sources, first from a study of the literature concerning alternative principal certification and second

from the analysis of the data collected from the interviews during the

qualitative study.

(2)   With the above information, another doctoral student (Sally Pitts) and I

developed a set of potential scale items (20-40 for each scale) based on the

understanding of the concept for each independent variable (see Table

D1, Appendix D).

(3)   These statements were reviewed for grammar, wording, and correct

domain placement.

(4)   The scale was then ready for content validation as described below.

Likert scale content validity. The scales were validated by a group of education

experts, who evaluated the statements for domain placement, item-domain association,

and clarity (see Table D2, Appendix D for a copy of the content validation instrument

and Tables D3, D4, and D5, Appendix D for domain placement, strength of association,

and clarity of items). This procedure was applied to each identified predictor variable and

its associated statements reducing the final scales to the number of items as follows:

conditions of the job, 8 items; specific attitude, 8 items; general attitude, 7 items,

anticipated concerns, 8 items, conditions of the individual, 8 items; normative pressures-

positive, 4 items; normative pressures-negative, 3 items; and past behaviors, 5 items.

These scales were used to collect data on the predictor variables (see Table D6, Appendix

D for domains and items following the content validation).

Content validity can be improved by carefully thinking through the concepts

(accomplished by adapting the Kufel, Gaudreau, and Parks, 2004 interview protocol to

meet the needs of this study), using appropriate concept mapping methods [accomplished

by using the Maykut and Morehouse (1994) constant-comparison method to lay out and visualize the data], and having experts critique the operational definitions (accomplished by the researcher and the researcher's advisor working together on the most appropriate measurement scales and validating those scales). Data from the qualitative study and a review of the literature were used to construct survey items for each domain (predictor variable). The domains were listed with a description of what each domain purports to measure (see Table D1, Appendix D) using a format similar to Margheim (2001). A group of education experts was asked to classify the items into appropriate domains and to rate the items for strength of association with the selected domains and for clarity.

Descriptive statistics were calculated to determine the percentage of raters that classified each item in the expected domain, the strength of association of each item with the domain, and the clarity of each item. The descriptive statistics were number and percentage for domain classification and number, mean, and standard deviation for strength of association and clarity ratings. For an item to be acceptable for use on the questionnaire, 80% of the reviewers had to classify it within its expected domain, a 3.0 or higher mean association level had to be achieved, and a 2.5 or higher clarity level had to be observed (see Tables D3, D4, and D5, Appendix D). These items were then scrutinized for any possible wording that may prejudice the relationship between the predictor variable and the dependent variable. Many of the items were reworded to assure this while maintaining the defined construct.

Items with the highest average mean scores for strength of association and clarity were included for the final web questionnaires. Not all items were included due to the goal of creating a balance of items representing all domains. This led to the elimination of

some items and reduced the questionnaire to 56 Likert scale items. A summary of the validated items by domain is in Table 11.

Before finalizing and releasing the final questionnaire, the researcher determined that the variable "conditions" should be expanded to include more than a "yes" or "no" question about school districts experiencing a shortage in "quality" and "quantity" of principals. The researcher was able to pull information from the qualitative study that helped in creating additional questionnaire items. It was determined that 8 additional Likert items would be added to address conditions related to the individual, and 8 additional items to address conditions related to the job that may affect directors of human resources' support for hiring alternatively certified principals would be added. These items were included in the principal components analysis. Two separate scales were detected, one for individual conditions and one for job conditions. Alpha reliability coefficients were calculated for the scales (see Table D6, Appendix D for added items for conditions). As observed in Table 12, these scales produced very high alphas (.91, .95) and thus were included for the descriptive and inferential statistics.

Likert scale construct validity. Factor validity is a form of construct validity that is established with factor analysis. Principal components analysis was performed to reduce or to discover the number of domains (predictor variables) in the data set. Principal component analysis is a type of data reduction and summarization that assesses the construct validity of a test or scale (Principal Component Analysis, 1999). It evaluates and provides evidence of construct validity (Factor Analysis Using SAS PROC FACTOR, 1995). Construct validity was supported through variable extraction and the pattern of relationships among the observed variables using the principal components

Table 11

Item Validation by Domain, (N=25)

Domain	Number of items used in validation process	Number of items validated in validation process	Percent validated after validation process	Number of validated items used on the scale
General attitude	21	12	57.1	8
Anticipated concerns	35	13	37.1	8
Past behaviors	15	10	66.7	8
Specific attitude	32	9	28.1	8
Normative pressures	14	11	78.6	8

Note. Number of items validated in validation process includes items with an 80% or higher domain rating, a 3.0 or higher strength of association rating, and a 2.5 or higher clarity rating. Conditions of the job and conditions of the individual were not validated as they were later added.

Table 12

Alpha Reliability Coefficients for the Predictor Variables Following the Principal Components Analysis

Scale	N (Items)	*M* Scale mean (Item mean)	Scale *SD*	Alpha
Conditions of the job (Items: 57, 58, 59, 60, 61, 62, 63, 64)	8	22.66 (2.83)	3.85	.95
Specific attitude (Items: 33, 34, 35, 36, 37, 38, 39, 40)	8	22.93 (2.87)	3.36	.90
General attitude (Items: 10R, 11, 12R, 13, 14, 15R, 16R)	7	20.34 (2.91)	3.10	.88
Anticipated concerns (Items: 17, 18, 19, 20, 21, 22, 23, 24)	8	18.84 (2.36)	3.40	.84
Conditions of the individual (Items: 49, 50, 51, 52, 53, 54, 55, 56)	8	23.31 (2.91)	3.74	.92
Normative pressures-positive (Items: 41, 42, 43, 47)	4	9.13 (2.28)	1.78	.73
Normative pressures-negative (Items: 45, 46, 48)	4	6.20 (2.07)	1.76	.80
Past behaviors (Items: 25, 27R, 30, 31R, 32R)	5	15.08 (3.02)	2.27	.80

Note. R = recoded item because of negative wording. See Table D5, Appendix D for the content of items.

analysis of the data.

Before proceeding with the principal components analysis, the Kaiser-Meyer-Olkin measure of sampling adequacy and the Bartlett's test of sphericity were conducted to determine if the sample was suitable for factor analysis. The Kaiser-Meyer-Olkin value was a .88, well above the suggested value of .6 and the Bartlett's test was a .00, meeting the <0.05 standard (Pallant, 2001). Therefore, the researcher proceeded with the principal components analysis. The Varimax rotation with Kaiser normalization was the rotation method used. The rotation converged in 19 iterations.

The principal components analysis yielded eight usable components (see Tables D7, D8, D9, Appendix D). Three components were not used (components 9, 10, & 11). Component nine had two items with only a .65 alpha (items pb28r & pb29r). Component 10 was not used because only one item loaded on it (item ga9). Component 11 was not used because no items had a substantial loading of .40 or higher. Item pb26 was not used because it did not have a substantial loading on any component. Item np44 was discarded as a bad item because it could be confusing to the respondent (see Table D7, Appendix D).

Likert scale reliability. Items in a survey should be constructed in a way that does not create confusion or multiple interpretations. This helps to ensure that variability in responses results from differences in respondents and not from errors in interpretation of items. Cronbach's Alpha was computed on the data collected from participants following a principal components analysis to determine the internal consistency of the items selected to measure each independent variable. A coefficient of .80 or higher was the criterion for acceptable internal consistency. All alphas except for normative pressures-

positive (.73) met the criterion and the scales were considered to be sufficiently reliable to be used in the analysis of the data. Normative pressures-positive was kept because the alpha was close to the .80 criteria and was considered important because it measured a different type of pressure than normative pressures-negative. The alphas along with the means and standard deviations are reported in Table 12. An inter-item correlation matrix is provided for each predictor variable to show the internal consistency within the domain (see Table E1, Appendix E).

Likert scale scoring. A four choice scale response scale was used for each item. Respondents were asked to decide if they: 1=Strongly disagreed, 2=Disagreed, 3=Agreed, or 4=Strongly agreed with the item. In some cases (items 10, 12, 15, 16, 27, 28, 29, 31, and 32) it was necessary to reverse the response value because some statements were reversed in meaning: 1=4, 2=3, 3=2, and 4=1. A respondent's score for each Likert scale was the mean of the items in the scale. The predictor variables and related final items are in Table 13.

Characteristics of Human Resource Directors and Their School Districts

The researcher felt that an important part of the study was to gather information on the characteristics of the human resource directors and their districts to be used as predictor variables in the multiple linear regression, and to learn as much as possible about the role these characteristics played in a director's willingness to support hiring alternatively certified principals. The researcher chose the following characteristic variables: gender of the director, years of experience of the director, district location of the director, if the director's school district allows hiring alternatively certified principals, if the director's district was experiencing a shortage in quantity of principals, if the

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Table 13

The Final Domains, Descriptions, and Items for the Web Questionnaires

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Domains, Descriptions, and Items

Domain 1: *General attitude* toward alternative principal certification.

Description: This domain will assess judgments, feelings, and opinions that directors of human resources hold about the alternative certification of principals.

Items:

10. At no time should there be an avenue for employment in education of people from fields other than education. (R)
11. Alternative certification is a good way to address shortages of educators.
12. Alternative certification of educators is demeaning to traditionally certified educators. (R)
13. I believe alternative certification of educators is a good idea.
14. Alternative routes to certification will increase the talent pool in education.
15. Alternative certification of educators will harm our schools. (R)
16. Alternative certification of educators weakens the instructional program in schools. (R)

Domain 2: *Anticipated concerns* about the ability of alternatively certified principals to be effective educational leaders.

Description: This domain will assess worries about acceptance, the ability of alternatively certified principals to provide instructional leadership, work with teachers to improve student achievement, conduct the daily operations of the school, and work with parents and the community to improve the school.

Items:

17. Alternatively certified principals would lack instructional leadership skills.
18. Alternatively certified principals would struggle in the position, even with a strong mentor.
19. Alternatively certified principals would not be able to articulate appropriate educational values.
20. Alternatively certified principals would not know how to work with children.
21. Alternatively certified principals would treat schools like a business.
22. Alternatively certified principals would require too much professional development and training to make them effective school leaders.

(table continues)

Table 13 (continued)

Domains, Descriptions, and Items

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23. An alternatively certified principal would not be accepted by the school community (e.g., teachers, parents, other principals).
24. Alternatively certified principals would not be able to select teachers effectively.

Domain 3: *Past behaviors* related to the employment of alternatively certified personnel.

Description: This domain will assess the previous experiences and decisions made about supporting or not supporting alternatively certified principals or teachers for employment.

Items:

25. In the past I have considered supporting alternatively certified teachers.
27. In the past I have avoided supporting alternatively certified applicants. (R)
30. In the past I felt alternative certification of teachers was a good plan.
31. I have not supported hiring alternatively certified teachers in the past. (R)
32. I have never supported hiring alternatively certified teachers. (R)

Domain 4: *Specific attitude* toward employing alternatively certified principals.

Description: This domain will assess judgments, feelings, and opinions about employing alternatively certified principals with specific characteristics.

Items:

33. An alternatively certified principal who has successfully completed a rigorous internship could perform well in a school.
34. An alternatively certified principal who is highly recommended by other educational administrators would be an acceptable educational leader.
35. An alternatively certified principal who was successful in a non-public school setting could perform well in a public school.
36. An alternatively certified principal who had acquired essential educational knowledge could be an effective educational leader.
37. An alternatively certified principal who had acquired leadership skills in settings other than education could be an effective educational leader.
38. Depending on specific conditions, an alternatively certified principal could be a successful educational leader.
39. An alternatively certified principal who understands children could be a successful educational leader.

Table 13 (continued)

Domains, Descriptions, and Items

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40. An alternatively certified principal could perform well in some settings.

Domain 5: *Normative pressures* by others.

Description: This domain will assess pressures from superiors or others of influence to support or not support hiring alternatively certified principals.

Normative pressures-positive items:

41. My superintendent believes that alternatively certified principals are acceptable candidates for the principalship.
42. I have school board members who believe that alternatively certified principals would be acceptable candidates for the principalship.
43. Alternatively certified principals that I would usually ignore are considered acceptable by others of influence in my district.
47. My superiors consider alternatively certified principals to be capable principal candidates.

Normative pressures-negative items:

45. Because of pressure from influential others, alternatively certified principals are not acceptable in my school district.
46. My superiors expect me to ignore the applications of alternatively certified principals.
48. My superiors want me to overlook applications from alternatively certified principals.

Domain 6: *Conditions of* the *individual* principal candidate.

Description: This domain will assess if directors of human resources would consider supporting hiring alternatively certified principals based on individual attributes.

Items:

49. I would consider an alternatively certified principal if he or she were the "right fit" for the job.
50. I would consider an alternatively certified principal if he or she were the most qualified candidate for the job.
51. I would consider an alternatively certified principal if he or she had the leadership skills for which I am looking.

(table continues)

Table 13 (continued)

Domains, Descriptions, and Items

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52. I would consider an alternatively certified principal if he or she were knowledgeable about the field of education.
53. I would consider an alternatively certified principal if he or she were willing to pursue a traditional certification while on the job.
54. I would consider an alternatively certified principal if he or she had strong people skills.
55. I would consider an alternatively certified principal if he or she were willing to take what I feel are crucial education courses.
56. I would consider an alternatively certified principal if he or she had strong leadership skills.

Domain 7: *Conditions of* the *job* per the school district.

Description: This domain will assess if directors of human resources would consider supporting hiring alternatively certified principals based on conditions of the job per that school district.

Items:

57. I would consider an alternatively certified principal if there were a shortage of certified administrators in my district.
58. I would consider an alternatively certified principal if there were no certified candidates available.
59. I would consider an alternatively certified principal if I had no other choice.
60. I would consider an alternatively certified principal if the talent pool were shallow.
61. I would consider an alternatively certified principal if no one I felt could do a good job were available.
62. I would consider an alternatively certified principal if no certified principal applied for the principalship.
63. I would consider an alternatively certified principal if I could not find a certified principal.
64. I would consider an alternatively certified principal if there were no certified principals willing to take the principalship position.

Note. Items 9, 26, 28, 29, and 44 were not used in the analysis (see Appendix I & J for these items). Statements marked with (R) were *reverse scored*. Therefore, those items scored as 4 were scored as 1; those scored as 3 were scored as 2; those scored as 2 were scored as 3; and, those scored as 1 were scored as 4.

director's district was experiencing a shortage in quality of principals, if the director held

a degree in professional education, if the director had worked mostly in the field of

professional education, and if the director was more willing to support hiring an

alternatively certified assistant principal than principal. Following the analysis of the

principal components analysis, a revised theory was developed that included the seven

domains. The conditions variable was split into conditions of the job and conditions of

the individual and the normative pressures variable was split into normative pressures-

positive and normative pressures-negative (see Figure 2).

Administration of the Web Questionnaires

The questionnaire was designed using the procedures recommended by Dillman et

al. (1999) to help facilitate a high return rate. The available Virginia Polytechnic Institute

and State University "Survey.vt.edu" software was used to insert statements, send, and

receive the electronic survey in a user-friendly manner.

Dillman et al. (1999) constructed a list of 10 principles based on review of

dozens of web surveys. Their suggestions were used to make the web questionnaire user-

friendly. They were applied as follows:

Principle 1. A motivational welcome screen to introduce the web questionnaire

and to clearly explain directions was used.

Principle 2. The web questionnaire began with statements on the opening screen.

Principle 3. Each question was presented in a standard format with choices listed

in a column format. (Thurstone scale = 2 choices and Likert scale = 4 choices)

Principle 4. Line length was limited to fit on the screen so that no scrolling was

necessary.
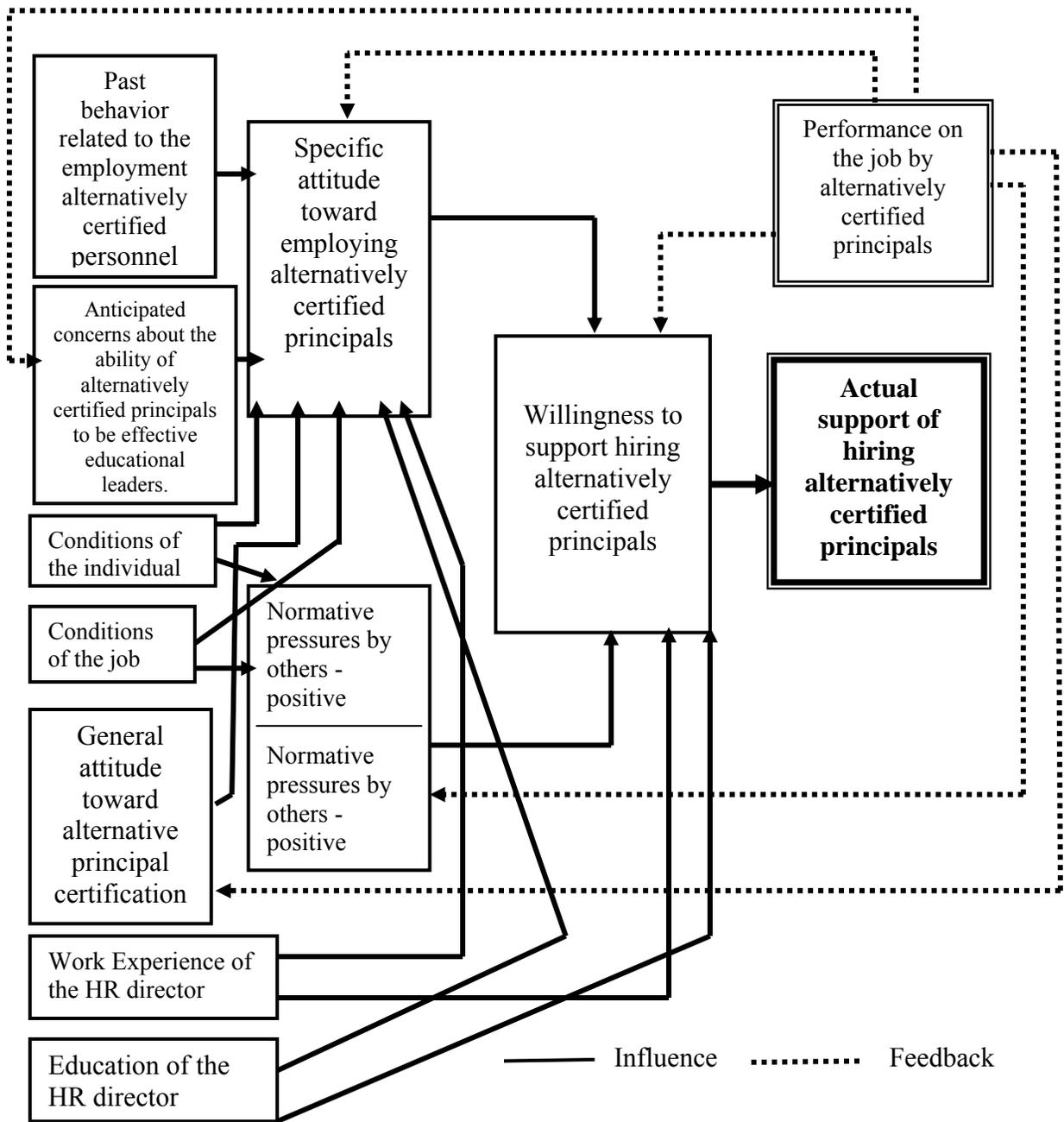
Figure 2. Revised theory explaining the support of directors of human resources for hiring alternatively certified principals following the principal components analysis.

Note. From *School superintendents' beliefs about licensure of school principals*. A. P.

Kufel, P. A. Gaudreau, and D. J. Parks, 2004. Unpublished manuscript, Virginia

Polytechnic Institute and State University. Adapted with permission.

Principle 5. Directions were posted by each question (where necessary) so that scrolling back to the first page was not necessary.

Principle 6. There were no requirements to answer a question before the respondent could proceed to the next one.

Principle 7. The web questionnaire was constructed so that the participant could scroll from question to question.

Principle 8. Double-banked choices were used (when necessary) at the bottom of each page so they did not carry over to the next page.

Principle 9. Statements were numbered so that respondents were aware of where they were in the completion process. A total number of items was given at the start of the web questionnaire.

Two web questionnaires were created on Survey.vt.edu (see Appendix I & J). One was for the inside definition group; the other was for the outside definition group. Dillman (2000) suggested that a dual-mode method for contacting participants should be used. This strategy uses email, postal mail, and possibly telephone communication to pre-notify participants. This method is intended to increase questionnaire return. Each participant was emailed a password to help ensure that only the selected individual participated in the study. Answers were kept confidential and no individual's answers were associated with his or her identity. When respondents submitted their completed questionnaires, their names were deleted from the email list and never associated with their answers in any way. All emails were sent on an individual basis, not by a listserv or a mass emailing of names. This helped to personalize the contact and establish confidentiality.

A specific timeline following the advice of Dillman (2000) was followed to help achieve a high return rate:

(1)   A brief prenotice email was sent (March 1, 2006) to participants two days in advance of the questionnaire (see Appendix F for prenotice email). The email explained that an important questionnaire would be forthcoming in a few days. It contained a very brief explanation of the purpose and importance of the study, the potential benefits, and the importance of individual responses to the study. The email explained that each questionnaire was coded to ensure confidentiality while allowing for contact with nonrespondents. The importance of the prenotice email was to establish the importance of the questionnaire and to create awareness so that the questionnaire was not automatically deleted upon arrival.

(2)   Two days later (March 3, 2006), the questionnaire with an explanation of why the participant's response is important was emailed individually (see Appendix F for cover letter with URL embedded). One half of the participants received a questionnaire with the "inside education" definition description at the top, and the other one half of the participants received the same questionnaire but with the "outside education" definition description at the top.

(3)   Exactly one week after the initial survey was sent (March 10, 2006), an email was sent to all participants to thank those who had submitted the questionnaire and to remind those who had not. The replacement

questionnaire URL was attached to this thank you email (see

Appendix F for follow-up email one).

(4)   Two weeks after the initial questionnaire was sent (March 17, 2006), a

reminder email with the embedded questionnaire URL was sent to

nonrespondents noting that their questionnaire had not been received

and explaining the value of their input to the study (see Appendix F for

follow-up email two).

(5)   Dillman suggested that three weeks after the initial questionnaire was

sent, a final contact email should be sent individually to each

nonrespondent; therefore, one week after the above reminder, the

researcher emailed a final notice (March 24, 2006) (see Appendix F for

follow-up email three). Additional special follow up emails to non

respondents were used after this date as part of the final contacts as

Dillman reported that making a special contact improves overall

response rates to mail surveys.

Management of the Web Questionnaire Data

Data from the electronic web questionnaires were imported into the Statistical

Package for the Social Sciences (SPSS version 11.5) from the survey.vt.edu. Data was

converted from words to numbers using codes (see Table 13). Before running statistical

analyses, data were checked for accuracy. The researcher reviewed each row of data three

times for any unusually large numbers and incorrect decimal point placements. No errors

were found. Data were printed onto hard copies and electronically saved to several

sources for preservation purposes. Two hundred and forty-one members of the American

Association of School Personnel Administrators (AASPA) responded to the

questionnaires. All 241 responses were inputted into the SPSS for data analysis. Table 14

is a summary of the coding used in the SPSS data file.

Procedures for Analyzing the Data

Descriptive statistics using SPSS were calculated to report categorical information

about the respondents. Table 15 is a summary of the research question, a brief description

of the variables, the analytical procedures, and the method of reporting the data. Multiple

linear regression using SPSS was performed to determine the relationships between the

predictor variables and the willingness of directors of human resources to support hiring

alternatively certified principals.

Table 14

Coding of the Variables for Statistical Package for the Social Sciences (SPSS) Entry

Item	Variable name	Response	Code
1	Gender	Male	1
		Female	0
2	Years of experience	≤5	1
		6-10	2
		11-15	3
		16-20	4
		>20	5
	Job experience 1&2 v. 3,4,5 Dummy coded for experience of 1 to 10 years v. experience greater than 10 years	1-10 years	1
		>10 years	0
	Job experience 5 v. 1,2,3,4 Dummy coded for experience over 20 years v. experience ≤ 20 years	Over 20 years	1
		≤ 20 years	0
3	School district location	Primarily Rural	1
		Primarily Suburban	2
		Primarily Urban	3
	Location 1 v. 2,3 Dummy coded for school district location primarily rural v. primarily urban or suburban	Primarily rural	1
		Primarily urban or suburban	0

(table continues)

Table 14 (continued)

Item	Variable name	Response	Code
	Location 3 v. 1,2 Dummy coded for school district location primarily urban v. primarily rural or suburban	Primarily urban Primarily rural or suburban	1 0
4	School district allows hiring alternatively certified principals	Yes No	1 0
5	School district experiencing a shortage in quantity of principal candidates	Yes No	1 0
6	School district experiencing a shortage in quality of principal candidates	Yes No	1 0
7	Education (Director holds some type of degree in education)	Yes No	1 0
8	Work experience (Director has worked mainly in the field of education)	Yes No	1 0
9, 10*, 11, 12*, 13, 14, 15*, 16*	General attitude	Strongly disagree Disagree Agree Strongly agree	1 2 3 4

(table continues)

Table 14 (continued)

Item	Variable name	Response	Code
17, 18, 19, 20, 21, 22, 23, 24	Anticipated concerns	Strongly disagree Disagree Agree Strongly agree	1 2 3 4
25, 26, 27*, 28*, 29*, 30, 31*, 32*	Past behaviors	Strongly disagree Disagree Agree Strongly agree	1 2 3 4
33, 34, 35, 36, 37, 38, 39, 40	Specific attitude	Strongly disagree Disagree Agree Strongly agree	1 2 3 4
41, 42, 43, 44, 45, 46, 47, 48	Normative pressures	Strongly disagree Disagree Agree Strongly agree	1 2 3 4
49, 50, 51, 52, 53, 54, 55, 56	Conditions of the individual	Strongly disagree Disagree Agree Strongly agree	1 2 3 4
57, 58, 59, 60, 61, 62, 63, 64	Conditions of the job	Strongly disagree Disagree Agree Strongly agree	1 2 3 4
65, 66, 67, 68, 69, 70, 71, 72, 73, 74, 75	Thurstone items to measure the dependent variable	Disagree Agree	1 2
76	More willing to support assistant principal than principal	Yes No	1 0

Note. * = reversed-scored item

Table 15

Methodology Summary Table

Research question	Variables and Relationships	Description of data analysis	Reported data
What variables explain the variation in the willingness of directors of human resources to support hiring alternatively certified principals?	Criterion variable: willingness of directors of human resources to support hiring alternatively certified principals.	Descriptive statistics	Means, standard deviations, minimums, maximums
	Predictor variables: general attitude toward alternative principal certification, anticipated concerns about the ability of alternatively certified principals to be effective educational leaders, past behaviors related to the employment of alternatively certified personnel, specific attitude toward employing alternatively certified principals, normative pressures by others, conditions of the job, and conditions of the individual.	Descriptive statistics	Correlations and inter-item correlations among all categorical and all predictor variables, results of t- tests, results of chi-square tests, degrees of freedom, and p-values.
	Categorical variables: Gender=male or female, Years of experience=years of experience as a director of human resources, District location=primarily rural, suburban, or		

(table continues)

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Table 15 (continued)

Research question	Variables and relationships	Description of data analysis	Reported data
What variables explain the variation in the willingness of directors of human resources to support hiring alternatively certified principals?	urban; allows hiring=district allows hiring alternatively certified principals, Shortage in quantity=district has a shortage in quantity of principals, Shortage in quality=district has a shortage in quality of principals, Education=director holds some type of degree in education, Work experience=director has worked mostly in the field of education, Assistant principal=director more willing to support hiring an alternatively certified assistant principal than principal.	Descriptive statistics	Correlations and inter-item correlations among all categorical and all predictor variables, results of t- tests, results of chi-square tests, degrees of freedom, and p-values.
	Univariate relationships	T-tests, Pearson correlations, and chi-square.	Results of t- tests, Pearson correlations and chi-square tests.
	Multivariate relationships	Multiple linear regression	Unstandardized coefficients (beta and standard error), standardized coefficients (beta, t statistic, and significance; collinearity statistics (tolerance and variance inflation factor).

Note. See Tables 6 – 10 for a listing of all predictor and categorical variables.

CHAPTER 3

RESULTS

The results of the qualitative and quantitative analyses are presented in this chapter. The thematic patterns and detailed findings in the interview data for the inside and outside education groups are presented. Descriptive statistics for the variables in the web questionnaire are displayed in tables, and findings from the regression of the dependent variable—the willingness of directors of human resources to support hiring alternatively certified principals are reported.

Results From the Interview Protocols

The results from the interviews (*N*=8 inside definition, *N*=6 outside definition) are presented in two parts: Part I is an overview of the major themes. It is a summary of the results and a point of view for understanding the detailed analysis that follows. It is a big picture perspective. Part II is a detailed analysis of the results, including representative excerpts from the data. It has examples of judgments, feelings, and opinions that the purposefully sampled directors of human resources hold concerning alternative certification and alternatively certified principals (see raw data matrices in Appendix G & Appendix H).

Overview of Results From the Interviews

Five major themes were found (see Table 16) in the data from the interviews with directors of human resources concerning their willingness to support hiring alternatively certified principals. The themes were: (1) general attitude toward alternative principal certification, (2) conditions within the school district under which directors of human resources would consider supporting alternatively certified principals, (3) concerns about

Table 16

Thematic Patterns in the Data for the Inside and Outside Definition Groups, (N=14)

Themes	Patterns	Groups[1]	
		Inside education *N*=8	Outside education *N*=6
General attitude toward alternative certification of principals	Supports alternative certification	X	X
	Oppose alternative certification	X	X
	Ambivalent to alternative certification		X
	Not applicable, district not allowed to hire alternatively certified principals	X	
Conditions under which directors of human resources would support hiring alternatively certified principals	Most qualified candidate	X	X
	No certified candidate available	X	X
	Working on a program with a local college or taking classes in education or pursuing an individual licensing plan	X	X
	"Right fit" for the position	X	
	Same skills as a certified person	X	X
	Knowledge of schools	X	X
	Temporary position	X	
	Ability to be a leader	X	X
	Track record and experience	X	X
	Ability to build relationships and teams	X	
	People skills		X
	Commitment to education		X
	Ability to learn quickly		X
	None (unnecessary to consider, would not hire, don't envision one)	X	X
Anticipated concerns directors of human resources have about alternatively certified principals	Lack of knowledge base in specific areas of education or leadership	X	X
	Possible negative perceptions of others:		
	Students	X	X
	Teachers	X	X
	Superintendents		X
	School board	X	X
	Parents	X	X
	Substitute teachers		X
	Other administrators	X	X

(table continues)

Table 16 (continued)

Themes	Patterns	Groups[1]	
		Inside education *N*=8	Outside education *N*=6
Anticipated concerns directors of human resources have about alternatively certified principals	Lack of experience in schools	X	X
	Lack of acceptance	X	
	No understanding of expectations	X	
	No preparation	X	X
	Credibility	X	
	None (would not hire)	X	
Support needed for alternatively certified principals to be successful	Mentoring	X	X
	Professional development or training	X	X
	Administrative support	X	X
	Resources	X	
Past behaviors of directors of human resources concerning supporting hiring alternatively certified personnel	Have not considered hiring alternatively certified principals	X	X
	Considered hiring alternatively certified teachers	X	X
	Considered hiring alternatively certified principals	X	X
	Have not considered hiring alternatively certified teachers	X	

Note. Table format is from *School superintendents' beliefs about licensure of school principals*. A. P. Kufel, P. A. Gaudreau, and D. J. Parks, 2004. Unpublished manuscript, Virginia Polytechnic Institute and State University. Adapted with permission.
[1]An X indicates that at least one person expressed this view.

the ability of alternatively certified principals to be effective school leaders, (4) past

behaviors related to the employment of alternatively certified personnel, and (5) support

needed to help alternatively certified principals to be successful if they are hired.

*General Attitude of Directors of Human Resources Toward Alternative Principal
Certification*

All directors of human resources had formed judgments, beliefs, or opinions

related to the alternative certification of principals. The majority of directors articulated

attitudes of opposition about alternative certification of school principals. This held true

regardless of the inside or outside definition of alternative principal certification given to

them. Two of the three directors who were accepting of alternative principal certification

were from the inside definition group. One respondent from the outside definition group

expressed an attitude of indifference (see Table 17).

*Conditions Within the School District Under Which Directors of Human Resources
Would Consider Supporting Alternatively Certified Principals*

Many directors of human resources believed that alternatively certified principals

would be a viable alternative if there were no certified candidate available, a shortage of

certified administrators existed, the person was the "right fit" for the job, or the person

was the most qualified candidate for the job. If the person was willing to take further

courses in education, was committed to education, had the same skills as a certified

person, had the ability to be a leader, had a good track record and experience, had people

skills, had team building skills, or was interested in a temporary position, then they might

be considered a worthy candidate. This was a fairly evenly divided opinion between the

inside and outside definition groups.

Table 17

Orientation of Directors of Human Resources Toward Alternatively Certified Principals,
(N=10)

| | Group membership | | | |
| | Inside education definition (*N*=4) | | Outside education definition (*N*=6) | |
	n	%	*n*	%
Adamantly opposed to alternatively certified principals	2	50.0	4	66.6
Accepting of alternatively certified principals	2	50.0	1	16.7
Indifferent toward alternatively certified principals	0	0	1	16.7

Note. Table format and categories are from *School superintendents' beliefs about licensure of school principals*. A. P. Kufel, P. A. Gaudreau, and D. J. Parks, 2004. Unpublished manuscript, Virginia Polytechnic Institute and State University. Adapted with permission. Two directors from the inside group responded not applicable, and two responded with concerns rather than an actual support or oppose answer. Therefore, the number for the inside group is four for this table.

Concerns of Directors of Human Resources About the Ability of Alternatively Certified Principals to be Effective Educational Leaders

The ability of alternatively certified principals to be effective schools leaders was expressed as a concern by the directors of human resources. This concern covered an array of duties that a principal must be capable of performing. The emphasis was on a lack of knowledge base about all aspects of school leadership that alternatively certified candidates must possess. Lack of experience in schools, lack of acceptance, no understanding of expectations, and no preparation for the principalship were expressed concerns. Other concerns were about credibility, acceptance, and the perceptions of others with whom the principal must interact such as students, teachers, superintendents, school boards, substitute teachers, and other administrators.

Support Needed to Help Alternatively Certified Principals be Successful if They Were to be Hired

Providing support so that alternatively certified principals can be successful school leaders was an area that human resource directors believed would be essential. The directors felt that mentoring or a mentorship program would be needed along with administrative support. Additionally, the directors added that professional development or training would be needed to help ensure the success of alternatively certified principals. While directors did not go into detail, resources were mentioned as being necessary for alternatively certified principals to be successful. The researcher interpreted this to mean both tangible and intangible resources.

Past Behaviors of Directors of Human Resources Related to the Employment of Alternatively Certified Personnel

Human resource directors' past behaviors with respect to supporting hiring

alternatively certified principals, personnel, and teachers were another major theme that emerged in the analysis of the data. Supporting the hiring of alternatively certified teachers was consistently more common than supporting the hiring of alternatively certified principals. This held true regardless of the inside or outside definition groups. Most of the directors had experience with alternatively certified teachers, but very few had supported hiring an alternatively certified principal in the past. While some directors referred to past experience with hiring alternatively certified personnel, they were clear in separating this from principals.

Detailed Results From the Interview Protocols

The theory based on the work of Fishbein and Ajzen (1975) and Kufel, Gaudreau, and Parks (2004) was used to develop the initial theory and to guide the collection of data for the qualitative part of the study. The theory included the following variables that were expected to influence the willingness of directors of human resources to support hiring alternatively certified principals: past behaviors, anticipated concerns, conditions, general attitude, specific attitudes, and normative pressures. Data collected in the interviews partially supported the theory. It became evident that prior work experience and education of directors of human resources may influence willingness to support hiring so these variables were added to the theory.

The intent of the protocol adapted from Kufel et al. (2004) was to identify general attitudes, conditions, and concerns that influence the willingness of directors of human resources to support hiring alternatively certified principals. Consequently, a good portion of the data fell into these categories. Many of the responses of the directors of human resources were categorized under these broad themes, but there were important

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distinctions between and within the inside and outside definition groups. There were some important commonalties as well. A look back at Table 16 reveals themes in the data that were common for the two groups. The detailed description of the data that follows contains the patterns unique to each group.

General Attitude of Directors of Human Resources Toward Alternative Principal Certification

It became obvious during the interviews that the general attitude of the directors of human resources had an influence on their willingness to support hiring alternatively certified principals. This pattern was evident in both the inside and outside definition groups. Two patterns emerged during the interviews. Directors representing both groups were adamantly opposed to alternative certification of principals, and directors representing both groups were accepting of the idea. Interestingly, only one director (outside group) claimed to be indifferent toward the idea.

Directors of human resources supportive of alternative certification. Only one director from the outside education group and two from the inside education group were supportive of alternatively certified principals. The one director from the outside group did add a stipulation. The stipulation was that he could support alternatively certified principals if there were a principal shortage. Ironically, while the person quoted above is not supportive of the alternative idea except in shortage situations, he did make a positive comment:

> My views are not very strong in support of this personnel action. However, if
> given the appropriate support and guidance from a successful retired principal to
> provide one-[to-]one face-to-face mentoring, one could produce a diamond in the
> rough. (JS2, p. 5)

Supporters from the inside group focused on the need and quality of the candidate. If the option was open to select any candidate, they wanted to select the best candidate, regardless of the type of certification. One director from the inside group exclaimed:

Principals are graying – retiring. In a national search if you get 15 candidates, you are lucky. I support it, and local school systems should have that flexibility and control to find the best principals for their schools. The more flexibility states can give, the better off we will be. States must trust school systems to make the best hiring decisions and support them. (MM, p. 4)

One director from the inside definition group and one from the outside definition group stated that they would support an alternatively certified principal if they came through the selection process as the best or as the most qualified candidate. Others (Inside=3) echoed similar responses, such as the candidate being the "right fit" or the candidate possessed the needed skill set to be an effective leader.

Directors of human resources opposed to alternative certification. Three directors from the outside education group and two directors from the inside definition group were opposed to the alternative certification of principals. Many stated an emphatic "no" to supporting these candidates. These responses were so strong that they did not cite a reason why – just no. One director from the outside group exclaimed:

I do not believe this action would benefit children, because the person would not be in the building due to the professional development training needed. A building level principal must understand the climate and culture of the building as

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well as the community. It is very important to establish relationships within and outside the building. (JS2, p. 4)

Participants from the outside group were concerned about placing a person lacking teaching experience and an educational background in a building during these times of strict accountability. As one director from the outside group stated, "The fact that they have not been a teacher in a school system is a negative. With the emphasis on testing and achievement, I view this as a negative." (BR, p.2)

Directors ambivalent toward alternative certification. Fourteen directors were interviewed with either the inside or outside definition of alternative certification and only one director (Outside=1) was ambivalent toward alternative certification. For the most part directors took a strong stance in favor of or against the concept. The indifference of this one director may be tied to the needs in this director's particular school system.

Alternative principal certification not applicable. Two directors from the inside definition group responded that alternative principal certification is not applicable to their school districts because they do not allow hiring of these candidates.

Conditions Within the School District in Which Directors of Human Resources Would Consider Supporting Alternatively Certified Principals

It became clear during the analysis of the data that conditions within the school district had an influence on the willingness of directors of human resources to support hiring alternatively certified principals. These conditions may be current, forecasted for the future, or may be specific conditions that an alternatively certified principal would have to meet to be supported. They were in the form of existing characteristics that an

alternative candidate already possesses or specific goals for the individual to meet in the near future.

Fourteen conditions under which directors would support hiring alternative principals were identified in the data from the two definition groups. Directors said they would consider supporting alternatively certified candidates if they were: the most qualified, the only certified candidates available, working on a program with a local college or taking classes in education, the "right fit," knowledgeable, for a temporary position, able to lead, had a track record and experience, able to build relationships and teams, skilled in working with people, or committed to education. Some participants within both groups mentioned that there were no conditions under which they would support hiring alternatively certified candidates.

The most qualified candidate. One director from the inside definition group and one director from the outside definition group stated they would support hiring an alternatively certified principal if he or she was the most qualified candidate.

No certified candidate available. While most directors (6 of 14) interviewed in this study were opposed to the idea of alternative certification, they realized the possibility of one day facing a situation in which one must be considered. Four directors from the inside definition group and five from the outside definition group stated they would support alternatively certified candidates if no certified candidate was available. One director commented, "It depends on the availability of qualified people. We look for the best candidate we can find hoping it will be a certified candidate" (MM, p.3). Another director simply stated, "I would support [an alternatively certified candidate] if no one was certified that I feel would do a good job" (MS, p.2). However, several directors

(Inside=2) mentioned other steps they would take before turning to alternatively certified candidates to address quantity and quality issues. One director made the following comment:

> My first preference of course is someone who is fully certified. If there is not a certified candidate out there or if a certified candidate is not the right fit, then school systems have to be flexible – people you pull through the ranks, grow your own programs and search for internal people with given skills sets. (MM, p. 3)

Another director had a similar philosophy to share about preparing for shortages by looking inward: "We have been fortunate to train our own staff and prepare them for the administrative openings as needed. When needed we have been fortunate to hire administrators from outside the school district" (MS, p. 2).

Taking courses in education. Though dominated by the outside group (Inside=1, Outside=5), the desire by directors for alternatively certified principals to continue their education through a local college or university was present in both groups. It became apparent during the interviews and the data analysis that directors felt more comfortable supporting hiring candidates knowing that they were expanding their knowledge base via courses in education. The outside definition group may have been more concerned because of the assumed low level of educational experience that these candidates from outside education would possess.

One director from the outside group stated, "A condition that I would require for employment would be for the candidate to enroll in suggested courses to improve or supplement the areas that would be serious challenges" (JS2, p. 4). Another director made

a similar comment, "A condition that I would require for employment would be to develop a specific timeline for completion of the certification process" (DM, p. 3).

Other directors had similar comments to make related to a need for courses in education to better prepare alternatively certified principals. One director believed that to support an alternatively certified principal, the person must make a five-year commitment to the school system in addition to taking classes. The impression left by the directors was that these candidates are under trained and that hiring them was an investment that needed to be protected.

"Right fit" for the position. Two directors from the inside definition group stated that they would consider hiring an alternatively certified candidate if they were the right fit for the position. These directors stated that there may be situations in which these candidates may have the required skill set and that the right fit was the most important thing.

Same skills as a certified person. There is no flexibility or time for growth when it comes to leadership skills according to directors. One director exclaimed, "Alternatively certified principals must have the same leadership skills as a traditionally certified principal. Don't lessen your standards. They must have the same types of qualities" (MM, p. 4). Another director commented, "An alternatively certified candidate must have the ability to learn quickly" (BR, p. 3). An alternatively certified principal must have skills that translate into leadership ability. One director stated, "An alternatively certified candidate must have excellent problem analysis and organizational skills" (BH, p. 3). These are skills expected of both traditionally certified and alternatively certified

candidates. Four inside and two outside directors mentioned that the alternatively certified candidate must have the same skills as a certified person.

Knowledge of schools. The principal must be knowledgeable about all aspects of the day-to-day operations of the building. Not knowing because of inexperience or improper background is not acceptable to teachers, parents, students, and central office staff. There is little time for staff development and training and no room for error, so alternative principals have to come to the table with a requisite knowledge base. Without this knowledge base, alternative candidates have little to no chance of meeting the requirements of the job in the minds of directors.

Two directors (Inside=1, Outside=1) from both groups stated that alternative candidates must be knowledgeable. Most did not elaborate on the extent of the knowledge because of the vastness of a principal's responsibilities. However, a little probing revealed that if the extent of the knowledge were to be prioritized, then an understanding of school law, finance, personnel, and instruction would top the list. One director from the outside group insisted that the candidate have a true understanding of the total child, as children are our major client in the field of education.

A temporary position. One director from the inside definition group believed that he or she may lend support to an alternatively certified candidate for a temporary position. While the director did not give specific details, it is believed that this refers to interim principalships and other short-term administrative needs.

Ability to be a leader. Regardless of the background of a candidate, an expectation of immediate high quality leadership was placed upon the principal by the directors (Inside=1, Outside=2). Teachers expect to be led and for principals to be able to

answer all of their questions and address their concerns. The same expectations are placed on the principal by parents and students. Factor in the leadership expectations of those in charge at the school board office and one can quickly acknowledge the need for an alternatively certified candidate to have proven or potential leadership skills before assuming the position.

Track record and experience. Two directors from the inside definition group and one director from the outside group stated that an alternatively certified candidate must have a proven track record and experience. This did not have to be in the field of education, but they had to have proven leadership experience.

Ability to build relationships and teams. One director from the inside definition group believed that if an alternatively certified candidate had the ability to build relationships and teams with members with whom he or she must interact, then he or she would be willing to support their hiring. The principal has to the have the ability to lead teams. This cannot happen until relationships are built. For an alternatively certified principal, the skill of relationship building could prove important in bringing people aboard and gaining trust.

Strong people skills. Principals must interact with teachers, parents, students, central office staff, and school board members on a daily basis. The ability to communicate well and communicate effectively is vital in running a school and accomplishing the goals of the school. Three of the directors representing the outside definition group cited the need for strong people skills as a condition for supporting their employment. The directors mentioned that the abilities to build relationships and to

communicate with others were very important skills needed to be successful in the principalship.

Commitment to education. One director from the outside definition group believed that if a particular candidate showed a commitment to education then he or she could support their hiring. This may be because of the quality issue. Directors may feel that an alternatively certified candidate that is committed to education and children may be better than a traditionally certified candidate that is simply going through the motions.

Ability to learn quickly. One director from the outside definition group noted the importance of learning quickly. Principals have to be able to learn the demands of the job and make many decision that impact learning and operations on a daily basis. Education does not slow down so you can catch up just because you are inexperienced or alternatively certified.

No conditions under which hiring would be supported. It was surprising to the researcher that eight responses from directors representing the inside definition group and three responses from directors representing the outside definition group mentioned that there were no conditions in which they would support hiring an alternatively certified candidate. The researcher believed that there had to be at least one condition that would exist for hiring alternatively certified principals. It was discovered that the directors were personally opposed to the idea or had "grow your own programs" for administrators and did not have a need to consider alternatively certified candidates. When pressed, they contributed to some of the answers above, but preferred not to support hiring alternatively certified principals.

Concerns of Directors of Human Resources About the Ability of Alternatively Certified Principals to be Effective Educational Leaders

Directors expressed many concerns that they would have concerning alternatively certified principals leading their schools. They believed that there would be a wide variety of challenges facing these candidates. These challenges were in their ability to be instructional leaders. Additionally, directors were concerned about their acceptance from the full spectrum of people with whom a principal must interact. The acceptance of superintendents, school boards, teachers, substitute teachers, parents, and other administrators were of concern. Furthermore, directors believed that a lack of experience, little preparation, and no understanding of expectations could be detrimental to these candidates.

Lack of a knowledge base in specific areas of educational leadership. Most (Inside=6, Outside=6) of the concerns of the human resource directors focused on the ability of an alternatively certified principal to be an effective instructional leader. This was based on an assumed lack of knowledge about instruction, curriculum, and running a school. One director developed a list of all the essentials that an alternatively certified candidate would be missing:

- Building level experience as a teacher
- An internship at the appropriate level
- School-based knowledge regarding school finance
- School-based knowledge regarding school law
- School-based knowledge regarding recruiting, training, and evaluating substitute teachers
- School-based knowledge regarding instruction
- School-based knowledge of interpretation of test data
- School-based knowledge regarding strategies to help the struggling learner
- School-based knowledge regarding recruiting, training, and evaluating professional and support staff employees
- School-based knowledge regarding student issues (e.g., attendance, discipline, academic assessments)

- School-based knowledge regarding licensure requirements mandated by the department of education
- School-based knowledge regarding the dismissal of tenured teachers
- School-based knowledge regarding community issues to include parents who are not happy with student performance
- School-based knowledge regarding district policy, practices, federal and state laws (JS2, p. 2-3)

Perceptions of others. Participant responses (Inside=11, Outside=13) in both groups expressed concerns about the acceptance from members within the educational community. These concerns dealt with how people with whom a principal must interact would view an alternatively certified principal. Directors most often cited the perceptions of teachers and parents in their list of players within the educational community. Teachers dominated this list as they are the group with which the principal would interact on a day-to-day basis, but others (superintendents, school boards, substitute teachers, and other administrators) were mentioned.

Five directors from the inside group and four directors from the outside group listed teachers as their major group of concern. While most directors just stated teachers without further explanation, one director mentioned the seasoned veteran teacher. Most veteran teachers have seen several principals come and go during their tenure. These teachers can carry much power and much influence over the climate within a school and over the less experienced teachers in the building. Consequently, the acceptance of seasoned veteran teachers would be crucial to any new principal.

Five directors (Inside=2, Outside=3) responded to parental acceptance as being a concern. Interestingly, most of these responses came from the outside definition group. This seems to make sense as these alternative principal candidates would come to the building with little to no education background. Consequently, the parents would have to

be sold on the fact that the best candidate had been selected for the principalship. This may be a difficult sell without the candidate having experience in education.

Two directors (one from each definition group) responded that acceptance from other principals in the district would be a concern. Again, this seems logical because most principals have gone through the traditional education route and most have some type of work experience in education. Gaining acceptance and respect from other principals may be a difficult task, especially if they feel that they have paid some dues that alternative principals have bypassed. Principals often work together on committees or as teams and consult each other for advice. Being left out of this information loop could be detrimental on an alternative principal.

Two directors (Inside=1, Outside=1) remarked that perception of students was a concern. Perceptions of the superintendent were mentioned by one outside director. Four directors (Inside=2, Outside=2) were concerned about the perceptions of their school boards. One director from the outside definition group added perceptions of substitute teachers.

Lack of experience in schools. Three directors (Inside=1, Outside=2) were concerned that alternatively certified candidates did not have experience working in schools. It was expected that this would be more of a concern for the outside definition group because these candidates had not worked in education field in any capacity. The inside definition director was more concerned about preparatory experience if the principal was coming from another district. However, this would be true of traditionally certified candidates as well as each district tends to vary in how they do things.

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Lack of acceptance. The chance that an alternatively certified principal would not be accepted (in general) was a concern to one director from the inside definition group.

No understanding of expectations. One director from the inside definition group believed that an alternatively certified candidate would have no understanding of expectations. These expectations, according to the director, would be from the staff, school board, and the community. The director believed that there would be too much unknown. The researcher thought that these ideas would have been more related to an outside definition group member because the candidate would have no experience in education. This director may not have understood the importance of keeping in mind the "inside definition."

No preparation to do the job. One director from the inside definition group believed that alternatively certified candidates would come to the job unprepared. This may be in the lack of coursework that directors believed was crucial for success or lack of training typically provided through staff development for traditionally certified principals.

Credibility among other administrators. One director from the inside definition group stated that credibility among other administrators was a concern. While perceptions from other administrators were discussed above, credibility takes on another issue. Administrators within a district have to give an alternatively certified principal the same respect, trust, and sincerity that they would give a traditionally certified principal. They have to believe that the alternatively certified principal has integrity and that his or her school program has integrity. Without it, alternatively certified principals may always be treated as a different class and thus set up for failure.

None (would not hire). Two directors from the inside definition group stated that they would not hire an alternatively certified candidate. Therefore, they expressed no concerns.

Support Needed to Help Alternatively Certified Principals be Successful if They Were to be Hired

Most of the directors who participated in this study believed that a mentorship program and training would be essential for alternatively certified principals to have any chance at success. Additionally, the directors believed that alternative principals would need resources and administrative support from the central office. This support would need to come in a variety of forms from general support to more specific support in the areas of professional development. It was abundantly clear that without these support mechanisms alternatively certified principals would not be successful.

Mentoring as a form of support. This concept was more frequent among the inside definition group (Inside=4). However, there were still some outside group members (Outside=2) who discussed mentoring. The outside group in general was more inclined to lean toward college course work to improve the preparation of alternatively certified principals. Nonetheless, assigning a knowledgeable mentor to an alternatively certified principal was a common theme. One director commented:

> We would have to mentor within the school system or contract with recently retired principals to work with them during their first two to three years at the principalship. They need somebody that they can go to and feel free to share their concerns and challenges. (MM, p. 3)

It is interesting to note that this mentorship concept goes well beyond the first year of the principalship. This would seem to imply that it is impossible to learn all the

aspects of the job in the first year. Mentorships must continue until the alternative principal is comfortable in this role. Several directors mentioned recently retired principals as mentors. This may be a good idea as often mentors working full time have very little time to dedicate to those in need. One thing that was clear from the directors is that mentorship programs would be needed or alternatively certified principals would struggle in their efforts to be successful.

Training. The directors clearly separated training from mentoring. The directors from both groups (Inside=3, Outside=1) considered training as a mechanism to acquaint alternatively certified principals with topics and initiatives unique to their school districts. This training would include information about testing, laws, and administrative regulations. This differs from mentoring in that mentoring is more about human relations and having an internal support system.

Administrative support. Three directors from the inside definition group and two directors from the outside definition group stated the importance of administrative support for success of alternatively certified candidates. While directors were not descriptive in their responses, the researcher believed that this support would be needed from the central office level administrators and should be in the form of emotional (confidence) and physical (resources) support and is separate from mentoring support.

Resources. One director from the inside definition group mentioned that resources would have to be provided for the success of alternatively certified principals. While this response was not specific, it was taken to mean support in the areas of staff development, mentoring, and funds to support school-level initiatives implemented by the alternatively certified principal.

Past Behaviors of Directors of Human Resources Related to the Employment of Alternatively Certified Personnel

According to Eagly and Chaiken (1993) past behaviors are strong predictors of future behaviors. With this in mind, directors of human resources were asked during the interviews about their past support for hiring alternatively certified teachers and principals. Very few directors had previous experience in supporting hiring alternatively certified principals for employment. Most had not been faced with the situation. However, several of the directors from both groups had been involved in hiring alternatively certified teachers.

Have not considered hiring alternatively certified principals. Four directors (Inside=2, Outside=2) stated that they had not supported or had not considered hiring alternatively certified principals in the past. They either did not support the idea or were not faced with a need to consider this option. A few directors had been proactive in filling the limited voids or potential voids before turning to alternative means. However, the future may result in more experience with alternatively certified principals. One director exclaimed, "We are experiencing a shortage, and it will continue for the next two to three years. We have not hired an alternatively certified principal; however, if the administrative pool does not increase it could be an option" (JS2, p. 1).

Considered hiring alternatively certified teachers. Nine directors (Inside=4, Outside=5) represented school districts that have either hired or have supported hiring alternatively certified teachers in the past. A look at these numbers reveals that directors are certainly more willing to take a chance on alternatively certified teachers than principals. Perhaps they perceive this idea as less risky.

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Considered hiring alternatively certified personnel. Only two directors, one from each group claimed that they had supported hiring alternatively certified principals in the past. Most directors in this study had limited to no experience in dealing with alternatively certified principals. Most of the directors interviewed had not been faced with the need to look outside of the traditional principal route to fill needs. When a human resource director expressed support of alternative certification, he or she did not have a need to consider an alternative candidate. Where there was a need, there was a system in place to grow their own leaders. Therefore, no human resource director expressed an immediate need to consider supporting alternative candidates.

Have not considered hiring alternatively certified personnel. Three inside definition group directors had not considered supporting alternatively certified teachers. These directors may not have been faced with a shortage of teachers or were not interested in alternatively certified teachers.

Summary of Results From the Interview Protocols

Directors of human resources varied only slightly in their attitudes toward alternatively certified principals. This was consistent with the Roza et al. (2003) study in which she reported that directors acknowledged that they are not interested in alternatively certified candidates who have applied to districts for vacant principal positions. Six of the 14 participants responded that they were opposed to alternatively certified principals. Of the three who were accepting of alternatively certified principals, only one was from the outside group. Only one director (outside group) reported being ambivalent about alternative principals. Two directors (outside group) simply stated that alternative principal certification was not applicable to their districts. Several variables

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were contained in the data that may influence the willingness of directors of human resources to support hiring alternatively certified principals. These are clustered in five domains: (1) general attitudes of directors of human resources toward alternative principal certification, (2) conditions within the school district under which directors of human resources would consider supporting alternatively certified principals, (3) conditions of the individual under which directors of human resources would consider supporting alternatively certified principals, (4) concerns of directors of human resources about the ability of alternatively certified principals to be effective educational leaders, and (5) past behaviors of directors of human resources related to the employment of alternatively certified personnel. The researcher incorporated the data gathered about needed support for alternatively certified principals into the concerns domain when developing items for the quantitative questionnaire (e.g., alternatively certified principals would require too much professional development) because this was an area of concern.

The researcher believed that this was better for developing statements that had predictive value for the multiple linear regressions. All five of these variables along with a review of the current literature and other important information identified in the data shaped the framework for assessing variation in the willingness of directors of human resources to support hiring alternatively certified principals.

<div align="center">Discussion of Results From the Interview Protocols</div>

Though this was a small study, it provided informative data on the subject concerning directors' attitudes and perceptions of alternatively certified principals. Additionally, these data contained potential explanatory variables that were used to carry

out a more in-depth quantitative nationwide study of the variation in the willingness of directors of human resources to support hiring alternatively certified principals.

Following an analysis of the data, variables had to be added to the theory. It became apparent during one of the interviews that directors of human resources may have backgrounds, training, and work experiences in areas other than education. This led me to believe that there may be some bias on the part of directors, perhaps in favor of alternatively certified principals. Conversely, if their education and work experience is in education, this may result in a bias against alternative candidates. Although most of the directors were opposed to the idea of alternative principal certification, most were able to express situations in which they would consider supporting hiring such a candidate.

An analysis of the findings indicates that directors of human resources' positive attitudes toward supporting hiring is limited and mostly restricted to rural and urban school districts. Directors were able to articulate that they would consider an alternatively certified principal if there were shortages in numbers and quality of principals or the person was the "right fit' for the job. However, the directors did set some very heavy standards about the knowledge, skills, and dispositions these alternative candidates must possess. Included among these is a sound knowledge base, leadership skills, people skills, and a willingness to return to school for education courses. Legislators, school officials, and professors in graduate schools of education should be cognizant of the views of directors of human resources regarding their attitudes toward alternatively certified candidates and the conditions and stipulations under which supporting their employment would be acceptable.

Results From the Quantitative Study

Data are presented in two sections. The first section is the descriptive data and differences between the inside and outside definition groups. The descriptive data are means, frequencies, standard deviations, maximums, minimums, and percentages. Descriptive information about the respondents and specific survey responses are presented and discussed. Univariate statistics were calculated for relationships between the variables. The second section is a presentation and interpretation of the results of the multiple linear regression analysis.

Descriptive Data and Differences Between Inside and Outside Definition Groups

The questionnaires administered to directors of human resources who were members of the American Association of School Personnel Administrators (AASPA) on November 1, 2005 had 76 items. Descriptive data on the respondents and their school districts were collected with items one through eight and item 76 (see Appendix I and J). The eight predictor variables were measured with items nine through sixty-four (see Appendix I and J). Responses are discussed in this section. Descriptive statistics and univariate analyses for relationships between the eight predictor variables and group membership (inside definition or outside definition) are in Table 18, and descriptive statistics and univariate analyses for relationships between the data on respondents and their school districts and group membership are in Table 19.

Descriptive Data: Differences Between Inside and Outside Definition Groups on the Predictor Variables

The inside and outside definition groups did not differ on conditions of the job, general attitude, conditions of the individual, normative pressures-positive, normative pressures-negative, and past behaviors (see Table 18). There were significant differences

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Table 18

Means, Standard Deviations, Minimums, Maximums, and t-tests for Predictor Variables Classified by Inside and Outside Definition Groups

| | Total | | Group membership | | | | |
| | | | Inside definition | | Outside definition | | |
Predictor variable	*N* Total used Missing	*M* *SD* *Min./Max.*	*N* Total used Missing	*M* *SD* *Min./Max.*	*N* Total used Missing	*M* *SD* *Min./Max.*	*t*
Conditions of the job	234 7	2.83 .48 1.00/4.00	119 4	2.84 .50 1.00/4.00	115 3	2.82 .46 1.00/4.00	.37
Specific attitude	238 3	2.87 .41 1.13/4.00	120 3	2.90 .36 2.00/4.00	118 0	2.83 .46 1.13/4.00	1.48*
General attitude	241 0	2.89 .45 1.29/4.00	123 0	2.92 .43 1.29/4.00	118 0	2.87 .47 1.57/4.00	.97
Anticipated concerns	240 1	2.37 .43 1.13/3.75	122 1	2.29 .37 1.38/3.50	118 0	2.45 .48 1.13/3.75	-2.75**
Conditions of the individual	235 6	2.90 .47 1.00/4.00	119 4	2.92 .49 1.00/4.00	116 2	2.88 .45 1.00/4.00	.71
Normative pressures (positive)	223 18	2.29 .49 1.00/4.00	115 8	2.31 .52 1.00/4.00	108 10	2.26 .46 1.00/3.25	.84
Normative pressures (negative)	227 14	2.10 .60 1.00/4.00	115 8	2.08 .59 1.00/4.00	112 6	2.11 .61 1.00/4.00	-.46

(table continues)

Table 18 (continued)

Predictor variable	Total		Inside definition		Outside definition		t
	N Total used Missing	*M* *SD* *Min./Max.*	*N* Total used Missing	*M* *SD* *Min./Max.*	*N* Total used Missing	*M* *SD* *Min./Max.*	
Past behaviors	239 2	3.00 .47 1.00/4.00	121 2	3.00 .49 1.00/4.00	118 0	3.00 .46 2.00/4.00	.18

Note. The scale was 1 = Strongly disagree, 2 = Disagree, 3 = Agree, 4 = Strongly agree

*p≤.05, **p≤.01

Table 19

Relationships Between Group Membership and Characteristics of Respondents and Their School Districts on the Categorical Variables

Variable		Total		Group membership				Chi-square
				Inside definition		Outside definition		
		N	%	N	%	N	%	
Gender	Male	100	41.50	49	39.80	51	43.20	.28
	Female	141	58.50	74	60.20	67	56.80	
	Total	241		123		118		
	Missing	0		0		0		
Years of experience as a director of human resources	≤5	94	39.00	52	42.30	42	35.60	1.56
	6-10	68	28.20	33	26.80	35	29.70	
	11-15	35	14.50	17	13.80	18	15.30	
	16-20	19	7.90	8	6.50	11	9.30	
	>20	25	10.40	13	10.60	12	10.20	
	Total	241		123		118		
	Missing	0		0		0		
Degree held in education (bachelor's, master's, or advanced)	Yes	212	88.00	107	87.00	105	89.00	.23
	No	29	12.00	16	13.00	13	11.00	
	Total	241		123		118		
	Missing	0		0		0		
Most work experience in education	Yes	201	83.40	101	82.10	100	84.70	.30
	No	40	16.60	22	17.90	18	15.30	
	Total	241		123		118		
	Missing	0		0		0		
Would be more willing to support an assistant principal than a principal	Yes	158	67.50	84	70.60	74	64.30	1.04
	No	76	32.50	35	29.40	41	35.70	
	Total	234		119		115		
	Missing	7		4		3		

(table continues)

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Table 19 (continued)

Variable		Total		Group membership				Chi-square
				Inside definition		Outside definition		
		N	%	N	%	N	%	
Experiencing	Yes	68	28.50	35	28.70	33	28.20	.01
a shortage in	No	171	71.50	87	71.30	84	71.80	
quantity of	Total	239		122		117		
principal	Missing	2		1		1		
candidates								
Experiencing	Yes	135	56.50	76	62.30	59	50.40	3.42
a shortage in	No	104	43.50	46	37.70	58	49.60	
quality of	Total	239		122		117		
principal	Missing	2		1		1		
candidates								
School	Primarily:							
district	Rural	45	18.70	28	22.80	17	14.40	4.87
location	Suburban	155	64.30	71	57.70	84	71.20	
	Urban	41	17.00	24	19.50	17	14.40	
	Total	241		123		118		
	Missing	0		0		0		
District	Yes	67	28.50	39	32.20	28	24.60	1.69
allows hiring	No	168	71.50	82	67.80	86	75.40	
alternatively	Total	235		121		114		
certified	Missing	6		2		4		
principals								

for anticipated concerns and specific attitudes. The outside definition group had more concerns about the ability of an alternatively certified principal to do well in the job. The inside group expressed a more positive attitude toward alternatively certified candidates. Except for anticipated concerns and both normative pressure variables, all of the predictor variable scores were close to 3.00, indicating agreement with the items in that variable by the directors of human resources. On average, the past behaviors of directors of human resources received the highest score, 2.93, indicating agreement by directors with the items in that variable. The lowest score on average for all groups was a mean of 2.08 on negative normative pressures for the outside definition group indicating that directors, on average, did not feel much pressure from superiors to withhold support for alternatively certified principals.

Descriptive Data: Associations Between Membership in Inside and Outside Definition Groups and the Characteristics of Respondents and Their School Districts

Data on characteristics of respondents and their school districts and the associations of these characteristics with group membership are in Table 19. There were more female than male respondents in both groups. Three fifths of the inside definition group and a little over a half of the outside definition group were females. About two-thirds of each group had 10 years or less experience as a director of human resources. Nearly nine out of ten respondents from both groups held some type of degree in professional education. Over 80% had completed most of their work experience in the field of education. A little more than two-thirds of the respondents claimed they would be more willing to support hiring an alternatively certified assistant principal than a principal. Over 70% of the respondents for both groups claimed that their district was not experiencing a shortage in quantity of principal candidates; however, a little over half of

the respondents claimed that their school district was experiencing a shortage in the quality of principal candidates. About two-thirds of the respondents were from primarily suburban school districts. Over 70% of the respondents reported that their school district did not allow the hiring of alternatively certified principals. Respondents were represented by 35 different states from around the country. Pennsylvania, Texas, California, Illinois, and Washington (state) had the highest numbers (see Table 20).

Descriptive Data: Anticipated Concerns and Specific Attitudes by Directors of Human Resources

Anticipated concerns was one of the two predictor variables for which there was a significant difference between the inside and outside definition groups $t(218.10)=-2.75$, $p=.01$. The range of differences for conditions of the job, specific attitude, general attitude, anticipated concerns, conditions of the individual, normative pressures (positive), normative pressures (negative), and past behaviors; however was close, -.20 to .61. Items 17-24 were measures of the concerns that directors of human resources held about supporting the hiring of an alternatively certified principal. The overall mean of 2.37 indicated a slight agreement (3 = agree) with the anticipated concerns items. One hundred eighty (75%) of the directors agreed or strongly agreed with the concerns ($M >$ 2.0). The standard deviation for this variable was the second lowest (.43), indicating more agreement among the directors on this variable than on the seven other predictor variables. The directors of human resources who were given the outside definition reported a significantly greater amount of concern than those given the inside definition. This was expected by the researcher.

Specific attitude was the other predictor variable for which there was a significant difference between the inside and outside definition groups $t(222.39) = 1.48$, $p = .03$.

Table 20

State of Employment of Responding Personnel Directors

State	Number of respondents Inside definition/ Outside definition	Percentage of total respondents
1. Alabama	2	1.27
	1/1	
2. Arizona	6	3.82
	4/2	
3. California	8	5.10
	3/5	
4. Connecticut	4	2.54
	0/4	
5. Florida	6	3.82
	4/2	
6. Georgia	2	1.27
	1/1	
7. Illinois	8	5.10
	3/5	
8. Indiana	7	4.46
	3/4	
9. Kansas	3	1.91
	3/0	
10. Kentucky	2	1.27
	2/0	
11. Louisiana	2	1.27
	0/2	
12. Maryland	3	1.91
	2/1	
13. Massachusetts	3	1.91
	1/2	
14. Michigan	5	3.18
	3/2	
15. Minnesota	7	4.46
	6/1	
16. Missouri	4	2.55
	1/3	
17. Nebraska	4	2.55
	3/1	
18. New Jersey	3	1.91
	0/3	

(table continues)

Table 20 (continued)

State	Number of respondents Inside definition/ Outside definition	Percentage of total respondents
19. New Mexico	1 1/0	.64
20. New York	5 2/3	3.18
21. North Carolina	2 0/2	1.27
22. North Dakota	1 0/1	.64
23. Ohio	7 4/3	4.46
24. Oklahoma	3 1/2	1.91
25. Oregon	3 2/1	1.91
26. Pennsylvania	13 7/6	8.28
27. South Carolina	6 4/2	3.82
28. Tennessee	2 1/1	1.27
29. Texas	11 4/7	7.01
30. Utah	2 2/0	1.27
31. Vermont	2 1/1	1.27
32. Virginia	7 2/5	4.46
33. Washington (state)	8 4/4	5.10
34. Wisconsin	5 1/4	3.18
35. Wyoming	2 1/1	1.27
Total	157	65.15
Not coded	84	34.85
Total	241	100.00

Note. Not coded means that the respondent did not provide the pass code, and the researcher was unable to determine the state of employment.

Items 33 – 40 were measures of specific attitudes that directors held about the ability of alternatively certified principals to do the job.

The overall mean of 2.87 indicated agreement (3 = agree) with the specific attitude items. Two hundred twenty nine (96%) of the directors agreed or strongly agreed with the specific attitudes items ($M > 2.0$). The standard deviation for this variable was the lowest (.41), indicating more agreement among the directors on this variable than on all of the other variables. The directors who were given the inside definition reported a significantly more positive attitude toward alternatively certified principals than those given the outside definition. This was expected by the researcher.

Descriptive Data: A Discussion of the Dependent Variable

The dependent variable was a measure of the variation in the willingness of directors of human resources to support hiring alternatively certified principals. The measure was the mean score of the values of the items to which a respondent agreed (see Table C4, Appendix C). The mean of these individual scores was the score for each respondent. The scale used to measure willingness was a Thurstone scale, and it had a range of one to eleven. One was least willing to support hiring alternatively certified principals, six was neutral, and eleven was most willing to support hiring alternatively certified principals.

The mean willingness to support hiring alternatively certified principals for the 238 (3 missing) respondents was 7.49 ($SD = 1.34$), indicating that, on average, participants (189 or 78.4%) fell into the neutral portion (scores of 4.501 - 8) of the eleven-point scale. Forty-six (19.1%) of the directors expressed a favorable level (scores of 8.501 - 11) of willingness, while only three (1.2%) expressed an unfavorable

willingness (scores of 1 - 4.5) to support hiring alternatively certified principals. The average score represents an overall ambivalence toward supporting the hiring of alternatively certified principals.

A Discussion of the Dependent Variable for the Inside Definition Group

The mean level of willingness for the 120 (3 missing) respondents who completed the "inside" definition questionnaire was 7.69 ($SD = 1.29$). This was slightly higher than the combined mean for the two definition groups. This was expected as the "inside" definition focused on those candidates who held a master's degree in education and had worked in the field of education. These "insiders" were expected to be more acceptable to directors. On average, directors in the inside group were neutral with 94 (76.4%) falling into the mid-range (scores of 4.501- 8.5) and in the positive direction. Twenty-five (20.3%) of the directors expressed a favorable willingness (scores of 8.501 - 11) while only one (.81%) expressed an unfavorable willingness (scores of 1 - 4.5) to support hiring alternatively certified principals with education degrees and experience.

A Discussion of the Dependent Variable for the Outside Definition Group

The level of willingness for the 118 (0 missing) respondents who completed the "outside" definition questionnaire was 7.28 ($SD = 1.36$). This was slightly lower than the combined mean for the two definition groups. This was expected as the "outside" definition focused on those candidates who held a master's degree (not in education) and worked mostly in a field other than education. These "outsiders" were expected to be less acceptable to directors. On average, directors in the outside group were neutral in the positive direction with 95 (80.5%) expressing a moderate willingness (scores of 4.501 – 8.5) to support hiring alternatively certified principals. Twenty-one (17.8%) of the

directors expressed a favorable willingness (scores of 8.501 - 11) while two (1.7%)

expressed an unfavorable willingness (scores of 1 - 4.5) to support hiring alternatively

certified principals.

A Discussion of the Differences Between the Inside and Outside Definition Groups for the Dependent Variable

A t-test was conducted to determine if there was a difference between the inside

and outside definition groups on the level of willingness of directors of human resources

to support hiring alternatively certified principals. The mean difference of .41 in favor of

the inside group was significant $t(236) = 2.36$, $p = .02$. The results of the t-test are in

Table 21.

Multiple Linear Regression: The Prediction of Directors of Human Resources Willingness to Support Hiring Alternatively Certified Principals

Multiple linear regression was conducted using the mean of items 66-75 (level of

willingness to support hiring alternatively certified principals) as the criterion variable.

Predictor variables (*conditions of the job, specific attitudes, general attitudes, anticipated*

concerns, conditions of the individual, normative pressures-positive, normative

pressures-negative, and past behaviors) resulting from the principal components analysis

were combined with characteristic variables [*gender, if the district allows hiring*

alternatively certified principals, if the district has quantity issues concerning principals,

if the district has quality issues concerning principals, if the director holds some type of

degree in education, if the director has worked mostly in education, if the director would

some type of degree in education, if the director has worked mostly in education, if the

director would be more willing to support hiring an alternatively certified assistant

principal than a principal, the type of school district location (primarily rural v.

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Table 21

T-test for Differences Between the Inside and Outside Definition Groups on Willingness to Support Hiring Alternatively Certified Principals

Definition	*N*	*M*	*SD*	*t*	*df*	*p*
Inside	120	7.69	1.29	2.36	236	.02
Outside	118	7.28	1.36			

*p≤.05

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primarily urban or primarily suburban, primarily urban v. primarily rural or primarily

suburban), inside-outside definition groups, and the years of experience of the director

(less than 10 years v. more than 10 years, 20 or more years v. less than 20 years)] for a

total of 20 predictors for the regression. The analysis has two parts. The first part is a

presentation of the statistics, and the second part is the results of the multiple linear

regression analysis. See Table 22 for the codes used in the analyses.

<div align="center">*Preliminary Statistics for the Study*</div>

The preliminary statistics consist of the Pearson correlations between the

dependent variables and the predictor variables. Additionally, Pearson correlations were

conducted to determine the relationships among the predictor variables found to be

significant in the regression equation to check for multicollinearity, which is discussed in

detail later in the chapter. The Pearson correlations, levels of significance, R-squares, F-

statistics, and number of responses are reported.

Correlations Between Willingness to Support Hiring Alternatively Certified Principals and Predictor Variables

Pearson correlation coefficients were calculated to assess the correlations between

the predictors and the criterion variable (see Table 22). A significant correlation

coefficient was found between the level of willingness to support hiring alternatively

certified principals and conditions of the job, specific attitudes, general attitudes,

anticipated concerns, conditions of the individual, normative pressures-positive,

normative pressures-negative, past behaviors, district allows hiring alternatively certified

principals, director holds a degree in education, and director has worked mainly in

education. All were in the expected direction. The highest significant correlation

coefficient was anticipated concerns ($r = -.67$, $p \le .01$). This indicated that the more

Table 22

Pearson Correlation Coefficients Between the Predictor Variables and Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals

Predictor variable	Code	*N*	*r*
Gender	M=1 F=0	238	.07
District allows hiring alternatively certified principals	Yes=1 No=0	232	.28**
District experiencing a shortage in quantity of principals	Yes=1 No=0	236	.16*
District experiencing a shortage in quality of principals	Yes=1 No=0	236	.11
Director holds some type of degree in education	Yes=1 No=0	238	-.20**
Director has worked mainly in the field of education	Yes=1 No=0	238	-.18**
Director would support hiring an alternatively certified assistant principal rather than a principal	Yes=1 No=0	234	-.05
Job experience 1&2 v. 3,4,5 Dummy coded for experience of 1 to 10 years v. experience greater than 10 years	1-10 years=1 >10 years=0	238	-.10
Job experience 5 v. 1,2,3,4 Dummy coded for experience over 20 years v. experience ≤ 20 years	Over 20 years=1 ≤ 20 years=0	238	.08
Location 1 v. 2,3 Dummy coded for school district location primarily rural v. primarily urban or suburban	Primarily rural=1 Primarily urban or suburban=0	238	.11

(table continues)

Table 22 (continued)

Predictor variable	Code	*N*	*r*
Location 3 v. 1,2 Dummy coded for school district location primarily urban v. primarily rural or suburban	Primarily urban=1 Primarily rural or suburban=0	238	-.12
General attitudes	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	238	.45**
Anticipated concerns	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	238	-.67**
Past behaviors	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	237	.20**
Specific attitudes	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	238	.61**
Normative pressures (positive)	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	223	.42**
Normative pressures (negative)	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	227	-.20**

(table continues)

Table 22 (continued)

Predictor variable	Code	N	r
Conditions of the individual	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	235	.61**
Conditions of the job	Strongly disagree=1 Disagree=2 Agree=3 Strongly agree=4	234	.31**

*p≤.05, ** p≤.01

concerns a director had about alternatively certified principals the less willing they were

to support their hiring. The lowest correlations were with directors who had worked

mainly in education ($r = -.18$, $p \leq .01$), normative pressures-negative ($r = -.20$, $p \leq .01$),

director holds a degree in education ($r = -.20$, $p \leq .01$), and past behaviors ($r = .20$, $p \leq .01$).

This indicated that if directors supported hiring alternatively certified personnel in the

past, then they may be willing to support hiring alternatively certified principals in the

future, and the more negative pressure they felt about hiring alternatively certified

principals, the less willing they were to support their hiring. Both correlations were weak,

sharing only 4% of the variance. Directors who held a degree in education and who had

worked mainly in education were less likely to support hiring alternatively certified

candidates. Again, the two correlations were weak, sharing only 3.8% of the variance.

Inter-correlations between the significant predictor variables. Although a

principal components analysis was conducted to help develop the general measures and

reduce multicollinearity among the predictor variables, there can still be some level of

correlation. Therefore, Pearson correlations were calculated to determine the level of

correlation among all predictor variables (see Table E2, Appendix E). The strongest

significant correlations ($r = .65$, $p \leq .01$) were between specific attitude and conditions of

the individual and between specific attitude and anticipated concerns ($r = -.65$, $p \leq .01$).

The researcher expected that there would be a fairly strong correlation between these

predictors but felt strongly that the two were measuring different things, so leaving them

in the regression equation as separate variables was appropriate. The weakest significant

correlation existed between the director having 1 to 10 years of experience and the

district being a primarily rural location ($r = -.10$, $p \leq .05$). This is considered a very weak

correlation. The researcher reviewed the significant correlations among the predictor variables and felt that since the strongest correlations were measuring two different things and that other correlations fell into the moderate to very weak classification, they should remain. Additionally, the researcher chose to run the regression equation with all of the predictor variables using the collinearity diagnostics to gather data to determine if multicollinearity was an issue. This allowed the researcher to examine the Variance Inflation Factor (VIF) and tolerances to determine if multicollinearity was a problem.

Dealing with the issue of multicollinearity. If the researcher's goal is simply to predict the level of willingness from a set of predictor variables, multicollinearity is not a major problem. It becomes a problem when the researcher wants to understand how the predictor variables impact the level of willingness (Motulsky, 2002). For this study, the researcher wanted to know both. Therefore, collinearity statistics were conducted to determine if significant inter-correlations among the predictor variables would have an impact on the study. The tolerances or variance inflation factor (VIF) is probably better than using the bivariate correlations for testing multicollinearity (Multicollinearity, n.d.). A common rule of thumb is that VIF's that are higher than 10 or tolerances that are less than .10 are signs of multicollinearity. An examination of the data in Table 23 indicated that .36 was the lowest tolerance, and the other tolerances were considerably higher. Therefore, no tolerance was below the .10 rule of thumb. The researcher reviewed the VIF's for further evidence to determine if multicollinearity was an issue. The highest VIF was 2.79, well below the 10 or higher rule of thumb for multicollinearity concerns. In conclusion, based on a review of the collinearity statistics data, multicollinearity for this

Table 23

Regression Coefficients Table

Predictor	Unstandardized coefficients		Standardized coefficients			Collinearity Statistics	
	B	Std. error	Beta	t	Sig.	Tolerance	VIF
(Constant)	6.86	1.11		6.16	.00		
gascale	.29	.19	.10	1.53	.13	.47	2.14
acscale	-1.28	.19	-.42	-6.77	.00	.50	2.01
pbscale	-.01	.16	-.01	-.08	.93	.61	1.65
sascale	.05	.23	.01	.19	.85	.36	2.79
npnegscale	-.11	.11	-.05	-1.02	.31	.81	1.24
noposscale	.11	.15	.04	.73	.47	.64	1.56
ciscale	.99	.20	.34	4.99	.00	.39	2.54
cjscale	.06	.15	.02	.37	.70	.62	1.61
Experience 1	.04	.15	.02	.28	.78	.69	1.45
Experience 2	.13	.23	.03	.56	.58	.71	1.42
Location 1	-.04	.16	-.01	-.25	.81	.85	1.17
Location 2	-.39	.17	-.11	-2.36	.02	.86	1.17
Quality	.29	.14	.11	2.10	.04	.73	1.37
Degree in ed.	-.35	.24	-.08	-1.44	.15	.55	1.81
Work in ed.	.13	.20	.04	.61	.54	.56	1.77
Inside-Outside	.14	.12	.05	1.13	.26	.93	1.08
Ass. Principal	-.39	.13	-.14	-2.97	.00	.90	1.12
Quantity	-.11	.15	-.04	-.74	.46	.76	1.32
Allows hiring	.12	.15	.04	.78	.44	.73	1.37
Gender	-.08	.13	-.03	-.63	.53	.88	1.14

Note. ga=general attitude, ac=anticipated concerns, pb=past behaviors, sa=specific attitude, npneg=normative pressures-negative, nppos=normative pressures-positive, ci=conditions of the individual, cj=conditions of the job, Experience dummy variable 1=director

(table continues)

Table 23 (continued)

has 1-10 years experience, Experience dummy variable 2=director has over 20 years experience, Location 1=dummy variable primarily rural, Location 2=dummy variable primarily urban, Quality=district experiencing a shortage in the quality of principals, Degree in ed. =director holds a degree in education, Work in ed. = director has worked mainly in education, Inside-outside=inside v. outside definition group, Ass. Principal= director more willing to support hiring an alternatively certified assistant principal than principal, Quantity=district experiencing a shortage in quantity of principals, Allows hiring=district allows hiring, Gender=male v. female.

study was not an issue.

Testing the model for the predictor variables. A multiple linear regression was conducted using a model with 20 predictor variables. All requested variables were accepted and thus entered into the regression model by SPSS. The model had an R-square of .79 indicating that the model with the 20 predictor variables explained 79% of the variance in the willingness to support hiring alternatively certified principals. This was a good R-square so the researcher reviewed the analysis of variance (ANOVA) data. The regression equation with all 20 predictor variables was significantly related to directors of human resources willingness to support hiring alternatively certified principals, $F(20, 197) = 16.80$, $p = .00$. The 20 variables as a group can predict the level of willingness of directors of human resources to support hiring alternatively certified principals.

The Regression of Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals on the Predictor Variables

The unstandardized coefficients, the standard error, standardized coefficients, t-values, and p-values for the regression model are included in previous Table 23. The analysis combined 20 predictor variables (conditions of the job, specific attitude, general attitude, anticipated concerns, conditions of the individual, normative pressures positive, normative pressures negative, past behaviors, gender, district allows hiring alternatively certified principals, district experiencing a shortage in the quantity of principals, district experiencing a shortage in the quality of principals, director holds some type of degree in education, director has worked mostly in education, director would support hiring an alternatively certified assistant principal rather than principal, experience of 1 – 10 years, experience of 20 years or more, primarily rural location, primarily urban location, and the inside-outside definition groups).

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Of the 20 measures, anticipated concerns ($t = -6.77$, $p = .00$), conditions of the individual ($t = 4.99$, $p = .00$), primarily urban location ($t = -2.36$, $p = .02$), shortage in the quality of principals ($t = 2.10$, $p = .04$), and the director more willing to support hiring an alternatively certified assistant principal than principal ($t = -2.97$, $p = .00$) were significant predictors of the level of willingness of directors of human resources to support hiring alternatively certified principals. As a result, the final regression equation was: $\hat{Y} = 6.86 - 1.28$ (anticipated concerns) $+ .99$ (conditions of the individual) $- .39$ (primarily urban) $+ .29$ (quality) $- .39$ (assistant principal) (see Table 23 for abbreviation meanings).

Summary of the Multiple Linear Regression Results

Five of the 20 predictor variables were significant. The anticipated concerns variable indicated that as the level of concerns about alternatively certified principals increased then directors' willingness to support their hiring decreased. The conditions of the individual variable indicated that directors' willingness to support hiring alternatively certified principals increased as alternatively certified candidate's ability to meet certain individual criteria increased. The district experiencing a shortage in the quality of principals indicated that the more the district was experiencing a shortage in the quality of principals the more willing directors were to support hiring alternatively certified principals. The location of primarily urban indicated that directors from these locations were less willing to support hiring alternatively certified principals. The director being more willing to support hiring an alternatively certified assistant principal rather than a principal indicated that alternatively certified assistant principals have a better chance to enter schools through this avenue than through the principalship.

CHAPTER 4

DISCUSSION, POST-STUDY THEORY, IMPLICATIONS FOR PRACTICE,
RECOMMENDATIONS FOR FUTURE RESEARCH, AND REFLECTIONS

A discussion of the multiple linear regression, the predictor variables, and the

literature is given. The theory addressed in Chapter 1 was revised, and a post-study

theory that includes only the significant variables is given. Implications for practice,

recommendations for future research, and reflections by the researcher are presented.

Discussion of the Results

The sections that follow include a discussion addressing the multiple linear

regression, the predictor variables, and the literature. A post-study theory and a summary

of the significant variables are included. The chapter concludes with reflections from the

researcher.

Discussion Addressing the Multiple Linear Regression

Twenty predictors (conditions of the job, specific attitudes, general attitudes,

anticipated concerns, conditions of the individual, normative pressures-positive,

normative pressures-negative, past behaviors, gender, if the district allows hiring

alternatively certified principals, if the district has quantity issues concerning principals,

if the district has quality issues concerning principals, if the director holds some type of

degree in education, if the director has worked mostly in education, if the director would

be more willing to support an alternatively certified assistant principal than a principal,

the type of school district location (primarily rural v. primarily urban or primarily

suburban, primarily urban v. primarily rural or primarily suburban), definition (inside v.

outside definition groups), and the years of experience of the director (less than 10 years

v. more than 10 years, 20 or more years v. less than 20 years) were used in the multiple

linear regression to determine what variables best predict the willingness of directors of human resources to support hiring alternatively certified principals. The overall multiple linear regression was significant (R^2 = .79, $F(20, 197)$ = 16.80, p=.00), indicating that the predictors, when combined, do predict the willingness of directors of human resources to support hiring alternatively certified principals and explain 79% of the variance.

The inside definition group scored the lowest mean with *anticipated concerns*. The inside definition group, therefore, felt that there were fewer concerns that they would have with an alternatively certified principal than the outside group. The inside definition group scored the highest mean with *general attitudes* and *conditions of the individual*. This indicated that directors, on average, did agree with the items in the general attitude scale and would support hiring alternatively certified principals if they met specific individual characteristics.

The outside definition group's lowest mean was with *anticipated concerns*. While this (*anticipated concerns*) was the lowest mean for the outside definition group, it was significantly different (t= 2.75, p= ≤.01) than the inside definition group and, therefore, indicated significantly more concerns for supporting hiring alternatively certified candidates than the inside group. The outside definition scored the highest mean with past behaviors indicating that they agreed with the items in the past behaviors variable about supporting alternatively certified teachers and principals in the past.

The results from the multiple linear regression showed that five of the 20 predictor variables were significant and could be used to predict the willingness of directors of human resources to support hiring an alternatively certified principal. Anticipated concerns (t= -6.77, p=.00), conditions of the individual (t= 4.99, p=.00),

primarily urban school district location ($t= -2.36$, $p=.02$), shortage in the quality of

principals ($t= 2.10$, $p=.04$), and the director more willing to support hiring an

alternatively certified assistant principal than a principal ($t= -2.97$, $p=.00$) were the

significant predictor variables. Thus, these five predictor variables can be useful for

determining if an alternatively certified candidate would be employable in a certain

school district.

Discussion Addressing the Predictor Variables

The predictor and categorical variables were combined as predictors for the

multiple linear regression analysis. Therefore, there is not a separate discussion for the

categorical variables. A significant difference existed between the inside and outside

definition groups was with anticipated concerns ($t= -2.75$, $p = .00$). The outside definition

group had significantly more concerns about the abilities of alternatively certified

candidates than did the inside definition group. This was expected by the researcher

because the outside candidates do not hold a degree or work experience in the field of

education, whereas, the inside candidates have a degree in education and experience in

the field. However, the level of concern was not as high as the researcher expected for

either definition group. The other significant difference between the two groups was with

specific attitudes ($t= 1.48$, $p \leq .05$). The inside definition group had a more positive

attitude toward alternatively certified principals as expected by the researcher. There

were some differences among the means for the predictor variables between the two

groups for the other variables, but not to the extent that they were significantly different

according to the data analysis. Chi-square tests were conducted to check for significant

differences between the categorical variables. The results indicated that while there were

some differences in numbers of respondents per levels of the categorical variables, none were significantly different than would be expected given the population. With this said, a greater proportion of respondents were: female, had equal to or less than five years of experience, were from a primarily suburban school district, were not experiencing a shortage in the quantity of school principals [this finding supports the findings of earlier researchers (NAESP, 1998; Roza et al., 2003) that some school districts are faced with an issue of quality not quantity], were experiencing a shortage in the quality of school principals, held some type of degree in education, had mostly worked in the field of education, and were more willing to support hiring an alternatively certified assistant principal rather than a principal. This was not surprising as assistant principals have a more dominant operational role than instructional role in most school systems. Because these were non-significant differences, the observed differences are due to sampling and measurement errors.

Discussion Addressing the Literature

As I reviewed the topics of alternative principal certification, alternative teacher certification, and attitudes, I constructed a theory to predict the level of willingness of directors to support hiring alternatively certified principals. The theory evolved from information found in a review of the literature and from information given by professional colleagues in a discussion of the researcher's prospectus. This information resulted in eight major areas that became the domains (see Figure 1, Chapter 1) for this study.

The domains were adjusted and refined as a result of the information discovered from the qualitative study and from the principal components analysis. The conditions

domain was split into conditions of the individual and conditions of the job because these represented two different types of conditions. Additionally, the normative pressures domain was split into normative pressures-positive and normative pressures-negative to better assess the types of pressure that the directors felt from others about supporting hiring alternatively certified principals. This led to a total of eight domains for the final analysis along with 12 categorical variables (discussed earlier) that were combined into the multiple linear regression as predictor variables. The only domain with a significant difference between the inside and outside definitions groups was anticipated concerns. The predictor variables that were significant in the multiple linear regression were: anticipated concerns, conditions of the individual, school district being primarily urban in location, school district experiencing a shortage in the quality of principal candidates, and director of human resources more willing to support hiring an alternatively certified assistant principal than a principal. Individual item mean scores are presented in Tables K1 and K2, Appendix K. I added findings from this study to the body of literature. Table 24 is a summary of the findings.

<center>Post-Study Theory</center>

The results of the multiple linear regression led to some changes in the theory that future researchers and practitioners may find helpful. The post-study theory shows the variables that are significant at predicting the level of willingness of directors of human resources to support hiring alternatively certified principals. The new theory is in Figure 3 along with a summary of the variables in Figure 4. In this theory, the essential understanding is that the domains lead to willingness of directors of human resources to support hiring alternatively certified principals, and this willingness to support hiring

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Table 24

Research From This Study That can be Added to the Body of Literature for Each Domain

Domain	Date	Type of study, data source	Usable sample	Findings
Conditions of the job	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
Specific attitude	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
General attitude	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
Conditions of the individual	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a **significant** relationship to willingness to support hiring alternatively certified principals.
Past behaviors	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
Normative pressures-positive	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
Normative pressures-negative	2006	Questionnaire National population of AASPA members who are directors of human resources.	N=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.

(table continues)

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Table 24 (continued)

Domain	Date	Type of study, data source	Usable sample	Findings
Anticipated concerns	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a **significant** relationship to willingness to support hiring alternatively certified principals.
Gender (male v. female)	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
District allows hiring alternatively certified principals	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
District experiencing a shortage in the quantity of principals	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
District experiencing a shortage in the quality of principals	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a **significant** relationship to willingness to support hiring alternatively certified principals.
Human resource director holds a degree in education	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
Human resource director has worked mostly in the field of education	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.

(table continues)

Table 24 (continued)

Domain	Date	Type of study, data source	Usable sample	Findings
Human resource director more willingness to support hiring an alternatively certified assistant principal than principal	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a **significant** relationship to willingness to support hiring alternatively certified principals.
Human resource director has 10 or less years of experience	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
Human resource director has 20 or more years of experience	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
District location is primarily rural v. urban or suburban	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.
District location is primarily urban v. rural or suburban	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a **significant** relationship to willingness to support hiring alternatively certified principals.
Inside v. outside definition group	2006	Questionnaire National population of AASPA members who are directors of human resources.	*N*=238	Had a non-significant relationship to willingness to support hiring alternatively certified principals.

Note. AASPA refers to the American Association of School Personnel Administrators. Bold indicates a significant relationship.
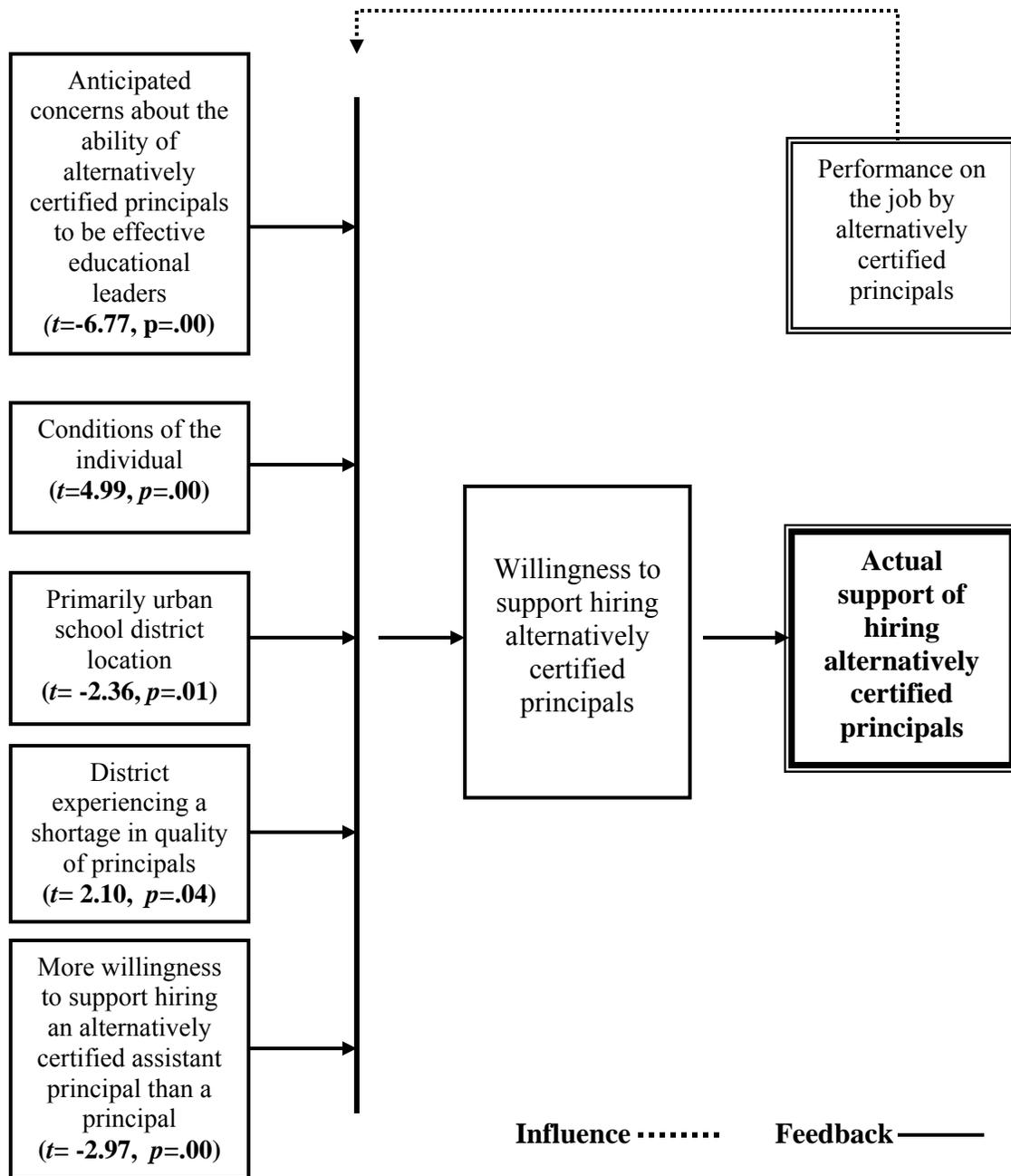
Figure 3. Post-study theory explaining the support of directors of human resources for hiring alternatively certified principals. Domains of predictors and their relationship to willingness of directors of human resources to support hiring alternatively certified principals.

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Anticipated concerns

Lack of knowledge base in
specific areas of education or
leadership
Possible negative perceptions of
others:
    Students
    Teachers
    Superintendents
    School board
    Parents
    Substitute teachers
    Other administrators
Lack of experience in schools
Lack of acceptance
No understanding of expectations
No preparation
Credibility
None (would not hire)
    (t=-6.77, p=.00)

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Conditions of the individual

Most qualified candidate
No certified candidate available
Working on a program with a local college or
taking classes in education or pursuing an
individual licensing plan
"Right fit" for the position
Same skills as a certified person
Knowledge of schools
Temporary position
Ability to be a leader
Track record and experience
Ability to build relationships and teams
People skills
Commitment to education
Ability to learn quickly
None (unnecessary to consider, would not hire,
don't envision one)
    (t=4.99, p=.00)

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Quality

School district is
experiencing a
shortage in the quality
of school principals
(t= 2.10, p=.04)

**Willingness to
support hiring an
alternatively
certified principal**

Prefer assistant principal

Directors were more willing
to support hiring
alternatively certified
assistant principals than
principals
(t= -2.97, p=.00)

District location

Directors from urban
school district locations
were less willing to
support alternatively
certified principals than
rural, and suburban school
districts
(t= -2.36, p=.01)

Figure 4. A summary of the variables in the domains that affect willingness of directors
of human resources to support hiring alternatively certified principals.

understanding is that the domains lead to willingness of directors of human resources to support hiring alternatively certified principals, and this willingness to support hiring leads to actual support of hiring, and actual support of hiring leads to the ability to evaluate job performance. This is important because without having the opportunity to perform as a principal; there is no way to evaluate the effectiveness of alternatively certified principals, nor a way to provide internal feedback loops to directors for future hiring decisions of alternatively certified principals. All predictor variables that were not statistically significant were dropped for the new theory.

Implications for Practice

The strongest relationship between a predictor variable and a director of human resource's willingness to support hiring an alternatively certified principal was *anticipated concerns*. Anticipated concerns focused on concerns that directors have about the ability of alternatively certified candidates to perform their job effectively. Some of the concerns included lack of instructional leadership skills, inability to articulate appropriate educational values, not knowing how to work with children, treating schools like a business, requiring too much training, not being accepted by the school community (e.g., teachers, parents, other principals), and not being able to effectively select teachers. Therefore, alternatively certified principals seeking employment should be cognizant of these concerns and be able to assure directors of human resources that these concerns should be minimal to none.

Conditions of the individual had a strong relationship with the criterion variable. This indicated that directors of human resources would be more willing to support those candidates that met a certain set of individual characteristics for which the director

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desired. Some of these characteristics included alternatively certified candidates being the "right fit" for the job, being the most qualified candidate for the job, having the leadership skills that are desired, being knowledgeable about the field of education, a willingness by the candidate to pursue a traditional certification while on the job, the candidate having strong people skills, and the candidate being willing to take what are considered as crucial education courses. An analysis of the data suggested that if alternatively certified candidates are able to possess and are willing to meet these conditions, then their chance of being recommended by directors of human resources for hiring would be improved. Alternatively certified candidates should be aware of these desired characteristics so that they can convey these traits, and their willingness to meet these conditions to directors in the prescreening or interview process.

The district being located in a primarily urban location, the district experiencing a shortage in the quality of principal candidates, and the director of human resources more willing to support hiring an alternatively certified assistant principal than a principal showed significant relationships with the criterion variable. While these relationships were weaker, they should not be overlooked. Districts that are experiencing a shortage in the quality of school principals may feel that bringing in alternatively certified principals would add a positive change and more competition to the position. Researching school systems with high administrator turnover rates, failing schools, or schools in need of improvement would be a good starting point for alternatively certified principals. Those alternatively certified candidates who can spark the imagination of directors to think outside the box will be those who can minimize the concerns of directors, and those who meet the conditions that a director will place upon them for employment. Alternatively

certified candidates should consider seeking employment outside of urban school districts because directors in these districts were less willing to support their hiring. It was clear upon reviewing the data that a shortage in quantity of administrative candidates did not exist. The data analysis on quantity further supported the data found in the review of the literature. Therefore, because enough traditionally certified candidates do exist to fill vacancies, a director of human resources would need to have a specific reason (such as a lack of quality in current principal applicants) to step outside the box and support hiring an alternatively certified candidate. Directors were more willing to support hiring an alternatively certified assistant principal rather than a principal. As their willingness to support alternatively certified assistant principals increased, their willingness to support hiring alternatively certified principals decreased. However, because of the ambiguity in the relationship, this finding is not interpretable. If one were to review the regression result in reverse it would not make sense.

This relationship may seem understandable, but should not be overlooked, because it does indicate that perhaps a back door to the principalship for alternatively certified candidates is open to enter schools in a leadership position. Because the assistant principal does not assume the direct responsibility for the outcomes of the school, most notably high stakes testing outcomes, then directors were a little more open-minded toward supporting their hiring in this role. Alternatively certified principals seeking this avenue should still heed the same advice mentioned earlier about anticipated concerns, conditions of the individual, district location, and quality to best make themselves employable.

The researcher believed that since quantity of traditionally certified candidates was not an issue, then the type of school district location would not matter to directors. An analysis of the data showed that a significant correlation did exist between a primarily urban school district location and willingness to support hiring alternatively certified principals. This was a negative relationship and indicated there is less willingness to support hiring alternatively certified principals in urban school districts. This was noted in the review of the literature in which Russo (2004) discovered that fellows from the New Leaders for New Schools (NLNS) program were struggling to fill positions in the inner-city job market. Directors from primarily urban locations may feel that quality of leadership is already an issue in their school districts, and bringing in alternatively certified principals would further exacerbate the problem. While urban school districts seem not to be the best fit for alternatively certified candidates, it would be wise for such candidates to focus on minimizing concerns of directors, meeting individual expectations (e.g., "right fit"), and maximizing their individual qualities so they are marketable in any school district.

The results of this study indicated that alternatively certified principals are most employable when anticipated concerns are minimized, when the individual seeking employment meets certain conditions for which the director is seeking (e.g., willing to take additional college coursework, willing to work toward traditional certification), when the school district for which he or she is seeking employment is experiencing a shortage in the quality of principal candidates, when the candidate is seeking an assistant principalship rather than a principalship, and if the candidate is seeking employment outside of a primarily urban school district. It would be beneficial for alternatively

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certified candidates to be aware of these significant findings to have the best chance of being hired. Nationwide, directors who are members of the AASPA should understand that if alternatively certified candidates meet these requirements, then their colleagues would consider supporting their hiring.

Alternatively certified principals should understand and accept that directors will have concerns about supporting their hiring due to enormous pressures from many stake holders. They should be aware that from the perspective of directors, a big chance is being taken by hiring them. Therefore, the directors may feel more comfortable supporting alternatively certified principals if a set of conditions were placed on them. This may be because the director feels that the alternatively certified principal is receiving the training and course work that is believed to be essential to a principal's success. As a result, school districts must be prepared to mentor, train, and help alternatively certified principals gain access to local college and universities for the desired coursework. School districts must understand that they are asking alternatively certified principals to adjust to a new job, spend many hours at work, and seek additional training, and coursework with what little time remains in their schedule. Additionally, these candidates would have to worker harder to prove themselves, and under the watchful eyes of many critics.

As a reminder from the qualitative study results where there were free-response type questions; and therefore, a chance to elaborate, the directors set some rigorous standards about what characteristics alternative candidates must possess. Included among these were a sound knowledge base, leadership skills, people skills, and a willingness to go back to graduate school for education courses. Legislators, school officials, and

professors in graduate schools of education should be cognizant of the AASPA directors of human resources' input regarding their attitudes toward alternatively certified principals, and the conditions and concerns in which supporting their hiring would be a viable solution.

Recommendations for Future Research

The researcher developed a revised theory that can be used to extend the study of the variation in the level of directors of human resources' willingness to support hiring alternatively certified principals. While additional studies are needed to strengthen the theory, the instrument developed for this study does have the potential to be a useful tool for measuring the variables that predict the level of willingness of directors to support hiring alternatively certified principals. Future modifications and refinements to this model will enhance its effectiveness in determining what independent variables best predict a director's willingness to support hiring alternatively certified principals. Modifications and refinements to this model could result in similar alternative studies. Such similar alternatives are:

- The data used for this study were gathered through members of the American Association of School Personnel Administrators (AASPA). Therefore, this study can only be generalized to the AASPA population. Certainly, there are many more directors of human resources to be studied that are not AASPA members, but may one day be faced with an alternatively certified applicant.
- This study was a nationwide study. The model could be narrowed in focus to individual states and localities to determine which predictor variables best explain the level of willingness to support hiring alternatively certified

principals on a smaller scale. Once the focus of the study has been narrowed, the researcher can then concentrate on making sure that almost every school district within a region or state is represented in the study thus reducing the potential of coverage error while collecting data unique to that state.

- The study could be replicated based on specific characteristic or demographic variables. For example, this model could be tested based on elementary school, middle school, or high school principalships. A comparison of differences among the predictor variables for these three groups would be useful for alternatively certified candidates seeking employment and to schools districts seeking applicants.

- In this study, I incorporated the predictor variables with the categorical (characteristic) variables to determine what variables were the best predictors of willingness. Because the few categorical variables that were significant were very weak, I would suggest taking those out of the analysis. The categorical variables could still be used, but to describe the respondents and their school districts used in the study.

- In this study, I did not provide a chance for participants to comment on their answer. Some respondents emailed me back stating that they would like to have made a comment with some of their answers. This was done intentionally by the researcher to keep the amount of data manageable. The researcher now believes that this information could have been collected as valuable data to construct instruments for future studies, and not used for this particular study.

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- This study did not offer a choice of neutral for the Likert scale questionnaire items. Some respondents emailed me back stating they preferred for this to have been a choice for some of their responses because they felt trapped into an agree or disagree answer. Future researchers may want to consider this as an option based on the feedback from the participants. While having a neutral choice can often lead to respondents selecting that choice without truly reflecting on their answer, it may prevent skipping over questions or the flipping a coin mentality because the neutral choice was not offered.

- As the researcher developed the questionnaire, he was pleased that it could be completed in 15 minutes or less time. However, he discovered that 15 minutes was a lot of time to ask of directors of human resources. This is because directors are inundated with surveys and questionnaires. Additionally, directors of human resources are busy people, regardless of the size of their school systems; time restraints force them to prioritize all requests of their time. One director politely let me know that he would only commit five minutes to a questionnaire, not a second more, and thus did not complete my questionnaire. Therefore, creating a questionnaire that can be completed in less than 10 minutes and closer to five while capturing the intended data would be a great asset to the researcher for improving response rates.

- Some directors emailed me back to let know that their state did not allow the hiring of alternatively certified principals so they would not be participating in the study. Future researchers should make it very specific in the directions that they are seeking feedback regardless of rather or not their state allows it. For

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the study to be reliable and valid, the researcher needs input from all different members of the population. Better clarification in the directions should help to minimize the nonparticipation problem when potential participants believe they are exempt from the study.

- A review of the final questionnaires showed that the researcher placed a number next to each Likert scale choice (e.g., 1 Strongly disagree, 2 disagree) allowing for easy entry from words to numbers into the SPSS database. However, the researcher did not do this for the Thurstone items or the categorical items. Doing so would have allowed for more efficient entry of data from the survey software to the SPSS database.

- The researcher spent a great amount of time sending 689 individual emails on 5 different occasions to the AASPA directors of human resources. This was done for two particular reasons. One as recommended by Dillman (2000), was to keep email contact personal (e.g., no mass emails, no listservs). The second reason was to give each member an individual code. The problem that the researcher encountered was that many directors chose not to give their code. This may have been out of forgetfulness or deliberate as they did not want their names associated with their answers. The researcher believes that since all participants were members of a professional organization, much time could have been saved by sending a mass email using the "undisclosed recipients" feature with an attached roster of codes. This would have accounted for Dillman's recommendation as the participant would not see any other names in their email but the sender's information, and would have provided a roster

with a code beside each members name in a single email attachment. Professional etiquette not to use another member's code would have to be expected. This would save the researcher a great amount of time that could be used for additional follow up contacts. However, this would need to be a professional judgment call by the researcher.

The return rate for this study was 35.0 percent. If one takes out the names of those members that had invalid email addresses, then the return rate climbs to about 37.0 percent. The initial emailing did not result in the expected return rate. Therefore, the researcher continued to follow the recommendations of Dillman (2000), using follow up emails until the expected 35.0 percent rate was met. The researcher advises that Dillman's suggestions be followed accordingly. Although, the researcher felt like he was beginning to harass directors with constant emails, returns continued to come in, which helped the researcher to meet the expected return rate. Furthermore, I would suggest some follow up emails (that were not part of the standard letter) be used, but more of a one to two sentence personal reminder asking the director to please respond to the research request.

<div align="center">Reflections</div>

The predictor with the largest effect on the level of willingness to support hiring alternatively certified principals was *anticipated concerns*. Directors of human resources are in a difficult position because if they recommend an alternatively certified principal for hiring and the person turns out to be a poor performing principal; then they are likely to hear about it from their superiors and from the community. The education of our children cannot afford to be used as a testing ground for alternatively certified principals.

Although, the same could be said for any poor principal, even if traditionally certified. Therefore, if alternatively certified principals want to increase their employability, they would be wise to recognize the concerns that directors of human resources possess, and perform well when given an opportunity. Being knowledgeable about these concerns will give alternatively certified candidates an area in which to focus and improve. If these candidates can show directors that these areas of concerns are actually their strengths or that these areas of concern are only minimal, then their chances of being recommended for hiring will improve.

I was surprised that there were not other significant domain variables other than anticipated concerns and conditions of the individual. I felt that conditions that school districts were experiencing related to the job (e.g., shortage of qualified candidates applying) would be a significant predictor for sure. However, I became aware of a more powerful force at play. That force is that directors of human resources are more concerned with the individual candidate and the characteristics, qualities, and willingness to improve that the candidate possesses to be an effective educational leader.

This is powerful information. Approaching this study, I believed that an alternatively certified candidate seeking employment could knock on the schoolhouse doors of any school struggling to find principal candidates and be welcomed with open arms. I now know that an alternatively certified candidate will have to do much more than just show up in the right place at the right time. Indeed, the candidate will have to minimize concerns of human resource directors and will have to possess the individual qualities for which directors' desire to be employable. But on a positive note, if states allow or will soon allow hiring of alternatively certified principals; alternatively

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candidates seeking employment are not going to meet a lot of resistance from directors as they have shown they are positive neutral toward these candidates. They may experience a little, but this researcher concludes, not a lot. Furthermore, the level of anticipated concerns (by both groups) was not as high as expected by the researcher. While it is significant (between the inside and outside definition groups) and important, it could be worse for alternatively certified principals. This seems to indicate that while directors do have some concerns about the ability of alternatively certified candidates to perform the job; these concerns are not so great as to completely inhibit their willingness to support hiring alternatively certified principals if they are candidates of high quality.

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DIRECTORS OF HUMAN RESOURCES' VIEWS OF PRINCIPAL ALTERNATIVE
CERTIFICATION INTERVIEW PACKET

(Adapted from Kufel, Gaudreau, & Parks, 2004)

Date:

Address:

To:

The alternative certification of school principals is expanding across the country.
Nineteen states already have provisions for alternatively certifying principals, and
another five states are considering permissive legislation. Despite such legislation, a
major question remains, "How employable are alternatively certified principals?"

As a director of human resources, you have much control in the application process for
the hiring of school principals. Your views, to a large extent, may determine whether
alternatively certified principals will be considered for jobs. Therefore, we are conducting
a study of the views directors of human resources have about alternatively certified
principals and under what conditions they would be willing to support hiring them.

We invite you to participate in a 15-minute interview on your views about alternatively
certified principals. Attached is a list of questions that would guide our conversation. The
data we gather through these interviews will be used to construct a survey that will be
sent to a sample of directors of human resources nationwide. Your views will aid in
constructing a valid questionnaire.

***An option has been provided to complete the interview protocol and send it back in the
enclosed self-addressed stamped envelope if this would be more convenient for you. If
you select this option, please be sure to read the definition of alternative principal
certification included in the attached protocol.***

With your permission, the telephone interview will be taped. The tapes will be
transcribed and lettered so that your identity will not be associated with the content. After
electronic submission of the dissertation to Virginia Polytechnic Institute and State
University, the tapes will be destroyed. Won't you please help us with this study by
completing and returning the attached form by <<<INSERT DATE>>>. Your views will
be greatly appreciated.

Sincerely yours,

David J. Parks   Douglas L. Hartley
Professor & Associate Director   Researcher
School of Education   School of Education
parks@vt.edu   dhartley@ycsd.york.va.us
540.231.9709   757.220.4097

INTERVIEW QUESTIONS AND PARTICIPATION RETURN FORM

(Adapted from Kufel, Gaudreau, & Parks, 2004)

Directors of Human Resources' Views of Principal Alternative Certification

How long have you been a director of human resources?

Would you classify your district as urban, suburban, or rural?

Is your district presently experiencing a principal shortage?

Does your district allow hiring alternatively certified personnel such as principals and teachers?

In the past have you considered hiring an alternatively certified teacher or principal?

Given this definition, what do you believe are the most serious challenges facing an alternatively certified principal? (e.g., acceptance, instructional)

When thinking about the different people that a principal must interact with, whose perceptions would be of greatest concern to you if you supported hiring an alternatively certified principal? (e.g., teachers, parents, students, school board)

If you were to support hiring an alternatively certified principal, what would you (and your district) have to do to help this person be successful?

Given this definition, under what conditions would you support hiring an alternatively certified principal?

Under what circumstances would you prefer an alternatively certified principal?

Given that you could support hiring an alternatively certified principal under this definition, what characteristics would the alternatively certified principal have to possess?

Given this definition, what are your current views about supporting the hiring of alternatively certified principals?

....

*Please cut off and return in the self-addressed, stamped envelope. Thank you

☐ I will be available to talk with you about this issue on _____

between _____. Please call me at that time.
(Any business hours)

☐ Please contact my assistant _____ at _____

to set up an appointment.

────── "OR" ──────

> ***If you prefer, you may complete and mail this information to me in the enclosed self-addressed, stamped envelope. If you select this option, please be sure to read the definition of alternative principal certification included in the attached protocol.***

Name _____ State _____ Date _____

Phone _____ Email _____

INTERVIEW PROTOCOL (INSIDE DEFINITION)

(Adapted from Kufel, Gaudreau, & Parks, 2004)

Hello, Dr. / Mr. / Mrs._____. This is Doug Hartley calling from the Virginia Tech School of Education. I am joining you on speakerphone as the researcher on this project.

I would like to thank you very much for agreeing to share your views on hiring alternatively certified principals.

I am soliciting your help in designing a survey that will be administered nationally to gauge the beliefs of directors of human resources about the hiring of alternatively certified principals. Your responses will help me create a valid and reliable survey instrument for this purpose

Please keep in mind that when I am talking about alternatively certified principals I am talking about candidates who have a master's degree and experience in education, but they have not completed a university-based principal preparation program. These candidates could include, but are not limited to, teachers, guidance counselors, reading specialists, and department heads. As a reminder, I am speaking specifically about candidates hired to be full-fledged principals.

With your permission, I would like to record this conversation to assist me in creating domains for the survey instrument I am developing. The tapes will be transcribed, and the transcription will be lettered so that you will not be identified with the content. The tapes will be destroyed after the electronic submission of the dissertation to Virginia Polytechnic and State University. Data will be aggregated, and no participant will be identified with his or her responses.

Do you have any questions about this project?

I will be happy to email you the results of this study. Add to list as appropriate.

INTERVIEW PROTOCOL (OUTSIDE DEFINITION)

(Adapted from Kufel, Gaudreau, & Parks, 2004)

Hello, Dr. / Mr. / Mrs._____ . This is Doug Hartley calling from the Virginia Tech School of Education. I am joining you on speakerphone as the researcher on this project.

I would like to thank you very much for agreeing to share your views on hiring alternatively certified principals.

I am soliciting your help in designing a survey that will be administered nationally to gauge the beliefs of directors of human resources about the hiring of alternatively certified principals. Your responses will help me create a valid and reliable survey instrument for this purpose

Please keep in mind that when I am talking about alternatively certified principals I am talking about candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and they have not completed a university-based principal preparation program. As a reminder, I am speaking specifically about candidates hired to be full-fledged principals.

With your permission, I would like to record this conversation to assist me in creating domains for the survey instrument I am developing. The tapes will be transcribed, and the transcription will be lettered so that you will not be identified with the content. The tapes will be destroyed after the electronic submission of the dissertation to Virginia Polytechnic and State University. Data will be aggregated, and no participant will be identified with his or her responses.

Do you have any questions about this project?

I will be happy to email you the results of this study. Add to list as appropriate.

RESEARCHER'S DATA COLLECTION SHEET FOR THE PILOT INTERVIEW
PROTOCOLS

VirginiaTech

CODE: _____

COLOR: _____

Qualitative Interview Questions

Name: _____ **Date:** _____

Definition: *Inside*   *Outside*

Code: R = researcher   D = director of human resources

1. R: How long have you been a director of human resources?
   D:

2. R: Would you classify your district as urban, suburban, or rural?
   D:

3. R: Is your district presently experiencing a principal shortage?
   D:

4. R: Does your district allow hiring alternatively certified personnel such as
           principals and teachers?
   D:

5. R: Follow up: If not, have you considered hiring an alternatively certified
           candidate?
   D:

6. R: Given this definition, what do you believe are the most serious challenges
           facing an alternatively certified principal?
   D:

7. R: When thinking about the different people that a principal must interact
           with, whose perceptions would be of greatest concern to you if you
           supported hiring an alternatively certified principal?
   D:

8. R: If you were to support hiring an alternatively certified principal, what would you (and your district) have to do to help this person be successful?

    D:

9. R: Given this definition, under what conditions would you support hiring an alternatively certified principal?

    D:

10. R: Under what circumstances would you prefer an alternatively certified principal?

    D:

11. R: Given that you could support hiring an alternatively certified principal under this definition, what characteristics would the alternatively certified principal have to possess?

    D:

12. R: Given this definition, what are your current views about supporting the hiring of an alternatively certified principal?

    D:

RESEARCHER'S DATA COLLECTION SHEET FOR THE INTERVIEW
PROTOCOLS

CODE: _____

COLOR: _____

***Directors of Human Resources' Views of Principal Alternative Certification
Interview Questions***

(Adapted from Kufel, Gaudreau, & Parks, 2004)

Name: _____ **M / F Date:** _____

Definition: *Inside*   *Outside*   **State has alternate route:**   *Yes*   *No*

State has shortage: *Yes*   *No*

Code: R = Researcher   D = Director of Human Resources

1. R: How long have you been a director of human resources?
   D:

2. R: Would you classify your district as urban, suburban, or rural?
   D:

3. R: Is your district presently experiencing a principal shortage?
   D:

4. R: Does your district allow hiring alternatively certified personnel such as
   principals and teachers?
   D:

5. R: In the past have you considered hiring an alternatively certified teacher or
   principal?
   D:

6. R: Given this definition, what do you believe are the most serious challenges
   facing an alternatively certified principal? (e.g., acceptance, instructional)
   D:

7. R: When thinking about the different people that a principal must interact
   with, whose perceptions would be of greatest concern to you if you
   supported hiring an alternatively certified principal? (e.g., teachers,
   parents, students, school board)
   D:

8. R: If you were to support hiring an alternatively certified principal, what would you (and your district) have to do to help this person be successful?

D:

9. R: Given this definition, under what conditions would you support hiring an alternatively certified principal?

D:

10. R: Under what circumstances would you prefer an alternatively certified principal?

D:

11. R: Given that you could support hiring an alternatively certified principal under this definition, what characteristics would the alternatively certified principal have to possess?

D:

12. R: Given this definition, what are your current views about supporting the hiring of alternatively certified principals?

D:

APPENDIX B

Application for and Letter of Support From the AASPA

American Association of School Personnel Administrators

533-B N. Mur-Len Road, Olathe, KS 66062
Phone (913) 829-2007   Fax (913) 829-2041
www.aaspa.org
aaspa@aaspa.org

October 17, 2005

Douglas L. Hartley
Assistant Principal - Bruton High School
19 Pine Street
Poquoson, VA 23662

Dear Douglas,

On behalf of the Executive Board of the American Association of School Personnel Administrators (AASPA), I am pleased to inform you that your request for support has been approved for your project titled, "Variation in the Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals."

At the Board Meeting on October 4, 2005, the Board reviewed your proposal and officially approved your request.

We understand that to support your project, we will provide you with a membership list, from which you will e-mail approximately 1200 people to take your online survey. We understand that there is no cost to AASPA associated with this study, and you will be sending questionnaires electronically. We would appreciate if you would keep the Executive Board informed of your progress through the Executive Director during the duration of your project.

AASPA exists to promote best practices in the field of school personnel administration. We appreciate your dedication to our field and wish you all the best in your research endeavors.

Sincerely,
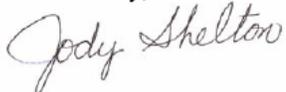
Jody Shelton

Jody Shelton, Ed.D.
Executive Director
AASPA

The American Association of School Personnel Administrators provides leadership in promoting effective human resource practices within education through professional development activities and a broad-based resource network.

5.21 – ADMINISTRATORS AMERICAN ASSOCIATION OF SCHOOL PERSONNEL REQUEST FOR SPECIAL PROJECT GRANT

AASPA Executive Board is interested in encouraging its members/affiliates in the development and sharing of innovative techniques, projects, research and/or procedures through special grants. Since funds are limited, participants are encouraged to emphasize, if possible, the importance of this project to the greatest number of our membership.

1. Brief Description of Project/Study:

Approximately 1200 AASPA members will be sent an online survey utilizing Likert and Thurstone scale items to rate their agreement or disagreement for each statement related to personal and environmental variables concerning alternatively certified principals.

2. Title:

Variation in the Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals.

3. Beginning and Ending Dates:

The survey response time frame will be December 9, 2005, through January 23, 2006. A final product is anticipated to be completed in April 2006.

4. What is planned:

A review of the literature and a qualitative study (not involving AASPA) will be used to develop a series of statements based on variables such as anticipated concerns, past behaviors, conditions of the school district, and others discovered during the qualitative interview process that may impact a director of human resources willingness to support hiring alternatively certified principals. This survey will be emailed to approximately 1200 AASPA members with a hyperlink to click on to complete the survey. The survey will consist of a set of Thurstone statements (agree or disagree) and a series of Likert statements (ranging from strongly agree to strongly disagree). Once the survey is completed, the participant can click the submit button and the process is complete. The survey will be developed to be completed in approximately 20 minutes. All data will be coded and names will not be associated with responses to assure confidentiality. I will use multiple linear regression and principal components analysis to analyze the data.

5. Name of person(s) who will have a major role:

Douglas L. Hartley (Researcher/Student – Virginia Polytechnic Institute and State University / Assistant Principal – Bruton High School – Williamsburg, Virginia)
Dr. David J. Parks (Dissertation Advisor – Virginia Polytechnic Institute and State University)

6. Cost Projections:

$0.00

The amount of the Project Grant requested for the Special Project:

"Mailing List" (email included)

7. The anticipated product of the project/study:
(Direct your comments to the ability and value of the product to be shared with other AASPA affiliates and/or members.)

AASPA will be provided a final copy of the survey results as they may be of interest to members as to whether or not alternative principal certification is viewed as a viable option to address quantity and quality issues in public education.
The final product will consist of a dissertation submitted electronically to the Virginia Polytechnic Institute and State University, which is available online to all members who access the online Virginia Tech library.

8. Statement of probable benefit/advantage to the AASPA member(s) or the affiliate, the AASPA, and/or the profession.

As of 2004, 20 states offer some type of alternate route to the principalship with six more considering the same. Therefore, an investigation of the employability of these candidates is important. Although there are many people certified to be principals, some do not wish to fill the ranks, and others are viewed as lacking the quality needed to lead schools in an age of strict accountability. This has resulted in concerns of quality and quantity in the principalship. Learning if alternatively certified principals are viewed as a potential solution to these issues would be beneficial in addressing future quality and quantity issues.
AASPA will be provided a copy of the findings from this survey.

9. Name, Address, and Telephone of Contact Person(s):

Douglas L. Hartley (19 Pine Street, Poquoson, VA 23662 (757-868-3825 H) (757-220-4097 W)
Dr. David J. Parks (School of Education, 101 War Memorial Hall, Mail Code 0313, Blacksburg, VA 24061) (540-231-3841)

10. Action Taken by AASPA Executive Board:

_____
_____
_____
_____
_____
_____
_____
_____

Return form to: AASPA, Executive Director

APPENDIX C

DOCUMENTS USED IN THE DEVELOPMENT OF THE THURSTONE SCALE FOR
MEASURING THE WILLINGNESS OF DIRECTORS OF HUMAN RESOURCES TO
SUPPORT HIRING ALTERNATIVELY CERTIFIED PRINCIPALS

Table C1

*Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the
Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively
Certified Principals, (N=25)*

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
1.	I would not hire an alternatively certified principal, but superintendents in some districts should.[1]	2	1	3.5	2.5
2.	I would be extremely reluctant to hire an alternatively certified principal.	2	1	3	2
3.	I probably would not hire an alternatively certified principal.[1]	2	2	5	3
4.	I don't agree with alternatively certifying all principals, but I would be willing to hire a specific individual.[1]	5	2.5	7	4.5
5.	I would be extremely willing to hire an alternatively certified principal.	10	6	11	5
6.	I would hire an alternatively certified principal over a traditionally certified principal.	9	3	10.5	7.5
7.	During the hiring process, I always consider hiring alternatively certified principals first.[1]	9	6.5	10	3.5
8.	Alternatively certified principal candidates are better prepared than traditional principal candidates for the responsibilities of the principalship.[1]	7	3	10.5	7.5

(table continues)

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Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
9.	Alternatively certified principal candidates are given preferential treatment during the screening process.[1]	4	1.5	7.5	6
10.	I am fervently in favor of hiring alternatively certified principals.[1]	7	1.5	11	9.5
11.	I would never hire another traditional principal candidate.[1]	1	1	11	10
12.	I would never hire an alternatively certified principal.[1]	1	1	1	0
13.	I am adamantly opposed to ever hiring alternatively certified principals.[1]	1	1	1	0
14.	There are no circumstances under which I would be willing to hire an alternatively certified principal.	1	1	2	1
15.	I will always hire traditional principal candidates.[1]	1	1	3	2
16.	If a principal candidate has not taught in a public school classroom, I won't even consider them.[1]	2	1	3	2
17.	I prefer hiring alternatively certified principals.[1]	7	2	11	9
18.	If given the opportunity, I would consider hiring an alternatively certified principal.[1]	9	7	10	3
19.	I certainly would consider an alternatively certified principal, but I have not yet.	8	6.5	9	2.5
20.	I am receptive to hiring alternatively certified principals.[1]	9	8	10	2
21.	In my district, we actively recruit alternatively certified principals.[1]	9	7	10	3

(table continues)

Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
22.	Alternatively certified principals cannot succeed in K-12 public education.[1]	1	1	1.5	0.5
23.	Principals should not be certified alternatively.	1	1	3	2
24.	The best principals have gone through the traditional certification route.	3	2	5.5	3.5
25.	I would rather hire a traditionally certified principal than an alternatively certified principal.	3	2	6	4
26.	In my district, we actively train alternatively certified principals.[1]	9	7.5	10	2.5
27.	I think alternatively certified principals have the capacity to succeed in K-12 public education.	9	7.5	10.5	3
28.	I would only hire a traditional candidate if I was forced to.[1]	3	1	10	9
29.	Decertifying the principalship would make the principalship more competitive.[1]	7	5.5	9	3.5
30.	I believe traditional certification for principals inhibits quality people, whom I'd hire, from entering the principalship.[1]	6	2.5	9.5	7
31.	During the hiring process I do not consider hiring alternatively certified principals.	1	1	2	1
32.	Traditionally certified principals are better prepared than alternatively certified principals.	4	2	7.5	5.5
33.	Decertifying the principalship would be a disaster to the school principal profession.	1	1	2.5	1.5

(table continues)

Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
34.	The best principal candidates have gone through the traditional certification route.	3	2	4	2
35.	I doubt alternatively certified principals can be successful.	2	1	2.5	1.5
36.	If given the opportunity I would not support hiring alternatively certified principals.	2	1	4.5	3.5
37.	I would hire alternatively certified principals under certain circumstances.[1]	8	5	10	5
38.	I do not believe in alternative certification for school principals, but it is not practically advisable to abolish it.[1]	4	2	5	3
39.	The best principal candidates have gone an alternative route.	8	1	11	10
40.	Alternatively certified principals can be successful without having been a teacher.	9	6	10	4
41.	Alternatively certified principals bring energy to the principalship that traditional principals lack.	9	2.5	10	7.5
42.	I would hire an alternatively certified principal if I thought they could be effective.[1]	9	8	10	2
43.	I am more willing to consider hiring alternatively certified principals than I used to be.	8	6.5	9	2.5
44.	I used to be opposed to hiring alternatively certified principals, but I've changed my position over the last several years.[1]	6	5	9	4
45.	I prefer hiring traditional principal candidates.[1]	4	3	6	3

(table continues)

Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
46.	I only consider traditional principal candidates.[1]	1	1	1.5	0.5
47.	Only traditionally certified principals can succeed in K-12 public education.[1]	1	1	2	1
48.	I would not hire an alternatively certified principal.[1]	1	1	2.5	1.5
49.	I would not hire an alternatively certified principal, if they had no teaching experience.[1]	4	2	4.5	2.5
50.	I would hire an alternatively certified principal if it was absolutely necessary.	3	2	5	3
51.	I am extremely apprehensive about hiring an alternatively certified principal.	2	1	3	2
52.	I am apprehensive about hiring an alternatively certified principal.	2	2	5	3
53.	I would be hesitant about hiring an alternatively certified principal.[1]	3	2	4.5	2.5
54.	I would be nervous about hiring an alternatively certified principal.[1]	3	2	4	2
55.	I would be uneasy about hiring an alternatively certified principal.[1]	3	2	4.5	2.5
56.	I would be frightened about hiring an alternatively certified principal.[1]	2	1	2	1
57.	I am willing to consider hiring an alternatively certified principal.[1]	9	8	11	3
58.	In some cases, I might prefer an alternatively certified principal.	8	6	10	4

(table continues)

Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
59.	I consider all principal applicants.	10	6	11	5
60.	I used to be adamantly opposed, but now I am more willing to hire alternatively certified principals than I have been.[1]	7	5	7	2
61.	I prefer traditional candidates, but if necessary, I would consider hiring an alternatively certified principal.*	6	5	9	4
62.	I prefer traditional candidates, but if necessary, I would consider hiring an alternatively certified principal.*	7	5	9	4
63.	I believe some alternatively certified principals would be successful principals.	9	6.5	9.5	3
64.	My first choice would be someone traditionally certified, but I would consider an alternative candidate if I thought they were a viable option.[1]	8	5.5	10	4.5
65.	I would approach hiring alternatively certified principals cautiously.	5	3	6	3
66.	I would prefer a traditional candidate, but in some situations an alternatively certified principal might be more successful.[1]	6	5	10	5
67.	I am adamantly opposed to alternative certification for school principals, but if I had to I would hire an alternatively certified principal.[1]	2	1	4	3

(table continues)

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Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
68.	I always hire the most qualified candidate.[1]	10	7	11	4
69.	I always hire the candidate who has the greatest potential to be successful.[1]	11	7.5	11	3.5
70.	To consider an alternatively certified principal as a viable candidate, they would have to be extraordinary.[1]	4	3	7.5	4.5
71.	I have never considered hiring an alternatively certified principal.	5	2	6	4
72.	I have never thought about hiring an alternatively certified principal.	5	3.5	6	2.5
73.	I only consider traditionally certified candidates, but the doors to the principalship should be open.[1]	4	2	6	4
74.	I only hire traditional candidates, but some districts would benefit from alternative certification for school principals.[1]	4	2	5.5	3.5
75.	I would be concerned about hiring an alternatively certified principal.[1]	3	2	5	3
76.	I would be hesitant about hiring an alternatively certified principal.[1]	4	2	5	3
77.	Hiring alternatively certified school principals is a great idea, but not in my school district.[1]	3	2	4	2
78.	I would hire an alternatively certified principal if recommended by a reliable source.	9	6.5	10	3.5

(table continues)

Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
79.	I would consider hiring some alternatively certified principals.[1]	9	8	10	2
80.	I always hire the most qualified candidate regardless of certification held.[1]	9	7	11	4
81.	The type of certification a principal candidate possesses does not influence my willingness to hire.[1]	9	7	11	4
82.	I seriously consider all principal candidates regardless of their certification.[1]	8	7	11	4
83.	I might consider an alternatively certified principal candidate.[1]	8	6.5	9	2.5
84.	I am more willing to hire alternatively certified principals than I have been in the past.[1]	8	5.5	9	3.5
85.	I am ambivalent toward the concept of alternative certification for school principals.[1]	6	5	6	1
86.	I am indifferent about alternatively certifying school principals.	6	4.5	7	2.5
87.	I don't care if principal candidates are traditionally certified or alternatively certified.[1]	8	6	9	3
88.	All principals should be certified alternatively.	4	1	11	10
89.	I would only consider hiring alternatively certified principals.	6	1	11	10
90.	I would always hire alternatively certified principals.	9	2	11	9

(table continues)

Table C1 (continued)

Median and Dispersion Statistics for Potential Thurstone Scale Items for Measuring the Expressed Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals, (N=25)

Item	Potential item	Median	Quartile 1	Quartile 3	Interquartile range
91.	I would rather hire an alternatively certified principal than a traditional principal.[1]	10	4	11	7
92.	I am more willing to recommend hiring an alternatively certified principal than a traditionally certified principal.[1]	9	4	10.5	6.5
93.	There are no circumstances when I would hire an alternatively certified principal.[1]	1	1	1	0
94.	I always hire the most qualified candidate, but I just don't think that person can be alternatively certified.	4	2	5	3
95.	I am uncomfortable placing an alternatively certified principal candidate in a school's lead position.[1]	4	2	7	5
96.	I would only hire an alternatively certified principal candidate if I was forced.[1]	2	1	2.5	1.5
97.	I cannot think of an instance when I would hire an alternatively certified principal.	1	1	3.5	2.5

[1]Adapted with permission from Andy Kufel from his dissertation (VARIATION IN THE WILLINGNESS OF SUPERINTENDENTS TO SUPPORT HIRING ALTERNATIVELY CERTIFIED PRINCIPALS) in process at Virginia Polytechnic Institute and State University.

*Repeated item – not used because of potential error.

FINAL ITEMS ON THE THURSTONE SCALE
FOR MEASURING THE EXPRESSED WILLINGNESS OF DIRECTORS OF
HUMAN RESOURCES TO SUPPORT HIRING ALTERNATIVELY CERTIFIED
PRINCIPALS

Table C2

Instrument for Test-Retest Analysis of the Thurstone Items

Name: _____ **Date:** _____

Place the letter X in the box that best reflects your answer (agree or disagree).

Thurstone Scale Statement	Agree	Disagree	Score
1. (12) I would never hire an alternatively certified principal. (1)			
2. (60) I used to be adamantly opposed, but now I am more willing to hire alternatively certified principals than I have been. (7)			
3. (5) I would be extremely willing to hire an alternatively certified principal. (10)			
4. (72) I have never thought about hiring an alternatively certified principal. (5)			
5. (79) I would consider hiring some alternatively certified principals. (9)			
6. (34) The best principal candidates have gone through the traditional certification route. (3)			
7. (85) I am ambivalent toward the concept of alternative certification for school principals. (6)			
8. (69) I always hire the candidate who has the greatest potential to be successful. (11)			
9. (49) I would not hire an alternatively certified principal, if they had no teaching experience. (4)			
10. (43) I am more willing to consider hiring alternatively certified principals than I used to be. (8)			
11. (56) I would be frightened about hiring an alternatively certified principal. (2)			
12. (68) I always hire the most qualified candidate. (10)			
13. (13) I am adamantly opposed to ever hiring alternatively certified principals. (1)			
14. (59) I consider all principal applicants. (10)			
15. (42) I would hire an alternatively certified principal if I thought they could be effective. (9)			
16. (19) I certainly would consider an alternatively certified principal, but I have not yet. (8)			

(table continues)

Table C2 (continued)

Instrument for Test-Retest Analysis of the Thurstone Items

Thurstone Scale Statement	Agree	Disagree	Score
17. (35) I doubt alternatively certified principals can be successful. (2)			
18. (77) Hiring alternatively certified principals is a great idea, but not in my district. (3)			
19. (65) I would approach hiring alternatively certified principals cautiously. (5)			
20. (86) I am indifferent about alternatively certifying school principals. (6)			
21. (20) I am receptive to hiring alternatively certified principals. (9)			
22. (29) Decertifying the principalship would make the principalship more competitive. (7)			
	Total score		

Note. Shaded items were selected for the final questionnaire to measure the dependent variable. The total score is calculated by averaging the scale scores for the items marked "agree" by the respondent. The scale score in the parenthesis following each item is the median placement score on the 11-point scale from 1=lowest level of willingness of directors of human resources to support hiring alternatively certified candidates to 11=highest level of willingness of directors of human resources to support hiring alternatively certified candidates. The first number in parenthesis is the item number used in the development of the Thurstone scale. Items were scrambled for the test-retest.

Table C3

Test-Retest Reliability Results for the Thurstone Scale, N=13

Participant number	M (t_1)	M (t_2)
1	4.63	4.63
2	6.75	6.90
3	7.50	8.38
4	7.92	7.75
5	7.54	7.82
6	7.46	6.92
7	7.78	8.00
8	7.92	7.64
9	7.45	6.42
10	8.08	7.93
11	7.90	8.67
12	6.57	6.31
13	7.25	7.22

Note. The coefficient of stability (rt_1t_2) = .881, p ≤ .01. For the 22 items used in the test-retest reliability assessment see Table C2.

Table C4

Thurstone Item Scores by Respondent, N=241

	65	66	67	68	69	70	71	72	73	74	75
1.	.	.	.	.	.	11	4	.	10	8	9
2.	.	.	.	.	6	11	4	.	10	8	9
3.	.	.	.	.	6	11	4	.	10	8	9
4.	.	7	.	3	6	11	4	.	10	8	9
5.	.	.	.	3	.	11	4	.	10	8	9
6.	.	.	.	3	.	.	4	.	10	8	9
7.	.	.	5	3	.	11	4	.	10	8	9
8.	.	.	5	3	6	11	4	.	10	8	.
9.	.	.	.	.	.	11	4	.	10	8	9
10.	.	7	.	.	.	11	.	.	10	8	9
11.	.	.	5	3	6	11	.	2	10	8	9
12.	.	7	5	3	.	11	4	.	10	8	9
13.	.	.	.	.	.	11	.	.	10	.	9
14.	.	.	.	.	.	11	.	.	10	8	9
15.	.	.	.	.	.	11	.	.	10	8	9
16.	.	.	.	.	6	11	.	.	10	.	9
17.	.	7	5	.	.	11	.	.	10	8	9
18.	.	7	.	3	6	11	.	2	10	.	9
19.	.	.	.	.	.	11	4	.	10	.	9
20.	.	.	.	3	.	11	.	.	10	8	9
21.	.	.	.	.	.	11	4	.	.	8	9
22.	.	7	5	3	6	11	4	2	10	8	9
23.	.	.	.	3	.	11	.	.	10	8	9
24.	.	.	5	3	6	11	.	.	10	8	9
25.	.	.	5	3	.	11	4	2	.	.	9
26.	.	.	.	.	.	11	.	.	10	8	9
27.	.	.	5	3	6	11	.	.	10	8	9
28.	1	.	5	3	6	11	.	2	10	8	9
29.	.	.	5	3	6	11	.	.	10	8	9
30.	.	7	.	3	6	11	4	.	10	.	9
31.	.	7	.	3	.	11	4	.	10	8	9
32.	.	.	.	.	.	11	4	.	10	8	9
33.	.	.	.	3	.	11	.	.	10	.	9
34.	.	.	.	.	.	11	4	.	10	.	9
35.	.	.	.	.	.	11	4	.	10	.	9
36.	.	.	.	.	.	.	.	.	.	.	.
37.	.	.	5	3	6	.	4	2	10	.	9
38.	.	.	5	3	.	11	4	.	10	8	9
39.	1	.	5	3	.	11	4	.	10	.	.

(table continues)

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Table C4 (continued)

	65	66	67	68	69	70	71	72	73	74	75
40.	.	.	5	3	6	11	4	.	10	8	9
41.	.	7	.	3	.	11	4	.	10	8	9
42.	.	7	.	.	.	11	.	.	10	8	9
43.	.	.	.	3	.	11	4	.	10	8	9
44.	.	.	5	3	6	11	4	.	10	8	9
45.	.	.	5	3	6	11	.	2	10	8	9
46.	.	.	.	3	.	11	4	.	10	8	9
47.	.	.	.	3	.	11	.	.	10	.	.
48.	.	.	.	.	.	11	.	.	10	8	9
49.	.	.	.	3	.	11	.	.	10	8	9
50.	.	.	.	.	6	11	.	.	10	8	9
51.	.	.	.	.	6	11	.	.	10	8	9
52.	.	7	.	3	.	11	.	.	10	8	9
53.	.	.	5	.	6	11	4	2	10	8	9
54.	.	.	.	.	.	11	.	.	10	.	.
55.	.	7	.	3	.	11	.	.	10	8	9
56.	.	.	5	3	6	11	4	.	10	8	9
57.	.	.	.	3	.	11	.	.	10	8	9
58.	.	.	5	.	.	11	4	.	10	8	9
59.	.	7	.	3	.	11	4	.	10	8	9
60.	.	.	5	3	6	11	4	2	10	8	.
61.	.	.	.	3	.	.	.	.	10	.	.
62.	.	.	.	3	.	11	4	.	10	8	9
63.	.	.	.	.	6	11	4	.	10	8	9
64.	.	7	.	.	.	11	.	.	10	8	9
65.	.	.	.	.	.	11	.	.	10	8	.
66.	.	7	.	.	.	11	.	.	10	.	.
67.	.	.	.	.	.	11	.	.	10	.	9
68.	.	.	.	.	.	11	.	.	10	.	9
69.	.	.	.	3	.	11	4	2	10	.	.
70.	.	.	5	3	.	11	.	2	10	8	.
71.	1	.	5	3	.	11	4	.	10	.	.
72.	.	.	.	.	.	11	.	.	10	8	9
73.	.	7	.	3	.	11	4	2	10	8	9
74.	.	.	5	3	.	11	4	.	10	8	9
75.	.	.	.	3	.	11	4	2	10	8	.
76.	.	.	.	3	6	11	.	.	10	8	9
77.	.	.	5	3	.	.	4	2	.	.	.
78.	.	.	.	3	6	11	.	.	10	8	9
79.	.	.	.	3	.	11	4	.	10	8	.

(table continues)

Table C4 (continued)

	65	66	67	68	69	70	71	72	73	74	75
80.	.	.	.	3	.	11	.	.	10	8	9
81.	1	.	5	3	6	11	4	.	10	.	.
82.	.	7	5	3	.	11	.	.	10	8	9
83.	.	7	.	3	6	11	4	.	10	8	9
84.	.	7	5	3	6	11	4	2	10	8	9
85.	.	7	.	3	.	11	4	.	10	.	9
86.	.	.	.	.	6	11	.	2	10	.	9
87.	.	.	.	.	.	11	.	.	10	8	9
88.	.	7	5	3	6	11	4	2	.	.	.
89.	.	.	5	3	.	11	.	2	10	8	9
90.	1	.	5	3	.	11	4	2	10	.	.
91.	.	.	.	.	.	11	.	.	10	8	9
92.	.	.	.	3	.	11	4	2	10	.	.
93.	.	.	5	3	6	11	4	2	10	8	9
94.	.	7	.	3	.	11	.	.	10	8	.
95.	.	.	.	3	.	11	4	.	10	8	.
96.	.	.	.	.	.	11	.	2	10	8	9
97.	.	.	.	3	.	11	4	2	10	8	9
98.	.	7	.	3	6	11	4	.	10	.	9
99.	.	.	.	.	6	11	.	.	10	8	9
100.	.	.	.	.	.	11	.	.	10	8	9
101.	.	.	.	.	6	11	.	.	10	.	.
102.	.	7	5	3	.	11	4	2	10	8	.
103.	.	.	.	3	6	11	.	.	10	8	9
104.	.	7	.	3	.	11	.	.	10	8	9
105.	.	.	5	3	.	.	4	.	10	.	.
106.	.	.	.	3	6	11	4	.	10	8	9
107.	.	7	5	3	.	11	.	.	.	8	9
108.	.	.	.	3	.	11	.	2	10	8	.
109.	.	.	.	.	.	11	.	.	10	8	9
110.	.	.	5	3	6	11	.	2	10	8	9
111.	.	7	.	.	.	11	.	.	10	8	9
112.	.	.	.	3	6	11	.	2	10	8	9
113.	.	.	.	.	6	11	4	.	10	8	9
114.	.	.	.	.	.	11	.	.	10	8	9
115.	.	.	.	3	6	11	.	.	10	8	9
116.	.	.	.	.	6	11	.	2	10	8	9
117.	.	.	.	.	.	11	4	.	10	.	9
118.	.	7	.	3	.	11	.	.	10	8	9
119.	.	7	.	3	.	11	4	2	10	8	9
120.	.	.	.	3	.	11	.	.	10	8	9

(table continues)

Table C4 (continued)

	65	66	67	68	69	70	71	72	73	74	75
121.	.	.	5	.	6	11	.	.	10	8	9
122.	.	7	.	3	.	11	4	.	10	8	9
123.	.	.	5	3	6	11	4	2	10	8	9
124.	.	.	.	.	.	.	.	.	10	.	9
125.	.	.	.	3	6	11	4	2	10	.	.
126.	.	.	.	.	6	11	.	.	10	8	9
127.	1	.	.	3	.	11	4	2	10	8	9
128.	.	.	5	3	6	11	.	2	10	8	.
129.	1	.	5	3	.	11	4	2	10	.	.
130.	.	.	.	.	6	11	.	.	10	8	9
131.	.	.	.	.	.	11	.	.	10	.	9
132.	.	7	.	3	.	11	4	2	10	8	9
133.	1	.	5	3	.	11	4	2	10	.	.
134.	.	.	.	.	.	11	.	.	10	.	9
135.	.	.	.	.	.	11	.	.	10	8	9
136.	.	.	.	3	.	.	4	.	.	.	.
137.	.	.	5	3	6	.	4	2	10	.	.
138.	.	7	5	.	.	11	4	.	10	.	.
139.	1	.	5	3	.	11	4	2	10	.	.
140.	.	.	.	.	6	11	4	.	10	8	9
141.	.	.	5	3	6	11	4	2	10	8	.
142.	.	.	.	3	6	11	4	.	10	8	9
143.	1	.	5	3	.	11	4	.	10	.	.
144.	.	.	5	3	.	11	4	2	10	8	9
145.	.	7	.	3	6	11	.	.	10	8	9
146.	.	7	.	.	.	11	4	2	.	8	9
147.	.	7	5	.	.	11	.	.	10	8	9
148.	.	.	5	.	.	11	4	.	10	8	9
149.	.	.	.	.	6	11	.	.	10	8	9
150.	.	.	.	3	6	11	.	.	10	8	9
151.	.	.	.	.	.	11	4	.	10	8	9
152.	1	.	5	3	.	11	4	2	10	.	.
153.	.	7	5	3	.	11	4	2	10	8	9
154.	.	.	5	3	.	11	4	2	10	.	.
155.	.	.	.	.	.	11	4	.	10	.	.
156.	.	.	5	.	.	11	.	.	10	8	9
157.	.	.	5	3	.	11	4	2	10	8	9
158.	.	.	.	.	.	11	.	.	10	8	9
159.	1	.	5	3	.	11	4	.	10	.	.
160.	.	7	.	3	.	11	.	.	10	8	9
161.	.	.	.	3	6	11	.	.	10	8	9

(table continues)

Table C4 (continued)

	65	66	67	68	69	70	71	72	73	74	75
162.	.	.	5	3	.	11	.	2	10	8	9
163.	.	.	5	.	6	11	4	.	10	8	9
164.	.	.	.	.	.	11	4	.	10	8	9
165.	.	.	.	3	.	.	4	2	10	8	9
166.	.	.	.	3	.	11	.	2	10	8	9
167.	.	7	.	.	.	11	.	.	10	.	9
168.	.	.	.	3	.	11	4	2	10	.	.
169.	1	.	5	3	.	11	4	2	10	.	.
170.	.	.	.	3	.	11	.	.	10	8	9
171.	.	.	5	3	6	11	4	2	10	8	.
172.	.	.	.	.	.	11	.	.	10	8	9
173.	.	.	.	3	.	11	4	.	10	8	9
174.	.	7	.	3	6	11	4	.	10	8	9
175.	.	.	5	3	.	11	4	2	10	8	9
176.	1	.	5	3	6	11	4	2	.	.	.
177.	.	.	.	3	.	11	4	.	10	8	9
178.	.	.	.	.	.	.	.	.	.	.	.
179.	.	.	.	3	.	11	4	.	10	.	9
180.	.	.	.	.	.	11	.	2	10	.	.
181.	.	7	.	3	6	11	4	.	10	.	9
182.	.	.	.	3	.	11	4	.	10	8	9
183.	.	.	.	.	.	.	.	.	10	8	9
184.	.	.	.	3	.	11	4	.	10	8	9
185.	.	.	.	3	.	11	4	.	10	8	9
186.	.	7	.	.	.	11	.	.	10	8	9
187.	.	.	.	.	.	11	4	.	10	.	9
188.	1	.	5	.	6	11	4	2	10	8	.
189.	.	.	5	.	6	11	.	.	10	8	9
190.	1	.	.	3	.	.	4	2	.	.	.
191.	.	.	.	3	.	11	.	.	10	8	9
192.	.	.	.	3	.	11	4	.	10	8	9
193.	.	7	.	.	6	11	4	.	10	8	9
194.	.	.	.	.	.	11	4	.	10	8	9
195.	.	.	5	.	6	11	4	.	10	8	9
196.	1	.	5	3	.	11	4	2	10	.	.
197.	.	.	.	.	.	11	4	.	10	.	9
198.	.	.	.	3	.	11	4	.	10	8	9
199.	.	7	.	3	.	11	.	2	10	8	9
200.	.	.	.	3	6	11	.	.	10	8	9
201.	1	.	5	3	6	11	4	2	10	.	.
202.	.	7	.	3	6	11	4	2	10	8	9

(table continues)

Table C4 (continued)

	65	66	67	68	69	70	71	72	73	74	75
203.	.	.	5	3	.	11	4	.	10	8	9
204.	.	7	5	3	.	11	.	2	10	.	.
205.	.	.	.	.	6	.	.	.	.	.	.
206.	.	7	.	.	.	11	.	.	10	8	9
207.	.	.	.	.	.	.	.	.	.	.	.
208.	.	.	5	.	6	11	.	.	10	8	9
209.	.	7	.	3	.	11	4	.	10	8	9
210.	.	7	5	.	6	11	.	2	10	.	.
211.	.	.	.	.	.	11	.	.	10	8	9
212.	.	.	5	3	.	.	4	.	10	8	9
213.	.	.	.	3	.	11	4	.	10	8	9
214.	.	.	.	.	6	.	4	2	10	8	9
215.	.	7	.	3	6	11	4	.	10	8	.
216.	.	.	.	.	.	11	.	.	10	8	9
217.	.	.	5	.	.	11	4	.	10	.	9
218.	.	7	.	.	6	11	4	.	10	8	9
219.	.	.	5	.	.	11	.	2	10	8	9
220.	.	7	5	3	.	11	4	2	10	.	.
221.	.	.	5	3	.	11	4	2	10	8	.
222.	.	.	.	3	.	.	.	.	10	8	9
223.	.	.	.	.	.	11	.	.	10	8	9
224.	.	7	.	3	.	11	.	.	10	8	9
225.	.	.	5	.	.	11	4	.	10	8	9
226.	.	7	5	3	.	11	.	.	10	8	9
227.	.	.	5	3	.	11	4	2	10	8	9
228.	.	.	.	.	.	.	.	.	.	8	9
229.	1	.	5	3	.	11	4	.	10	.	.
230.	.	7	5	3	6	11	4	2	10	8	9
231.	.	.	.	3	.	.	.	2	10	8	.
232.	1	.	5	.	.	11	4	.	10	.	9
233.	.	.	.	.	.	11	.	.	10	8	9
234.	.	.	5	3	6	11	4	2	10	.	.
235.	.	.	.	.	.	11	4	.	10	.	9
236.	.	.	.	.	.	11	.	.	10	.	9
237.	.	.	.	.	.	11	.	.	10	8	9
238.	1	.	.	.	6	.	4	.	.	.	9
239.	.	.	.	.	.	11	4	.	10	8	9
240.	.	7	.	.	.	11	.	.	10	8	9
241.	.	.	.	3	6	11	4	2	10	.	.

Note. Scores are only reported for items in which a respondent agreed. A period refers to a disagree statement.

DOCUMENTS USED IN THE DEVELOPMENT OF THE LIKERT SCALES FOR
MEASURING THE PREDICTOR VARIABLES

Table D1

*The Five Domains (Predictor Variables) and Items Prior To Conducting the Content
Validation*

Domains, Descriptions, and Items

Domain 1: *General attitude* toward alternative principal certification.

Description: This domain will assess judgments, feelings, and opinions that directors of
human resources hold about the alternative certification of principals.

Items:
  1. Barriers in education preparation such as certification should not be maintained.
  2. At no time should there be an avenue for employment of people outside of
     education.
 11. Previous classroom instruction is necessary to be an effective principal.
 16. Alternative principal certification is a good way to address principal shortages.
 17. Alternative principal certification is demeaning to traditionally certified principals.
 27. I believe that alternative certification has created a practical route to the
     principalship.
 28. I believe alternative certification has created an easy route to the principalship.
 29. I am displeased that my state does not allow alternative certification.
 37. Alternative certification routes provide inadequate training.
 38. I feel that alternatively certified principals think they can fix all our problems
     overnight.
 47. I think alternative certification was created by legislatures who know nothing about
     education
 48. I believe alternative certification is a good idea.
 56. Alternative routes to certification will increase the principal talent pool.
 57. Alternative routes to certification will dilute the talent pool.
 65. Alternative certification routes are the key to positive change in our schools.
 66. I think alternative certification devalues the education profession.
 75. Alternative certification will harm our schools.
 86. Alternative certification is unlikely to fix shortages.
 96. Alternative certification has created a more rigorous route to the principalship.
 97. Alternative certification will harm our profession.
116. Alternative certification creates unfit instructional leaders.

(table continues)

Domains, Descriptions, and Items

Domain 2: *Anticipated concerns* about the ability of alternatively certified principals to be effective educational leaders.

Description: This domain will assess worries about acceptance and the ability of alternatively certified principals to provide instructional leadership, work with teachers to improve student achievement, conduct the daily operations of the school, and work with parents and the community to improve the school.

Items:
3. Alternatively certified principals lack instructional leadership skills.
4. Alternatively certified principals have good management skills.
12. Alternatively certified principals would not be welcomed by our community.
18. Alternatively certified principals would not be accepted by teachers.
19. Alternatively certified principals would be respected by teachers.
20. Alternatively certified principals would be respected by the community.
30. Alternatively certified principals cannot articulate educational values.
31. Alternatively certified principals will not be respected by students.
32. Alternatively certified principals will be respected by other principals.
39. Alternatively certified principals do not know how to work with children.
40. Alternatively certified principals do not know how to communicate with parents.
41. Alternatively certified principals will treat schools like a business.
49. Alternatively certified principals would be too controlling.
50. Alternatively certified principals would be too tough on staff.
51. Alternatively certified principals would be too tough on students.
58. Alternatively certified principals are equipped to meet the NCLB expectations.
59. I think that alternatively certified principals are just looking for a second income.
67. I think that alternatively certified principals would put all the work on subordinates due to their lack of instructional knowledge.
68. Alternatively certified principals would require too much professional development.
69. Alternatively certified principals lack the appropriate people skills needed in education.
70. Alternatively certified principals will need more staff development training than traditionally certified principals will.
76. I don't think alternatively certified principals could provide effective staff development.
77. I don't think alternatively certified principals could use data to create effective instructional strategies.
78. I don't think alternatively certified principals could effectively use current research-based knowledge to improve classroom instruction.

(table continues)

Domains, Descriptions, and Items

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79. I don't think alternatively certified principals could meet the needs of special education students.
87. I don't think alternatively certified principals could meet the demands of children in the NCLB sub-groups.
88. I believe alternatively certified principals would struggle with policies.
89. I feel that alternatively certified principals would have a difficult time with discipline issues.
98. I feel that alternatively certified principals would struggle with extra-curricular program issues.
99. Alternatively certified principals will not be able to use school resources efficiently.
109. I feel that an alternatively certified principal would not be considered as qualified by the community.
110. Coordinating all school issues would be too much for an alternatively certified principal to handle.
114. Alternatively certified principals will require too much support.
115. I don't think alternatively certified principals could effectively evaluate teachers.
117. I don't think alternatively certified principals could effectively select teachers.

Domain 3: *Past behaviors* related to the employment of alternatively certified personnel.

Description: This domain will assess the previous experiences and decisions made about supporting or not supporting alternatively certified principals or teachers for employment.

Items:
5. I have considered supporting alternatively certified teachers.
6. I have considered supporting alternatively certified principals.
13. I have avoided supporting alternatively certified principals.
21. I have considered alternative candidates to fill principalships.
22. I have not forwarded alternatively certified applicants to the superintendent.
33. I have recruited alternatively certified principals.
42. In the past I have rated alternatively certified principals unfairly.
43. I have reviewed applications from alternatively certified principals.
52. In the past I felt alternative certification of teachers was a bad idea.
60. In the past I have withheld applications from alternatively certified principals.
61. In the past I felt alternative certification of teachers was a good plan.

(table continues)

Table D1 (continued)

Domains, Descriptions, and Items

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71. I have not supported alternatively certified teachers in the past.
80. I have never supported hiring alternatively certified teachers.
90. I have never supported hiring alternatively certified principals.
100. I have always supported hiring alternatively certified teachers.
(table continues)

Domain 4: *Specific attitude* toward employing alternatively certified principals.

Description: This domain will assess judgments, feelings, and opinions about employing alternatively certified principals with specific characteristics.

Items:
7. I would support those alternatively certified principals who have successfully completed a rigorous internship.
8. I would support hiring a highly recommended alternatively certified principal.
14. I would support hiring an alternatively certified principal who was successful in a private school.
23. I would support hiring an alternatively certified principal who was successful in the private sector.
24. I would support hiring an alternatively certified principal who successfully completed an internship.
34. I would support an alternatively certified principal who interviewed well.
44. There are certain alternatively certified principals that I would support.
45. I think certain alternatively certified principals can be successful.
53. Certain alternatively certified principals may even be better than traditionally certified principals.
54. I may support a specific alternatively certified principal.
62. I would support an alternatively certified principal who completed what I consider to be the essential courses to be successful.
63. I would support an alternatively certified principal who exhibited a lot of charisma.
72. I would support an alternatively certified principal who was successful in a charter school.
73. I would support an alternatively certified principal who was successful in an alternative school.
74. I have no intentions to support an alternatively certified principal.
81. I would support an alternatively certified principal who was successful in a charter school.

(table continues)

Table D1 (continued)

Domains, Descriptions, and Items

91. I am determined to support alternatively certified principals.
92. My goal is to support alternatively certified principals.
93. My objective is to have no alternatively certified principals leading our schools.
94. My intent is to support hiring alternately certified principals.
101. When it comes to principals, I intend to support the best candidate, even if the person is alternatively certified.
102. I have always supported hiring alternatively certified principals.
103. I intend to give all principal candidates a fair chance.
104. I do not intend to support alternatively certified principals.
105. I intend to support alternatively certified principals.
106. I do not plan to support alternatively certified principals.
111. I have positive intentions toward alternatively certified principals.
112. I plan to discourage alternatively certified principals from applying to our school system.
113. I plan to encourage alternatively certified principals to apply our school system.

Domain 5: *Normative pressures* by others.

Description: This domain will assess pressures from superiors or others of influence to support or not support hiring alternatively certified principals.

Items:
9. I feel pressure from my superintendent to support alternatively certified principals.
10. I feel pressure from my school board to support alternatively certified principals.
15. I feel pressure from the community to support alternatively certified principals.
25. I am encouraged to support alternatively certified principals.
26. My superiors expect me to forward alternatively certified principal applicants to their desks.
36. My superiors pressure me to support specific principal candidates.
46. I have been told to support alternatively certified principals.
64. I am sometimes pressured into supporting alternatively certified principals that I would usually ignore.
84. If it were not for pressure from my superiors, I would not support alternatively certified principals.
85. Because of pressure from my superiors I can not support alternatively certified principals.
95. My superiors expect me to ignore alternatively certified principal applications.
107. My superiors expect me to support alternatively certified principals.
108. My superiors want me to overlook applications from alternatively certified principals.

DOCUMENTS USED IN THE DEVELOPMENT OF THE LIKERT SCALES FOR
MEASURING THE PREDICTOR VARIABLES

Table D2

Instrument for the Content Validation of the Likert Scales

Name: _____ Date: _____

Directions:
➢ Each statement requires three responses. One for each category – **Domain**,
   Association, and **Clarity**.

➢ **Domain** – Read each statement, decide which domain the statement should be
   classified in, and circle the number of that domain:

   1 = *General attitudes toward alternative certification.*
   2 = *Anticipated concerns about alternatively certified principals.*
   3 = *Past behaviors of directors of human resources.*
   4 = *Specific attitude about alternatively certified principals.*
   5 = *Normative pressures by others.*

➢ **Association** – Decide how strongly the statement is associated with the domain you
   have selected and circle the number:

   1 = Not associated.
   2 = Somewhat associated.
   3 = Associated.
   4 = Strongly associated.

➢ **Clarity** – Read each statement and decide how clear it is. Here I'm trying to address
   any ambiguity or confusion in statements. Code the clarity by circling:

   1 = Unclear, needs to be omitted or revised.
   2 = Somewhat unclear, consider revising.
   3 = Clear.

   ➢ *For any statements that you code as 1 or 2 for association or*
      clarity, feel free to insert suggested rewording. Your suggestions
      are encouraged and are important.

➢ If you have any questions, please contact me at dhartley@ycsd.york.va.us or
   757-220-4097.

- o I will not use all of these statements … only about one-third of the strongest items. So, please be brutally honest!!
- o Please remember to be thorough and take your time. The entire process should take no more than 30 minutes.
- o **I strongly recommend pulling off the first page of directions to use as a guide.**
- o

Domains

1. *General attitude toward alternative principal certification.* Judgments, feelings, and opinions that directors of human resources hold about the alternative certification of principals.

2. *Anticipated concerns about the ability of alternatively certified principals to be effective educational leaders*. These are worries about acceptance and the ability of alternatively certified principals to provide instructional leadership, work with teachers to improve student achievement, conduct the daily operations of the school, and work with parents and the community to improve the school.

3. *Past behaviors related to the employment of alternatively certified personnel.* Previous experiences and decisions made about supporting or not supporting alternatively certified principals or teachers for employment.

4. *Specific attitude toward employing alternatively certified principals.* Judgments, feelings, and opinions about employing alternatively certified principals.

5. *Normative pressures by others*. Pressures from superiors or others of influence to support or not support hiring alternatively certified principals.

. . . .

Questionnaire statements	Domain	Association	Clarity
1. Barriers in education preparation such as certification should not be maintained.	1 2 3 4 5	1 2 3 4	1 2 3
2. At no time should there be an avenue for employment of people outside of education.	1 2 3 4 5	1 2 3 4	1 2 3
3. Alternatively certified principals lack instructional leadership skills.	1 2 3 4 5	1 2 3 4	1 2 3
4. Alternatively certified principals have good management skills.	1 2 3 4 5	1 2 3 4	1 2 3
5. I have considered supporting alternatively certified teachers.	1 2 3 4 5	1 2 3 4	1 2 3
6. I have considered supporting alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
7. I would support those alternatively certified principals who have successfully completed a rigorous internship.	1 2 3 4 5	1 2 3 4	1 2 3
8. I would support hiring a highly recommended alternatively certified principal.	1 2 3 4 5	1 2 3 4	1 2 3
9. I feel pressure from my superintendent to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
10. I feel pressure from my school board to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
11. Previous classroom instruction is necessary to be an effective principal.	1 2 3 4 5	1 2 3 4	1 2 3
12. Alternatively certified principals would not be welcomed by our community.	1 2 3 4 5	1 2 3 4	1 2 3
13. I have avoided supporting alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
14. I would support hiring an alternatively certified principal who was successful in a private school.	1 2 3 4 5	1 2 3 4	1 2 3
15. I feel pressure from the community to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
16. Alternative principal certification is a good way to address principal shortages.	1 2 3 4 5	1 2 3 4	1 2 3
17. Alternative principal certification is demeaning to traditionally certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
18. Alternatively certified principals would not be accepted by teachers.	1 2 3 4 5	1 2 3 4	1 2 3
19. Alternatively certified principals would be respected by teachers.	1 2 3 4 5	1 2 3 4	1 2 3
20. Alternatively certified principals would be respected by the community.	1 2 3 4 5	1 2 3 4	1 2 3
21. I have considered alternative candidates to fill principalships.	1 2 3 4 5	1 2 3 4	1 2 3
22. I have not forwarded alternatively certified applicants to the superintendent.	1 2 3 4 5	1 2 3 4	1 2 3
23. I would support hiring an alternatively certified principal who was successful in the private sector.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
24. I would support hiring an alternatively certified principal who successfully completed an internship.	1 2 3 4 5	1 2 3 4	1 2 3
25. I am encouraged to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
26. My superiors expect me to forward alternatively certified principal applicants to their desk.	1 2 3 4 5	1 2 3 4	1 2 3
27. I believe that alternative certification has created a practical route to the principalship.	1 2 3 4 5	1 2 3 4	1 2 3
28. I believe alternative certification has created an easy route to the principalship.	1 2 3 4 5	1 2 3 4	1 2 3
29. I am displeased that my state does not allow alternative certification.	1 2 3 4 5	1 2 3 4	1 2 3
30. Alternatively certified principals cannot articulate educational values.	1 2 3 4 5	1 2 3 4	1 2 3
31. Alternatively certified principals will not be respected by students.	1 2 3 4 5	1 2 3 4	1 2 3
32. Alternatively certified principals will be respected by other principals.	1 2 3 4 5	1 2 3 4	1 2 3
33. I have recruited alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
34. I would support an alternatively certified principal who interviewed well.	1 2 3 4 5	1 2 3 4	1 2 3
35. I would support hiring a specific alternatively certified principal.	1 2 3 4 5	1 2 3 4	1 2 3
36. My superiors pressure me to support specific principal candidates.	1 2 3 4 5	1 2 3 4	1 2 3
37. Alternative certification routes provide inadequate training.	1 2 3 4 5	1 2 3 4	1 2 3
38. I feel that alternatively certified principals think they can fix all our problems overnight.	1 2 3 4 5	1 2 3 4	1 2 3
39. Alternatively certified principals do not know how to work with children.	1 2 3 4 5	1 2 3 4	1 2 3
40. Alternatively certified principals do not know how to communicate with parents.	1 2 3 4 5	1 2 3 4	1 2 3
41. Alternatively certified principals will treat schools like a business.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
42. In the past I have rated alternatively certified principals unfairly.	1 2 3 4 5	1 2 3 4	1 2 3
43. I have reviewed applications from alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
44. There are certain alternatively certified principals that I would support.	1 2 3 4 5	1 2 3 4	1 2 3
45. I think certain alternatively certified principals can be successful.	1 2 3 4 5	1 2 3 4	1 2 3
46. I have been told to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
47. I think alternative certification was created by legislatures who know nothing about education	1 2 3 4 5	1 2 3 4	1 2 3
48. I believe alternative certification is a good idea.	1 2 3 4 5	1 2 3 4	1 2 3
49. Alternatively certified principals would be too controlling.	1 2 3 4 5	1 2 3 4	1 2 3
50. Alternatively certified principals would be too tough on staff.	1 2 3 4 5	1 2 3 4	1 2 3
51. Alternatively certified principals would be too tough on students.	1 2 3 4 5	1 2 3 4	1 2 3
52. In the past I felt alternative certification of teachers was a bad idea.	1 2 3 4 5	1 2 3 4	1 2 3
53. Certain alternatively certified principals may even be better than traditionally certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
54. I may support a specific alternatively certified principal.	1 2 3 4 5	1 2 3 4	1 2 3
55. I have been told to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
56. Alternative routes to certification will increase the principal talent pool.	1 2 3 4 5	1 2 3 4	1 2 3
57. Alternative routes to certification will dilute the talent pool.	1 2 3 4 5	1 2 3 4	1 2 3
58. Alternatively certified principals are equipped to meet the NCLB expectations.	1 2 3 4 5	1 2 3 4	1 2 3
59. I think that alternatively certified principals are just looking for a second income.	1 2 3 4 5	1 2 3 4	1 2 3
60. In the past I have withheld applications from alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
61. In the past I felt alternative certification of teachers was a good plan.	1 2 3 4 5	1 2 3 4	1 2 3
62. I would support an alternatively certified principal who completed what I consider to be the essential courses to be successful.	1 2 3 4 5	1 2 3 4	1 2 3
63. I would support an alternatively certified principal who exhibited a lot of charisma.	1 2 3 4 5	1 2 3 4	1 2 3
64. I am sometimes pressured into supporting alternatively certified principals that I would usually ignore.	1 2 3 4 5	1 2 3 4	1 2 3
65. Alternative certification routes are the key to positive change in our schools.	1 2 3 4 5	1 2 3 4	1 2 3
66. I think alternative certification devalues the education profession.	1 2 3 4 5	1 2 3 4	1 2 3
67. I think that alternatively certified principals would put all the work on subordinates due to their lack of instructional knowledge.	1 2 3 4 5	1 2 3 4	1 2 3
68. Alternatively certified principals would require too much professional development.	1 2 3 4 5	1 2 3 4	1 2 3
69. Alternatively certified principals lack the appropriate people skills needed in education.	1 2 3 4 5	1 2 3 4	1 2 3
70. Alternatively certified principals will need more staff development training than traditionally certified principals will.	1 2 3 4 5	1 2 3 4	1 2 3
71. I have not supported alternatively certified teachers in the past.	1 2 3 4 5	1 2 3 4	1 2 3
72. I would support an alternatively certified principal who was successful in a charter school.	1 2 3 4 5	1 2 3 4	1 2 3
73. I would support an alternatively certified principal who was successful in an alternative school.	1 2 3 4 5	1 2 3 4	1 2 3
74. I have no intentions to support an alternatively certified principal.	1 2 3 4 5	1 2 3 4	1 2 3
75. Alternative certification will harm our schools.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
76. I don't think alternatively certified principals could provide effective staff development.	1 2 3 4 5	1 2 3 4	1 2 3
77. I don't think alternatively certified principals could use data to create effective instructional strategies.	1 2 3 4 5	1 2 3 4	1 2 3
78. I don't think alternatively certified principals could effectively use current research-based knowledge to improve classroom instruction.	1 2 3 4 5	1 2 3 4	1 2 3
79. I don't think alternatively certified principals could meet the needs of special education students.	1 2 3 4 5	1 2 3 4	1 2 3
80. I have never supported hiring alternatively certified teachers.	1 2 3 4 5	1 2 3 4	1 2 3
81. I would support an alternatively certified principal who was successful in a charter school.	1 2 3 4 5	1 2 3 4	1 2 3
82. I would support an alternatively certified principal who was successful in an alternative school.	1 2 3 4 5	1 2 3 4	1 2 3
83. I have no intentions to support an alternatively certified principal.	1 2 3 4 5	1 2 3 4	1 2 3
84. If it were not for pressure from my superiors I would not support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
85. Because of pressure from my superiors I can not support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
86. Alternative certification is unlikely to fix shortages.	1 2 3 4 5	1 2 3 4	1 2 3
87. I don't think alternatively certified principals could meet the demands of children in the NCLB subgroups.	1 2 3 4 5	1 2 3 4	1 2 3
88. I believe alternatively certified principals would struggle with policies.	1 2 3 4 5	1 2 3 4	1 2 3
89. I feel that alternatively certified principals would have a difficult time with discipline issues.	1 2 3 4 5	1 2 3 4	1 2 3
90. I have never supported hiring alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
91. I am determined to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
92. My goal is to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
93. My objective is to have no alternatively certified principals leading our schools.	1 2 3 4 5	1 2 3 4	1 2 3
94. My intent is to support hiring alternately certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
95. My superiors expect me to ignore alternatively certified principal applications.	1 2 3 4 5	1 2 3 4	1 2 3
96. Alternative certification has created a more rigorous route to the principalship.	1 2 3 4 5	1 2 3 4	1 2 3
97. Alternative certification will harm our profession.	1 2 3 4 5	1 2 3 4	1 2 3
98. I feel that alternatively certified principals would struggle with extra-curricular program issues.	1 2 3 4 5	1 2 3 4	1 2 3
99. Alternatively certified principals will not be able to use school resources efficiently.	1 2 3 4 5	1 2 3 4	1 2 3
100. I have always supported hiring alternatively certified teachers.	1 2 3 4 5	1 2 3 4	1 2 3
101. When it comes to principals, I intend to support the best candidate even if the person is alternatively certified.	1 2 3 4 5	1 2 3 4	1 2 3
102. I have always supported hiring alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
103. I intend to give all principal candidates a fair chance.	1 2 3 4 5	1 2 3 4	1 2 3
104. I do not intend to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
105. I intend to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
106. I do not plan to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
107. My superiors expect me to support alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
108. My superiors want me to overlook applications from alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3

(table continues)

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Table D2 (continued)

Instrument for the Content Validation of Likert Scales

Questionnaire statements	Domain	Association	Clarity
109. I feel that an alternatively certified principal would not be considered as qualified by the community.	1 2 3 4 5	1 2 3 4	1 2 3
110. Coordinating all school issues would be too much for an alternatively certified principal to handle.	1 2 3 4 5	1 2 3 4	1 2 3
111. I have positive intentions toward alternatively certified principals.	1 2 3 4 5	1 2 3 4	1 2 3
112. I plan to discourage alternatively certified principals from applying to our school system.	1 2 3 4 5	1 2 3 4	1 2 3
113. I plan to encourage alternatively certified principals to apply to our school system.	1 2 3 4 5	1 2 3 4	1 2 3
114. Alternatively certified principals will require too much support.	1 2 3 4 5	1 2 3 4	1 2 3
115. I don't think alternatively certified principals could effectively evaluate teachers.	1 2 3 4 5	1 2 3 4	1 2 3
116. Alternative certification creates unfit instructional leaders.	1 2 3 4 5	1 2 3 4	1 2 3
117. I don't think alternatively certified principals could effectively select teachers.	1 2 3 4 5	1 2 3 4	1 2 3

Note. Shaded items were selected for the final questionnaire based on an analysis of the data.

STATISTICS FOR THE CONTENT VALIDATION OF THE LIKERT SCALES

Table D3

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

	Expected domain	Domains									
		General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
Item		*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
1.	General attitude	21	**84**	3	12	1	4				
2.	General attitude	20	**80**	1	4	2	8	2	8		
3.	Anticipated concerns	4	16	20	**80**			1	4		
4.	Anticipated concerns	2	8	7	28	4	16	11	44	1	4
5.	Past behaviors	4	16			20	**80**	1	4		
6.	Past behaviors					20	**80**	5	20		
7.	Specific attitude	1	4	4	16			20	**80**		
8.	Specific attitude	2	8			2	8	20	**80**	1	4
9.	Normative pressures	1	4			2	8			22	**88**
10.	Normative pressures	1	4	1	4	1	4	1	4	21	**84**
11.	General attitude	7	28	7	28	4	16	6	24	1	4
12.	Anticipated concerns	4	16	9	36			7	28	5	20
13.	Past behaviors	2	8	1	4	20	**80**	2	8		
14.	Specific attitude	3	12	2	8			20	**80**		
15.	Normative pressures	1	4	4	16	1	4	2	8	17	68
16.	General attitude	20	**80**	1	4	4	16				
17.	General attitude	21	84	2	8			2	8		
18.	Anticipated concerns	4	16	20	**80**					1	4

(table continues)

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Table D3 (continued)

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

		Domains									
	Expected domain	General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
Item		N	%	N	%	N	%	N	%	N	%
19.	Anticipated concerns	2	8	22	**88**			1	4		
19.	Anticipated concerns	9	36	9	36			6	24	1	4
20.	Past behaviors	3	12	3	12	12	48	7	28		
21.	Past behaviors	4	16	6	24	10	40	3	12	2	8
22.	Specific attitude	4	16	4	16	4	16	12	48	1	4
23.	Specific attitude	5	20	20	**80**						
24.	Normative pressures	1	4	3	12			1	4	20	**80**
25.	Normative pressures	1	4	2	8	4	16	1	4	17	68
26.	General attitude	22	**88**	2	8			1	4		
27.	General attitude	20	**80**	3	12	1	4	1	4		
28.	General attitude	10	40	4	16	2	8	7	28	2	8
29.	Anticipated concerns	2	8	21	**84**			2	8		
30.	Anticipated concerns	5	20	12	48	1	4	4	16	3	12
31.	Anticipated concerns	4	16	20	**80**			1	4		
32.	Past behaviors	1	4	2	8	21	**84**	1	4		
33.	Specific attitude	5	20	2	8	3	12	14	56	1	4
34.	Specific attitude	4	16	1	4			20	**80**		
35.	Normative pressures	2	8	1	4	1	4			21	84
36.	General attitude	9	36	9	36	2	8	4	16	1	4
37.	General attitude	6	24	10	40	3	12	6	24		
38.	Anticipated concerns	5	20	20	**80**						

(table continues)

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Table D3 (continued)

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

	Expected domain	Domains									
		General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
Item		*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
40.	Anticipated concerns	6	24	11	44	2	8	4	16	2	8
41.	Anticipated concerns	1	4	21	**84**			2	8	1	4
42.	Past behaviors	1	4	2	8	20	**80**	2	8		
43.	Past behaviors	1	4	2	8	18	72	3	12	1	4
44.	Specific attitude	4	16	1	4			20	**80**		
45.	Specific attitude	3	12	2	8			20	**80**		
46.	Normative pressures	1	4	2	8	2	8			20	**80**
47.	General attitude	11	44	4	16	1	4	7	28	2	8
48.	General attitude	20	**80**	1	4	1	4	3	12		
49.	Anticipated concerns	7	28	10	40			8	32		
50.	Anticipated concerns	4	16	11	44	2	8	7	28	1	4
51.	Anticipated concerns	4	16	12	48	1	4	7	28	1	4
52.	Past behaviors	4	16	3	12	15	60	3	12		
53.	Specific attitude	7	28			3	12	12	52	2	8
54.	Specific attitude	3	12	1	4			21	**84**		
55.	Normative pressures	1	4	2	8	3	12	1	4	18	72
56.	General attitude	21	**84**	2	8	1	4	1	4		
57.	General attitude	21	**84**	2	8	1	4	1	4		
58.	Anticipated concerns	6	24	9	36			8	32	2	8

(table continues)

Table D3 (continued)

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

		Domains								
	Expected domain	General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
Item		*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
59.	Anticipated concerns	7	28	8	32	1	4	7	28	2	8
60.	Past behaviors	2	8	3	12	20	**80**				
61.	Past behaviors	3	12	1	4	21	**84**				
62.	Specific attitude	5	20	2	8	4	16	13	52	1	4
63.	Specific attitude	4	16	2	8	3	12	15	60	1	4
64.	Normative pressures	1	4	3	12	1			4	20	**80**
65.	General attitude	1	14	3	12			8	32		
66.	General attitude	12	48	6	24	2	8	5	20		
67.	Anticipated concerns	3	12	13	52	1	4	6	24	2	8
68.	Anticipated concerns	2	8	21	**84**			1	4	1	4
69.	Anticipated concerns	3	12	20	**80**	1	4	1	4		
70.	Anticipated concerns	3	12	16	64	1	4	5	20		
71.	Past behaviors	5	20	20	80						
72.	Specific attitude	1	4	3	12	1	4	20	**80**		
73.	Specific attitude	2	8	1	4	3	12	19	76		
74.	Specific attitude	11	44	1	4	1	4	10	40	2	8
75.	General attitude	21	84	2	8			2	8		
76.	Anticipated concerns	3	12	13	52	1	4	8	32		

(table continues)

Table D3 (continued)

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

		Domains									
	Expected domain	General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
Item		*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
77.	Anticipated concerns	2	8	11	44	2	8	10	40		
78.	Anticipated concerns	3	12	11	44	3	12	8	32		
79.	Anticipated concerns	1	4	13	52	2	8	9	36		
80.	Past behaviors	3	12	1	4	21	**84**				
81.	Specific attitude	3	12	2	8	2	8	18	72		
82.	Specific attitude	4	16	4	16	2	8	15	60		
83.	Specific attitude	7	28	4	16	3	12	11	44		
84.	Normative pressures	1	4	1	4	3	12			20	**80**
85.	Normative pressures	1	4	2	8	1	4	1	4	20	**80**
86.	General attitude	21	**84**	3	12			1	4		
87.	Anticipated concerns	1	4	20	**80**			4	16		
88.	Anticipated concerns	4	16	15	60	2	8	4	16		
89.	Anticipated concerns	3	12	14	56	2	8	6	24		
90.	Past behaviors	2	8			22	**88**	1	4		
91.	Specific attitude	9	36	3	12	2	8	11	44		
92.	Specific attitude	9	36	3	12	5	20	8	32		
93.	Specific attitude	10	40	5	20	3	12	7	28		
94.	Specific attitude	8	32	3	12	4	16	10	40		

(table continues)

Table D3 (continued)

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

		Domains									
	Expected domain	General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
Item		*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
95.	Normative pressures	1	4	1	4	1	4			22	**88**
96.	General attitude	13	52	1	4	2	8	9	36		
97.	General attitude	11	44	6	24	1	4	6	24	1	4
98.	Anticipated concerns	5	20	15	60	1	4	3	12	1	4
99.	Anticipated concerns	2	8	18	72	2	8	3	12		
100.	Past behaviors	6	24	2	8	14	56	3	12		
101.	Specific attitude	9	36	1	4	6	24	9	36		
102.	Specific attitude	8	32	3	12	9	36	5	20		
103.	Specific attitude	11	44	2	8	5	20	7	28		
104.	Specific attitude	7	28	4	16	5	20	9	36		
105.	Specific attitude	10	40	2	8	4	16	9	36		
106.	Specific attitude	11	44	1	4	2	8	9	36	2	8
107.	Normative pressures	2	8	1	4			1	4	21	**84**
108.	Normative pressures	1	4	2	8	2	8			20	**80**
109.	Anticipated concerns	2	8	20	**80**	1	4	2	8		
110.	Anticipated concerns	1	4	17	68	2	8	5	20		
111.	Specific attitude	7	28	1	4	2	8	14	56	1	4
112.	Specific attitude	6	24	3	12	8	32	8	32		

(table continues)

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Table D3 (continued)

Content Validation Data for the Predictor Variables: Classification of Items Into Domains by Experts, N=25

Item	Expected domain	General attitude		Anticipated concerns		Past behaviors		Specific attitude		Normative pressures	
		N	*%*	*N*	*%*	*N*	*%*	*N*	*%*	*N*	*%*
113.	Specific attitude	7	28			8	32	10	40		
114.	Anticipated concerns	4	16	21	**84**						
115.	Anticipated concerns			17	68	3	12	5	20		
116.	General attitude	20	80	5	20						
117.	Anticipated concerns	2	8	21	**84**	1	4	1	4		

Note. See Table D1, Appendix D for a list of the items. Empty slots indicate that no respondents classified the item into that domain.

STATISTICS FOR THE CONTENT VALIDATION OF THE LIKERT SCALES

Table D4

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

		Domains														
	Expected domain	General attitude			Anticipated concerns			Past behaviors			Specific attitude			Normative pressures		
Item		*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
1.	General attitude	21	**3.52**	.602												
2.	General attitude	20	**3.50**	.607												
3.	Anticipated concerns				20	**3.25**	.550									
4.	Anticipated concerns															
5.	Past behaviors							20	**3.15**	.671						
6.	Past behaviors							20	**3.10**	.641						
7.	Specific attitude										20	**3.20**	.696			
8.	Specific attitude										20	**3.20**	.768			
9.	Normative pressures													22	**3.27**	.703
10.	Normative pressures													21	**3.38**	.740
11.	General attitude															
12.	Anticipated concerns															
13.	Past behaviors							20	**3.15**	.745						
14.	Specific attitude										20	**3.20**	.696			
15.	Normative pressures															
16.	General attitude	20	**3.35**	.671												
17.	General attitude	21	**3.38**	.590												

(table continues)

Table D4 (continued)

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

		General attitude			Anticipated concerns			Past behaviors			Specific attitude			Normative pressures		
Item	Expected domain	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
18.	Anticipated concerns				20	**3.15**	.587									
19.	Anticipated concerns				22	**3.14**	.560									
20.	Anticipated concerns															
21.	Past behaviors															
22	Past behaviors															
23	Specific attitude															
24	Specific attitude										20	**3.15**	.745			
25	Normative pressures													20	**3.25**	.639
26.	Normative pressures															
27.	General attitude	22	**3.32**	.568												
28.	General attitude	20	**3.20**	.696												
29.	General attitude															
30.	Anticipated concerns				21	**3.33**	.577									
31.	Anticipated concerns															
32.	Anticipated concerns				20	**3.10**	.641									
33.	Past behaviors							21	**3.00**	.775						
34.	Specific attitude															
35.	Specific attitude										20	**3.25**	.716			

(table continues)

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Table D4 (continued)

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

		Domains														
	Expected domain	General attitude			Anticipated concerns			Past behaviors			Specific attitude			Normative pressures		
Item		*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
36.	Normative pressures													21	**3.05**	.740
37.	General attitude															
38.	General attitude															
39.	Anticipated concerns				20	**3.20**	.616									
40.	Anticipated concerns															
41.	Anticipated concerns				21	**3.29**	.644									
42.	Past behaviors							20	**3.20**	.616						
43.	Past behaviors															
44.	Specific attitude										20	**3.05**	.826			
45.	Specific attitude										20	**3.20**	.834			
46.	Normative pressures													20	**3.20**	.696
47.	General attitude															
48.	General attitude	20	**3.45**	.605												
49.	Anticipated concerns															
50.	Anticipated concerns															
51.	Anticipated concerns															
52.	Past behaviors															
53.	Specific attitude															
54.	Specific attitude										21	**3.05**	.740			

(table continues)

Table D4 (continued)

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

	Expected domain	Domains														
		General attitude			Anticipated concerns			Past behaviors			Specific attitude			Normative pressures		
Item		N	M	SD	N	M	SD	N	M	SD	N	M	SD	N	M	SD
55.	Normative pressures															
56.	General attitude	21	**3.38**	.590												
57.	General attitude	21	**3.29**	.644												
58.	Anticipated concerns															
59.	Anticipated concerns															
60.	Past behaviors							20	**3.15**	.587						
61.	Past behaviors							21	**3.14**	.573						
62.	Specific attitude															
63.	Specific attitude															
64.	Normative pressures													20	**3.30**	.657
65.	General attitude															
66.	General attitude															
67.	Anticipated concerns															
68.	Anticipated concerns				21	**3.14**	.573									
69.	Anticipated concerns				20	**3.10**	.718									
70.	Anticipated concerns															
71.	Past behaviors							20	**3.50**	.607						
72.	Specific attitude										20	**3.35**	.489			
73.	Specific attitude															
74.	Specific attitude															

(table continues)

Table D4 (continued)

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

	Expected domain	Domains														
		General attitude			Anticipated concerns			Past behaviors			Specific attitude			Normative pressures		
Item		*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
75.	General attitude	21	**3.38**	.590												
76.	Anticipated concerns															
77.	Anticipated concerns															
78.	Anticipated concerns															
79.	Anticipated concerns															
80.	Past behaviors							21	**3.29**	.644						
81.	Specific attitude															
82.	Specific attitude															
83.	Specific attitude															
84.	Normative pressures													20	**3.35**	.489
85.	Normative pressures													20	**3.30**	.733
86.	General attitude	21	**3.29**	.561												
87.	Anticipated concerns				20	**3.10**	.641									
88.	Anticipated concerns															
89.	Anticipated concerns															
90.	Past behaviors							22	**3.23**	.813						
91.	Specific attitude															
92.	Specific attitude															
93.	Specific attitude															

(table continues)

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Table D4 (continued)

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

		General attitude			Anticipated concerns			Past behaviors			Specific attitude			Normative pressures		
Item	Expected domain	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
94.	Specific attitude															
95.	Normative pressures													22	**3.36**	.581
96.	General attitude															
97.	General attitude															
98.	Anticipated concerns															
99.	Anticipated concerns															
100.	Past behaviors															
101.	Specific attitude															
102.	Specific attitude															
103.	Specific attitude															
104.	Specific attitude															
105.	Specific attitude															
106.	Specific attitude															
107.	Normative pressures													21	**3.52**	.512
108.	Normative pressures													20	**3.35**	.671
109.	Anticipated concerns				20	**3.25**	.639									
110.	Anticipated concerns															
111.	Specific attitude															
112.	Specific attitude															

(table continues)

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Table D4 (continued)

Content Validation Data for the Predictor Variables: Strength of Association of Items With Domains by Experts, N=25

		Domains														
	Expected domain	General attitude			Anticipated Concerns			Past behaviors			Specific attitude			Normative pressures		
Item		*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*	*N*	*M*	*SD*
113.	Specific attitude															
114.	Anticipated concerns				21	**3.00**	.632									
115.	Anticipated concerns															
116.	General attitude	20	**3.35**	.587												
117.	Anticipated concerns				21	**3.29**	.561									

Note. Strength of association of items with domains by experts is reported only for the number of participants that chose the expected domain using the ≥ 80% classification of items into domains criteria. Responses to unexpected domains ≤ 80% were filtered using the "if the condition is satisfied" function of SPSS.

STATISTICS FOR THE CONTENT VALIDATION OF THE LIKERT SCALES

Table D5

Level of Clarity Ratings by Experts, N=25

Item	N	M	SD
1	25	2.52	.510
2	25	2.72	.542
3	25	2.92	.277
4	25	2.72	.458
5	25	2.76	.523
6	25	2.68	.627
7	25	2.72	.458
8	25	2.76	.523
9	25	2.76	.436
10	25	2.76	.436
11	25	2.80	.500
12	25	2.76	.523
13	25	2.68	.557
14	25	2.80	.408
15	25	2.76	.436
16	25	2.84	.374
17	25	2.80	.500
18	25	2.80	.500
19	25	2.76	.597
20	25	2.84	.473
21	25	2.64	.569
22	25	2.60	.645
23	25	2.72	.542
24	25	2.72	.542
25	25	2.60	.577
26	25	2.64	.700
27	25	2.76	.436
28	25	2.84	.374
29	25	2.72	.614
30	25	2.80	.500
31	25	2.76	.436
32	25	2.72	.458
33	25	2.80	.408
34	25	2.76	.523
35	25	2.72	.542

(table continues)

Table D5 (continued)

Level of Clarity Ratings by Experts, N=25

Item	N	M	SD
36	25	2.80	.500
37	25	2.72	.542
38	25	2.68	.627
39	25	2.80	.408
40	25	2.84	.374
41	25	2.76	.523
42	25	2.72	.542
43	25	2.80	.408
44	25	2.60	.577
45	25	2.76	.436
46	25	2.80	.500
47	25	2.76	.436
48	25	2.92	.277
49	25	2.84	.374
50	25	2.84	.374
51	25	2.84	.374
52	25	2.84	.374
53	25	2.76	.436
54	25	2.68	.557
55	25	2.84	.374
56	25	2.80	.408
57	25	2.80	.408
58	25	2.84	.374
59	25	2.72	.542
60	25	2.80	.500
61	25	2.80	.408
62	25	2.80	.408
63	25	2.76	.436
64	25	2.72	.614
65	25	2.76	.436
66	25	2.76	.436
67	25	2.84	.473
68	25	2.76	.436
69	25	2.80	.408
70	25	2.76	.597
71	25	2.96	.200
72	25	2.88	.332

(table continues)

Table D5 (continued)

Level of Clarity Ratings by Experts, N=25

Item	N	M	SD
73	25	2.84	.473
74	25	2.84	.473
75	25	2.76	.523
76	25	2.72	.542
77	25	2.88	.332
78	25	2.68	.627
79	25	2.76	.523
80	25	2.88	.332
81	25	2.80	.500
82	25	2.84	.374
83	25	2.80	.408
84	25	2.68	.557
85	25	2.68	.557
86	25	2.72	.542
87	25	2.84	.374
88	25	2.84	.374
89	25	2.80	.577
90	25	2.76	.523
91	25	2.80	.577
92	25	2.72	.458
93	25	2.64	.700
94	25	2.80	.408
95	25	2.72	.542
96	25	2.72	.542
97	25	2.88	.332
98	25	2.76	.523
99	25	2.88	.332
100	25	2.84	.374
101	25	2.80	.500
102	25	2.68	.627
103	25	2.84	.374
104	25	2.80	.408
105	25	2.84	.374
106	25	2.80	.500
107	25	2.72	.542
108	25	2.76	.436
109	25	2.72	.542

(table continues)

Table D5 (continued)

Level of Clarity Ratings by Experts, N=25

Item	N	M	SD
110	25	2.72	.458
111	25	2.68	.627
112	25	2.80	.500
113	25	2.64	.700
114	25	2.84	.374
115	25	2.88	.332
116	25	2.76	.436
117	25	2.76	.436

DOCUMENTS USED IN THE DEVELOPMENT OF THE LIKERT SCALES FOR MEASURING THE PREDICTOR VARIABLES

Table D6

The Five Domains and Items After Completion of Content Validation

Domains, Descriptions, and Items

Domain 1: *General attitude* toward alternative principal certification.

Description: This domain will assess judgments, feelings, and opinions that directors of human resources hold about the alternative certification of principals.

Items:
1. Barriers in education preparation such as certification should not be maintained.
2. At no time should there be an avenue for employment of people outside of education.
16. Alternative principal certification is a good way to address principal shortages.
17. Alternative principal certification is demeaning to traditionally certified principals.
48. I believe alternative certification is a good idea.
56. Alternative routes to certification will increase the principal talent pool.
75. Alternative certification will harm our schools.
116. Alternative certification creates unfit instructional leaders.

Domain 2: *Anticipated concerns* about the ability of alternatively certified principals to be effective educational leaders.

Description: This domain will assess worries about acceptance, the ability of alternatively certified principals to provide instructional leadership, work with teachers to improve student achievement, conduct the daily operations of the school, and work with parents and the community to improve the school.

Items:
3. Alternatively certified principals lack instructional leadership skills.
19. Alternatively certified principals would be respected by teachers.
30. Alternatively certified principals cannot articulate educational values.
39. Alternatively certified principals do not know how to work with children.
41. Alternatively certified principals will treat schools like a business.
68. Alternatively certified principals would require too much professional development.
109. I feel that an alternatively certified principal would not be considered as qualified by the community.
117. I don't think alternatively certified principals could effectively select teachers.

(table continues)

Table D6 (continued)

The Five Domains and Items After Completion of Content Validation

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Domains, Descriptions, and Items

Domain 3: *Past behaviors* related to the employment of alternatively certified personnel.

Description: This domain will assess the previous experiences and decisions made about supporting or not supporting alternatively certified principals or teachers for employment.

Items:
5. I have considered supporting alternatively certified teachers.
6. I have considered supporting alternatively certified principals.
13. I have avoided supporting alternatively certified principals.
42. In the past I have rated alternatively certified principals unfairly.
60. In the past I have withheld applications from alternatively certified principals.
61. In the past I felt alternative certification of teachers was a good plan.
71. I have not supported alternatively certified teachers in the past.
80. I have never supported hiring alternatively certified teachers.

Domain 4: *Specific attitude* toward employing alternatively certified principals.

Description: This domain will assess judgments, feelings, and opinions about employing alternatively certified principals with specific characteristics.

Items:
7. I would support those alternatively certified principals who have successfully completed a rigorous internship.
8. I would support hiring a highly recommended alternatively certified principal.
14. I would support hiring an alternatively certified principal who was successful in a private school.
24. I would support hiring an alternatively certified principal who successfully completed an internship.
35. I would support an alternatively certified principal who interviewed well.
45. I think certain alternatively certified principals can be successful.
54. I may support a specific alternatively certified principal.
72. I would support an alternatively certified principal who was successful in a charter school.

Table D6 (continued)

The Five Domains and Items After Completion of Content Validation

Domains, Descriptions, and Items

Domain 5: *Normative pressures* by others.

Description: This domain will assess pressures from superiors or others of influence to support or not support hiring alternatively certified principals.

Items:
9. I feel pressure from my superintendent to support alternatively certified principals.
10. I feel pressure from my school board to support alternatively certified principals.
64. I am sometimes pressured into supporting alternatively certified principals that I would usually ignore.
84. If it were not for pressure from my superiors I would not support alternatively certified principals.
85. Because of pressure from my superiors, I can not support alternatively certified principals.
95. My superiors expect me to ignore alternatively certified principal applications.
107. My superiors expect me to support alternatively certified principals.
108. My superiors want me to overlook applications from alternatively certified principals.

Domain 6: *Conditions of* the *individual* principal candidate.

Description: This domain will assess if directors of human resources would consider supporting hiring alternatively certified principals based on individual attributes.

Items:
1. I would consider an alternatively certified principal if he or she were the "right fit" for the job.
2. I would consider an alternatively certified principal if he or she were the most qualified candidate for the job.
3. I would consider an alternatively certified principal if he or she had the leadership skills for which I am looking.
4. I would consider an alternatively certified principal if he or she were knowledgeable about the field of education.
5. I would consider an alternatively certified principal if he or she were willing to pursue a traditional certification while on the job.
6. I would consider an alternatively certified principal if he or she had strong people skills.

(table continues)

Table D6 (continued)

The Five Domains and Items After Completion of Content Validation

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Domains, Descriptions, and Items

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7. I would consider an alternatively certified principal if he or she were willing to take what I feel are crucial education courses.
8. I would consider an alternatively certified principal if he or she had strong leadership skills.

Domain 7: *Conditions of* the *job* per the school district.

Description: This domain will assess if directors of human resources would consider supporting hiring alternatively certified principals based on conditions of the job per that school district.

Items:
1. I would consider an alternatively certified principal if there were a shortage of certified administrators in my district.
2. I would consider an alternatively certified principal if there were no certified candidates available.
3. I would consider an alternatively certified principal if I had no other choice.
4. I would consider an alternatively certified principal if the talent pool were shallow.
5. I would consider an alternatively certified principal if no one I felt could do a good job were available.
6. I would consider an alternatively certified principal if no certified principal applied for the principalship.
7. I would consider an alternatively certified principal if I could not find a certified principal.
8. I would consider an alternatively certified principal if there were no certified principals willing to take the principalship position.

Note. These items were renumbered after the completion of the principal components analysis and for inclusion in the final questionnaires. See Appendix I and J for the final questionnaires.

Table D7

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
9. Certification in education is a barrier to the entry of high quality candidates into the field.	.07	.14	.26	.24	.11	-.05	-.07	.05	.02	.58	.07
10. At no time should there be an avenue for employment in education of people from fields other than education. (R)	-.04	.25	.63	.09	.10	.15	.03	-.04	-.04	.11	-.01
11. Alternative certification is a good way to address shortages of educators.	.11	.14	.72	.16	.01	-.05	.18	.02	.11	.07	.09
12. Alternative certification of educators is demeaning to traditionally certified educators.(R)	-.02	.12	.58	.25	-.04	.17	.28	-.14	-.10	-.19	.10
13. I believe alternative certification of educators is a good idea.	.05	.11	.79	.10	.10	-.06	.19	.13	.02	.14	.02
14. Alternative routes to certification will increase the talent pool in education.	.04	.17	.74	.09	.10	-.10	.12	.17	-.01	.05	-.20
15. Alternative certification of educators will harm our schools.(R)	.00	.17	.71	.17	.01	.12	.25	-.10	.06	.04	.04

(table continues)

Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
16. Alternative certification of educators weakens the instructional program in schools.(R)	.01	.06	.76	.20	.09	.11	.11	.10	.04	.01	.02
17. Alternatively certified principals would lack instructional leadership skills.	.04	-.17	-.30	-.67	-.12	-.05	.01	.03	.05	-.02	-.11
18. Alternatively certified principals would struggle in the position, even with a strong mentor.	-.15	-.13	-.18	-.68	-.15	-.06	.06	-.11	.04	-.15	-.19
19. Alternatively certified principals would not be able to articulate appropriate educational values.	-.01	-.33	-.08	-.68	-.07	.08	.01	-.04	-.07	-.04	.05
20. Alternatively certified principals would not know how to work with children.	-.14	-.30	-.10	.60	.00	-.02	-.11	-.05	-.05	-.03	.32
21. Alternatively certified principals would treat schools like a business.	-.02	.08	-.02	.61	-.06	-.13	-.03	.14	.44	.08	.32

(table continues)

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Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
22. Alternatively certified principals would require too much professional development and training to make them effective school leaders.	-.06	-.27	-.10	-.68	-.10	-.09	.01	-.10	.01	-.21	-.12
23. An alternatively certified principal would not be accepted by the school community (e.g., teachers, parents, other principals).	-.03	-.15	-.13	-.46	-.12	-.10	-.04	-.31	-.04	.35	-.04
24. Alternatively certified principals would not be able to select teachers effectively.	-.13	-.25	-.35	-.62	-.06	-.07	-.01	-.03	.05	.04	.05
25. In the past I have considered supporting alternatively certified teachers.	-.03	.10	.28	-.09	-.04	-.19	.73	.15	.06	.07	.01
26. In the past I have considered supporting alternatively certified principals.	.02	.26	.21	.38	.24	.11	.09	.33	-.14	.20	.25
27. In the past I have avoided supporting alternatively certified applicants. (R)	.05	-.05	.36	.02	.08	.05	.58	.05	.03	.36	-.01
28. In the past I have rated alternatively certified applicants unfairly. (R)	-.02	.05	.05	-.09	-.07	.15	.20	.02	.80	-.02	-.08

(table continues)

Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
29. In the past I have withheld applications from alternatively certified educators. (R)	.05	-.21	.04	.02	.12	.21	.25	-.19	.68	.04	.03
30. In the past I felt alternative certification of teachers was a good plan.	-.01	.05	.45	.06	.11	.02	.60	.01	.05	-.12	.11
31. I have not supported hiring alternatively certified teachers in the past. (R)	-.06	-.01	.28	-.05	.04	.18	.65	-.11	.32	-.13	.16
32. I have never supported hiring alternatively certified teachers. (R)	-.05	-.01	.16	.08	-.02	.26	.66	.01	.21	-.08	-.19
33. An alternatively certified principal who has successfully completed a rigorous internship could perform well in a school.	.04	.69	.08	.33	.11	-.01	.10	.18	.02	.12	.13
34. An alternatively certified principal who is highly recommended by other educational administrators would be an acceptable educational leader.	.08	.63	.23	.23	.19	.02	.05	.02	-.02	.12	.20
35. An alternatively certified principal who was successful in a non-public school setting could perform well in a public school.	.25	.50	.29	.21	.06	-.05	.08	.01	-.04	.03	.40

(table continues)

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Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
36. An alternatively certified principal who had acquired essential educational knowledge could be an effective educational leader.	.05	.67	.29	.22	.23	.03	-.02	-.10	.00	-.05	.05
37. An alternatively certified principal who had acquired leadership skills in settings other than education could be an effective educational leader.	.24	.59	.25	.47	.13	.10	-.02	.07	-.03	-.01	.11
38. Depending on specific conditions, an alternatively certified principal could be a successful educational leader.	.21	.67	.15	.14	.25	.18	-.06	.01	-.07	.05	-.30
39. An alternatively certified principal who understands children could be a successful educational leader.	.10	.66	.13	.32	.25	.07	-.07	.10	-.01	-.03	.04
40. An alternatively certified principal could perform well in some settings.	.13	.68	.14	.12	.23	.15	.06	-.06	-.08	-.03	-.31
41. My superintendent believes that alternatively certified principals are acceptable candidates for the principalship.	.10	.14	.12	.32	.07	.43	.20	.42	-.14	.10	.34

(table continues)

Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
42. I have school board members who believe that alternatively certified principals would be acceptable candidates for the principalship.	.12	.25	.21	.14	.13	.19	.21	.64	-.13	-.09	.05
43. Alternatively certified principals that I would usually ignore are considered acceptable by others of influence in my district.	.11	-.13	-.05	.03	.09	-.13	-.08	.79	.03	.07	-.06
44. If it were not for pressure from influential others, I would not consider alternatively certified principals in my school district.	-.20	-.30	-.13	-.21	.02	-.53	-.02	.07	-.13	-.07	.09
45. Because of pressure from influential others, alternatively certified principals are not acceptable in my school district.	-.00	-.09	-.09	.09	.28	-.78	-.14	-.02	.07	.05	.12
46. My superiors expect me to ignore the applications of alternatively certified principals.	-.02	.05	.01	-.08	-.21	-.85	-.02	.01	-.12	-.00	-.03

(table continues)

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Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
47. My superiors consider alternatively certified principals to be capable principal candidates.	.04	.18	.12	.27	.23	.49	.07	.41	-.18	.04	.32
48. My superiors want me to overlook applications from alternatively certified principals.	.00	-.07	.00	-.03	-.21	-.79	.01	-.01	-.25	.05	-.05
49. I would consider an alternatively certified principal if he or she were the "right fit" for the job.	.18	.40	.12	.13	.53	.29	.20	.19	.01	.28	-.08
50. I would consider an alternatively certified principal if he or she were the most qualified candidate for the job.	.34	.24	.05	.18	.50	.18	.20	.20	-.00	.35	-.14
51. I would consider an alternatively certified principal if he or she had the leadership skills for which I am looking.	.31	.37	.10	.16	.62	.17	.16	.08	.02	.30	-.10
52. I would consider an alternatively certified principal if he or she were knowledgeable about the field of education.	.27	.34	.04	.12	.66	.15	.11	.09	-.01	.21	.01

(table continues)

Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
53. I would consider an alternatively certified principal if he or she were willing to pursue a traditional certification while on the job.	.34	.06	.05	.02	.66	-.07	-.16	.13	.08	-.15	-.03
54. I would consider an alternatively certified principal if he or she had strong people skills.	.32	.33	.13	.19	.63	.12	.12	-.02	-.11	-.01	.05
55. I would consider an alternatively certified principal if he or she were willing to take what I feel are crucial education courses.	.26	.12	.09	.05	.75	-.12	-.17	.08	-.01	-.11	.06
56. I would consider an alternatively certified principal if he or she had strong leadership skills.	.30	.33	.12	.22	.65	.13	.18	-.02	.02	.09	.09
57. I would consider an alternatively certified principal if there were a shortage of certified administrators in my district.	.61	.22	.05	.15	.39	.10	.11	.02	.03	.04	.13
58. I would consider an alternatively certified principal if there were no certified candidates available.	.77	.15	.02	.08	.22	.08	.05	-.04	.02	.00	.01

(table continues)

Table D7 (continued)

Rotated Factor Matrix for the Principal Components Analysis of the Independent Variables

Item	Component										
	1	2	3	4	5	6	7	8	9	10	11
59. I would consider an alternatively certified principal if I had no other choice.	.84	.02	.01	-.03	.08	.01	-.05	-.00	-.02	.05	-.06
60. I would consider an alternatively certified principal if the talent pool were shallow.	.84	.12	-.04	.10	.19	.06	.02	.04	-.11	.01	.04
61. I would consider an alternatively certified principal if no one I felt could do a good job were available.	.83	-.04	-.08	.04	.07	.01	-.01	.05	-.05	.03	-.00
62. I would consider an alternatively certified principal if no certified principal applied for the principalship.	.88	.14	.07	.10	.16	.00	-.03	.07	.05	.01	.02
63. I would consider an alternatively certified principal if I could not find a certified principal.	.91	.08	.10	-.00	.14	.02	-.03	.06	.04	.04	-.01
64. I would consider an alternatively certified principal if there were no certified principals willing to take the principalship position.	.88	.08	.07	.03	.14	-.03	-.07	.08	.07	-.01	-.02

Note. Statements marked with (R) were *reversed scored*. Therefore, those scored as 1 were scored as 4; those scored as 2 were scored as 3; those scored as 3 were scored as 2; and, those scored as 4 were scored as 1. Shaded component boxes refer to those items that loaded on that component with a substantial loading ($\geq$ .40). The components are 1=Conditions of the job, 2=Specific attitude, 3=General attitude, 4=Anticipated concerns, 5=Conditions of the individual, 6=Normative pressures, 7=Past behaviors, 8=Normative pressures, 9=Past behaviors, 10=General attitude, and 11=Specific attitude. Number is 9 – 64 because these are the Likert scale items in the final questionnaires.

Table D8

Scree Plot for the Principal Components Analysis of the Independent Variables
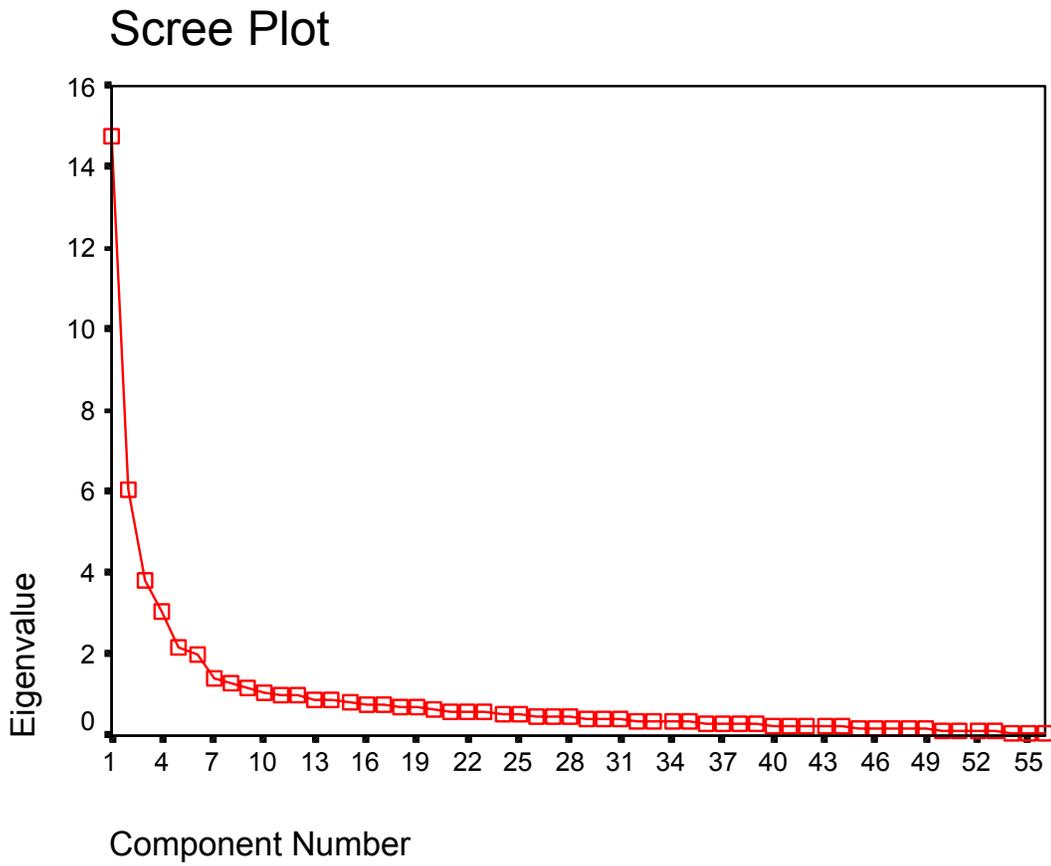
Table D9

Percent of Variance for the Principal Components Analysis of the Independent Variables

Component	Initial eigenvalues % of variance	Extraction sum of squared loading % of variance	Rotation sums of squared loadings % of variance
1	26.40	26.40	11.65
2	10.77	10.77	8.98
3	6.85	6.85	8.90
4	5.51	5.51	8.32
5	3.86	3.85	7.61
6	3.59	3.59	6.02
7	2.57	2.57	5.10
8	2.33	2.33	3.56
9	2.14	2.14	3.10
10	1.87	1.87	2.26
11	1.80	1.80	2.19
12	1.76		
13	1.61		
14	1.57		
15	1.48		
16	1.41		
17	1.36		
18	1.30		
19	1.29		
20	1.16		
21	1.08		
22	1.04		
23	1.01		
24	.97		
25	.96		
26	.87		
27	.84		
28	.83		
29	.78		
30	.70		
31	.70		
32	.65		
33	.63		
34	.61		
35	.60		

(table continues)

Table D9 (continued)

Percent of Variance for the Principal Components Analysis of the Independent Variables

Component	Initial eigenvalues % of variance	Extraction sum of squared loading % of variance	Rotation sums of squared loadings % of variance
36	.57		
37	.53		
38	.51		
39	.50		
40	.47		
41	.45		
42	.43		
43	.40		
44	.38		
45	.36		
46	.35		
47	.32		
48	.30		
49	.29		
50	.26		
51	.24		
52	.22		
53	.18		
54	.14		
55	.13		
56	.11		

INTER-ITEM CORRELATIONS FOR THE PREDICTOR VARIABLES

Table E1

Inter-Item Correlation Matrix for General Attitude

Item	10(r)	11	12(r)	13	14	15(r)	16(r)
10(r)	1.00						
11	.43	1.00					
12(r)	.45	.43	1.00				
13	.47	.62	.47	1.00			
14	.41	.56	.37	.68	1.00		
15(r)	.47	.57	.54	.57	.51	1.00	
16(r)	.52	.59	.46	.59	.54	.64	1.00

Note. r = reverse-coded item.

Inter-Item Correlation Matrix for Anticipated Concerns

Item	17	18	19	20	21	22	23	24
17	1.00							
18	.54	1.00						
19	.45	.47	1.00					
20	.29	.35	.50	1.00				
21	.36	.29	.25	.34	1.00			
22	.49	.60	.54	.43	.31	1.00		
23	.36	.37	.28	.27	.19	.31	1.00	
24	.52	.47	.46	.52	.33	.48	.32	1.00

Inter-Item Correlation Matrix for Past Behaviors

Item	25	27(r)	30	31(r)	32(r)
25	1.00				
27(r)	.47	1.00			
30	.52	.41	1.00		
31(r)	.45	.39	.52	1.00	
32(r)	.39	.33	.39	.53	1.00

Note. R = reverse-coded item. *(table continues)*

Table E1 (continued)

Inter-Item Correlation Matrix for Specific Attitude

Item	33	34	35	36	37	38	39	40
33	1.00							
34	.62	1.00						
35	.46	.52	1.00					
36	.57	.49	.48	1.00				
37	.59	.53	.58	.62	1.00			
38	.49	.45	.33	.57	.60	1.00		
39	.53	.55	.42	.56	.68	.56	1.00	
40	.40	.43	.33	.56	.51	.68	.57	1.00

Inter-Item Correlation Matrix for Normative Pressures-Positive

Item	41	42	43	47
41	1.00			
42	.53	1.00		
43	.21	.29	1.00	
47	.68	.48	.14	1.00

Inter-Item Correlation Matrix for Normative Pressures-Negative

Item	45	46	48
45	1.00		
46	.53	1.00	
48	.21	.29	1.00

(table continues)

Table E1 (continued)

Inter-Item Correlation Matrix for Conditions of the Individual

Item	49	50	51	52	53	54	55	56
49	1.00							
50	.73	1.00						
51	.77	.80	1.00					
52	.71	.70	.80	1.00				
53	.33	.43	.42	.46	1.00			
54	.58	.49	.65	.63	.40	1.00		
55	.39	.35	.46	.51	.65	.53	1.00	
56	.63	.56	.74	.66	.41	.80	.53	1.00

Inter-Item Correlation Matrix for Conditions of the Job

Item	57	58	59	60	61	62	63	64
57	1.00							
58	.63	1.00						
59	.45	.70	1.00					
60	.65	.64	.67	1.00				
61	.50	.57	.64	.77	1.00			
62	.64	.68	.70	.76	.70	1.00		
63	.61	.74	.75	.75	.69	.87	1.00	
64	.58	.65	.69	.71	.69	.88	.87	1.00

Note. All inter-item correlations completed after the principal components analysis and only included items with a substantial loading ($\geq$ .40).

Table E2

Correlation Coefficients, Significance Levels, and Ns for the Relationships Among all Predictor Variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	r	1.00	-.46	.56	.49	-.10	.26	.32	.10	.18	.14	.03	.06	.11	-.19	-.17	.06	.01	.12	.22	-.08
	p	.	.00	.00	.00	.06	.00	.00	.06	.00	.01	.31	.18	.05	.00	.00	.17	.45	.03	.00	.11
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241
2	r	-.46	1.00	-.13	-.65	.11	-.39	-.43	-.20	-.14	-.12	-.09	.01	-.09	.15	.20	-.18	-.06	-.18	-.25	.06
	p	.00	.	.00	.00	.05	.00	.00	.00	.01	.03	.08	.45	.08	.01	.00	.00	.19	.00	.00	.19
	n	240	240	238	238	227	223	235	234	240	240	240	240	238	240	240	240	234	238	234	240
3	r	.56	-.13	1.00	.16	-.19	.19	.17	.03	.06	.03	.10	.04	.05	-.10	-.04	.01	-.03	.04	.18	-.13
	p	.00	.00	.	.01	.00	.00	.01	.31	.18	.33	.05	.30	.23	.07	.26	.43	.31	.25	.00	.03
	n	239	238	239	237	227	223	234	233	239	239	239	239	237	239	239	239	233	237	233	239
4	r	.49	-.65	.16	1.00	-.12	.37	.65	.33	.21	.15	.03	-.06	.07	-.19	-.17	.10	.12	.12	.23	-.04
	p	.00	.00	.01	.	.03	.00	.00	.00	.00	.01	.31	.18	.14	.00	.01	.07	.03	.03	.00	.25
	n	238	238	237	238	227	223	235	234	238	238	238	238	236	238	238	238	234	236	232	238
5	r	-.10	.11	-.19	-.12	1.00	-.31	-.20	-.07	.07	.05	-.11	.05	.10	.06	-.03	-.03	.02	-.07	-.30	-.07
	p	.06	.06	.00	.03	.	.00	.00	.16	.14	.24	.05	.23	.07	.20	.32	.32	.40	.16	.00	.15
	n	227	227	227	227	227	220	227	226	227	227	227	227	226	227	227	227	225	226	222	227
6	r	.26	-.39	.19	.37	-.31	1.00	.42	.19	.01	-.06	.10	.01	.13	-.02	-.08	.06	-.03	.20	.37	-.05
	p	.00	.00	.00	.00	.00	.	.00	.00	.45	.18	.06	.42	.03	.40	.13	.20	.36	.00	.00	.25
	n	223	223	223	223	220	223	223	223	223	223	223	223	222	223	223	223	223	222	218	223
7	r	.32	-.43	.17	.65	-.20	.42	1.00	.57	.05	.01	.07	-.09	-.01	-.10	-.10	.05	.12	.09	.22	.02
	p	.00	.00	.01	.00	.00	.00	.	.00	.22	.44	.14	.08	.42	.07	.07	.24	.03	.09	.00	.38
	n	235	235	234	235	227	223	235	234	235	235	235	235	234	235	235	235	233	234	229	235
8	r	.10	-.20	.03	.33	-.07	.19	.57	1.00	.07	.01	.09	-.11	-.03	-.04	-.01	.02	.23	-.02	.02	-.05
	n	.06	.06	.31	.00	.16	.00	.00	.	.16	.45	.09	.04	.31	.26	.43	.36	.00	.40	.38	.23
		234	234	233	234	226	223	234	234	234	234	234	234	233	234	234	234	233	233	228	234
9	r	.18	-.14	.06	.21	.07	.01	.05	.07	1.00	.49	-.11	.08	-.01	-.07	-.21	-.04	.01	.13	-.07	-.05
	p	.00	.00	.18	.00	.14	.45	.22	.16	.	.00	.05	.10	.43	.15	.00	.26	.46	.02	.16	.22
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241
10	r	.14	-.12	.03	.15	.05	-.06	.01	.01	.49	1.00	-.09	.10	-.03	.04	-.14	.01	-.04	.06	-.10	-.07
	p	.01	.01	.33	.01	.24	.17	.44	.45	.00	.	.08	.06	.32	.26	.01	.46	.29	.19	.07	.16
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241
11	r	.03	-.09	.10	.03	-.11	.10	.07	.09	-.10	-.09	1.00	-.22	.03	-.09	-.16	.11	-.10	.03	.06	.03
	p	.31	.31	.06	.31	.05	.06	.14	.09	.05	.08	.	.00	.30	.10	.01	.05	.07	.33	.18	.33
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241

(table continues)

Table E2 (continued)

Correlation Coefficients, Significance Levels, and Ns for the Relationships Among the Significant Predictor Variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
12	r	.06	.01	.04	-.06	.05	.01	-.09	-.11	.08	.09	-.22	1.00	.12	.13	.11	.07	-.03	-.09	.01	-.05
	p	.18	.18	.30	.18	.23	.42	.08	.04	.10	.06	.00	.	.03	.02	.04	.15	.31	.08	.43	.24
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241
13	r	.11	-.09	.05	.07	.10	.13	-.01	-.03	-.01	-.03	.03	.12	1.00	.12	-.01	.12	.07	.37	.03	-.16
	p	.05	.05	.23	.14	.07	.03	.42	.31	.43	.32	.30	.03	.	.01	.44	.03	.14	.00	.35	.01
	n	239	238	237	236	226	222	234	233	239	239	239	239	239	239	239	239	232	238	233	239
14	r	-.19	.15	-.10	-.19	.06	-.02	-.10	-.04	-.07	.04	-.09	.13	.17	1.00	.59	-.03	.05	.01	-.12	.13
	p	.00	.00	.07	.00	.20	.40	.07	.26	.15	.26	.10	.02	.01	.	.00	.32	.21	.46	.04	.02
	n	241	240	239	238	227	223	235	234	241	241	241	24	239	241	241	241	234	239	235	241
15	r	-.17	.20	-.04	-.16	-.03	-.08	-.10	-.01	-.21	-.14	-.16	.11	-.01	.59	1.00	-.04	.02	-.09	-.05	.10
	p	.00	.00	.26	.01	.32	.13	.07	.43	.00	.01	.01	.04	.44	.00	.	.28	.36	.08	.23	.05
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241
16	r	.06	-.18	.01	.10	-.03	.06	.05	.02	-.04	.01	.11	.07	.12	-.03	-.04	1.00	.07	.01	.09	-.03
	p	.17	.17	.43	.07	.32	.20	.24	.36	.26	.46	.05	.15	.03	.32	.29	.	.16	.47	.10	.30
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241
17	r	.01	-.06	-.03	.12	.02	-.03	.12	.23	.01	-.04	-.10	-.03	.07	.05	.02	.07	1.00	-.02	-.06	-.02
	p	.45	.45	.31	.03	.40	.36	.03	.00	.46	.29	.07	.31	.14	.21	.36	.16	.	.37	.18	.37
	n	234	234	233	234	225	223	233	233	234	234	234	241	232	234	234	241	234	232	228	234
18	r	.12	-.18	.04	.12	-.07	.20	.09	-.02	.13	.06	.03	-.09	.37	.01	-.09	.01	-.02	1.00	.19	-.09
	p	.03	.03	.25	.03	.16	.00	.09	.40	.02	.19	.33	.08	.00	.46	.08	.47	.37	.	.00	.08
	n	239	238	237	236	226	222	234	233	239	239	239	239	238	239	239	239	232	239	233	239
19	r	.22	-.24	.18	.23	-.30	.37	.22	.02	-.07	-.10	.06	.01	.03	-.12	-.05	.09	-.06	.19	1.00	.14
	p	.00	.00	.00	.00	.00	.00	.00	.38	.16	.07	.18	.43	.35	.04	.23	.10	.18	.00	.	.01
	n	235	234	233	232	222	218	229	228	235	235	235	235	233	235	235	235	228	233	235	235
20	r	-.08	.06	-.13	-.04	-.07	-.05	.02	-.05	-.05	-.07	.03	-.05	-.16	.13	.10	-.03	-.02	-.09	.14	1.00
	p	.11	.11	.03	.25	.15	.25	.38	.23	.22	.16	.33	.24	.01	.02	.05	.30	.37	.08	.01	.
	n	241	240	239	238	227	223	235	234	241	241	241	241	239	241	241	241	234	239	235	241

(table continues)

Note. Key is as follows:
1. ga=general attitude
2. ac=anticipated concerns
3. pb=past behaviors
4. sa=specific attitude
5. npneg=normative pressures negative
6. nppos=normative pressures positive

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Table E2 (continued)

7. ci=conditions of the individual
8. cj=conditions of the job
9. Experience dummy variable 1=director has 1-10 years experience
10. Experience dummy variable 2=director has over 20 years experience
11. Location 1=dummy variable primarily rural
12. Location 2 dummy variable 2=primarily urban
13. Quality=district experiencing a shortage in the quality of principals
14. Degree in ed.=director holds a degree in education
15. Work in ed.= director has worked mainly in education
16. Inside-outside=inside v. outside definition group
17. Ass. Principal= director more willing to support hiring an alternatively certified assistant principal than principal
18. Quantity=district experiencing a shortage in quantity of principals
19. Allows hiring=district allows hiring
20. Gender=male v. female.

APPENDIX F

EMAIL CONTACT LETTERS TO DIRECTORS OF HUMAN RESOURCES FOR
QUESTIONNAIRE PARTICIPATION

Prenotice Email

Virginia Tech
1872

VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Office of Academic Programs

School of Education (0313)
Blacksburg, Virginia 24061
(540) 231-9721 Fax: (540) 231-3717

Date:

Dear Director of Human Resources,

A few days from now you will receive via email a request to fill out a brief web
questionnaire for an important research project being conducted by us through Virginia
Polytechnic Institute and State University.

It concerns the willingness of directors of human resources to support hiring alternatively
certified principals. The American Association of School Personnel Administrators
(AASPA) has reviewed this study and has requested the results upon completion.

We are writing in advance because we have found many people like to know ahead of
time that they will be contacted. This study is important because it will help determine if
alternative principal certification may help address principal shortages and the quality of
school leaders.

Thank you for your time and assistance. Your response will help to strengthen the study
and add insight into the current development of alternative certification of principals.

Sincerely,
Signed   Signed
Douglas L. Hartley   David J. Parks

Researcher and Assistant Principal   Professor of Education
Bruton High School   101 War Memorial Hall
185 East Rochambeau Road   Virginia Tech
Williamsburg, VA 23188   Blacksburg, VA 24061
757.220.4097   540.231.3841

Cover Letter With Questionnaire URL Embedded

Virginia Tech
1872
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Office of Academic Programs
School of Education (0313)
Blacksburg, Virginia 24061
(540) 231-9721 Fax: (540) 231-3717

Date:

Dear Director of Human Resources,

We are writing to ask for your assistance in a study of the willingness of directors of human resources to support hiring alternatively certified principals. We are interested in knowing if alternative principal certification is a viable option in addressing principal shortages and the quality of school leaders.

You were selected to participate in this study because you are a member of the American Association of School Personnel Administrators (AASPA) and serve as the Director of Human Resources, Assistant Superintendent for Human Resources, Chief Human Resource Officer, or Executive Director of Human Resources or Personnel for a public school district. All members of AASPA who fit this description were selected for participation. The Association has reviewed this study and has requested a copy of the results.

Your answers will be kept completely confidential. All data will be aggregated, and no individual will be identified in the final report. When you have responded and submitted your completed questionnaire, your name will be deleted from the email list, and there will be no association of your name with your responses. Responding to the questionnaire is voluntary; however, you can be of great assistance by taking a few minutes to share your perspectives and opinions about alternatively certified principals:
https://survey.vt.edu/survey/entry.jsp?id=1139269383306

If you have any questions or comments about this study, we would be happy to communicate with you via phone or email.

Your help with this important study is greatly appreciated.

Sincerely,
Signed   Signed
Douglas L. Hartley   David J. Parks

Researcher and Assistant Principal   Professor of Education
Bruton High School   101 War Memorial Hall
185 East Rochambeau Road   Virginia Tech
Williamsburg, VA 23188   Blacksburg, VA 24061
757.220.4097   540.231.3841

APPENDIX F (continued)

Follow-up Email One

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Office of Academic Programs

School of Education (0313)
Blacksburg, Virginia 24061
(540) 231-9721 Fax: (540) 231-3717

Date:

Dear Director of Human Resources,

Last week, a questionnaire seeking your input on the willingness of directors of human resources to support hiring alternatively certified principals was emailed to you. Your name, with approval of the American Association of School Personnel Administrators (AASPA), was selected from the membership directory.

If you have already completed and returned the questionnaire, please accept our sincerest thanks. If not, please do so today. We are especially grateful for your help because it is only by asking people like you to share your thoughts and opinions that we can understand if alternative principal certification may help to address principal shortages and the quality of school leaders.

If you did not receive the web questionnaire address link or if it was misplaced, we have included it again here: https://survey.vt.edu/survey/entry.jsp?id=1139269383306

Sincerely,
Signed
Douglas L. Hartley

Signed
David J. Parks

Researcher and Assistant Principal
Bruton High School
185 East Rochambeau Road
Williamsburg, VA 23188
757.220.4097

Professor of Education
101 War Memorial Hall
Virginia Tech
Blacksburg, VA 24061
540.231.3841

A Land-Grant University – Putting Knowledge to Work
An Equal Opportunity/Affirmative Action Institution

Virginia Tech

VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Office of Academic Programs

School of Education (0313)
Blacksburg, Virginia 24061
(540) 231-9721 Fax: (540) 231-3717

Date:

Dear Director of Human Resources,

About three weeks ago, you were sent a web questionnaire in reference to your opinions concerning alternatively certified principals. To the best of our knowledge, we have not received your responses.

The comments of those who have already responded include a variety of opinions concerning the employability of alternatively certified principals. These differences include those who are adamantly opposed to the idea, some who are indifferent to the idea, and some who are supportive of the idea. We believe the results will be very useful to members of the American Association of School Personnel Administrators (AASPA), officials in state departments of education, professors who prepare school leaders, and policy makers at all levels of government.

We are emailing you again because of the importance that your questionnaire responses have for obtaining accurate results. While we have sent questionnaires across the country to AASPA members, it's important to hear from nearly everyone selected so that we can be confident that the results are truly representative.

Your answers will be kept completely confidential. Data will be aggregated, and no individual will be identified in the final report. When you have responded and submitted your completed questionnaire, your name will be deleted from the email list and there will be no association of your name with your responses. Responding to the questionnaire is voluntary; however, you can be of great assistance by taking a few minutes to share your perspectives and opinions about alternatively certified principals.

If you have any questions or comments about this study, we would be happy to talk with you via phone or email.

We hope that you will be able to complete and return the questionnaire soon.
https://survey.vt.edu/survey/entry.jsp?id=1139269383306

Sincerely,
Signed   Signed
Douglas L. Hartley   David J. Parks

Researcher and Assistant Principal   Professor of Education
Bruton High School   101 War Memorial Hall
185 East Rochambeau Road   Virginia Tech
Williamsburg, VA 23188   Blacksburg, VA 24061
757.220.4097   540.231.3841

Follow-up Email Three

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Office of Academic Programs

School of Education (0313)
Blacksburg, Virginia 24061
(540) 231-9721 Fax: (540) 231-3717

Date:

Dear Director of Human Resources,

During the last month, you were sent an email concerning an important study that we are conducting at Virginia Polytechnic Institute and State University.

Our purpose is to assess the willingness of directors of human resources to support hiring alternatively certified principals.

The study is nearing the end, and this is the last contact that will be made with directors in human resources who are members of the AASPA. We believe that you can provide valuable input concerning the employability of alternatively certified principals.

We are sending this final contact via high importance email because of our concern that people who have not responded may have different perspectives than those who have responded. We believe that input from all AASPA human resource directors will assure that the questionnaire results will be representative of a national population.

Your answers will be kept completely confidential. Data will be aggregated, and no individual will be identified in the final report. When you have responded and submitted your completed questionnaire, your name will be deleted from the email list, and there will be no association of your name with your responses.

Responding to the questionnaire is voluntary; however, you can be of great assistance by taking a few minutes to share your perspectives and opinions about alternatively certified principals. If you have any questions or comments about this study, we would be happy to communicate with you via phone or email.

We appreciate your willingness to consider our request as we conclude this effort to better understand if alternative principal certification is a viable option in addressing principal shortages and the quality of school leaders. The questionnaire is at
https://survey.vt.edu/survey/entry.jsp?id=1139269383306

Sincerely,
Signed   Signed
Douglas L. Hartley   David J. Parks
Researcher and Assistant Principal   Professor of Education
Bruton High School   101 War Memorial Hall
185 East Rochambeau Road   Virginia Tech
Williamsburg, VA 23188   Blacksburg, VA 24061
757.220.4097   540.231.3841

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Inside Definition of an Alternatively Certified Principal, *N*=8

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Inside" definition of alternative principal certification. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program.	I would not hire an alternative certified principal. (KG, T, 3) I would consider an alternatively certified principal. (LT, T, 3) Not applicable [school district is not allowed to hire alternatively licensed principals]. (GR, T, 3) We are opposed to this idea. (MS2, T, 3) Not applicable [school district is not allowed to hire alternatively licensed principals]. (PL, T, 3)	Only if a certified principal was not available. (TA, T, 2) Availability of qualified people. We look for the best candidate we can find, hoping it will be a certified candidate. (MM, T, 3) Depends on the situation and what skill set you are looking for and can they take a school in the right direction – "right fit." (MM, T, 3) If the person came through the selection process as the most qualified candidate. (JDD, T, 2)	Credibility among other administrators in the district. (TA, T, 1) [The principal has] no preparatory experience if coming from another district. [The principal does not] know procedures, community, students. (MM, T, 1-2) No modeling or frame of reference. No preparatory course work to prepare you. (MM, T, 1-2) No understanding of the expectations of staff, community, board of education. Too much unknown. (MM, T, 1-2)	Provide very extensive mentorship. (TA, T, 2) Mentor within system or contract with recently retired principals to work with them during their first 2 to 3 years at the principalship. Provide somebody that they can go to and feel free to share concerns and challenges. Mentors send their reflections of how it is going. We have a cast, which is a group of central office administrators who work with principals one time a month or more if needed and support the principals working with them on issues that school	No [the person has not considered hiring alternatively certified personnel in the past]. (TA, T, 1) Yes [the person has considered hiring alternatively certified personnel in the past]. (MM, T, 1) [Alternatively certified] teachers [have been considered for hiring in the past]. (JDD, T, 1) No [the person has not considered hiring alternatively certified personnel in the past]. (KG, T, 1) Yes – for teachers. (LT, T, 1)

(table continues)

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Inside Definition of an Alternatively Certified Principal, *N*=8

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Inside" definition of alternative principal certification. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program.	North Carolina allows us to do it. There could come a time when we have to do it. Thank goodness NC gives us the leeway to do it for assistant principals. Principals are graying – retiring. In a national search if you get 15 candidates you are lucky. I support it and local school systems should have that flexibility and control to find the best principals for their schools. The more flexibility states can give the better off we will be. States must trust school systems to make the best hiring decisions and support them. (MM, T, 4)	No ready candidate. (LT, T, 2) Specific person's track record and experience. (LT, T, 2) None, we have been fortunate to train our own staff and prepare them for the administrative openings as needed. When needed we have been fortunate to hire administrators from outside the school district. (MS2, T, 2) Would be willing to consider a program designed in concert with a local college if initial planning allowed for district input. (PL, T, 3) Extensive educational experience and a proven track record of leadership. (TA, T, 3)	In a small community – all are important. Two main ones: faculty (got to have this respect, those already in the district have earned that respect), board of education (because they have to answer to everybody and provide the reasoning why they are seeking these candidates). (MM, T, 2) Acceptance, knowledge base [concerns about alternatively certified principals]. (JDD, T, 1) Teachers [a concern is acceptance by teachers]. (KG, T, 2) Lack of experience in schools, true understanding of the daily world of public administration. (LT, T, 2)	principals need help with. It is principal directed, not SBO directed. One central office member is a lead mentor for each school. The cast team has worked really well. (MM, T, 1-2) Training, mentoring, administrative support. (JDD, T, 2) Provide training and support. (KG, T, 2) Verbalize why they are qualified, also why we went this course – provide resources for their success. Mentors. (LT, T, 2) Ensure that an experienced mentor principal was assigned to him/her. (GR, T, 2	No [the person has not considered hiring alternatively certified personnel in the past]. (MS2, T, 1) Principals: no Teachers: yes, through a "Resident Teacher Program." (PL, T, 1) Teachers-yes, admin-no. (GR, T, 1)

(table continues)

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Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Inside Definition of an Alternatively Certified Principal, *N*=8

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Inside" definition of alternative principal certification. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program.		Same skills as a certified person. Don't lessen your standards. Same types of qualities. Knowledgeable, communicates well with others, leadership skills, vision. (MM, T, 4) Leadership, communication, human relations skills, instructional knowledge. (JDD, T, 3) Knowledge of school law, of curriculum, and best practices. (KG, T, 3) Ability to build relationships, lead teams, understanding of public law/process, curriculum knowledge. (LT, T, 3)	I think parents would be of some concern and teachers. (LT, T, 2). [A lack of] knowledge of instruction. (GR, T, 2) Teachers, public [perceptions would be of the most concern]. (GR, T, 2) We would not consider hiring one [so the person had no concerns]. (MS2, T, 1) We are opposed to this idea [so the director had no concerns]. (MS2, T, 2) School board perceptions [would be of the most concern]. (TA, T, 1)	Provide mentoring and staff development on topics and initiatives unique to the district. (PL, T, 2)	

<div align="right">*(table continues)*</div>

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Inside Definition of an Alternatively Certified Principal, *N*=8

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Inside" definition of alternative principal certification. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program.		Strategic vision development, data analysis [abilities], talent development, research based and driven, educational philosophy. You want a leader, not a business manager. (PL, T, 3) First preference is of course someone who is fully certified. If there is not a certified candidate out there or a certified candidate who is not the right fit [then an alternatively certified candidate could be considered]. School systems have to be flexible – people you pull through the ranks [within your own school system], grow your own programs, [with] given skill sets. (MM, T, 3)	Functioning without the perspective of a research-based program. Formal leadership training covers not just the mechanics of the principalship but helps an aspiring leader to develop their philosophy, their core beliefs. (PL, T, 3) The seasoned professional teacher [perceptions would be of the most concern]. (PL, T, 3) Teachers, parents, students [perceptions would be of the most concern]. (JDD, T, 2) Acceptance [acceptance by all in the educational arena]. (KG, T, 1)		

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Inside Definition of an Alternatively Certified Principal, *N*=8

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Inside" definition of alternative principal certification. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program.		When they are the right fit, best person is more important. (LT, T, 3) None [because the person does not support alternatively certified principals]. (GR, T, 2) None [because the person is opposed to the idea]. (MS2, T, 2) For a temporary position. (TA, T, 2) Our school system would not hire an alternative school principal [under any conditions]. (MS2, T, 3) Not applicable [because this person would not hire an alternatively certified principal]. (GR, T, 3)			

(table continues)

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Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Inside Definition of an Alternatively Certified Principal, *N*=8

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Inside" definition of alternative principal certification. These are candidates who have a master's degree and experience in education, but who have not completed a university-based principal preparation program.		Cannot envision one. (PL, T, 3) None! [there are no conditions under which this person would support hiring an alternatively certified principal] (KG, T, 2) At the current time I would not [there were no circumstances under which this person would recommend]. (GR, T, 2)			

Note. The code for each direct quotation is in this order: the initials of the responding human resource director, the type of data (e.g., T=Transcript), the page number in the data.

APPENDIX H

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Outside Definition of an
Alternatively Certified Principal, *N*=6

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Outside" definition of alternative principal certification. These are candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program.	This would not be a preference of mine. (MS, T, 3) NO! [director is against alternative certification] (JS, T, 3) My views are not very strong in support of this personnel action. (JS2, T, 5) I could support the program, specifically if there were shortages of principals. (DM, T, 3) I don't currently support alternative principal certification. (BH, T, 3)	Develop an individualized licensure plan (timelines for completion). Commitment from the candidate. Five year commitment to the school district. Enroll in suggested courses to improve or supplement the areas listed under "serious challenges." (JS2, T, 4) That the alternative certification process required the candidate to obtain college credit or other professional development in leadership training. (DM, T, 2)	Lack of knowledge of education laws and issues. (MS, T, 1) Perceptions of teachers are my greatest concern. (MS, T, 1) Understanding instruction, child development, and the instructional process. (JS, T, 1) Lack of building-level experience as a teacher. Lack of an internship at the appropriate level. Lack of school –based knowledge regarding school finance. Lack of school-base knowledge	A lot of training on testing, laws, administrative regulations. (MS, T, 2) Provide a mentor (retired principal). (JS2, T, 4) Provide mentorship and support most likely in the area of curriculum and assessment. (BR, T, 2) If given the appropriate support and guidance from a successful retired principal to provide one-to-one/face-to-face mentoring, one could produce a diamond from the rough. (JS2, T, 5)	Yes [director has considered hiring alternatively certified personnel in the past]. (MS, T, 1) Yes – teachers [director has considered supporting alternatively certified teachers]. (JS, T, 1) We have hired alternatively certified teachers, but not in the slot of principal. (JS2, T, 1) Teachers [director has considered hiring alternatively certified teachers]. (DM, T, 1)

(table continues)

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Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Outside Definition of an Alternatively Certified Principal, *N*=6

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Outside" definition of alternative principal certification. These are candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program.	I am not very supportive of hiring alternately certified principals. (BR, T, 3)	Severe shortage of principals. (BH, T, 2) When there are no quality candidates who are certified in the pool. (BR, T, 2) Leadership, organizational, relationship [building] skills [The director would support hiring if the candidate possessed these skills]. (MS, T, 3) Ability to distribute instructional leadership to teachers and building. Committed to learning about instructional process. (JS, T, 3)	regarding school law. Lack of school-based knowledge regarding recruiting, training, and evaluating substitute teachers. Lack of school-based knowledge regarding instruction. Lack of school-based knowledge regarding the interpretation of test data. Lack of school-based knowledge regarding strategies to help the struggling learner. Lack of school-based knowledge regarding recruiting, training, and evaluating professional and support staff employees. Lack of school-based knowledge regarding student issues, i.e., attendance, discipline, academics (SOL assessments).		We considered a foreign language candidate, but he did not make it past the screening process. (BR, T, 1) [Teachers yes but] not principals to my knowledge. (BH, T, 1)

(table continues)

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Outside Definition of an Alternatively Certified Principal, *N*=6

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Outside" definition of alternative principal certification. These are candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program.		An understanding of the total child. An understanding of the day-to-day operations of the facility. An understanding of personnel and finance. An understanding of instruction. (JS2, T, 5) Experience, academic scholarship, professional development, specific time lines for completing the certification process. (DM, T, 3) Exemplary people skills. Proven leadership skills. Excellent problem analysis skills. Excellent organizational skills. Commitment to education and the students at that level. (BH, T, 3)	Lack of school-based knowledge regarding licensure requirements mandated by the department of education. Lack of school-based knowledge regarding dismissal of tenured teaches. Lack of school-based knowledge regarding community issues to include parents who are not happy with student performance. Lack of school-based knowledge regarding practices, federal and state laws. (JS2, T, 2-3) Superintendent, school board, teachers, students, parents, substitute teachers [perceptions from these people are a concern for this director]. (JS2, T, 3)		

(table continues)

Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Outside Definition of an Alternatively Certified Principal, *N*=6

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Outside" definition of alternative principal certification. These are candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program.		If the person was the best candidate for the position. (MS, T, 2) Never. I do not believe this action would benefit children, because the person would not be in the building due to professional development training. A building-level principal must understand the climate and culture of the building as well as the community. It is very important to establish relationships within and outside the building. (JS2, T, 4) In cases where there is a shortage of certified administrators. (DM, T, 2)	Implementation of curriculum standards. Understanding the dynamics of operating a school. Knowledge of how to improve student achievement. Coaching teachers to improve instruction. (BH, T, 2) Teachers, parents, central office staff. [perceptions of these people are a concern for this person]. (BH, T, 2) Teachers, other administrators, and parents [perceptions of these people are a concern]. (BR, T, 2) Teachers [perceptions of teachers are a concern for this person]. (JS, T, 1)		

(table continues)

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Raw Data Matrix (Direct Quotations) for Interviews With Directors of Human Resources Given the Outside Definition of an Alternatively Certified Principal, *N*=6

Source of data	General attitude	Conditions	Anticipated concerns	Needed support	Past behaviors
Nationwide directors of human resources representing urban, suburban, and rural school districts. "Outside" definition of alternative principal certification. These are candidates who have a master's degree in an area other than education, leadership experience outside education, no experience in education, and have not completed a university-based principal preparation program.		Prior to hiring; courses in educational leadership. (BH, T, 2) When there are no quality candidates who are certified in the pool. (BR, T, 3) I cannot think of any for my district. (BR, T, 3) If [there is] no one certified that I feel would do a good job. (MS, T, 2) Never – would hire a lead teacher before doing that. (JS, T, 2) Strong people skills and the ability to learn quickly. (BR, T, 3)	[Lack of] experience and professional development. (DM, T, 1) [Perceptions of] parents and other principals [are a concern]. (DM, T, 2)		

Note. The code for each direct quotation is in this order: the initials of the responding human resource director, the type of data (e.g., T=Transcript), the page number in the data.

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"Inside" Questionnaire

Welcome to the Alternative Principal Certification Web Questionnaire. Many believe that the quality of the building principal affects the achievement of students. Although national statistics show that there is an average of 17 candidates for each principal position, directors of human resources believe that too few of them have the ability needed to lead a learning community toward excellence (Roza, Celio, Harvey, & Wishon, 2003). Thus, in the minds of many directors a shortage of qualified candidates for the principalship exists. Because of the key role that directors of human resources play in supporting the hiring of principals, your views will be helpful in understanding the role alternative certification of school principals could play in reducing principal shortages. In this nationwide study, the beliefs of directors of human resources regarding the viability of alternative certification as a part of the solution to the principal shortage are explored.

There are 76 multiple choice questions in this questionnaire. Please respond by clicking in the circle next to the choice that best reflects your answer. Please answer every question. It is anticipated that the survey can be completed in 15 minutes or less.

Each item is numbered so that you can keep track of your progress.

Your name will not be associated with any of your beliefs, and data will be aggregated so that no individual can be identified by his or her responses. No names will appear in the final report. By responding to this survey you are giving your consent to participate.

**IMPORTANT: PLEASE USE THE FOLLOWING DEFINITION OF ALTERNATIVELY CERTIFIED PRINCIPALS WHEN RESPONDING TO THE QUESTIONNAIRE:

AN ALTERNATIVELY CERTIFIED PRINCIPAL IS ONE WHO:

>HAS A MASTER'S DEGREE IN EDUCATION
>HAS EXPERIENCE IN EDUCATION
>HAS NOT COMPLETED A UNIVERSITY-BASED PRINCIPAL PREPARATION PROGRAM

After completing the questionnaire and reviewing your answers, please click on the SUBMIT TAB at the very end of the questionnaire.

Code # sent via email:

1. **Gender:**
   ☐ Male
   ☐ Female

2. **My years of experience as a director of human resources are:**
   ☐ ≤5
   ☐ 6-10
   ☐ 11-15
   ☐ 16-20
   ☐ >20

3. **My school district location can be best described as:**
   ☐ Primarily Rural
   ☐ Primarily Suburban
   ☐ Primarily Urban

4. **My school district allows hiring of alternatively certified principals.**
   ☐ Yes
   ☐ No

5. **My school district is experiencing a shortage in the QUANTITY of principal candidates.**
   ☐ Yes
   ☐ No

6. **My school district is experiencing a shortage in the QUALITY of principal candidates.**
   ☐ Yes
   ☐ No

7. **Education: I hold a bachelor's degree, master's degree, or advanced degree in professional education.**
   ☐ Yes
   ☐ No

8. Work experience: Most of my work experience has been in the field of professional education (e.g., teacher, principal, etc.).

☐ Yes

☐ No

9. Certification in education is a barrier to the entry of high quality candidates into the field.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

10. At no time should there be an avenue for employment in education of people from fields other than education. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

11. Alternative certification is a good way to address shortages of educators.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

12. Alternative certification of educators is demeaning to traditionally certified educators. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

13. I believe alternative certification of educators is a good idea.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

14. Alternative routes to certification will increase the talent pool in education.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

15. Alternative certification of educators will harm our schools. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

16. Alternative certification of educators weakens the instructional program in schools. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

17. Alternatively certified principals would lack instructional leadership skills.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

18. Alternatively certified principals would struggle in the position, even with a strong mentor.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

19. Alternatively certified principals would not be able to articulate appropriate educational values.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

20. Alternatively certified principals would not know how to work with children.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

21. Alternatively certified principals would treat schools like a business.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

22. Alternatively certified principals would require too much professional development and training to make them effective school leaders.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

23. An alternatively certified principal would not be accepted by the school community (e.g., teachers, parents, other principals).

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

24. Alternatively certified principals would not be able to select teachers effectively.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

25. In the past I have considered supporting alternatively certified teachers.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

26. In the past I have considered supporting alternatively certified principals.

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

27. In the past I have avoided supporting alternatively certified applicants. (R)

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

28. In the past I have rated alternatively certified applicants unfairly. (R)

- 1 Strongly disagree
- 2 Disagree
- 3 Agree
- 4 Strongly agree

29. In the past I have withheld applications from alternatively certified educators. (R)

- 1 Strongly disagree
- 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

30. In the past I felt alternative certification of teachers was a good plan.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

31. I have not supported hiring alternatively certified teachers in the past. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

32. I have never supported hiring alternatively certified teachers. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

33. An alternatively certified principal who has successfully completed a rigorous internship could perform well in a school.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

34. An alternatively certified principal who is highly recommended by other educational administrators would be an acceptable educational leader.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

35. An alternatively certified principal who was successful in a non-public school setting could perform well in a public school.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

36. An alternatively certified principal who had acquired essential educational knowledge could be an effective educational leader.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

37. An alternatively certified principal who had acquired leadership skills in settings other than education could be an effective educational leader.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

38. Depending on specific conditions, an alternatively certified principal could be a successful educational leader.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

39. An alternatively certified principal who understands children could be a successful educational leader.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

40. An alternatively certified principal could perform well in some settings.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

41. My superintendent believes that alternatively certified principals are acceptable candidates for the principalship.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

42. I have school board members who believe that alternatively certified principals would be acceptable candidates for the principalship.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

43. Alternatively certified principals that I would usually ignore are considered acceptable by others of influence in my district.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

44. If it were not for pressure from influential others, I would not consider alternatively certified principals in my school district.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

45. Because of pressure from influential others, alternatively certified principals are not acceptable in my school district.

○ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

46. My superiors expect me to ignore the applications of alternatively certified principals.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

47. My superiors consider alternatively certified principals to be capable principal candidates.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

48. My superiors want me to overlook applications from alternatively certified principals.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

49. I would consider an alternatively certified principal if he or she were the "right fit" for the job.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

50. I would consider an alternatively certified principal if he or she were the most qualified candidate for the job.

☐ 1 Strongly disagree

☐ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

51. I would consider an alternatively certified principal if he or she had the leadership skills for which I am looking.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

52. I would consider an alternatively certified principal if he or she were knowledgeable about the field of education.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

53. I would consider an alternatively certified principal if he or she were willing to pursue a traditional certification while on the job.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

54. I would consider an alternatively certified principal if he or she had strong people skills.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

55. I would consider an alternatively certified principal if he or she were willing to take what I feel are crucial education courses.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

56. I would consider an alternatively certified principal if he or she had strong leadership skills.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

57. I would consider an alternatively certified principal if there were a shortage of certified administrators in my district.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

58. I would consider an alternatively certified principal if there were no certified candidates available.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

59. I would consider an alternatively certified principal if I had no other choice.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

60. I would consider an alternatively certified principal if the talent pool were shallow.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

61. I would consider an alternatively certified principal if no one I felt could do a good job were available.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

62. I would consider an alternatively certified principal if no certified principal applied for the principalship.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

63. I would consider an alternatively certified principal if I could not find a certified principal.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

64. I would consider an alternatively certified principal if there were no certified principals willing to take the principalship position.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

65. I would never support hiring an alternatively certified principal.

☐ Disagree

☐ Agree

66. I used to be adamantly opposed, but now I am more willing to support the hiring of alternatively certified principals than I have been.

☐ Disagree

☐ Agree

67. I have never thought about supporting the hiring of an alternatively certified principal.

◻ Disagree

◻ Agree

68. The best principal candidates have gone through the traditional certification route.

◻ Disagree

◻ Agree

69. I am ambivalent toward the concept of alternative certification for school principals.

◻ Disagree

◻ Agree

70. I always support hiring the candidate who has the greatest potential to be successful.

◻ Disagree

◻ Agree

71. I would not support the hiring of an alternatively certified principal if he or she had no teaching experience.

◻ Disagree

◻ Agree

72. I would be frightened about supporting the hiring of an alternatively certified principal.

◻ Disagree

◻ Agree

73. I always support hiring the most qualified candidate.

◻ Disagree

◻ Agree

74. I certainly would consider supporting the hiring of an alternatively certified principal, but I have not yet.

◻ Disagree

◻ Agree

75. I am receptive to supporting the hiring of alternatively certified principals.

⬜ Disagree

⬜ Agree

76. Would you be more willing to support the hiring of alternatively certified assistant or vice principals rather than principals?

⬜ Yes

⬜ No

Congratulations, you have completed the questionnaire. Please review your answers to be sure that you have answered every question and as you had intended.

When you are finished, please click on the SUBMIT tab below.

Thank you very much.

Note. Statements marked with (R) were *reverse scored.* Therefore, those items scored as 4 were scored as 1; those scored as 3 were scored as 2; those scored as 2 were scored as 3; and, those scored as 1 were scored as 4.

"Outside" Questionnaire

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There are 76 multiple choice questions in this questionnaire. Please respond by clicking in the circle next to the choice that best reflects your answer. Please answer every question. It is anticipated that the survey can be completed in 15 minutes or less.

Each item is numbered so that you can keep track of your progress.

Your name will not be associated with any of your beliefs, and data will be aggregated so that no individual can be identified by his or her responses. No names will appear in the final report. By responding to this survey you are giving your consent to participate.

**IMPORTANT: PLEASE USE THE FOLLOWING DEFINITION OF ALTERNATIVELY CERTIFIED PRINCIPALS WHEN RESPONDING TO THE QUESTIONNAIRE:

AN ALTERNATIVELY CERTIFIED PRINCIPAL IS ONE WHO:

>HAS A MASTER'S DEGREE IN AN AREA OTHER THAN EDUCATION
>HAS LEADERSHIP EXPERIENCE OUTSIDE EDUCATION
>HAS NO EXPERIENCE IN EDUCATION
>HAS NOT COMPLETED A UNIVERSITY-BASED PRINCIPAL PREPARATION PROGRAM

After completing the questionnaire and reviewing your answers, please click on the SUBMIT TAB at the very end of the questionnaire.

Code # sent via email:

☐

1. Gender:

☐ Male

☐ Female

2. My years of experience as a director of human resources are:

☐ ≤5

☐ 6-10

☐ 11-15

☐ 16-20

☐ >20

3. My school district location can be best described as:

☐ Primarily Rural

☐ Primarily Suburban

☐ Primarily Urban

4. My school district allows hiring of alternatively certified principals.

☐ Yes

☐ No

5. My school district is experiencing a shortage in the QUANTITY of principal candidates.

☐ Yes

☐ No

6. My school district is experiencing a shortage in the QUALITY of principal candidates.

☐ Yes

☐ No

7. Education: I hold a bachelor's degree, master's degree, or advanced degree in professional education.

☐ Yes

☐ No

8. Work experience: Most of my work experience has been in the field of professional education (e.g., teacher, principal, etc.).

☐ Yes

☐ No

9. Certification in education is a barrier to the entry of high quality candidates into the field.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

10. At no time should there be an avenue for employment in education of people from fields other than education. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

11. Alternative certification is a good way to address shortages of educators.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

12. Alternative certification of educators is demeaning to traditionally certified educators. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

13. I believe alternative certification of educators is a good idea.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

14. Alternative routes to certification will increase the talent pool in education.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

15. Alternative certification of educators will harm our schools. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

16. Alternative certification of educators weakens the instructional program in schools. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

17. Alternatively certified principals would lack instructional leadership skills.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

18. Alternatively certified principals would struggle in the position, even with a strong mentor.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

□ 4 Strongly agree

19. Alternatively certified principals would not be able to articulate appropriate educational values.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

20. Alternatively certified principals would not know how to work with children.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

21. Alternatively certified principals would treat schools like a business.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

22. Alternatively certified principals would require too much professional development and training to make them effective school leaders.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

23. An alternatively certified principal would not be accepted by the school community (e.g., teachers, parents, other principals).

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

24. Alternatively certified principals would not be able to select teachers effectively.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

25. In the past I have considered supporting alternatively certified teachers.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

26. In the past I have considered supporting alternatively certified principals.

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

27. In the past I have avoided supporting alternatively certified applicants. (R)

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

28. In the past I have rated alternatively certified applicants unfairly. (R)

◻ 1 Strongly disagree

◻ 2 Disagree

◻ 3 Agree

◻ 4 Strongly agree

29. In the past I have withheld applications from alternatively certified educators. (R)

◻ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

30. In the past I felt alternative certification of teachers was a good plan.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

31. I have not supported hiring alternatively certified teachers in the past. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

32. I have never supported hiring alternatively certified teachers. (R)

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

33. An alternatively certified principal who has successfully completed a rigorous internship could perform well in a school.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

34. An alternatively certified principal who is highly recommended by other educational administrators would be an acceptable educational leader.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

□ 4 Strongly agree

35. An alternatively certified principal who was successful in a non-public school setting could perform well in a public school.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

36. An alternatively certified principal who had acquired essential educational knowledge could be an effective educational leader.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

37. An alternatively certified principal who had acquired leadership skills in settings other than education could be an effective educational leader.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

38. Depending on specific conditions, an alternatively certified principal could be a successful educational leader.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

39. An alternatively certified principal who understands children could be a successful educational leader.

□ 1 Strongly disagree

□ 2 Disagree

□ 3 Agree

□ 4 Strongly agree

40. An alternatively certified principal could perform well in some settings.

  ☐ 1 Strongly disagree

  ☐ 2 Disagree

  ☐ 3 Agree

  ☐ 4 Strongly agree

41. My superintendent believes that alternatively certified principals are acceptable candidates for the principalship.

  ☐ 1 Strongly disagree

  ☐ 2 Disagree

  ☐ 3 Agree

  ☐ 4 Strongly agree

42. I have school board members who believe that alternatively certified principals would be acceptable candidates for the principalship.

  ☐ 1 Strongly disagree

  ☐ 2 Disagree

  ☐ 3 Agree

  ☐ 4 Strongly agree

43. Alternatively certified principals that I would usually ignore are considered acceptable by others of influence in my district.

  ☐ 1 Strongly disagree

  ☐ 2 Disagree

  ☐ 3 Agree

  ☐ 4 Strongly agree

44. If it were not for pressure from influential others, I would not consider alternatively certified principals in my school district.

  ☐ 1 Strongly disagree

  ☐ 2 Disagree

  ☐ 3 Agree

  ☐ 4 Strongly agree

45. Because of pressure from influential others, alternatively certified principals are not acceptable in my school district.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

46. My superiors expect me to ignore the applications of alternatively certified principals.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

47. My superiors consider alternatively certified principals to be capable principal candidates.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

48. My superiors want me to overlook applications from alternatively certified principals.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

49. I would consider an alternatively certified principal if he or she were the "right fit" for the job.

○ 1 Strongly disagree

○ 2 Disagree

○ 3 Agree

○ 4 Strongly agree

50. I would consider an alternatively certified principal if he or she were the most qualified candidate for the job.

○ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

51. I would consider an alternatively certified principal if he or she had the leadership skills for which I am looking.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

52. I would consider an alternatively certified principal if he or she were knowledgeable about the field of education.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

53. I would consider an alternatively certified principal if he or she were willing to pursue a traditional certification while on the job.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

54. I would consider an alternatively certified principal if he or she had strong people skills.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

55. I would consider an alternatively certified principal if he or she were willing to take what I feel are crucial education courses.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

56. I would consider an alternatively certified principal if he or she had strong leadership skills.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

57. I would consider an alternatively certified principal if there were a shortage of certified administrators in my district.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

58. I would consider an alternatively certified principal if there were no certified candidates available.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

59. I would consider an alternatively certified principal if I had no other choice.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

60. I would consider an alternatively certified principal if the talent pool were shallow.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

61. I would consider an alternatively certified principal if no one I felt could do a good job were available.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

62. I would consider an alternatively certified principal if no certified principal applied for the principalship.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

63. I would consider an alternatively certified principal if I could not find a certified principal.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

64. I would consider an alternatively certified principal if there were no certified principals willing to take the principalship position.

☐ 1 Strongly disagree

☐ 2 Disagree

☐ 3 Agree

☐ 4 Strongly agree

65. I would never support hiring an alternatively certified principal.

☐ Disagree

☐ Agree

66. I used to be adamantly opposed, but now I am more willing to support the hiring of alternatively certified principals than I have been.

☐ Disagree

○ Agree

67. I have never thought about supporting the hiring of an alternatively certified principal.

○ Disagree

○ Agree

68. The best principal candidates have gone through the traditional certification route.

○ Disagree

○ Agree

69. I am ambivalent toward the concept of alternative certification for school principals.

○ Disagree

○ Agree

70. I always support hiring the candidate who has the greatest potential to be successful.

○ Disagree

○ Agree

71. I would not support the hiring of an alternatively certified principal if he or she had no teaching experience.

○ Disagree

○ Agree

72. I would be frightened about supporting the hiring of an alternatively certified principal.

○ Disagree

○ Agree

73. I always support hiring the most qualified candidate.

○ Disagree

○ Agree

74. I certainly would consider supporting the hiring of an alternatively certified principal, but I have not yet.

○ Disagree

☐ Agree

75. I am receptive to supporting the hiring of alternatively certified principals.

☐ Disagree

☐ Agree

76. Would you be more willing to support the hiring of alternatively certified assistant or vice principals rather than principals?

☐ Yes

☐ No

Congratulations, you have completed the questionnaire. Please review your answers to be sure that you have answered every question and as you had intended.

When you are finished, please click on the SUBMIT tab below.

Thank you very much.

Note. Statements marked with (R) were *reverse scored.* Therefore, those items scored as 4 were scored as 1; those scored as 3 were scored as 2; those scored as 2 were scored as 3; and, those scored as 1 were scored as 4.

APPENDIX K

Descriptive Statistics for Each Question Used in the
Final Analysis for the Inside and Outside Definition Groups

Table K1

Descriptive Statistics for Each Questionnaire Item Used in the Final Analysis (Inside Definition), N=123

Item	N	Min.	Max.	M	SD
1	123	1	2	1.60	.49
2	123	1	5	2.16	1.33
3	123	1	3	1.97	.65
4	121	1	2	1.68	.47
5	122	1	2	1.71	.45
6	122	1	2	1.38	.49
7	123	1	2	1.13	.34
8	123	1	2	1.18	.39
9	122	1	4	1.99	.67
10 (R)	123	1	4	3.01	.66
11	123	1	4	2.86	.61
12 (R)	122	1	4	2.96	.57
13	123	1	4	2.85	.57
14	123	1	4	2.92	.55
15 (R)	119	2	4	3.03	.47
16 (R)	123	1	4	2.85	.53
17	122	1	4	2.48	.66
18	122	1	4	2.40	.63
19	120	1	4	2.12	.47
20	120	1	3	2.03	.46
21	121	1	4	2.35	.53
22	121	1	4	2.25	.52
23	122	1	4	2.48	.61
24	122	1	4	2.24	.63
25	120	1	4	2.98	.60
26	118	1	4	2.42	.67
27 (R)	120	1	4	2.80	.62
28 (R)	118	1	4	3.23	.51
29 (R)	120	1	4	3.23	.65
30	117	1	4	2.91	.67
31 (R)	118	1	4	3.07	.69
32 (R)	119	1	4	3.32	.62
33	120	1	4	2.95	.58
34	119	1	4	2.83	.54

(table continues)

Table K1 (continued)

Descriptive Statistics for Each Questionnaire Item Used in the Final Analysis (Inside Definition), N=123

Item	N	Min.	Max.	M	SD
35	119	1	4	2.65	.55
36	120	2	4	2.98	.47
37	120	1	4	2.81	.58
38	120	2	4	3.08	.41
39	119	2	4	2.92	.50
40	120	2	4	3.06	.33
41	109	1	4	2.42	.70
42	108	1	4	2.37	.61
43	112	1	4	2.11	.58
44	114	1	4	1.94	.61
45	111	1	4	2.09	.67
46	113	1	4	2.09	.77
47	107	1	4	2.38	.65
48 (R)	114	1	4	2.05	.68
49	118	1	4	2.95	.63
50	117	1	4	3.05	.68
51	118	1	4	3.00	.64
52	118	1	4	2.92	.62
53	118	1	4	2.96	.61
54	117	1	4	2.77	.59
55	116	1	4	2.86	.57
56	115	1	4	2.89	.60
57	118	1	4	2.85	.55
58	119	1	4	2.92	.60
59	117	1	4	2.84	.62
60	117	1	4	2.82	.55
61	117	1	4	2.79	.57
62	116	1	4	2.80	.58
63	116	1	4	2.86	.57
64	116	1	4	2.81	.56
76	119	1	2	1.29	.46

Note. Items 65-75 were Thurstone scale items (see Table C4, Appendix C).

Descriptive Statistics for Each Question Used in the
Final Analysis for the Inside and Outside Definition Groups

Table K2

Descriptive Statistics for Each Questionnaire Item Used in the Final Analysis (Outside Definition), N=118

Item	N	Min.	Max.	M	SD
1	118	1	2	1.57	.48
2	118	1	5	2.29	1.32
3	118	1	3	2.00	.54
4	114	1	2	1.75	.43
5	117	1	2	1.72	.45
6	117	1	2	1.50	.50
7	118	1	2	1.11	.31
8	118	1	2	1.15	.36
9	118	1	4	1.98	.82
10 (R)	118	1	4	2.99	.67
11	118	1	4	2.81	.66
12 (R)	117	1	4	2.91	.62
13	118	1	4	2.80	.59
14	116	1	4	2.88	.58
15 (R)	118	2	4	2.98	.49
16 (R)	118	1	4	2.71	.63
17	118	1	4	2.83	.76
18	116	1	4	2.53	.63
19	118	1	4	2.28	.70
20	117	1	4	2.05	.52
21	117	2	4	2.62	.60
22	114	1	4	2.31	.67
23	117	1	4	2.64	.70
24	118	1	4	2.27	.72
25	117	2	4	3.03	.54
26	116	1	4	2.22	.70
27 (R)	117	1	4	2.84	.60
28 (R)	116	2	4	3.26	.48
29 (R)	115	1	4	3.13	.68
30	116	1	4	2.85	.59
31 (R)	116	1	4	3.07	.63
32 (R)	117	1	4	3.20	.66
33	117	1	4	2.81	.69
34	118	1	4	2.76	.71

(table continues)

Table K2 (continued)

Descriptive Statistics for Each Questionnaire Item Used in the Final Analysis (Outside Definition), N=118

Item	N	Min.	Max.	M	SD
35	117	1	4	2.74	.60
36	116	1	4	2.84	.54
37	117	1	4	2.70	.63
38	115	1	4	2.97	.52
39	116	1	4	2.82	.54
40	115	1	4	2.98	.48
41	103	1	4	2.28	.68
42	102	1	4	2.40	.60
43	104	1	3	2.02	.48
44	108	1	4	1.97	.62
45	107	1	4	2.13	.66
46	109	1	4	2.06	.75
47	103	1	4	2.30	.58
48 (R)	108	1	4	2.08	.67
49	112	1	4	2.88	.55
50	113	1	4	3.07	.56
51	114	1	4	2.95	.56
52	114	1	4	2.87	.49
53	113	1	4	2.85	.64
54	115	1	4	2.77	.59
55	115	1	4	2.80	.53
56	114	1	4	2.87	.56
57	114	1	4	2.84	.54
58	113	1	4	2.96	.52
59	114	1	4	2.83	.58
60	114	1	4	2.76	.55
61	113	1	4	2.73	.57
62	113	1	4	2.81	.55
63	112	1	4	2.86	.54
64	113	1	4	2.81	.55
76	115	1	2	1.36	.48

Note. Items 65-75 were Thurstone scale items (see Table C4, Appendix C).

VITA

Douglas L. Hartley

ACADEMIC EXPERIENCES

Virginia Polytechnic Institute and State University, Blacksburg, VA, Spring 2007, Ph.D. Educational Leadership and Policy Studies

The George Washington University, Washington, D.C., Summer 1993, M.A. Educational Administration and Human Development K-12 Education

Longwood College, Farmville, VA, Spring 1991, B.S. Earth Science and Secondary Education

PROFESSIONAL EXPERIENCES

July, 2006 – Present – Assistant Principal, York County School Division, Tabb High School

August, 2002 – July, 2006 – Assistant Principal, York County School Division, Bruton High School

August, 2000 – August, 2002 – Assistant Principal, York County School Division, Grafton High School

August, 1996 – June, 2000 – Earth science teacher and coach (football, wrestling, and track), York County School Division, Grafton High School

August, 1991 – June, 1996 – Earth science teacher and coach (football and wrestling), York County School Division, Tabb High School

Attachment A

INSTITUTIONAL REVIEW BOARD (IRB) LETTERS OF APPROVAL

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Institutional Review Board

Dr. David M. Moore
IRB (Human Subjects) Chair
Assistant Vice President for Research Compliance
1880 Pratt Drive, Suite 2006(0497), Blacksburg, VA 24061
Office: 540/231-4991; FAX: 540/231-0959
email: moored@vt.edu

DATE:

MEMORANDUM

TO: David J. Parks ELPS 0302
                Douglas Hartley

FROM: David Moore

SUBJECT: **IRB Expedited Approval:** "Variation in the Willingness of Directors of Human Resources to Support Hiring Alternatively Certified Principals" IRB # 05-509

This memo is regarding the above-mentioned protocol. The proposed research is eligible for expedited review according to the specifications authorized by 45 CFR 46.110 and 21 CFR 56.110. As Chair of the Virginia Tech Institutional Review Board, I have granted approval to the study for a period of 12 months, effective September 1, 2005.

Virginia Tech has an approved Federal Wide Assurance (FWA00000572, exp. 7/20/07) on file with OHRP, and its IRB Registration Number is IRB00000667.

cc: File
    Department Reviewer: Jan K. Nespor

A Land-Grant University - Putting Knowledge to Work
An Equal Opportunity/Affirmative Action Institution

Attachment B

Virginia Tech
VIRGINIA POLYTECHNIC INSTITUTE
AND STATE UNIVERSITY

Institutional Review Board

Dr. David M. Moore
IRB (Human Subjects) Chair
Assistant Vice President for Research Compliance
1880 Pratt Drive, Suite 2006(0497), Blacksburg, VA 24061
Office: 540/231-4991; FAX: 540/231-0959
email: moored@vt.edu

DATE: September 23, 2005

MEMORANDUM

TO: David J. Parks ELPS 0302
               Douglas Hartley

FROM: David Moore

SUBJECT: **IRB Exempt Approval:** "Variation in the Willingness of Directors of Human
               Resources to Support Hiring Alternatively Certified Principals" IRB # 05-573
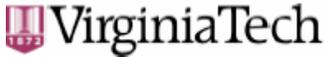
I have reviewed your request to the IRB for exemption for the above referenced project. I concur
that the research falls within the exempt status. Approval is granted effective as of September 23,
2005.

Virginia Tech has an approved Federal Wide Assurance (FWA00000572, exp. 7/20/07) on file with
OHRP, and its IRB Registration Number is IRB00000667.

cc: File
    Department Reviewer: Jan K. Nespor

A Land-Grant University - Putting Knowledge to Work
An Equal Opportunity/Affirmative Action Institution

VirginiaTech

Office of Research Compliance
1880 Pratt Drive (0497)
Blacksburg, Virginia 24061
540/231-4358 Fax: 540/231-0959
E-mail: ctgreen@vt.edu
www.irb.vt.edu

DATE: February 16, 2006

FWA00000572(expires 7/20/07)
IRB # Is IRB00000667.

MEMORANDUM

TO: David J. Parks
           Douglas Hartley

FROM: Carmen Green

SUBJECT: **IRB Exempt Approval:**   "Variation in the Willingness of Directors of Human
           Resources to Support Hiring Alternatively Certified Principals" , IRB # 06-088

I have reviewed your request to the IRB for exemption for the above referenced project. I concur that
the research falls within the exempt status.   Approval is granted effective as of February 16, 2006.

As an investigator of human subjects, your responsibilities include the following:

1.   Report promptly proposed changes in previously approved human subject research
     activities to the IRB, including changes to your study forms, procedures and
     investigators, regardless of how minor. The proposed changes must not be initiated
     without IRB review and approval, except where necessary to eliminate apparent
     immediate hazards to the subjects.

2.   Report promptly to the IRB any injuries or other unanticipated or adverse events
     involving risks or harms to human research subjects or others.

cc: File
    Department Reviewer:Jan K. Nespor

Invent the Future

VIRGINIA POLYTECHNIC INSTITUTE UNIVERSITY AND STATE UNIVERSITY

An equal opportunity, affirmative action institution