THE DEVELOPMENT OF A COMPARATIVE APPRAISAL OF PERCEIVED RESOURCES AND DEMANDS FOR PRINCIPALS

by

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A dissertation submitted to the faculty of
The University of North Carolina at Charlotte
in partial fulfillment of the requirements
for the degree of Doctor of Education in
Educational Leadership

Charlotte

2011

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ABSTRACT

DREW RORY MAERZ. The development of a comparative appraisal of perceived resources and demands for principals. (Under direction of DR. CLAUDIA P. FLOWERS)

The purpose of this study was to develop the Comparative Appraisal of perceived Resources and Demands for Principals (CARD-P), which is used for appraising perceived stress in the elementary school principalship. An appraisal-based definition of stress was derived from literature and used as the theoretical framework for creating the instrument. The instrument was developed to capture the cognitive-transactional nature of stress as the differential between the subjective appraisal of demands and resources within the school/school district environment. The instrument was adapted from the Classroom Appraisal of Resources and Demands – School-aged Version developed by Lambert, McCarthy, & Abbott-Shim (2001).

The CARD-P was developed in three stages. The first stage utilized a questionnaire given to a purposeful sample of six current principals stratified by grade level to determine characteristics (personal, school, and school system), demands, and resources perceived as most contributing to stress in the principalship. Due to the differences between perceptions of elementary and high school principals, the instrument was designed for elementary principals. The second stage aligned the characteristics, demands and resources with relevant literature to generate items and subscales for inclusion in a prototype. In the final stage, cognitive interviews with six elementary principals were used to improve the comprehension, structure, and clarity of the instrument.

The CARD-P (Appendix G) is a 104-item instrument for measuring perceived stress in the elementary school principalship. The CARD-P employs four sub-scales: two scales with short anwers for general information about the principal (13 items) and the school/school district (16 items), a 36-item perceived demands subscale with a five-point Likert-like scale from 1 (not demanding) to 5 (extremely demanding), and a 34-item perceived resources and supports subscale with a five-point Likert-like scale from 1 (very unhelpful) to 5 (very helpful). Four open-ended questions are also included in the measure. Through these sub-scales, the CARD-P attempts to measure principal stress as the difference between the perceived demands and the perceived resources subscales. While the data from this study supports the potential of the instrument for use by elementary principals, future research is needed to assess the technical quality of the instrument. Future research may also include the expansion of the CARD-P for middle and high school principals.

ACKNOWLEDGEMENTS

I would like to thank:

Cynthia, my wife, who walks life's path with me every day; and never complains about my pace or detours.

John C. Maerz, my father, who taught me the value and importance of education.

Barbara Maerz, my mother, who loves me and believes in me, unconditionally.

Tanner and Emi, my children, who inspire me, love me, and bring me joy every day.

Dr. Claudia Flowers and Dr. Dawson Hancock, who demonstrated patience, offered guidance, and provided encouragement throughout this process.

Drs. Richard G. Lambert, Christopher McCarthy, and Martha Abbott-Shim for developing the Classroom Appraisal of Resources and Demands (CARD) upon which the instrument developed in this study is based.

"By perseverance, the snail reached the ark." – Charles H. Spurgeon

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CHAPTER 1: INTRODUCTION

Quality school leadership is a key component in creating and maintaining an effective school. School-based administrators play a vital role in building quality school leadership. They set the direction for school improvement, support teacher development as professionals, and strongly impact student learning (Davis, Darling-Hammond, LaPointe & Meyerson, 2005). Effective school-based administrators have the ability to establish vibrant learning communities that support the education and success of both students and teachers (Cusick, 2005).

School-Based Administrator Shortage

Unfortunately, effective school school-based administrators are becoming more difficult to find. The shortage of school-based administrators available to lead our public schools has been well documented for more than a decade (Gutterman, 2007; Fenwick, 2001). This shortage of school administrators is due to the simple law of supply and demand: the supply of candidates is decreasing and the demand, or number of vacancies, is increasing due to the number of school-based administrators leaving the profession.

The supply of candidates for school-based administrator vacancies is in decline. In a study of Michigan superintendents and human resources directors, Cusick (2003) noted that the number of candidates for school principal positions fell by nearly 50% during the previous 15 years. Similar decreases in applicants for principal positions

were noted by Lovely (2004), where the number of expected applicants for principal vacancies in an urban school district decreased from near 40 in the late 1970s to fewer than 10 at the time of the study. The magnitude of this decrease has been noted by superintendents. In a study of 176 superintendents, the diminished supply of principal candidates was identified as "somewhat extreme" or "extreme" by 50% of the respondents (Whitaker, 2001).

The limited supply of school-based administrator applicants represents a change from the traditional career pathways. The traditional professional trajectory for school leadership was to begin as a teacher, earn your advanced degree and then move into a principalship (Gutterman, 2007). Today, many teachers are satisfied with their position and salary and are opting not to move into administration (Ryan, 2006). Teachers are not willing to accept the increased responsibility and demands of being a school principal (Gutterman, 2007; Johnson, 2005; Lovely, 2004; Cusick, 2003). The decrease in the number of applicants for school-based administrator vacancies is not necessarily due to a lack of qualified candidates, some educators who earn their principal licensure are choosing not to become principals. In a report in the *Los Angeles Times*, only 38% of the 2,000 to 3,500 California educators who earn their principal licensure actually became school-based administrators (Orozco & Oliver 2001). Orozco & Oliver (2001 p.1) state, "This is a staggering loss of leadership potential. No other profession can claim such a high loss of interest after professional preparation." The result of the decrease in qualified candidates was evidenced in a study conducted by the National Association of Elementary School Principals and the National Association of Secondary

School Principals which found that about half of the school districts surveyed reported a poor candidate pool for the school principal positions they were trying to fill.

The limited supply of potential school-based administrator applicants is occurring while the demand for new school-based administrators is peaking. According to the Educational Research Service in 1999 (as cited in Lovely, 2005), 40% of all public school principals were expected to retire by 2010. A similar study by the Ohio Department of Education reported that nearly 60% of educational leaders were eligible for retirement in the next four years (Rayfield & Diamantes, 2004). In a Northeast Regional Elementary School Principals' Council study of 3,200 principals, 42% indicated they planned on retiring in the next five years (Ryan, 2006). This high level of retirements is not a surprise. As Dan Collins, executive director of the Pennsylvania Association of Elementary and Secondary School Principals shared, it is a function of the baby boomer generation retiring (cited in Ryan, 2006). However, retirements do not account for all the principal vacancies in schools.

School-based administrators leave schools for a variety of reasons. According to the 2008–09 Principal Follow-up Survey conducted by the National Center for Educational Statistics, there were 89,920 public school principals in the United States in 2007-08 (Battle, 2010). Twenty percent (18,470) of these principals changed positions by the start of the 2008-09 academic year. Of the non-staying principals, 6.9% (6,210) moved to a different school, 11.9% (10,690) left the principalship or retired, and 1.8% (1,570) left the principalship and their current positions were unknown. Of the school-based administrators who left the principalship 45.4% retired, 15.6% continued working in a K-12 school, 33.2% were working in education outside a school, and 3.2% left

education. After accounting for retirements, 6.2% (5559) of all public school principals left the principalship and 2.2 % (1978) accepted a demotion or left education all together.

The findings from the 2008–09 Principal Follow-up Survey illustrate a challenging trend; many principals are leaving the principalship without retiring (Battle, 2010). Johnson (2005) shared data from a study by Stephen Davis (1997) showing 10% of principals leave their jobs to return to the classroom or quit education all together. This mirrors the findings of Lovely (2004). She identified a turnover rate of 42% in elementary principalships over a 5 year period. Johnson (2005) calls these principals, who voluntarily quit the principalship, "exiters."

As school administrators and policy makers look to address the growing school administrator shortage, they will need to improve the supply of or decrease the demand for principals. Efforts to improve the supply of qualified candidates for principalships continue to be the focus of research (Lovely, 2004; Cusick, 2003; Whitaker, 2001; Fenwick, 2001). While localized efforts have been made to encourage school-based administrators to postpone retirement or advancement to other educational leadership positions (Lovely, 2004), there is minimal research in this area. The remaining piece of the demand portion of the principal shortage is the "exiters" (Johnson, 2005), the principals who voluntarily leave their principalship. The examination of the causes for principals exiting a principalship continues to be a focus for study (Papa, 2007; Johnson, 2005; Lovely, 2004; Rayfield & Diamantes, 2004).

Exiting the Principalship

Ebaugh (1998) described a four-step process for exiting roles. The first step in the role exit process is *first doubts*. First doubts occur when an individual begins to question whether a current role or position is right for him/her. First doubts usually result from organizational changes, job burnout, disappointment or drastic modifications in relationships, and specific events. First doubts usually correspond with a general feeling of inadequacy or dissatisfaction and leads to seeking alternatives. *Seeking alternatives* is the second step in the role exit process. While seeking alternatives, an individual begins to compare his/her current role with alternative roles. While seeking alternatives, individuals weigh new roles, test social support, evaluate the stress or freedom the new role affords, and assess the pros and cons of change. After evaluating options, individuals reach a *turning point* when staying in their current role is no longer viable. The turning point is "an event that mobilizes and focuses awareness that old lines of action are complete, have failed, have been disrupted, or are no longer personally satisfying" (p.123). Upon passing the turning point, the final step to a role exit is *creating the ex-role*. When creating the ex-role, the individual integrates the norms newly acquired roles with their previous identity to create a new sense of self.

Johnson (2005) employed Ebaugh's role exit process with principals who voluntarily left the principalships. In interviews with 12 former principals, she found two types of exiters: satisfied and dissatisfied. Three principals were satisfied with their principalship, but left to pursue a more promising role. Nine principals were dissatisfied and sought alternatives to their role as a principal. Focusing on the unsatisfied principals, Johnson identified three reasons for the principals experiencing first doubts.

Four principals entered the profession to influence and help children, but found many obstacles preventing their efforts. Three principals desired to work with teachers and professional development, but found the burdens of management limited their effectiveness as instructional leaders. The final two principals experienced first doubts due to personal reasons. One exiter struggled with the high physical and emotional toll of the principalship and the other faced a family illness that limited her time to be effective. Four principals identified specific turning points in making their decision to exit the principalship. All the principals, satisfied and dissatisfied, identified adjustments made in creating their ex-role. Most discussed the process needed to reconcile their reasons for entering the principalship with their reasons for exiting it. While identifying the challenges to leaving the principalship (telling their staff, missing relationships with staff and students), these challenges did not offset their reasons for exiting.

Johnson (2005) identified four areas exiters identified as reasons for seeking alternatives to the principalship. School culture was one area exiters identified. Dissatisfied principals identified a desire to improve instruction and learning, but found the static culture of schools and aversion of their staff to change a hindrance and frustration. A workload that far exceeded the school day was a second reason for seeking alternatives. Exiting principals found the time demands, including attendance at school and community functions while serving as an instructional leader, supervising their staff and managing the school, were unreasonable. The third reason for exiting was bureaucracy. Exiters cited central office demands, local/state/federal policies and laws, mountains of paperwork, and evaluation responsibilities as bureaucratic impediments.

The final area of challenge identified was student discipline and irate parents. None of the principals missed dealing with the complications and emotions surrounding discipline and unsupportive or hostile parents. For the principals in the study, these challenges defined the tipping point that led them to become ex-principals.

Johnson's (2005) findings are echoed in other studies (Combs, Edmonson, & Jackson, 2009; Papa, 2007; Gutterman, 2007; Lovely, 2005; Rayfield & Diamantes, 2004; Cusick, 2003; Fenwick & Pierce 2001). Sodoma and Else (2009) noticed a sharp increase in the duties and responsibilities of school-based administrators over recent years. These responsibilities included taxpayer and legislative demands for more services, competent workers, higher achievement scores, and remedies for many social issues. Cusick (2003) identified some of the many responsibilities that fall on school-based administrators, including school improvement, annual reports, accountability, core curriculum, student safety, gender and equity issues, staff development, special education, and student achievement. These responsibilities were not only assigned to the principal, but in some states they are legislated duties (NC Gen. Stat., §115C-288, 2010). Else and Sodoma (1999) found job demands and the time required to meet these demands are the primary job dissatisfaction issues identified by school-based administrators. Similarly, when asked to identify the primary barriers to an effective principalship, principals identified stress (91%) and time required at work (86%) as the top barriers. Low pay (67%), accountability mandates (64%) and increasing disrespect from students (54%) were other barriers identified by principals (DiPaola & Tschannen-Moran, 2003).

Unfortunately, these demands have not only led school-based administrators to exit the principalship; they have also led to increased levels of exhaustion, stress, and burnout principals experience (Combs et al., 2009). While not exclusive from one another, the exhaustion, stress, and burnout often contribute to the decision to leave the principalship. As Whitaker (1996) discovered, the conditions that lead to stress and burnout are often just the daily demands of the principalship.

While most school-based administrators report satisfaction with their job and moderate to low levels of stress (Sodoma & Else, 2009), the number reporting moderate to high levels of dissatisfaction and burnout are increasing. In a study by Combs et al. (2009), 8.8% of principals in a large southwestern state (N = 4206) reported high levels of burnout and 26.8% reported moderate levels of burnout. From their study, more than a third of all principals are candidates for exiting the principalship.

The shortage of principals places an emphasis on the need to support school-based administrators reporting moderate to high levels of stress and burnout. To identify these school-based administrators and to target the support and resources they require, a more cogent description of the factors predicting stress among school school-based administrators is required (Combs et al., 2009). To maintain school-based administrator job satisfaction, the demands principals face must be identified to help them work effectively (Sodoma & Else, 2009). Identifying the demands and sources of stress, before they lead to burnout, is tantamount to supporting and retaining principals experiencing first doubts or seeking alternatives.

Identifying and Measuring Demands and Stress

Identifying the demands current school-based administrators perceive in their principalship can assist in providing the resources and support needed to retain quality school leaders. Despite the importance of this information and the number of studies looking at school-based administrator retention, little is known about the pressures and demands school-based administrators face under the current system of accountability (Akiba & Reichardt, 2004). Post facto studies have identified the duties and responsibilities which school-based administrators have perceived as the causes for their exiting the profession (Johnson, 2005; Rayfield & Diamantes, 2004; Akiba & Reichardt, 2004). Analyses of research over the past 20 years have also yielded insight into why school-based administrators change schools or leave their positions (Papa, 2007; Lovely, 2005; Gmelch & Gates, 1998). However, research on sitting school-based administrators is limited to studies exploring the relationships between job demands, resources, and burnout (Combs, Jackson, & Edmonson, 2007). With the studies of practicing school-based administrators being limited; research into stress within education, human services in general, and other educational professions may provide the insights needed to support principals.

Today's schools can be stressful places to work (Moody & Barrett, 2009). Educational and school reform efforts, poor working conditions, excessive paperwork, limited resources, and poor efficacy can lead to stress in educators (Hammond & Onikama, 1997). Yet, the challenges faced in meeting the educational and developmental needs of students that often seem overwhelming can simultaneously be motivational. The desire to find the right instructional methodology, resource, or

strategy to help students learn and grow often proves to be both stressful and stimulating on a professional level. According to Goodwin, Cunningham, and Childress (2003), this dichotomy of motivation and stress contributes significantly to the number of teachers and school administrators leaving our schools today (in Moody & Barrett, 2009). With the ever present challenges within the school and classroom, it is easy for educators to experience stress, become overstressed, and reach the tipping point of exiting their professional roles (Botwinik, 2007).

Stress and burnout are problems in human service professions in general (Weiclaw, Agerbo, Mortensen, & Bonde, 2006; Shinn, Rosario, Mørch, & Chestnut, 1984). Weiclaw and colleagues (2006) researched the relative risk of depression and stress in human service professions. They defined human service professions as health care, education, social work, and customer services. Their population based case-control study (N = 28,971) showed consistent association between employment in human services occupations and the risk of affective and stress related disorders. Risks were highest for education and social service occupations. These findings are similar to other studies on stress in human services (Shinn et al., 1984) and reflect the research findings in education in general (Moody & Barrett, 2009).

While there are differences in the stress they experience (Moody & Barrett, 2009), both the principalship (Goodwin, Cunningham & Eagle, 2005) and teaching are viewed as occupations with a high risk of stress (Lambert, McCarthy, O'Donnell & Wang, 2009). Stress within both roles may manifest similar professional outcomes. Teaching has documented personnel shortages due to a lack of qualified applicants (Ingersoll, 2001), has large numbers exiting the profession (Keigher, 2010; Ingersoll,

2001) and is studied extensively for stress and burnout (O'Donnell, Lambert & McCarthy, 2008). In addition, teachers work in the same settings and may experience some of the same social, cultural, and political pressures as school-based administrators.

The educational workplace may facilitate the factors leading to stress and burnout. Ingersoll (2001) noted that administrative support, student discipline, and teacher efficacy contribute to teachers' perception of stress and turnover. According to the most recent Teacher Follow-up Survey, teachers cited working conditions, school factors, salary and/or benefits, and student performance factors as reasons for leaving the profession (Keigher, 2010). Student performance factors have increased relevance since the passage of the "No Child Left Behind Act" (P.L. No. 107-110, H.R., 2001). The intensified accountability measures have impacted the stress experienced by teachers and school-based administrators (Fisher, 2009; Johnson, 2005; Lovely, 2004; Cusick, 2004).

Work related stress can be defined as a characteristic of the work environment that poses a threat to the individuals (Wolverton, Wolverton & Gmelch, 2002). The cognitive-transactional model of stress suggests that as a threat or demand is perceived, a person weighs their resources or capacity to address it (Lazarus & Folkman, 1984). If the demand exceeds the resources available, a stress response is triggered (Sapolsky, 1998). If the demands consistently exceed the resources available leading to multiple stress responses, burnout can result. Burnout and high levels of stress may contribute to both teachers and principals leaving the profession.

In an effort to study how to best help teachers prevent stress and burnout, the Classroom Appraisal of Resources and Demands (CARD) was developed (Lambert, Abbott-Shim, & McCarthy, 2001). The CARD allows teachers to cognitively appraise

their perception of classroom demands, which theoretically contribute to stress, and their perception of school-provided resources (Lambert et al., 2009). The CARD was originally developed to assess the resources and demands perceived by preschool teachers in their classrooms (Lambert, Abbott-Shim & McCarthy, 2001). The CARD School-Age Version (CARD-SA) was adapted for elementary teachers from the original CARD (Lambert, McCarthy & Abbott-Shim, 2001). The CARD-SA focuses on the demands of the elementary school classroom environment and the school supplied resources available to teachers to meet those demands (Lambert, McCarthy, & Abbott-Shim, 2001). The research on both instruments has been supportive of their reliability and validity for use with teachers (Lambert, O'Donnell, Kusherman & McCarthy, 2006).

After developing CARD instruments for both preschool and the elementary school, the potential application of the CARD model into other educational professions was hypothesized. The expansion of the CARD for middle school and high school teachers led to the development of the CARD secondary version (Lambert, McCarthy & Fisher, 2008). The first extension of the CARD model beyond classroom teachers was for school counselors (McCarthy & Lambert, 2008). The Counselor's Appraisal of Resources and Demands (CARD-SC) was developed by revising and adapting the CARD to examine the relationship between the demands and resources in the school counselors work environment (McCarthy et al., 2010). Initial research supports the reliability of using the CARD-SC with school counselors.

Purpose of Study

The development of the CARD from its initial use in preschool classrooms to the use with elementary and, now, middle and secondary teachers demonstrates the

flexibility of the instrument to be used in a variety of classroom and school settings. The creation of the CARD-SC for school counselors demonstrates the adaptability of the instrument for other professions within education. One novel adaptation of the CARD model would be to appraise the perceived resources and demands of principals. The development of a CARD-P instrument, unique to the principalship, could support the identification of the stressors experienced by current principals and define school or system supplied resources and support needed to retain quality school leaders. Ergo, the purpose of this study is to develop the Comparative Appraisal of perceived Resources and Demands for Principals (CARD-P). The CARD-P will be developed to measure the differential between the subjective appraisal of both demands and resources perceived by principals; thereby attempting to capture the cognitive-transactional nature of stress within the principalship.

The loss of school-based administrators due to job dissatisfaction, stress, and burnout evidences the need for support. The CARD-P may provide principals the ability to appraise the perceived demands within the principalship and their perceived availability of coping resources. Together, these perceived demands and resources combine to define stress in the cognitive-transactional model. The identification of demands and resources will theoretically support efforts to lower the stress experienced by school-based administrators.

Research Questions

The current study seeks to develop an instrument to measure the perceived stress of principals by appraising their perception of resources and demands within their current position. The measure is based on the cognitive-transactional model of stress

(Lazarus & Folkman, 1984) and is modeled after the CARD developed by Lambert, Abbott-Shim and McCarthy (2001). The assessment will be composed of five parts, including (1) general demographic information about the principal, (2) general characteristics about their school and district, (3) an appraisal of perceived current demands, (4) an appraisal of perceived available resources, and (5) general open-ended questions. The major research questions of this study are as follows:

1. What personal characteristics or experiences do principals perceive as influencing the level of principal stress?
2. What school or system characteristics do principals perceive as influencing the level of principal stress?
3. What professional demands, experienced in the school or school district environment, do principals perceive as contributing to principals' stress?
4. What school or system provided resources or support do principals perceive to be available to cope with perceived demands?
5. Can an appraisal instrument be developed for appraising demands elementary principals perceive in the school or school district environment and the resources available to meet those demands?

Delimitations and Limitations

Covering a broad realm of human experience, stress is a difficult term to define (Hobfoll, 2001). For this study, stress is viewed within the appraisal paradigm using a cognitive-transactional model. Stress is defined as the relationship between a person and the environment that is appraised by the person to create a demand that exceeds his or her perceived resources for coping with the demand, thus endangering his or her well-

being (Lazarus & Folkman, 1984). Operating within this definition, stress measured by the CARD-P instrument is theorized to be the differential between perceived resources and demands as defined by the subject. Generalizations or use of the instrument within other stress paradigms or beyond the individual perceptions or appraisals should not be assumed.

The appraisal paradigm of stress emphasizes a subject's perception of demands and resources. The perceived lack of resources in the face of demands theoretically results in stress. The focus on perceptions may not result in actual experience of a threat or frustration. This imbalance between perceptions and the experience of stress may limit the generalization of the results for principals currently experiencing stress.

The study populations of principals for the practitioner and instrument review panels were both convenience samples. The subjects included current principals in a rural, North Carolina school district. Although principals may encounter similar experiences from district to district and state to state, it should not be assumed that the perceived demands and resources of these principals represent the perceived demands of principals in other districts or states (Creswell, 2008; Marshall & Rossman, 2006). By using a population from one school district, a full complement of personal and professional demographics may not be represented (Creswell, 2008). In addition, generalizations about principals in schools from suburban or urban schools or school districts should not be assumed.

The principals selected for the practitioner and instrument review panels voluntarily participated in the research. Therefore, the findings were based on subjects who volunteered to participate and may not reflect the range of personal and professional

demographics of all principals (Creswell, 2008). An additional consideration is that response bias may have been a possibility if principals felt pressure or a responsibility to respond to the survey or interview in a positive manner (Creswell, 2008).

Due to the nature of the CARD, the instrument's items are to reflect the perceived demands and resources of current professionals. Thus, the principals contributing to the practitioner and instrument review panels needed to be both experienced and currently serving as a principal. Therefore, the study population was delimited to current principals with a minimum of three years of experience in the principalship. The generalization of the findings to novice principals may be limited due to the unique demands and resources they may perceive (Roberson, Schweinle & Styron, 2003)

The data were collected from public school principals in a rural, North Carolina school district; therefore, no private or charter school-based administrators were included. North Carolina schools are required to administer state proficiency and growth exams as part of compliance with the *No Child Left Behind* (*NCLB*) federal legislation and North Carolina accountability model. While all traditional public schools in North Carolina are required to participate in these assessments, private and charter schools are exempt from these requirements. These may limit the generalization of the findings for private or charter school principals.

The data collection from the practitioner and instrument review panels occurred during the last 12 weeks of the school year. As the end of the school year is traditionally the most stressful for principals (Hiebert & Mandaglio, 1988; Hiebert & Bassarman, 1986; Hembling & Gilliland, 1981), principals participating in the panels may be more

attuned to the perceived demands related to the end of the school year. Other demands may present themselves or be perceived as more demanding at other times during the academic year.

The final CARD-P instrument was designed to measure the perceived demands and resources of elementary principals. Upon analysis of the data gathered from the Practitioner Appraisal of Perceived Stress questionnaire, 48% of the identified perceived demands and resources were unique to elementary and high school principals, respectively. To improve the relevance of the instrument, items were aligned to the responses of elementary principals. This may limit the generalization of the findings for middle and high school principals.

Definitions

CARD: the Classroom Appraisal of Resources and Demands instrument (McCarthy et. al, 2001) is a self-appraisal of the subjective experience of both classroom demands and resources provided by the school. The CARD attempts to capture the situationally specific nature of teacher stress (Lambert et al., 2009).

CARD-P: the Comparative Appraisal of perceived Resources and Demands for Principals instrument (Appendix G)

Cognitive-transactional paradigm of stress: a paradigm within stress research which emphasizes the perceptual nature of stress (Folkman & Lazarus, 1988; Matheny, Aycock, Pugh, Curlette & Canella, 1986). Stress is hypothesized to result from an appraised imbalance between perceived demands and the perceived adequacy of one's resources to cope with the demands (Brack & McCarthy, 1996; Folkman & Lazarus, 1988; Lazarus, 1966). Demands and resources are perceived and

appraised from both an individual and social/cultural process (Meyer, 2003, Lazarus, 2001; Hobfoll, 1998; Bernard & Krupat, 1994)

Demand: a perceived stimulus or situation that, within the context that it is experienced, is appraised as a threat or may lead to frustration (Monat & Lazarus, 1991)

Measurement Themes: themes identified by two or more members of the practitioner panel and assigned an impact value of 4.00 or higher. Measured themes were generated in the areas of personal and school characteristics, demands, and resources that are perceived to create or limit stress in the principalship.

Principal: the primary leader of a school building or school, used interchangeably with school-based administrator.

Resource (coping resources): an individual's subjective appraisal of personal properties (health, energy, positive beliefs, problem-solving and social skills), social support (emotional, informational or tangible), and/or materials (i.e., money, goods, and services) that define their availability to cope with perceived demands (Lazarus & Folkman, 1984)

School-based administrator: the primary leader of the school, in most cases the principal or headmaster.

Stress: from a psychological perspective and the cognitive-transactional paradigm, stress is "the relationship between a person and the environment that is appraised by the person to be taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p.19). This builds upon the definitions hypothesized by Gmelch & Swent (1984) and Lazarus (1966).

Overview of Research

This study will be presented in five chapters. The first chapter has served as an introduction to school-based administrator stress, the current shortage of school-based administrators, the reasons school-based administrators are leaving the profession and candidates are choosing not to become principals, and means for identifying and measuring demands and stress experienced by principals. The purpose of the study, statement of the research questions, delimitations and limitation, and definitions of key terms were included. The second chapter contains a review of the literature as it relates to stress and coping, measuring resources and demands within the cognitive-transactional stress model, the use of the CARD instrument with classroom teachers and counselors, and the working life of school-based administrators, and the relevant empirical research that has been conducted to this point. The third chapter presents the methodology to be used in the study, including participants, sampling method, survey methods, survey creation, and the use of the cognitive interview methodology to assess psychometric properties of the instrument. The fourth chapter presents the results of this research by addressing each research question. Finally, the fifth chapter summarizes the study and includes limitations and recommendations for future research on the development and testing of the psychometric properties of the Comparative Appraisal of perceived Resources and Demands for Principals instrument.

CHAPTER 2: REVIEW OF LITERATURE

An extensive review of research and related literature was conducted to provide context for this study. Literature and research were reviewed in three areas: (1) a general understanding of stress and coping, (2) the measurement of resources and demands, and (3) the work life of the school-based administrators.

Stress and Coping

The entomology of the word "stress" shows the word originated from the French *destresse* meaning hardship, adversity, force, or pressure (Harper, 2010). Scientifically, the term "stress" was first used in physics and chemistry to describe pressures applied to a system in order to study the impact and dynamic changes that result from these pressures (Matheny & Ashby, 2005). The term "stress" was adapted in the social sciences in the study of groups and individuals who are confronted by events or pressures to which they must adapt.

Covering a broad realm of human experience, stress is a difficult term to define (Hobfoll, 2001). Drawing from its scientific origins, it is usually defined in terms of internal or external stimuli that require a response from an individual (Gugliemi & Tatrow, 1998; Lazarus, 1990; Sparks, 1983). Monat and Lazarus (1991) recognized the inability of researchers to define stress and attribute this difficulty to the complex nature of stress as a phenomenon. The difficulty in defining stress has led some to suggest discarding the use of the term (Hinkle, 1974; Mason, 1975). While others contend the

term should be used as a broad label for the complex arena of stimuli and response (Lazarus, 1966). Matheny & Ashby (2005) suggest that in the current vernacular, stress is an umbrella term used to define sources of, responses to, and symptoms of stressors.

The difficulty of defining stress may derive from the various paradigms within stress research. Schwarzer (2001) identified three general paradigms of stress research: response-based, stimulus-based, and cognitive-transactional. The response-based paradigm identifies a stressor through a response or pattern of responses (Heath, 1995). Hans Selye's (1974) General Adaptation Syndrome model of stress is grounded in the response-based paradigm and defines stress as "the nonspecific response of the body to any demand made upon it" (p. 27). The stimulus-based paradigm identifies a stressor by the preceding disruptive or distressing events (Heath, 1995). Holmes and Rahe (1967, p.217) wrote that stress involves "events whose advent…requires a significant change in the ongoing life pattern of the individual." Their Social Readjustment Rating Scale is grounded in the stimulus-based model. Both the response-based and stimulus-based paradigms view individuals as passive participants and do not account for individual differences in both perception and response to stimuli (Heath, 1995). The resource-based paradigm, also called the appraisal paradigm, is presently accepted as the standard in the field of psychology (Schwarzer, 2001; Hobfoll, 1998; Monet & Lazarus, 1991) and considers stress to be a dynamic process of appraising demands against available resources. Using the appraisal model theorized by Lazarus (1966), Monat and Lazarus (1991) defined stress as any event in which the demands of the stimuli exceed the adaptive resources of the individual to respond. Unlike the response-based and stimulus-

based paradigms, the appraisal paradigm recognizes individual differences in both the perception of and responses to stimuli (Heath, 1995).

While Schwarzer (2001) identified three paradigms of stress research, Hobfoll (2001) sees his Conservation of Resources theory as a new paradigm of stress research. Hobfoll (2001) recognized the contributions of Lazarus (1966) in creating a robust and supportable appraisal theory of stress research, but identified two fundamental limitations to Lazarus' theory: (1) appraisals of resources and demands must wait until the *proximal-moment* of a demand is perceived and (2) the lack of information as to why individuals make certain appraisals.

Hobfoll (2001) questions the *proximal-moment* appraisal of resources and demands. Expanding upon the research of Aspinwall and Taylor (1997), Hobfoll theorized that appraisals need not be reactive to a given demand. People actively and proactively appraise their environment, life situations, personal goals, potential obstacles or demands, and seek to gain or conserve resources, continuously. He sees the cognitive process of appraisal as both reactive to a perceived demand and proactive to perceived potential demands. Simultaneously, people appraise their available resources and are motivated to continually acquire, maintain, and foster resources.

Hobfoll's COR theory (1998) theorizes the rationale behind why people make certain appraisals. He sees appraisals as automatic outgrowth of learned rules of interpretation, as well as shared and cultural scripting of responses. Hobfoll states, "This interpretation that appraisals are centrally idiographic is, I think, itself a reflection of the cultural, Western bias that champions the crystallized self and sees it as divisible from the embedded self" (2001, p.341). Hobfoll theorizes that coping is both an individual

and group process. Individuals and groups proactively cope by acquiring and maintaining resource reservoirs, responding to early warning signs of demands, and choosing to position themselves to maximize advantages. While self-directed appraisal plays a large role in the cognitive-transactional model, social and cultural influences often direct, limit, or block individual pathways of action and response.

Hobfoll (1998) suggests that the inclusion of social and cultural influences on demands and provide resources extends the cognitive-transactional model of stress. The notion that stress is related to social and cultural structures and conditions is both intuitively appealing and conceptually difficult according to Hobfoll (1998). It is appealing because it pulls from the rich foundations of psychological and sociological theory that defines a person by both individual traits and behaviors, but also accounts for his or her interactions with both the social and cultural environment in which he or she lives (Meyer, 2003). It is conceptually difficult because stress in the traditional cognitive-transactional model, as defined by Lazarus and Folkman (1984), emphasizes individual instead of social or cultural elements.

Bernard and Krupat (1994) envisioned stress as an interplay between both the individual and social/cultural environment. Their bio-psycho-social model theorizes that stress involves two factors: internal, external, and their interaction. The internal factors of stress are the personal neurological and physiological reactions to stress. The eternal factors are the environmental, social, and cultural events and experiences preceding a stress event. Finally, the interaction between the internal and external factors involves the individual's cognitive process or appraisal of the stress situation or demand. Theoretically, each individual brings a unique set of internal and external factors to a

stress situation and their interaction leads to idiographic appraisal and stress responses. This bio-psycho-social model of the stress response attempts to explain why individuals experiencing similar demands under similar life conditions may have widely varying responses (Pearlin, 1982).

While his claim of developing a new paradigm or theory has been questioned (Lazarus, 2001; Schwarzer, 2001), Hobfoll's (1998) efforts have extended the cognitive-transactional model (Schwarzer, 2001). Lazarus (1999) even acknowledged the importance of both personal psychological resources and social/cultural environmental demands. Using an analogy of a seesaw (1999, p. 58), Lazarus visualized the need for balance between personal demands and resources on one side and environmental resources and demands on the other. The adjustment of the appraisal or cognitive-transactional model to include social and cultural demands and resources extends the theory and may account for why appraisals vary when individuals are confronted with a demand.

Organizations and the work place are social/cultural environments in which stress has been studied for more than a half-century. Efforts to define and study stress in these environments have produced numerous models within the three stress paradigms. Kahn, Wolfe, Quinn, Snoek, and Rosenthal (1964) perceived stress as a function of three tensions which occur in organizational roles: ambiguity, conflict, and overload. McGrath (1976) expanded this definition to include the demands resulting from organizational stress. In a widely cited study of 1200 school administrators, McGrath's model was pared down to four sources of stress (Koch, Tung, Gmelch & Swent, 1982;

Gmelch & Swent, 1984). These four sources are role-based stress, conflict-mediating stress, task-based stress, and boundary-spanning stress.

Building upon the four sources of stress model, Gmelch and Burns (1994) developed a working definition of stress grounded in the cognitive-transaction paradigm. They defined stress as an individual's anticipated inability to effectively respond to a demand, in conjunction with an expectation of a negative consequence for an insufficient response. Within this definition, stress is the result of a person's appraisal that a situation or demand exceeds the resources available to adequately handle it.

When an individual is unable to effectively respond to a demand (a stress situation), he/she may perceive the demand as a threat or experience frustration (Monat & Lazarus, 1991). Threat is the perception of potential harm based upon an appraised demand exceeding available resources. With threat, the harm has not yet occurred but all cues identify a demand as a potential stress situation. Once a demand creates a stress situation, frustration is the result. Frustration is a general term used to describe the psychological and/or physiological harm that results from a demand that blocks or hinders progress toward a goal. Frustration is the stress response to a stress situation that is ongoing or already happened. According to Monat and Lazarus (1991), the distinction between these two types of stressful situations is significant in determining the individual response. Frustration is post facto and the individual can only compensate for the harm done, make amends, accept it, or give up on the goal. Threats, or perceived harm, can be prepared for through preventive measures or coping resources.

While both frustration and threats have different causation, both can manifest physiological and psychological reactions (Heath, 1995; Matheny et al., 1986).

However, the stress reactions are idiographic and unique for each individual (Hobfoll, 2001). Demands are individually appraised with respect to situation and the personal resources possessed. The perception of one's ability to adequately handle the demand through resources leads to individualized responses and reactions (Gmelch & Burns, 1994).

The process of managing a stress situation is coping (Lazarus, Averill, & Opton, 1974; Lazarus & Folkman, 1984). Monat and Lazarus (1991) view coping as an individual's efforts to master the demands that exceed or strain his/her available resources. They suggest that coping occurs in two main categories: problem-focused and emotion-focused. Problem-focused coping occurs when an individual seeks to modify the person-environment relationship to remove or diminish the demand (threat). Emotion-focused responses occur when an individual seeks to relive the emotional or physiological impact of not meeting the demand (frustration). In the process of coping, individuals do not use either strategy exclusively. Rather, they are used in combination to address the source of stress and assure personal wellbeing (Monat & Lazarus, 1991).

Matheny and colleagues (1986) note that research and intervention models primarily center on emotion-focused, or combative, resources. The term combative is used as these resources are employed to diminish or limit frustration. The research, focusing on the person-environment relationship or preventive resources, was limited (McCarthy et al., 2002). In an additional study, Matheny and colleagues (1993) found that most stress coping instruments assessed stress responses (combative resources) rather than coping resources (preventive resources).

In response to the gap in research regarding coping resources, Hobfoll (1998) focused on the appraisal of preventive resources in his conservation of resources model. The importance of studying coping resources was echoed by other researchers (Schwarzer, 2003; McCarthy et al., 2002; Matheny et al., 1993). Hobfoll (1998) argued that the assessment of coping resources is more predictive of stressful reactions than the measurement of demands. McCarthy and colleagues (1997) suggest that preventive coping resources allow an individual to modify or control demands that are encountered. If the preventive coping resources are adequate, they may even remove the perceived demand and preclude the need for a stress response (McCarthy et al., 1986).

Within cognitive-transactional models of stress, there is a continuous, dynamic interaction between the individual and the environment (Schwarzer, 2001). This interaction engages the individual in a constant appraisal of perceived demands, available resources, and coping responses/resources (Matheny et al., 2003). Demands are perceived stimuli or situations that are appraised as a threat or may lead to frustration (Monat & Lazarus, 1991). Resources are appraised personal properties, social support, and/or materials available to cope with perceived demands. A model of the dynamic interaction involved in stress prevention and coping was theorized by McCarthy and colleagues (see Figure 1, 2002). This model illustrates a theoretical process of stress and coping. The model begins with a cognitive-transactional model of demand and resource appraisal (Lazarus & Folkman, 1984). When experiencing a life event, an individual becomes aware of a demand. The individual makes an appraisal of his/her available resources to face the demands. When the resources exceed the demand, the life event is viewed as a challenge or opportunity, presenting the individual with the opportunity for

growth and optimal functioning. When the demands of the life event exceed the available resources, the result is a stress situation eliciting a stress response. In an effort to minimize the stressor and/or stress response, a secondary appraisal of the individual's coping resources occurs. Available coping resources may be preventive, changing the individual's perception of the life event, awareness of the demand or combative. Combative resources can be employed to reduce the threat (problem-focused strategies) or frustration, (emotion-focused strategies).

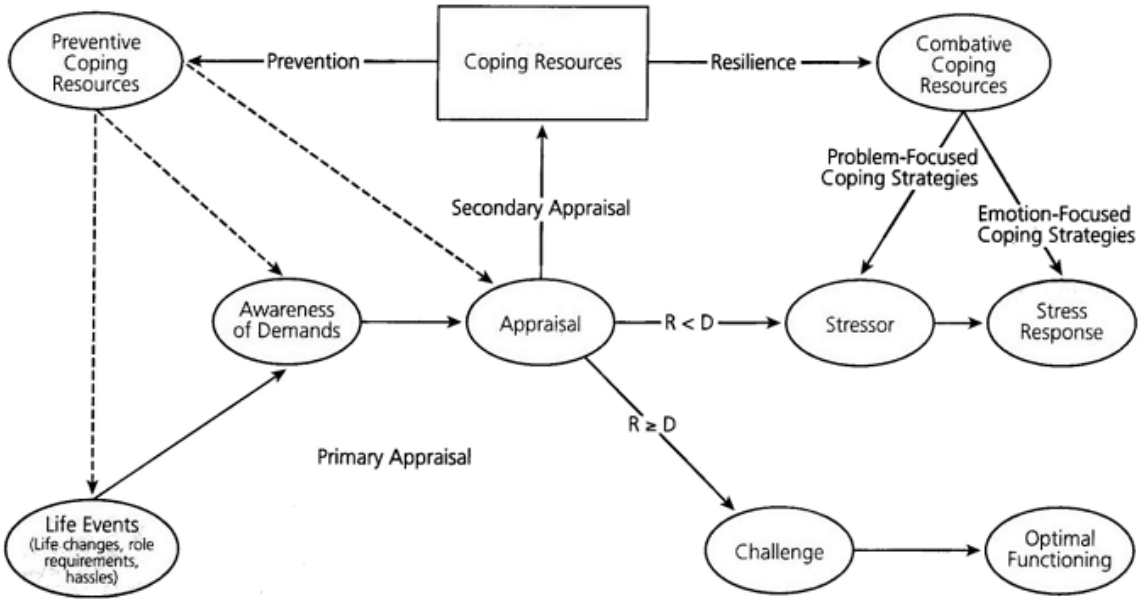

Figure1. Model of prevention of stress and coping. From "Factor structure of the preventive resources inventory and its relationship to existing measures of stress and coping" by C. J. McCarthy , R.G. Lambert, M. Beard, and A. Dematatis, 2002, in *Toward Wellness: Prevention, Coping, and Stress*, G. S. Gates and M. Wolverton (eds.). Information Age Publishing, Greenwich, Connecticut.

The hypothesized impact of preventive coping resources makes the McCarthy, Lambert, Beard, and Dematatis (2002) model unique from Lazarus and Folkman's (1984) cognitive-transactional model of stress and coping. In Figure 1, the points in the stress process where preventive coping resources may be most relevant are shown with dashed lines. According to McCarthy et al. (2002), preventive coping resources may change an individual's perception of life events as they are experienced and never escalate them to the demand status. Preventive coping resources may also change the perception of the demand once it is identified. The presence of preventive coping resources may also amend the individual's appraisal of his/her ability to handle encountered demands.

The appraisal of demands and resources in the prevention of stress and coping is generally accepted in the field of psychology (Lazarus, 2001; Schwarzer, 2001). Hobfoll (2001) argues that the idiographic model of appraisal is too limited and neglects external, environmental phenomenon in favor of internal, cognitive appraisals. He expounds that all demands or stress situations are situated in social context or involve social consequences. To account for both perspectives, Hobfoll (1998, 2001) offered the Conservation of Resources (COR) theory that considers both external and internal processes with equal value.

The basic tenet of COR theory is that individuals strive to obtain, retain, protect, and foster resources (Hobfoll, 1998, 2001). While these resources have individual value, they are products of a culture or environment. Hobfoll (1998) identified 74 resources that appear to have validity in Western cultures and are thus conserved. These resources include personal health, efficacy, feeling of success, and financial stability. When these

resources are not conserved, stress will occur. There are three instances in which resources are not conserved: (1) resources are threatened with loss, (2) resources are actually lost, and (3) a failure to gain sufficient resources following significant resource investment (Hobfoll, 2001). Within COR, a change in resources (particularly the loss) leads to stress situations, not the lack of resources available to address a given demand.

While Hobfoll (2001) believes COR to be a new paradigm of stress research, many believe it to be an extension of the cognitive-transactional paradigm (Lazarus, 2001; Schwarzer, 2001; Thompson & Cooper, 2001). Schwarzer (2001) sees COR theory as part of a movement to expand stress and coping research by including concepts of optional functioning (McCarthy et al., 2002), challenge and benefit (Lazarus, 1990), and resource gain/loss (Hobfoll, 1998, 2001). All these concepts are in line with the preventive coping theory of McCarthy, Lambert, Beard, and Dematatis (2002). People strive to expand coping strategies, minimize demands, and retain/gain additional resources (both internal and external) to prevent future stress or crises.

Measuring Resources and Demands

The application of stress theory has historically focused on measuring demands (stressors) or stress responses. As a practical matter, there has not been a good means for measuring stress as a cognitive process within the transactional model (Weiner, Freedheim, Schinka, Nezu & Geller, 2003). Most common procedures utilized to assess stress are either stimulus-based or response-based. Efforts over recent years have moved the foci of measurement from stimulus and responses to appraisal and coping behaviors (Rahe, Veach, Tolles & Murakami, 2000).

Response-based measures focus on the frustration resulting from stress. These measures view the stress response as occurring independent of the demand or stressor. In this model, frustration may be manifested through symptoms, emotions, illness, or physiological and psychological changes within an individual (Weiner et al., 2003). Some response-based instruments employ a "perceived stress scale" that ask individuals the magnitude of the stress experienced. An example was utilized by Ekehammar, Schalling and Magnusson (1975) in which individuals were asked to rate their experienced degree of anxiety, anxiousness, etc. Unfortunately, the use of these measures can be misleading because they ask an individual to assess the situation post facto (Schwarzer, 2000). In hindsight, individual assessments of perceived stress can confound the stress situation with the experienced frustration (Schwarzer, 2000). The ability to isolate the demand from the stress response may be beyond the cognitive ability of the individual. Other response-based inventories focus on the physiological stress responses by measuring heart rate, blood pressure, work attendance rates, or other health and wellness measures (Matheny et al. 1993). These stress responses can also be measured indirectly through symptoms such as teen pregnancy, divorce rates, or incidences of violence.

Stimulus-based instruments define critical events or demands. Within the stimulus based theory, the response is dependent upon the nature of the demand (Ekehammar et al, 1975). Stimulus-based instruments have been utilized since the late 1950s, when Hawkins, Davies, and Holmes (1957) introduced the Schedule of Recent Experiences (SRE, in Weiner et al., 2003). The SRE is a checklist of major life events experienced by the subject during the past year. Each major life event experienced is

allocated a score based on the severity of its impact on one's life. The total of these scores theoretically define the amount of stress experienced by the subject. The SRE was refined by Holmes and Rahe (1967) into the better known Social Readjustment Rating Scale (SRRS). The SRRS assigns stress value to life events experienced by the subject. For example, the death of a spouse is assessed a value of 100 and is comparable to the combination of the death of a close friend (37) and a jail term (63). As both have a value of 100, two subjects experiencing these events, respectively, would expect to experience comparable physiological and psychological stress responses. Most early stress instruments followed the SRE and SRRS model of objectively measuring the cumulative effect of life events (Matheny et al. 1993).

The lack of subjective feelings or personal perception has raised questions about the reliability of the life inventory approach of stimulus-based inventories (Weiner et al., 2003; Matheny et al., 1993). Initial efforts to address these questions had subjects assign weights to each event based on the severity of the stress response (Weiner et al., 2003). Another effort was to introduce the Daily Hassles and Daily Uplift Scale (Lazarus and Folkman, 1989). This scale recognized that individuals are often more affected by frequent minor events than by the occasional occurrence of a major event and those events can both cause and diminish demands. Even with these modifications, the reliability of checklists are low (Weiner et al., 2003) and still uniquely focus on the measurement of perceived demands (Matheny et al., 1993).

Assessments of demands and stress responses are static measures and do not account for the cognitive appraisals which occur within the transactional model of stress. Cognitive-transactional theorists recognize the need to assess demands and resources, as

well as coping resources and available responses, to adequately measure stress. Initial attempts to expand the scope of stress inventories beyond stimulus and response involved the assessment of coping responses.

Most coping research through the late 1970s emphasized global traits or styles of coping (Lazarus & Folkman, 1984). Early instruments in coping research included Schultz's Coping Operations Preference Inventory in 1967, Glesher and Ihievich's Defense Mechanism Inventory in 1969, and the California Psychology Inventory in 1977 (in Lazarus & Folkman, 1984). Within these scales, subjects were interviewed about stress situations and their coping responses; then their coping responses were categorized. These inventories were found to be unreliable and lacked discriminant validity in identifying the styles of coping. Lazarus and Folkman (1984) expanded upon these early models and further moved away from response-based inventories with their Ways of Coping Checklist. They assessed coping by having individuals reconstruct recent stress situations and describe what they thought, felt, and did. From these interviews, a checklist of coping mechanisms was developed to assess the coping responses employed by subjects. Lazarus and Folkman (1984) clearly understood the limits of their checklist as a conceptualization of coping and not a concrete measurement.

Other instruments were developed to measure multi-dimensional aspects of the cognitive-transactional stress model (Matheny et al., 1993). Stone and Neale (1984) employed an open-ended approach by presenting subjects with stress situations and offering choices of coping responses (in Lazarus & Folkman, 1984). Subjects were then asked if they employed similar resources in personal stress situations. Wong and Reker

(1983) used a similar multi-dimensional methodology; having subjects select problems and hassles that were pertinent to their life and then identify the coping strategies they employed to address them (in Lazarus & Folkman, 1984). Rahe, Veach, Tolles, and Murakami (2000) developed the Stress and Coping Inventory (SCI) utilizing eight measured dimensions. Rahe and his colleagues utilized four inventories to measure stress and four additional inventories to assess coping skills to determine a subject's vulnerability to stress responses. The four stress measures in the SCI were a demographic/historical inventory, the Recent Life Change Questionnaire, questionnaires about the recent health of the subject, and an assessment of behaviors and emotions. The SCI also employed four coping measures: Health Habits, Social Support, a Response to Stress inventory derived from the Ways of Coping inventory (Lazarus & Folkman, 1984), and a life satisfaction inventory. By blending the stress and coping models, Rahe and colleagues (2000) proposed a theoretical measure of stress levels within the participants. Due to the scope and the time required to implement the SCI, it found limited use. In addition, these instruments failed to create a comprehensive measure of coping resources, providing only a limited view of the coping responses employed by subjects (Matheny et al. 1993).

To measure stress within the cognitive-transactional model, instruments must assess both demands and coping resources, not only responses (Schwarzer, 2000; Matheny et al, 1993; Lazarus & Folkman, 1984). Stress researchers define resources as being both material and personal (Lazarus & Folkman, 1984). The personal nature of resources suggests that both coping and the experience of stress are subjective and idiosyncratic. Personal resources derive from personal social structures, life events,

education, and other individual experiences. Materials resources are those gathered or provided by individuals to address demands as they arise.

The situational appraisal of resources and demands is especially important in the educational context. In schools and classrooms, both resources and demands can vary considerably depending on students, professional background, and school environment (McCarthy, Lambert, Beard, & Dematatis, 2002). To assess the resources and demands in education, specific measures are required that consider the unique situations of educators (O'Donnell et al., 2008)

The Classroom Appraisal of Resources and Demands (CARD) instrument was developed to assess the unique demands and resources experienced by teachers (Lambert, Abbott-Shim, & McCarthy, 2001). The demands measured in the CARD include students with problem behaviors, class sizes, administrative issues, excessive paperwork, and pressures from administrators (Lambert et al. 2009). The resources measured by the CARD emphasize materials available to teachers in their school (O'Donnell et al., 2008). Two unique forms of the CARD were developed, one for school-age teachers and a second for preschool teachers (CARD-PS).

The CARD instrument was developed using existing research on teacher stress (McCarthy et al., 2009). During the development, several pilot studies were conducted with feedback obtained from the participants on the content and format of the questions and the instrument as a whole (McCarthy et al., 2009). The instrument is composed of 84 items. General information about the school and teacher are gathered through 19 questions. The Classroom Demands scale consists of 35 classroom/school demands with a five-point Likert-like scale from 1, "not demanding", to 5, "extremely demanding."

The Classroom Resource scale consists of 30 classroom/school resources with a five-point Likert-like scare from 1, “very unhelpful”, to 5, “very helpful.” Care was taken to create the demand items to assure they were clearly demands and the resource items were distinct. The correlation between the scales was (r = -.208), indicating they were conceptually distinct (McCarthy et al., 2009). The data from these two CARD scales provide unique measures of teacher resources and demands.

A stress score from the CARD is calculated using the difference score between the two measures. The measure of stress is determined by subtracting the scale scores, Demand minus Resources (Lambert et al., 2009). The difference score classifies teachers in one of three groups. Subjects with Resource scales exceeding the Demand scale (R>D) were considered resourced. Subjects with a Resource scale was within the 95% error of measurement of the Demand Scale (R=D) were considered balanced. When the Demand scale exceeded the Resource scale (R<D), the subjects were considered at risk due to increased demand.

Research on the CARD evidences the reliability and validity in the use of the instrument. Lambert and colleagues (2007) demonstrated a sample-specific reliability evidence for the Demands scale (α = .916) and Resources scale (α = .954). Factor analysis results evidenced construct validity of the instrument. Criterion validity was also evidenced through associations with predicted scale score directions and the classroom demographic information. Study of the CARD-PS evidenced similar findings (Lambert et al., 2006) with sample-specific reliabilities for Demands (α = .94) and Resources (α = .95). Factor analysis results also defined the construct validity of the instrument. Criterion validity was also evidenced through associations between scale

scores and predictions based on classroom demographic information. O'Donnell and colleagues (2008) yielded a reliability of the difference score measuring stress, Demands minus Resources, of .94.

The reliability and valid use of the CARD and CARD-PS has led to the adaptation of the instrument for other areas in education. In a study by McCarthy, Kerne, Calfa, Lambert, and Guzmán (2010), the CARD was adapted for use with school counselors (CARD-SC). The CARD-SC was developed to examine the relationship between the demands and resources of school counselors to assess their perceived stress. Other areas identified for potential CARD instruments are middle and high school teachers and additional support personnel (Lambert et al., 2009). One area for extension of the CARD model would be for school-based administrators.

Efforts to measure stress in school-based administrators using a resource and demand model have been attempted. Using the 35-item Administrator Stress Index (ASI) they developed, Swent and Gmelch (1982) surveyed 1,150 school administrators in Oregon. The survey categorized demands into five factors: administrative constraints, administrative responsibility, interpersonal relations, intrapersonal conflicts, and role expectations. Each factor was assessed using seven items. The survey identified the five most stressful demands as (1) complying with state, federal and organizational rules and policies, (2) feeling that meetings take up too much time, (3) trying to complete reports and other paper work on time, (4) trying to gain public approval and /or financial support for school programs, and (5) trying to resolve parent school conflicts. Within their findings, five of the ten most stressful demands were found in the administrative constraints factor. Brimm (1981) administered the ASI in Tennessee and found similar

results. The ASI continues to be utilized to measure because of its strong validity and reliability, with a factor correlation of .70 or higher on each dimension (Gmelch & Swent, 1984). While the ASI has proven itself to be valid and reliable in the measurement of demands faced by school-based administrators, it does not attempt to address the resource dimension of the cognitive-transactional model of stress.

Gmelch and Gates (1998) expanded upon the ASI in a study conducted in the spring of 1991. Their research included 656 subjects that were stratified and randomly selected to include elementary, junior high/middle school, and high school principals, as well as superintendents. Subjects within the study were administered an Administrator Work Inventory (AWI). The AWI is comprised of six instruments and a demographic questionnaire. The instruments utilized were the ASI, the Maslach Burnout Inventory (MBI), the Administrative Role Questionnaire, the Social Support Questionnaire, the Type A Personality inventory, and the Bern Sex-Role Inventory. The data from this study has been used in multiple research studies including links between stress and burnout (Torelli & Gmelch, 1993), coping and stress (Gmelch & Chan, 1995), the influence of role ambiguity and conflict on stress and burnout (Gmelch & Torelli, 1994), and personal, professional, and organizational characteristics on burnout (Gmelch & Gates, 1998). The limits of the AWI are the length of the inventory and the focus on administrator burnout. While a secondary finding shows a significant correlation between administrators' perceived stress and their perceived coping effectiveness (Gmelch & Chan, 1995), the instrument does not define the resources available or give direction on how to expand perceived coping effectiveness.

Building on the job-demand and control/resources (Demerouti, Bakker, de Jonge, Janssen, & Schaufeli, 2001) and conservation of resources (Hobfoll, 1998) models, Combs, Jackson, and Edmonson (2007) researched the resources and demands of elementary principals. Their study was linked with a larger study of 4,206 elementary principals conducted by the National Association of Elementary School Principals (NAESP) measuring demographic information, responsibilities, resources, and challenges of elementary principals. In addition to the NAESP survey, an instrument was developed to assess burnout as predicted by job demands, job resources, and relationships (Combs et al., 2007). Using a sample of 228 elementary principals, the findings suggest job resources and relationships were predictive of burnout among elementary principals. Within the instrument, job resources were given a narrow focus with only four items in the scale. Combs and colleagues (2007, p.156) noted "job resources were limited to include questions that measured the principal's perceived control over staff selection, staff evaluation, and goals for the school." In their conclusion, the importance of the dynamic balance between job resources and the ever changing job demands in the elementary principalship is stated. They also recognize the need to better describe and identify the job resources to build the resilience of school leaders.

Working Life of School-based Administrators

The role of the principalship has changed dramatically over the past two generations and is becoming increasingly complex (Lovely, 2004; DiPaola & Tschannen-Moran, 2003; Institute for Educational Leadership [IEL], 2000). Compared to the leader in Wolcott's *The Man in the Principal's Office* (1973), the expectations for

today's principalship bears little resemblance (Williamson & Blackburn, 2009). The mid-Twentieth Century expectation of the principal as an authoritarian manager has been replaced with the expectations for a principal who is culturally aware, politically astute, dynamic communicator, and an instructional leader (Grubb & Flessa, 2006; Lovely, 2004; DiPaola & Tschannen-Moran, 2003). The principalship of the Twenty-first Century is filled with complexities and uncertainties enveloped in an environment of high-stakes testing (Williamson & Blackburn, 2009; DiPaola & Tschannen-Moran, 2003). While in the mid-Twentieth Century, being an efficient manager may have been ample for principals to be deemed effective, today's expectation is that a principal must do more (IEL, 2000).

Even before the passage of the *No Child Left Behind (NCLB)* legislation in 2001, the principalship was becoming increasingly demanding. According to a 1998 report by the NAESP, the responsibilities of the elementary school principals rose dramatically over the previous decade (Pierce, 2000). Only ten years earlier, the average principal reported working 40 hours per week with his/her primary focus being management of the school, with little time spent in the classroom. By 1998, principals reported working 50 to 60 hour work weeks with greater accountability, increased demands from constituencies, and the expectation to both manage the school and lead instruction. According to Pierce (2000), the increased pressures, accountability, and high-stakes testing of 1998 led to the creation of "super principals" in our schools. These "super principals" must manage the school staff and facilities like in the past, as well as serve as change agents for school improvement (Williamson & Blackburn, 2009; Marzano, Waters & McNulty, 2005; DiPaola & Tschannen-Moran, 2003). Principals are charged

with building capacity in teachers by creating a learning environment focused on instruction, and by developing and leading a shared vision with clear goals and annual objectives for achievement (Marzano, Waters & McNulty, 2005). They also lead school improvement and instruction, driven through the disaggregation and analysis of data (Williamson & Blackburn, 2009). They must be legal experts in the areas of students with disabilities, *NCLB,* equal rights, homelessness, student safety, student privacy, bullying, harassment, and employment (Williamson & Blackburn, 2009; DiPaola & Tschannen-Moran, 2003).

The changing scope of the principalship can be seen in the adoption of the Interstate School Leaders Licensure Consortium (ISLLC) Standards for School Leaders by the Council of Chief State School Officers (see Table 1, 1996). The ISLLC standards marked an alignment of the focus of school leaders on success for all students with an emphasis on teaching and learning. By 2006, these standards were adopted by forty-three states in some manner related to administrator licensure or evaluation (Derrington & Sharratt, 2008). The adoption of the ISLLC standards evidenced the movement away from the principal as a manager into the principal as visionary leader, with increased demands and responsibilities.

With the passage of *NCLB* in 2001, the demands placed on principals were magnified (Lovely, 2004) and have led to increased stress (NAESP, 2007). Within the high-stakes environment of *NCLB,* the pressure of accountability for student learning and performance has fallen on the shoulders of principals (DiPaola & Tschannen-Moran, 2003). *NCLB* and state accountability often lead to multiple, and sometimes conflicting, demands being placed on principals to improve educational achievement (Grubb &

Table 1
ISLLC Standards for SchoolLeaders

STANDARD	DESCRIPTION
Standard 1	A school administrator is an educational leader who promotes the success of all students by facilitating the development, articulation, implementation, and stewardship of a vision of learning that is shared and supported by the school community.
Standards 2	A school administrator is an educational leader who promotes the success of all students by advocating, nurturing, and sustaining a school culture and instructional program conducive to student learning and staff professional growth
Standard 3	A school administrator is an educational leader who promotes the success of all students by ensuring management of the organization, operations, and resources for a safe, efficient, and effective learning environment.
Standard 4	A school administrator is an educational leader who promotes the success of all students by collaborating with families and community members, responding to diverse community interests and needs, and mobilizing community resources.
Standard 5	A school administrator is an educational leader who promotes the success of all students by acting with integrity, fairness, and in an ethical manner.
Standard 6	A school administrator is an educational leader who promotes the success of all students by understanding, responding to, and influencing the larger political, social, economic, legal, and cultural context.

Note. Council of Chief State School Officers. 1996. Interstate school leaders' licensure consortium: Standards for school leaders. Council of Chief State School Officers, Washington, DC.

Flessa, 2006). To wit, principals often face professional consequences when they fail to meet state and federal mandated test scores (NAESP, 2007). The pressure and demands on principals lead some to question if one person can meet all the responsibilities (Grubb & Flessa, 2006).

The multi-faceted demands placed on principals' can be seen in the job description for an advertised vacancy for a school principalship in a city school system in a mid-Atlantic state (CCS, 2010). The job description (Table 2) lists the primary function of the principals as providing "leadership for the professional staff of the school in the development, implementation, and evaluation of a comprehensive educational program, and to administer the program in accordance with school board policies and administrative rules and regulations" (p. 1).

Table 2
Job description with performance responsibilities

Performance Responsibilities
1. Fosters the success of all students by facilitating the development, communication, implementation and evaluation of a shared vision of learning that reflects excellence.
2. Communicates a clear vision of excellence and continuous improvement consistent with division goals.
3. Supervises the alignment, coordination and delivery of assigned programs and/or curricular areas.
4. Provides professional learning programs consistent with student needs, assessment and program evaluation.
5. Communicates high standards for teaching and learning.
6. Employs a variety of processes for gathering, analyzing and using data for decision making.

Performance Responsibilities
7. Works with central office staff to develop and implement a school improvement plan as needed.
8. Develops an effective plan for allocation of fiscal resources.
9. Plans, implements, supports, and enhances teaching and student achievement.
10 Monitors division, state, and federal requirements.
11 Promotes the development of specific and measurable goals for student achievement.
12 Collaborates with teachers and instructional support personnel.
13 Ensures content alignment with standards.
14 Ensures that staff meetings and professional development activities are focused on student outcomes.
15 Uses data to make clear, observable changes in teaching.
16 Promotes effective communications and interpersonal relations among staff, parents, students and community members.
17 Maintains effective discipline and fosters a safe learning environment.
18 Models high expectations of students and staff.
19 Selects, inducts, supports, evaluates and retains high quality instructional and support staff.
20 Ensures professional development programs aligned with instructional needs
21 Other duties as assigned

Note. From Charlottesville City Schools. 2010. Job description title: School principal. Retrieved from www.ccs.k12.va.us/departments/hr/jobdesc/School%20Principal%20JD.pdf

Within these responsibilities the traditional principal managerial responsibilities for students or facilities are not found. Unless embedded within the "other duties as assigned", the primary responsibilities of the principal in this school system rest in his/her visionary leadership. This is far removed from Wolcott's (1973) managerial principal.

The performance responsibilities within this job description mirror the findings of Rayfield and Diamantes (2004). Their research identified 25 job-specific responsibilities within the principalship. These responsibilities include selecting and evaluating teachers, creating a master schedule, professionally developing staff, assigning staff duties and responsibilities, developing a cooperative relationship with stakeholders, enforcing contract provisions, assuring safety, dealing with disruptive students, dealing with attendance concerns, working with parents, developing or aligning the curriculum, being accountable for the instructional program, complying with state and federal mandates, supervising special education, communicating with the community, attending community events, recognizing student and staff achievements, developing and managing budgets, fundraising, managing an athletic program, selecting and evaluating support personnel, supervising extra-curricular activities, and maintaining facilities.

The demands placed on principals are increasing. In a study of 1,543 Virginia principals, DiPaola and Tschannen-Moran's (2003) findings suggest that principals do not have the resources or authority to meet the demands of the position. While 78% of the principals surveyed believed their education prepared them for the principalship, 90% shared that they needed more professional development to meet the expectations of

their role. Within the instructional leadership arena, more than 90% of principals identified the greatest needs as being increasing student achievement on standardized tests, improving the use of instructional time, assessing instructional practice, professional development of faculty, curriculum alignment, and improving staff morale. Within the organizational management, responding principals identified special education law and implementation, legal issues, and student discipline as significant problems or issues. Within the communication area, problems with working with families and inadequate time to collaborate with peers were identified. Finally, within the area of professionalism, principals identified a need to enhance leadership skills and for skills in managing stress. In their conclusion, DiPaola and Tschannen-Moran (2003, p. 59) state "the data in this report reveal a profession under stress."

The results of increasing demands of the principalship are evidenced in the 2008-09 Principal Follow-up Survey. In this survey of 89,920 public school principals, 55% (49,160) responded that they worked more than 60 hours per week (Battle, 2010). An additional 16% (14,040) responded that they worked more than 55 hours per week. Battle (2010) noted that 12% (10,690) of the respondents chose to leave the principalship at the end of the 2007-08 school year and 7% changed schools. Within the same survey, 26% (23,250) of principals shared that their enthusiasm has decreased since they first became a principal. Twenty percent (18,090) shared that they would leave education as soon as possible if they could find a higher paying job. As the job demands increase, the profession becomes less attractive and the number of principals leaving the profession increases (Cusick, 2003).

All signs and research show the principalship is at a crossroads. The working life of school-based administrators has become increasingly complex and demanding. Lovely (2004, p.3) describes the state of the principalship as "a lethal mixture" of deterrents for both candidates and present principals. As schools search for leaders that can both manage and provide the instructional leadership needed to create and maintain an effective school, principals increasingly find the position with too many demands and limited resources.

Summary

The school principalship is filled with demands and responsibilities (Rayfield & Diamantes, 2004). These demands and responsibilities are so numerous, some researchers have claimed that they are impossible for one person to accomplish (Grubb & Flessa, 2006; Lovely, 2004). Current research has shown that the magnitude of demands within the principalship has resulted in fewer candidates entering the profession (Cusick, 2003; Orozco & Oliver, 2001), and more sitting principals exiting the position (Battle, 2010; Johnson, 2005; Lovely, 2004). The magnitude and volume of these demands has led to stress within the principalship (Combs et al., 2009; Combs et al., 2007; Lovely, 2004; DiPaola & Tschannen-Moran, 2003; Swent & Gmelch, 1982; Koch et al., 1982).

Based on the cognitive-transactional (Lazarus and Folkman, 1984) and conservation of resources (Hobfoll, 1998) models, stress is the result of situational demands exceeding the available resources (Gmelch & Burns, 1984). Efforts to support principals and limit the stress of their position must focus on identifying both demands

and resources. Once identified, stress can be reduced by decreasing the demands or providing additional resources.

Research has been conducted to assess the demands or responsibilities within the principalship (Gmelch & Gates, 1998; Swent & Gmelch, 1982; Brim, 1981). Findings from using the job demands-resource model (Combs et al., 2009) find the principal's job is "demanding, unrelenting, and overwhelming" and requires a dynamic balance between job resources and the ever changing job demands in the elementary principalship. Within the resource-demand model, there is a need to better describe and identify the job resources to build the resiliency of school leaders.

The Classroom Appraisal of Resources and Demands (CARD) instrument has been used effectively with teachers (O'Donnell et al., 2008, Lambert et al., 2001). Research on the CARD has shown it to be a reliable and valid measure of teacher demands and resources (Lambert et al., 2007). The CARD was successfully adapted for school counselors and has been proposed for use with other educational professions (McCarthy et al., 2010).

The adaptation of the CARD for use with school-based administrators presents a potential tool for appraising the resources and demands of the principalship. The Comparative Appraisal of Resources and Demands for School-based Administrators (CARD-P) would provide an easy to use measure of principal's stress. This instrument would examine the subjective experience of perceived demands within the school environment and resources and supports provided by the school and district. In measuring the differential between these subscales, the CARD-P attempts to capture the situational nature of principal stress.

CHAPTER 3: METHODOLOGY

In Chapters One and Two, the rationale and literature foundation for the study of principal stress as a measure of resources and demands were presented. The purpose of this chapter is to provide a description of the methodological plans for developing the Comparative Appraisal of perceived Resources and Demands for Principals (CARD-P) within the current study, including participants, procedure, instrumentation, and data analysis.

As indicated in Chapter Two, current measures of school-based administer stress primarily focus upon the demands dimension of cognitive-transactional stress (Gmelch & Gates, 1998; Gmelch & Swent, 1984; Brimm, 1981). The limited studies which addressed both resources and demands (Combs et al., 2007) offered a limited scope for resource appraisal. What may be of greater use to researchers, school system-level administrators, and principals is an instrument which provides a comprehensive measure of the perceived demands within the principalship and the perceived resources available to principals to address those demands. The CARD-P will be designed to allow principals to appraise the resources and demands within their position to operationalize their level of stress based on the Classroom Appraisal of Resources and Demands (CARD) developed by Lambert, McCarthy, and Abbott-Shim (2001).

Research Questions

As mentioned in Chapter One, the current study seeks to develop and test the psychometric properties of an instrument to measure the perceived stress of principals by appraising their perceived resources and demands within their current position. The assessment will have five components, including (1) general demographic information about the principal, (2) general characteristics about his/her school and school system, (3) an appraisal of perceived demands, (4) an appraisal of perceived resources available, and (5) general open-ended questions. The research questions to be answered by this study are:

1. What personal characteristics or experiences do principals perceive as influencing the level of principal stress?
2. What school or system characteristics do principals perceive as influencing the level of principal stress?
3. What professional demands, experienced in the school or school district environment, do principals perceive as contributing to principals' stress?
4. What school or system provided resources or support do principals perceive to be available to cope with perceived demands?
5. Can an appraisal instrument be developed for appraising demands elementary principals perceive in the school or school district environment and the resources available to meet those demands?

Instrument Development

The process for developing this instrument took place in three phases based on the steps for scale creation outlined in literature (Netemeyer, Bearden, & Sharma, 2003;

DeVellis, 2003). Each phase is described in detail below. It should be noted, in building the CARD-P, efforts were made to model the instrument after the CARD instruments developed for elementary teachers (Lambert, McCarthy, & Abbott-Shim, 2001), and pre-school teachers (Lambert, Abbot-Shim, & McCarthy, 2001). As mentioned in Chapter Two, research has been supportive of the CARD's reliability and validity for use with teachers (Lambert et al., 2006, 2009). The creation of a new instrument from the CARD model was previously undertaken by McCarthy and Lambert (2008). The Classroom Appraisal of Resources and Demands – School Counselor Version (CARD-SC) was developed by revising and adapting the school age version of the CARD for the specific demands and resources of school counselors (McCarthy, Kerne, Calfa, Lambert, & Guzmán, 2010).

Research suggested the use of practitioners from relevant populations for the creation of scales and the review of the items (DeVellis, 2003; Netemeyer et al., 2003; Crocker and Algina, 1986). In this study, a panel of practitioners (practitioner panel) were utilized to create an exhaustive list of perceived demands and resources faced within their principalship. An additional panel of practitioners (instrument review panel) were utilized to review the CARD-P Prototype for clarity, readability, understanding, and construction. The members of the practitioner and instrument review panel were selected because they were currently serving as a principal and had three or more years of experience in the principalship.

Phase 1. The first phase of scale creation was to clearly define what is to be measured (DeVellis, 2003). Defining what is to measured included the identification of the primary use of the instrument, establishment of well defined constructs for each

subscale, establishment of a scale format, determination of the content, and the proportion of items that should focus on each subscale within the instrument.

Defining the constructs was an essential first step in the instrument development or scaling process (Netemeyer, Bearden, & Sharma, 2003; DeVellis, 2003). Grounded in the cognitive-transactional model of stress (Lazarus & Folkman, 1984) and conservation of resources (Hobfoll, 1998) models, stress is the result of situational demands exceeding the available resources (Gmelch & Burns, 1984). The primary use of the CARD-P is to classify the level of perceived stress experienced by school-based administrators. More specifically, the instrument aims to classify stress as a differential between the self-appraisals of two distinct constructs: perceived demands and perceived resources (Lambert et al., 2009, 2006, 2007, 2001; McCarthy et al., 2010, 2006). The design of CARD-P should measure a principal's cognitive appraisals of perceived professional demands hypothesized to contribute to stress and system-provided resources which are perceived to limit or permit principals to cope with perceived demands. Together, the appraisal of these distinct constructs should provide a differential between perceived resources and demands, or an Appraisal Index. The Appraisal Index will be used to form three groups: resources principals, balanced principals, and demand principals (McCarthy et al., 2009). Principals with high appraisals of perceived resources and low appraisals of perceived professional demands (R > D) are considered resourced. Principals perceiving their professional demands and resources as equal (R = D) are considered balanced. Principals with low appraisals of perceived resources and high appraisals of perceived demands (R < D) are demand principals. For the Appraisal

Index to be considered useful and meaningful, the perceived demands and perceived resources subscales must reflect the depth and breadth of each construct.

In alignment with the cognitive-transactional stress theory, if relevant resources are available, a demand can lead to optimal functioning and stress situations can be avoided. To assure the CARD-P was aligned with cognitive-transactional stress theory, it was modeled after the existing CARD instruments (McCarthy et al., 2010; Lambert et al., 2008; Lambert, McCarthy, & Abbott-Shim, 2001; and Lambert, Abbot-Shim, & McCarthy, 2001).

Establishing a scale format to be used in the instrument was the next step in the first phase. The primary interest of the researcher is to locate school-based administrators on a continuum of perceived stress through appraisal of perceived resources and demands, allowing for a subject-centered scale format as utilized in the original CARD instruments (Lambert, Abbot-Shim, & McCarthy, 2001). Both the resource and demand subscales are composed of effective indicators of the respective construct, allowing for a reasonable sampling of items tapping each domain, respectively (Netemeyer et al., 2003). As the instrument utilizes two subscales to determine both resources and demands, respectively, the scale will be multidimensional.

The scale format for the CARD-P was modeled after the CARD instrument (Lambert, Abbot-Shim, & McCarthy, 2001). The subscales for perceived resources and demands utilized a Likert-type scale format. The Likert (1932) method is a traditional method for developing subject-centered scales (DeVellis, 2003). The Likert method presents an item as a declarative statement that is responded to by degrees of approval (Likert, 1932). Modeled after the CARD (Lambert, Abbot-Shim, & McCarthy, 2001),

the subscales used a five-option Likert-type response. Responses for the demands subscale range from 1 (Not Demanding) to 5 (Extremely Demanding). Responses for the resource subscale range from 1 (Very Unhelpful) to 5 (Very Helpful). Both subscales offer a response option of Not Applicable (NA). The school characteristic and personal demographic sections employ a response checklist and numeric response questions. The modeling of the CARD-P after the CARD were reviewed by the instrument review panel for readability, understanding, and appropriateness.

The determination of the proportion of items within the instrument was also aligned with the CARD (Lambert, Abbot-Shim, & McCarthy, 2001). The CARD asks 10 questions about the classroom characteristics and nine demographic questions of the teachers. The demands and resources subscales consisted of 35 and 30 items, respectively. The CARD-SC (McCarthy & Lambert, 2008) has fewer items with the demands subscale containing 26 items and the resources subscale having seven items. For the CARD-P, the subscales for perceived demands and resources reflects a reasonable sampling of the themes to accurately represent the construct of each subscale for use with principals (Netemeyer et al., 2003).

To determine the content included in the CARD-P subscales, the perceptions of a practitioner panel was sought. The use of current, experienced principals should have assisted in assuring an exhaustive list of perceived resources and demands were generated and the appropriate questions about school/school district characteristics and personal demographic questions were included. The practitioner panel consisted of six licensed principals with at least three years experience, who were presently serving as a principal in a North Carolina Public School. The principals were selected using a

stratified, purposeful sample from elementary, middle, and high schools. The principals were invited to participate through an e-mailed invitation.

Principals who served on the practitioner panel were sent a Practitioner Assessment of Perceived Stress questionnaire (PAPS) with four open-ended response questions (Appendix A). These questions asked the panelists to create an exhaustive list for each of the following questions:

1. What personal characteristic or experiences of principals may contribute to or limit principal stress?
2. What school or system characteristics, policies, or procedures may contribute to or limit principal stress?
3. What demands, faced within the principalship, contribute to principal stress?
4. What resources or support, provided by your school or district, lessen demands or decrease stress in the principalship?

PAPS were sent to members of the practitioner panel by e-mail. Panel members had the option to return the questionnaires digitally or as a hard copy.

Data from the PAPS were compiled on the Collective Review Form (Appendix B). The Collective Review Form aligned similar responses from the PAPS into general themes within each question. Individual responses from questionnaires were grouped by common content to create general themes within the underlying construct of each subscale. Within each theme, responses were analyzed for frequency and level of impact. Values were assigned based upon the reported level of impact (1 = low, 2 = moderate, and 3 = high) and the number of times panel members reported the construct measure. These values were recorded on the Collective Review Form (Appendix B).

For example, if four panelists identified hiring staff as a demand and each rated the hiring staff as moderate, the theme would have a value of 8 (4 responses x 2 for moderate). All themes were ranked by their frequency and perceived level of impact.

The generation of the measurement themes on the Collective Review Form concluded the first phase of instrument development. Building from the measurement themes, items for the four subscales were generated in the second phase.

Phase 2. The second phase of instrument development was the generation of the measurement items. The item creation process was guided by the procedures outlined by DeVellis (2003) and Netemeyer and colleagues (2003). Items were generated to clearly measure the intended construct of a subscale (Patten, 2000). Each measurement or scale was created to accurately and holistically represent the concept and themes intended to be measured.

To ensure clarity, DeVellis (2003) and Netemeyer and colleagues (2003) suggested specific guidelines. Their guidelines included using present tense language, avoiding indefinite qualifiers (e.g., sometimes, occasionally) and double negatives, refraining from absolute statements (e.g., all, never), and keeping statements under 20 words. Quality items were designed to be clear and unambiguous with all respondents comprehending the meaning in the same fashion (Netemeyer et al., 2003). In addition, efforts were made to keep the appearance, structure, and language aligned to the CARD (Lambert, Abbot-Shim, & McCarthy, 2001).

The ranked measurement themes were aligned with existing literature sources on the Construct Matrix (Appendix C). The alignment of themes with external literature was an effort to accurately and holistically represent the construct of the subscale. To

assure the subscales included all the elements of a construct, the CARD-SA instrument (Lambert, McCarthy, & Abbott-Shim, 2001), the 25 job tasks identified in the analysis of administrative duties (Rayfield & Diamantes, 2004), the motivators and hygiene factors for principals (Sodoma & Else, 2009), Hobfoll's 74 common resources (1998), the 10 most stressful administrative tasks for Tennessee school administrators (Brimm, 2001) and the Preventive Resources Inventory (McCarthy & Lambert, 2001) were aligned with the measurement themes generated from the PAPS data on the Collective Review Form (Appendix B). Although not included on the Construct Matrix, the ISSLC Standards for School Leaders (Council of Chief State School Officers, 1996) and the Job Description with Performance Responsibilities (CCS, 2010) were also considered. In some instances, items identified in the literature did not have a aligned measurement theme and were added to the Construct Matrix as "Other Issues". The alignment of the PAPS themes with relevant literature on the Construct Matrix attempted to assure the broad scope of school-based administration was addressed and that subscales attempted to measure a proper sample of the theoretical domain or construct (Netemeyer et al., 2003).

Once the Construct Matrix was completed, items were generated for the subscales and instrument. The subscales were designed to accurately represent the intended construct to be measured and cover the breadth of the each component as represented on the Construct Matrix. When writing, efforts were made to align items with the CARD (Lambert, Abbot-Shim, & McCarthy, 2001) in terms of language, structure, and appearance.

After generating items that attempted to address the breadth of each construct, a CARD-P Prototype was constructed (Appendix D). The CARD-P Prototype was designed with five sections in alignment with the structure of the CARD instrument (Lambert, Abbot-Shim, & McCarthy, 2001). The first two sections were designed to define the characteristics and experiences of the principal and the characteristics and policies of the school or school system. Both of these sections consisted of short response or multiple choice questions. The third section included the perceived demand subscale with a Likert-like scale ranging from 1 (Not demanding) to 5 (Extremely demanding) with a choice of NA available. The fourth section consisted of the perceived resource subscale with a Likert-like scale ranging from 1 (Very Unhelpful) to 5 (Very Helpful) with a choice of NA available. A fifth section was modeled after the CARD–SA (Lambert, McCarthy, Abbott-Shim, 2001) with open-ended questions about perceived demands and resources and an opportunity for subjects to share their professional intent for the coming school year. The CARD-P was also modeled after the original CARD instrument with respect to its organization, layout, and font.

Phase 3. The final phase of instrument development was the evaluation and revision of the CARD-P Prototype, subscales, and items. The CARD-P Prototype was evaluated through the employment of an instrument review panel. The instrument review panel consisted of six currently serving principals with at least three years experience as a principal in a North Carolina Public School. The principals were selected using a purposeful sample and were invited to participate through an e-mailed invitation.

The prototype of the CARD-P (Appendix D) was administered individually to members of the instrument review panel in a face-to-face interview using the concurrent think-aloud approach to design effective instruments (Youssefzadeh, 1999; Jobe & Mingay, 1991; 1990; 1989). Cognitive interviews engaged respondents tothink-aloud while they answered survey questions (Presser, Couper, Lessler, Martin, Martin, Rothgeb, & Singer, 2004; Jobe & Mingay, 1989). The cognitive interview is designed to provide insights into the challenges respondents face and how they interpret and answer survey items (Jobe & Mingay, 1989). The objective of using the cognitive interview was to reveal the thought processes involved in interpreting an item and arriving at an answer (Presser et al., 2004). During the cognitive interview process, there was minimal interviewer interaction with the panelist as they completed the instrument (Jobe & Mingay, 1991). However, probing (Jobe & Mingay, 1989) was utilized to gain additional information about respondents' strategies or difficulties in answering questions. To limit validity concerns within the interviews, efforts were made to limit probes to cognitive probes (e.g., "What are you thinking?", "What does [term] mean to you?"), while avoiding re-orienting, confirmatory, expansive and feedback probes (Presser et al., 2004).

During the cognitive interview with each panelist, the researcher made notes on each item using the Instrument Review Form (Appendix E). After each subscale, subjects were asked structured questions about their perception of the subscale and the construct measured by the subscale. After reading through the entire instrument, panelists gave more detailed comments on their difficulties with particular items, subscales, and the structure of the instrument as a whole. In addition to assessing items

for clarity, readability, and understanding, panelists provided feedback on the structure and organization of the instrument (Netemeyer et al., 2003). Collectively, the data from the interviews were compiled on a Collective Instrument Review Form.

Data gathered on the Collective Instrument Review Form (Appendix F) were analyzed in four stages to evaluate erroneous reporting (Jobe & Mingay, 1989). The first stage was comprehension, to ensure the respondent interprets the meaning of the item as designed. The second stage was retrieval, to assure the respondents can secure the relevant information to answer the question. Estimation/judgment, the third stage, assessed the respondent's ability to evaluate the information retrieved from memory for relevance to the question. The final stage was response in which the respondent assessed the sensitivity of the questions, the impact of answering, probability of accuracy, and other factors in generating an answer. The analysis of these four stages allowed for additional evaluation and revision of the CARD-P.

After recording the data from instrument review panel, a Collective Review Form was utilized to compile and analyze the data from the multiple interviews. Items identified with issues of clarity, readability, and understandability were reviewed, reworded, or dropped. Data from the structured questions were also compiled on the Collective Review Form and analyzed for trends and potential improvement of the instrument. The analysis also included the study of the research questions: "What demographic information do principals perceive as influencing the level of stress school-based administrators' experience?", "What school or system characteristics do principals perceive as influencing the level of prinicpal stress?", " What professional demands do principals perceive as contributing to principals' stress?", " What available school or

system provided resources do principals perceive to be available to cope with perceived demands?", and "Can an appraisal instrument be developed for appraising demands elementary principals perceive in the school or school district environment and the resources available to meet those demands?"

Summary

The development of the Comparative Appraisal of perceived Resources and Demands for Principals (CARD-P) Instrument presented opportunities to address the research questions within this research: "What demographic information do principals perceive as influencing the level of stress school-based administrators' experience?", "What school or system characteristics do principals perceive as influencing the level of school-based administrator stress?", " What professional demands do principals perceive as contributing to school-based administrator stress?", " What available school or system provided resources do principals perceive to be available to cope with perceived demands?", and "Can an appraisal instrument be developed for appraising demands elementary principals perceive in the school or school district environment and the resources available to meet those demands?"

The methodology employed in this study required three phases. The first phase utilized a practitioner panel of principals to identify an exhaustive list of personal and school/school system characteristics that may impact stress, perceived demands within the principalship, and perceived resources provided from the school system that may limit the level of stress experienced. This data was collected using the PAPS questionnaire (Appendix A).

The second phase compiled the data generated from the PAPS on the Collective Review Forms (Appendix B) and aligned the data with the CARD instrument (Lambert, Abbott-Shim, & McCarthy, 2001) and relevant literature sources. This alignment was collected on the Construct Matrix (Appendix C). The Construct Matrix was used to generate subscales or components of the CARD-P Prototype (Appendix D). By utilizing the Construct Matrix, items were generated that ensured the breadth of each subscale's construct was represented. The final composition of the five components within the CARD-P Prototype reflected the structure of the previous CARD instruments (McCarthy et al., 2010; Lambert et al., 2008; Lambert, McCarthy, & Abbott-Shim, 2001; and Lambert, Abbot-Shim, & McCarthy, 2001).

The CARD-P Prototype (Appendix D) was reviewed and refined in the third phase of the instrument development. Utilizing a cognitive interview methodology with a purposeful sample of current school principals, the researcher conducted concurrent read-aloud interviews to evaluate the clarity, readability, and understanding of the instrument (Jobe & Mingay, 1989). Principals also provided feedback as to the structure and organization of CARD-P, as well as, general feedback on the instrument. The analysis of the data generated from these interviews on the Collective Instrument review Form (Appendix F) allowed for additional revision of the CARD-P Prototype and the creation of the Comparative Appraisal of perceived Resources and Demands for Principals instrument (Appendix G).

CHAPTER 4: RESULTS

The intent of this study was to develop the Comparative Appraisal of perceived Resources and Demands for Principals (CARD-P) instrument. The CARD-P was developed to assess the differential between perceived demands and resources which may lead to stress in the principalship. The CARD-P was modeled after the Classroom Assessment of Resources and Demands (CARD) instrument developed for preschool teachers by Lambert, Abbott-Shim, and McCarthy (2001).

While creating the CARD-P, five research questions were posed to guide this study: "What demographic information do principals perceive as influencing the level of stress school-based administrators' experience?", "What school or system characteristics do principals perceive as influencing the level of school-based administrator stress?", " What professional demands do principals perceive as contributing to school-based administrator stress?", " What available school or system provided resources do principals perceive to be available to cope with perceived demands?", and "Can an appraisal instrument be developed for principals to assess the differential between perceived demands and resources?"

Data collected in the development of the CARD-P was qualitative in nature. The Practioner Assessment of Perceived Stress (PAPS) questionnaire (Appendix A) was administered to a practioner panel. This questionaire asked four open-ended questions concerning personal and school/school system characteristics that may impact stress, the

perceived demands of the principalship, and perceived resources available to cope with these demands. The data were compiled on the Collective Review Form and used to define the measurement themes and constructs of each CARD subscale. The data from the Collective Review Form also served as the structure for the Construct Matrix. Data were also collected from an instrument review panel in a cognitive interview utilizing the concurrent think-aloud interview approach to design effective instruments (Youssefzadeh, 1999; Jobe & Mingay, 1989). Data from the cognitive interviews were compiled on the Collective Instrument Review Form (Appendix F) and used to revise the CARD-P Prototype (Appendix D).

Chapter Four presents the study findings in four sections: the first three are aligned with the instrument development phases (DeVellis, 2003; Netemeyer et al., 2003) and the fourth discusses the research questions. The first section contains information on the practitioner panel and the compilation of data from the PAPS on the Collective Review Form (Appendix B). The second section discusses the development of the CARD-P Prototype. The third section contains information on the instrument review panel, the results from the cognitive interview process leading to the development of the CARD-P. The final section presents findings related to each research questions examined in this study.

Practitioner Panel Results

The practitioner panel was composed of six current principals with a minimum of three years of experience. The sample was designed to be purposeful and stratified. Invitations were sent to seven principals in a rural North Carolina school district at the elementary, middle, and high school levels. Electronic copies of the PAPS (Appendix

A) were sent to each of the panelists by e-mail with an offer to provide a paper copy if needed. A second email reminder was sent two weeks later to the panelists who had not submitted the questionnaire. One additional reminder was sent four weeks after the initial email. Panelists were given the option to submit their questionnaires either digitally or on paper. All six panelists submitted a completed PAS questionnaire in a digital format. The sample included two men and four women. All the panelists have a minimum of three years at their current school with two having more than ten years of experience. Three panelists had previously served as principals in other schools. All the panelists were currently employed in a rural, central North Carolina school system.

The Practitioner Assessment of Perceived Stress Questionnaire consisted of four open-ended questions. Principals were asked to reflect upon their experiences as a principal to identify the characteristics, demands, and resources they perceive as impacting principal stress. After identifying the characteristics, demands, or resources, panelists were asked to identify the level of the impact (low, moderate, or high) each had on stress. Six completed PAPS were received with characteristics, demands, or resources identified for each question.

The data from the PAPS questionnaires were tabulated on the Collective Review Form (Appendix B). When responses on multiple questionnaires identified common characteristics, demands, or resources, they were compiled into a single response theme. Of the 64 identified response themes, 38 were identified by two or more principals. Two response themes, experience and administrative support, were identified on all six questionnaires.

Once the practitioner responses were tabulated on the Collective Review Form (Appendix B), impact values were generated for each response theme. Impact values were calculated based on the number of responses and the level of impact assigned by each panelist. For example, three panelists identified communication as a personal characteristic of a principal that may contribute to or limit stress. Each responded that communication had a high level of impact on stress. High impact is assigned a value of three; moderate is two and low is one. By adding the three high impact levels together (3 + 3 + 3) for communication, the impact value was calculated as 9. All the impact values for the response themes were recorded on the Collective Review Form.

Response themes emerged from each of the questions with impact values computed from frequency and impact level. With each question aligned with a subscale within the CARD instrument (Lambert, Abbot-Shim, & McCarthy, 2001); response themes with high reported impact levels were designated as measurement themes for inclusion in the CARD-P. To differentiate, measurement themes required a minimum of two responses and an average impact level of 2.00 (see Table 3).

The first question on the PAPS (Appendix A) asked principals to identify personal characteristics or experiences of principals that may contribute to or limit principal stress. Within this question, 26 themes emerged from the responses compiled on the Collective Review Form. Ten of measurement themes emerged with at least two respondents and an average impact level of 2.00. These measurement themes were considered for inclusion in the generation of items for the subscale. Among personal characteristics, experience was the only measurement theme included on all six questionnaires with all but one principal identifying it as having a high impact level.

Table 3
Measurement themes generated from the PAPS data on the Collective Review Form

Measurement theme from PAPS	# responses	Average Impact	Impact Value
Question 1: Characteristics or experiences of principals			
Experience*	6	2.83	17
Communication Skills*	3	3.00	9
Personality Type*	3	2.67	8
Community Membership*	2	3.00	6
Ability to Listen*	2	3.00	6
Personal Issues*	3	2.00	6
Organization	2	3.00	6
Detail Oriented*	2	2.00	4
Personal Time*	2	2.00	4
Family Time*	2	2.00	4
Question 2: School or system characteristics			
Off-campus meetings*	5	2.60	13
Focus on initiatives*	3	2.66	8
LEA policies and procedures	2	3.00	6
Paperwork*	3	2.00	6
Evaluation*	3	2.00	6
Question 3: Demands faced within the principalship			
Personnel Issues*	4	2.75	11
Limited Time*	3	3.00	9
Accountability*	4	2.25	9
Staffing*	4	2.00	8
Paperwork*	3	2.66	8
Students*	2	2.50	5
Community Perceptions*	2	2.50	5
Discipline	2	2.50	5
Community*	2	2.00	4
Parents*	2	2.00	4
Budget	2	2.00	4
Question 4: Resources or support which lessen demands			
Administrative support*	6	2.5	15
Staff*	3	3.0	9
Assistant Principals	3	2.67	8
Technology*	3	2.33	7
Leadership Team*	3	2.33	7
LEA Support	2	3.00	6
Parent Organizations*	2	2.50	5
Professional Development*	2	2.00	4

* Includes a response from an elementary principal

Three measurement themes, communication skills, personality type, and personal issues were included on three questionnaires. The remaining measurement themes were identified by two principals.

The second question asked panelists to identify school or system characteristics, policies, or procedures that may contribute to or limit principal stress. When the responses were compiled, 28 themes emerged from the data. The responses to this question were more idiosyncratic. None of the themes were unanimous to all the questionnaires and only five of themes met the criteria to be considered a measurement theme. The measurement theme with the highest impact value was "Off Campus Meetings" with responses from five questionnaires and an impact value of 13. Focus on initiatives, paperwork, and evaluation were identified by three respondents. While LEA policies and procedures was only identified on two questionnaires; however, it was the only theme identified with a high impact level by all principals.

The third question in the PAPS focused on the perceived demands experienced by a school-based administrator. Panelists listed demands, faced within the principalship, that contribute to stress. Again, 28 unique themes emerged from the data. However, there was greater congruency within the responses, with 11 measurement theme emerging. Three themes were identified by four panelists: personnel issues, accountability, and hiring/retaining staff. Personnel issues had the highest impact value at 11. Both limited time and paperwork were identified on three questionnaires. Paperwork was also identified as a school or system characteristic in question two.

The final question in the PAPS asked principals to identify resources or support, provided by the school or district, which lessen demands or decrease stress in the

principalship. There were 20 themes which emerged from the responses to this question. Administrative support was the most common theme, appearing on all the questionnaires. Administrative support was one of eight subscale measurement themes identified for resources or support. Staff, assistant principals, technology, and a leadership team were also identified by three panelists.

An examination of data compiled on the Collective Review Form, evidenced a noticeable difference between the responses from high school principals and those of the elementary schools (see Table 4). Middle school principals aligned with both elementary and high schools, depending on the theme or construct. The data led to the development of 34 measurement themes within the four subscales. When isolating measurement themes by the school level, only 18 (52.9%) were identified by both elementary and high school principals. While 10 (29.4%) of the measurement themes were identified exclusively by elementary and middle schools and 6 (17.6%) were identified exclusively by high and middle schools. The difference is more pronounced when considering the 59 themes that did not meet the measurement criteria. Of these themes, 18 (30.5%) were identified by elementary school principals, 10 (16.9%) by middle school principals, and 31 (52.5%) solely by high school principals.

Table 4
Themes by school level

Response Type	Elementary School	High School	Combination
Measurement Themes (2+ responses with Impact Value greater than 4)	10	6	18
Themes (1 or 2 responses with Impact Value less than 4)	18	31	--

The collection of data with the PAPS (Appendix A), tabulation, and analysis of data on the Collective Review Form (Appendix B) were completed in the first phase of the instrument development process. Through tabulation and analysis, 34 measurement themes were identified for the development of the four subscales in phase two. In addition, a disparity between the responses of elementary and high school principals was identified. With this analysis, the instrument development process entered the second phase.

Generation of the CARD-P Prototype

The second phase of instrument development was the generation of the measurement items for the CARD-P Prototype. Before generating items, further analysis of the disparity between the responses from the elementary and high school principals and its potential implication on the development of the CARD-P instrument was required. After this analysis, the measurement themes developed in the first phase were aligned with current literature to assure the depth and breadth of the construct for each subscale was identified. Then, adhering to the procedures outlined by DeVellis (2003) and Netemeyer and colleagues (2003) and evaluating the themes to be measured within the subscales, items were generated. Finally, using the framework of the CARD-SA (Lambert, McCarthy, & Abbott-Shim, 2001), the subscale items were compiled into the CARD-P Prototype (Appendix D).

Before generating measurement items for the CARD-P, further analysis of the disparity between the elementary and high school principals' responses to the PAPS (Appendix B) was required. To include all the measurement themes identified by both elementary and high school principals would require a large number of measurement

items. If items were generated for all response themes, some items could, potentially, be irrelevant to some principals. For example, both high school principals identified the volume of discipline issues and the related paperwork as demands perceived to contribute to stress, while none of the middle or elementary school principals identified this theme. Similarly, neither of the high school principals identified personal issues as characteristic that may contribute to stress, while both elementary and one middle school principals noted this response. If measurement items were developed aligned to the discipline theme, these items may not be as relevant for elementary or middle school principals. Conversely, measurement items for the personal issues theme may not be as relevent to high school principals.

To keep the size of the CARD-P instrument manageable and relevant, it was decided to develop the instrument with a focus on elementary principals. Thus, only measurement themes identified by elementary principals (Table 3) would be utilized. This decision was reached through two strong considerations: previous CARD instruments (McCarthy et al., 2010; Lambert et al., 2008; Lambert, McCarthy, & Abbott-Shim, 2001; Lambert, Abbot-Shim, & McCarthy, 2001) and the number of principals. While studies have been conducted on all the previous CARD instruments, the CARD-SA (Lambert, McCarthy, & Abbott-Shim, 2001) has been researched more thoroughly than the CARD-Secondary Version. Building on the research on the CARD-SA (Lambert et al., 2009; McCarthy et al., 2009; Lambert et al., 2007; Lambert et al., 2006), the alignment with the CARD-SA would be more supportive of the potential reliability and provide the structure for the CARD-P. In addition, the uniqueness of elementary and secondary classrooms was previously identified within the separate

CARD instruments for school-aged (Lambert, McCarthy, & Abbott-Shim, 2001) and secondary teachers (Lambert, McCarthy, & Fisher, 2008). The second consideration was the scale of impact. Data from the 2008-09 Principal Follow-up Survey (Battle, 2010) showed there were 89,910 public school principals in 2007-08 of which 62,030 (69.0%) were elementary principals and 6,540 (7.3%) were in combination, elementary and secondary, schools. The disproportionate number of elementary to secondary principals was also evident at the local level. Within the school district in which this study occurred, 62.5% (*n*=24) of the principals served in elementary schools. At the state level, there were 2,279 public schools in North Carolina (EducationBug.org, 2011) of which 1,329 (58.3%) were elementary schools. Thus, designing the CARD-P instrument for elementary schools could potentially serve a larger number of principals.

After narrowing the scope of the CARD-P to elementary principals, the first step in generating the measurement items and the CARD-P instrument was to assure that measurement themes accurately and holistically represented the concept intended to be measured within each subscale. To accurately represent the measurement themes within each subscale, the ranked themes were aligned with factors from existing literature sources on the Construct Matrix (Appendix C). Six instruments or scales from literature were identified for inclusion on the Construct Matrix: the CARD-SA instrument (Lambert, McCarthy, & Abbott-Shim, 2001), the 25 job tasks identified in the analysis of administrative duties (Rayfield & Diamantes, 2004), the motivators and hygiene factors for principals (Sodoma & Else, 2009), Hobfoll's 74 common resources (1998), the 10 most stressful administrative tasks for Tennessee school administrators (Brimm, 2001) and the Preventive Resources Inventory (McCarthy & Lambert, 2001). The

factors from these literature sources were aligned with ranked measurement themes. When factors from literature did not align with a measurement theme, they were listed under a collective "Other" row under the practitioner panel heading. The completed Construct Matrix has a unique matrix for each subscale: personal characteristics or experiences; school and district characteristics, polices, or procedures; demands of the principalship; and school or district resources or support.

The completed Construct Matrix (Appendix C) aligns measurement themes and factors from the literature in a 'best fit' model. An example for one measurement theme in the Perceived Demands subscale is shown on Table 5. Each literature source had at least one aligned item or factor with the "Limited Time" measurement theme from the Collective Review Form. While written for teachers, the CARD-SA (Lambert, McCarthy, & Abbott-Shim, 2001) had seven factors which aligned with this measurement theme. The aligned measurement themes and factors included "meetings you are required to attend", "preparing lessons", and "number of program/administrative disruptions to the daily schedule." The Preventive Resources Inventory (McCarthy & Lambert, 2001) had four factors aligned with the Limited Time measurement theme, including "By organizing and planning my day, I am usually able to keep my daily demands under control." Only one factor, "time for work", from Hobfoll's 74 Common Resources (1998) aligned with "Limited Time." Three motivators and hygiene factors (Sodoma & Else, 2009), including "Time spent on management tasks", were included in the matrix. In addition, four of Brimm's 10 Most Stressful Administrative Tasks (2001) and two of the Rayfield and Diamantes' 25 job tasks identified in the analysis of administrative duties (2004) were included on the Construct Matrix (Appendix C).

The Construct Matrix provided an accurate and holistic representation of the construct for each subscale. The combination of data from the practitioner panel and relevant literature provided the measurement themes and factors needed to ensure the depth and breadth of the concepts was addressed. The identified measurement themes and factors provided the scope and structure for the item generation.

Item generation followed the guidelines presented by DeVellis (2003) and Netemeyer, Bearden and Sharma (2003) to ensure clarity and understanding. The guidelines suggested the use of present tense, avoiding indefinite qualifiers, refraining from absolute statements, and keeping statements brief. Items were designed to be clear and unambiguous.

Efforts to assure the depth and breadth of construct for each subscale saw items aligned with the measurement themes and factors identified in the Construct Matrix (Appendix C). Aligning the subscale items with the Construct Matrix required some movement of the measurement themes between subscales. As mentioned previously, there was overlap between two subscales in the principal responses concerning paperwork (school/school district characteristics and perceived demands). Another example of overlapping responses is the personal/family time measurement themes within personal characteristics and the limited time measurement theme in the demands subscale. For these themes and others with potential overlap in the Construct Matrix, the nature of the theme and the item response required for measurement were considered. As a result, some measurement themes were placed in two subscales: assistant principals, student demographics, and evaluation. Other measurement themes were

Table 5
Construct Matrix: Limited Time theme in the Perceived Demand subscale

Data Source	Items/Factors
Practitioner Panel	Limited Time
CARD-SA (Lambert, McCarthy, & Abbott-Shim, 2001)	Number of program/administrative disruptions to the daily schedule.
	Meetings you are required to attend.
	Time spent performing non-teaching related duties (monitoring bus, cleaning, etc.).
	Preparing lessons.
	Setting up the classroom for instructional activities.
	Preparing classroom materials.
	Externally imposed changes to the expectation for your job performance.
Preventive Resources Inventory (McCarthy & Lambert, 2001)	By organizing and planning my day, I am usually able to keep my daily demands under control.
	I usually don't create stress for myself by putting things off.
	I am able to reduce my daily remand level by planning ahead.
	I stay organized.
74 Common Resources (Hobfoll, 1998)	Time for work.
Motivators and Hygiene Factors (Sodoma & Else, 2009)	Extracurricular demands placed on you as a principal.
	Time available for activities that put balance in your life.
	Time spent on management tasks, i.e., budgeting, staffing, and planning.
10 Most Stressful Administrative Tasks (Brimm, 2001)	Bring interrupted frequently by telephone calls.
	Feeling that I have to participate in school activities outside the normal working hours.
	Feeling that I have too heavy a work load to finish during the normal work day.
	Feeling that meetings take up too much time.
25 Job Tasks of Administrators (Rayfield & Diamantes, 2004)	Attendance at community events.
	Supervision/Attendance at extra-curricular activities.

moved into either the perceived demands or perceived resources subscales: paperwork, communication skills, limited time, off campus meetings, focus on initiatives, and LEA policies and procedures.

Alignment of the measurements items to the CARD-SA (Lambert, McCarthy, Abbott-Shim, 2001) also supported the clarity and understanding of the instrument. The CARD-SA provided the structure for each subscale and the item design. Items in the personal and school/school district subscales were designed with numeric or multiple choice answers. Items in the perceived demands and perceived resource subscales will utilize a five-option Likert-like scale for responses.

Alignment of the CARD-P with the CARD- SA will also support the coverage of the depth and breadth of each concept measured in the subscales. According to Lambert and colleagues, the CARD-SA "focuses specifically on the demands of the classroom environment and material resources available to teachers to meet those demands" (2009, p. 974). Aligned with the CARD-SA, the focus of the CARD-P is the demands elementary principals perceive in the school or school district environment and the resources available to meet those demands. With the focus limited to the elementary school and school district environment, some of the themes identified from the PAPS responses (Appendix B) would not be appropriate for the CARD-P. For example, while the Personality Type of the principal may contribute to or limit principal stress, it is not within the focus of the school or district environment. Thus, this theme was not germane to the focus of the instrument. Other measurement themes falling outside the focus of the school or district environment included Ability to Listen, Personal Issues, and Detail

Oriented. The exclusion of these measurement themes narrowed the focus of the CARD-P and enhanced the relevance of the subscales and the final instrument.

Using the Construct Matrix (Appendix C) and the analysis of measurement themes, the author generated items addressed the breadth of each subscale. To assure the construct of each subscale was represented; items were purposely generated for and aligned measurement themes (Table 6). Due to the number of measurement themes within each subscale representing the scope of the principalship and the perceived demands and resources, the number of items generated exceeded the size of previous CARD instruments (McCarthy et al., 2010; Lambert et al., 2008; Lambert, McCarthy, & Abbott-Shim, 2001; Lambert, Abbot-Shim, & McCarthy, 2001). One hundred measurement items and four open-ended questions were created for the CARD-P Prototype.

The 104 questions for the CARD-P Prototype (Appendix D) were structured to look and function like the CARD-SA instrument (Lambert, McCarthy, & Abbott-Shim, 2001). The CARD-P was designed with five components: personal characteristics or experiences subscale, school or school district characteristics subscale, perceived demands of the principalship subscale, perceived school or district provided resources or support subscale, and open-ended questions. Sixteen items were generated for the first subscale, each with numerical or multiple-choice answers. Thirteen items were generated for the second subscale, also with numerical or multiple-choice answers. There were 36 measurement items generated for the perceived demands of the principalship subscale, each measured with a five-item Likert-like scale. The perceived

Table 6
Items generated by measurement theme for the CARD-P Prototype

Measurement Theme	Items generated for the subscale
Personal characteristics or experiences	
Experience	How many years have you been a principal?
	Did you serve as an assistant principal?
	Did you serve as a teacher?
Communication Skills	Communication with stakeholders.
Community	Do you live in the community your school serves?
Membership	Do you have children?
Other constructs from	If yes, what level(s) did you teach?
literature	What is the degree(s) you have earned?
	What field(s) are your degree(s)?
	Are you currently working toward a degree?
	If yes, what degree and field?
	What is your age?
	What is your gender?
	What is your ethnicity?
School or school district characteristics	
Off-campus meetings	Off campus meetings you are required to attend.
Focus on initiatives	Changes in district, state, and federal policies and procedures.
	New or modified educational initiatives.
LEA policies and procedures	Local school board policies and procedures.
Evaluation	Who is/are responsible for evaluating staff in your school?
	Teacher evaluation.
	Staff (non-teacher) evaluation.
Other constructs from	What grades are taught in your school?
literature	How many children are in your school?
	How many children come from homes in which English is not the primary language?
	How many children have identified special needs?
	How many children are identified as academically or intellectually gifted?

Measurement Theme	Items generated for the subscale
	How many children are homeless or transient?
	How many children have behavior problems?
	How many children in your school are performing below grade level?
	Describe the community your school serves.
Perceived demands of the principalship	
Personnel Issues	Teacher issues/needs.
	Staff (non-teacher) issues/needs.
Limited Time	Disruptions during the day.
	Evening and weekend meetings.
	Participation and or supervision of extracurricular activities.
	On campus meetings you are required to attend.
	Off campus meetings you are required to attend.
Accountability	Formative and benchmark assessments.
	State and federal summative testing.
	Adequate Yearly Progress and *No Child Left Behind* Legislation.
Staffing	How many staff members are in your school?
	Hiring and placement of teachers and staff.
	Staff (non-teacher) evaluation.
	Developing a master schedule.
Paperwork	Paperwork requirements.
	Teacher evaluation.
	Staff (non-teacher) evaluation.
	Developing a master schedule.
Students	Number of children in your school.
	Children with limited English skills.
	Children from diverse cultural backgrounds.
	Children from diverse economic backgrounds.
	Number of children performing below grade level.
	Children with Individualized Educational Programs.
	Academically or intellectually gifted children.
	Homeless or transient children.
	Children with poor attendance.

Measurement Theme	Items generated for the subscale
Community Perceptions	Community expectations.
Discipline	Discipline issues.
	Student conflict resolution.
Community	Communication with stakeholders.
	Parent-school conflicts.
Parents	Parent contacts and conferences.
	Parent support of school learning activities.
Budget	Preparing and allocating budget resources.
Other constructs from literature	School facilities and grounds.
	Student and staff safety.
	Overall, how demanding is your principalship?
Perceived school or district provided resources or support	
Administrative support	Principal mentors, peers, or organization within the school system.
	Administrative support from the system/district level.
	Evaluation and professional feedback from supervisors.
Staff	How many teachers are in your school?
	Do you have school counselors in your school?
	How many staff members are in your school?
	School counselor(s) and/or social workers at your school.
	Office staff at your school.
	Teachers at your school.
Assistant Principals	Do you have Assistant Principals in your school?
	Assistant principal(s) at your school.
Technology	District support personnel for computers and instructional technology.
Leadership Team	School Improvement Team/Faculty Council/Leadership Team.
	Evaluation and professional feedback from supervisors.
LEA Support	Support from your local school board.
	Local school board policies and procedures.
Parent Organizations	Parent support of school learning activities.
	Parent and teacher organization or association.

Measurement Theme	Items generated for the subscale
Professional Development	Professional development opportunities for you.
	Professional development opportunities for teachers and staff.
Other constructs from literature	Community partnerships.
	District support personnel for children requiring Individualized Education Programs.
	Materials for children requiring Individualized Education Programs.
	District support personnel for children identified as academically or intellectually gifted.
	Materials for children identified as academically or intellectually gifted.
	District support personnel for children with limited English skills.
	Materials for children with limited English skills.
	District support personnel for children from diverse cultural backgrounds.
	Materials for children from diverse cultural backgrounds.
	District support personnel for children from economically disadvantaged families.
	Materials for children from economically disadvantaged families.
	District support personnel for children performing below grade level.
	Materials for children performing below grade level.
	District support personnel for facilities and grounds.
	District support personnel for computers and instructional technology.
	District support personnel for curriculum and instruction.
	District support personnel for human resources.
	Instructional resources provided for your school.
	Your annual salary.
	Recognition of your achievements and accomplishments.
	Overall, how would you rate the resources available to help with the demands of your school and principalship?

school or district provided resource subscale also used a five-item Likert-like scale and included 35 items. The final component included for four open-ended questions for additional feedback from subjects.

The creation of the CARD-P Prototype (Appendix D) concluded the second phase of the instrument development process. With a completed instrument, designed for elementary principals, efforts to evaluate and revise the CARD-P Prototype could commence in the third phase.

Instrument Review Panel Results.

The third phase of the instrument develop process engaged an instrument review panel consisting of six current principals with a minimum of three years of experience. The sample was purposeful. Invitations to participate in a 45 – 60 minute face-to-face interview using the concurrent think-aloud approach for designing effective instruments (Youssefzadeh, 1999; Jobe & Mingay, 1991; 1990; 1989) were sent to six elementary principals in a rural North Carolina school district by email. Panelists were given the option for the researcher to come to their school or meet at a central location.

All six current principals agreed to serve on the instrument review panel with two choosing to meet at a central location and four at their schools. The sample included one man and five women. All the panelists were currently employed in a rural, central North Carolina school system and had between four and ten years experience as a principal. One principal was in a school which opened during the current year, but had nine years experience in a different elementary school within the system. Four principals served in schools with kindergarten through fifth grade. Two principals served in a primary/elementary school pair with each school serving kindergarten through second

grade and third through fifth grade, respectively. Two of the schools represented also contained prekindergarten programs.

Cognitive interviews occurred over a two-week period. During each interview, panelists were encouraged to think aloud while they reviewed survey questions (Presser, Couper, Lessler, Martin, Martin, Rothgeb, & Singer, 2004; Jobe & Mingay, 1989). While thinking aloud, the researcher made notes using an Instrument Review Form (Appendix E). Each form listed each measurement item with boxes to note issues with clarity, readability, and understanding. During the interview, if the panelist noted a concern with one of these measures, a mark was made noting the concern and its severity. Additional space was provided to make specific notes on each item as shared by the panelist. Additional questions were asked after each section of the instrument and after completing the entire instrument. The data from all six interviews has been compiled on the Collective Instrument Review Form.

Data gathered on the Collective Instrument Review Form (Appendix F) were analyzed in four stages. The first stage reviewed the data for issues with comprehension of the measurement items. Through analysis of the interview data, there were numerous issues with comprehension. Much of the panelist comment or observation data refers to comprehension concerns. Samples of the comprehension concerns, pulled from the Collective Instrument Review Form, are listed in Table 7. While some items (7, 8, 11, etc.) were identified by multiple panelists with comprehension concerns, others seemed to be concerns for only one panelist.

Measurement items identified in the Collective Instrument Review Form (Appendix F) as having issues with comprehension were evaluated by the researcher.

Panelist comments and observation data were reviewed with specific attention given to panelist recommendations. Each item with comprehension concerns was analyzed and a decision was made to keep as written, reword, or omit the item. As a result of the panelist comments and concerns with comprehension, 30 items were reworded and two were omitted. Samples of the rewording of items can be seen on Table 7. The two items omitted from the instrument corresponded with reworded items. Item 87 was omitted when item 86 was reworded from "District support personnel for children from economically disadvantaged families" to "District support for children from economically disadvantaged families." Similarly, Item 85 was omitted when item 84 was reworded to read "District support for children from diverse cultural backgrounds." After rewording and omitting these items, other items were moved to facilitate consistency in question styles and content.

The second analysis conducted on the data in the Collective Instrument Review Form (Appendix F) was concerning retrieval. To assure the respondent can secure the relevant information to answer the question, panelist comments and interview observations were reviewed. Five items were identified by panelists with potential retrieval issues. All of these items were from the school or school district characteristics component and asked questions about the school population. The five items were: (Item 3) How many children come from homes in which English is not the primary language?, (Item 4) How many children have identified special needs?, (Item 6) How many children are homeless or transient?, (Item 7) How many children have poor attendance?, and (Item 9) How many children in your school are performing below grade level?

Table 7
Sample comprehension issues from the Collective Instrument Review Form with changes

Item	Comprehension Concern	Reworded Item
7. How many children have poor attendance?	What is "poor"? I define "poor" as more than 10 absences, but the state defines it as more than 20. What is "poor attendance"? The letter we send with the policy is 20 or more days. I would say 10 or more days. I would also view this as consistent poor attendance over the years. Clarify what is poor? More than 10 days?	How many children have poor attendance (10 or more annual absences)?
8. How many children have behavior problems?	What is a behavior problem? Do you mean referrals or number of referrals? All behavior problems or just major problems or office referrals? Behavior with officer referrals? Do you mean ED/BD or kids sitting in the office?	How many children have behavior problems resulting in frequent office referrals?
11. How many teachers are in your school?	Do you mean certified, classroom only, or all types of teacher? If you mean certified, then say certified. Do you mean classroom teachers or certified? Is this teachers assigned to your school? Do you mean "certified"? Certified?	How many certified or licensed teachers are in your school?
40. Student conflict resolution.	I thought this was teaching conflict resolution. If it is about resolving student conflict, it may fall under discipline. If you mean resolving conflict, you may want to add resolving or mediating to the statement.	Resolving student conflict.
59. New or modified educational initiatives.	This should say "in your system" and the term "educational" may be restated as "curricular or instructional". Do you mean "educational reform initiatives"? Clarify "educational" as "curriculum and instructional". Curriculum and Instruction instead of educational.	New or modified curricular or instructional initiatives in your district or state.

In each instance, the concern was that the principal would need to look up the data to answer appropriately. None of the panelists shared that the data was not available. One of the panelists mentioned in the interview that if the survey were administered online, she would be able to look of the data within her office. Considering that the perception of principals is the construct of the subscale, the specific count of students is not required. Therefore, a line of additional instruction was added to the directions for the second subscale. This line reads, "For questions with a student count, please provide your best estimate."

The third stage in Jobe and Mingay's analysis of erroneous reporting (1989) was estimation or judgment. This stage analyzes the respondent's ability to evaluate the information retrieved from memory for relevance to the question. Aside from the retrieval of facts mentioned above, none of the panelists identified this as a concern. Most panelists viewed the items germane to their everyday experience as principals. "Parent-school conflicts" was the only item that may have concerns with estimation or judgment, as two panelists stated, "I had to think about this" and that she was "hesitant". However, with the rewording of this question, the concerns should be addressed.

The final stage of analysis concerned the sensitivity of the questions and its impact on the accuracy of answers. Within the review of each component of the instrument, panelists were asked, "Were there any questions you would be reluctant or would choose not to answer?" All panelists stated that were not any questions they would be reluctant to answer. One panelist questioned whether some respondents would not provide their age. However, others did not see this as a concern.

Additional feedback was elicited from the instrument review panel after each of the comments of the instrument was completed. Within the school or school district subsection, panelist thought the answers choices were appropriate. When asked their reluctance to answer a question, panelist 5 stated, "I would need time to look up attendance information" but did not indicate a reluctance to answer.

After the personal characteristics and experience section, there were a number of comments by panelists. Three panelists suggested moving the open-ended question at the bottom of the page to the top by school characteristics. When asked if the answer choices were appropriate, four said yes. One panelist suggested adding the choice of an Education Specialist (Ed.S.) to question 21 which asks what degree(s) you have earned. Another panelist suggested providing separate choices for school and district for item 29.

The general questions asked after the perceived demands component also yielded responses from the panelists. When asked about the answer choices, a panelist responded, "I like the odd number (of) choices. I like having a middle or neutral choice available." Other notes from the cognitive process show that two panelists thought that an item concerning emails and phone call should be included as communication or parent contact was too broad.

Additional feedback provided after the perceived resources and support section yielded fewer responses. When asked if there were question that did not belong in the section. One panelist stated, "Numbers 98 and 99, definitely number 98." Another panelist was not sure if salary should be included as a resource. An additional panelist also noted that the directions for the instrument should clarify that responses are not required.

The responses from the section or component questions were reviewed by the researcher. With respect to the second section, both items 21 and 29 were reworded to improve clarity and comprehension. In response to the two panelists concerns about communication, item 42 was reworded to read "Communication with stakeholders, including email and telephone." With respect to the comments about item 98 concerning salary, the research decided not to change the item. This item was generated from Sodoma and Else's (2009) motivators and hygiene factors for principals and was relevant to the discussion of resources provided by the school or school district.

The final set of questions asked during the cognitive interview process asked panelists about the instrument in general. The first question asked, "Was the instrument easy to use?" All six panelists responded that it was easy to use. One stated, "There was not a lot of educational jargon. The questions were clear and concise." Another panelist responded, "Questions were direct. Easily answered, I know the answers. Scales were easy…I want to say short and sweet, but I would complete it." One panelist noted, "It is something you need to think about. Some (items) require thought and you need to reflect."

When asked if the format of the instrument was easy to follow, specific feedback was provided. While four panelists said it was easy to follow, two gave two suggestions for improvement. One panelist suggested, "Move the question at the end of page 1 up and bold the last page directions." Another panelist echoed this suggestion, "Flip (the) personal and school questions on the first page."

The next two questions asked about the structure of the instrument itself. When asked about the font size and readability, three panelists said it was fine. Two panelists

emphasized that the font was acceptable if they used their glasses, with one stating, "With glasses, I can read anything, the font was fine. I like the color alternating all the way across." The last panelist shared that the font "could be bigger". When asked if they preferred to take the instrument with paper and pencil or online, five panelist said they prefer it online. "I would prefer online. I would not lose it and mailing it back would be easier," states on panelist. The sole panelist who preferred to use a paper and pencil version stated, "I like to go back and see the big scope, I prefer paper and pencil."

The final question of the interview asked, "Do you have any suggestions for improving this instrument?" Four panelists had no suggestions other than those we previously spoke about. One panelist suggested, "You should write on the direction how long it should take to complete it." Her concern was that she would spend too much time thinking through the items and not completing the survey. She also mentioned that it should be clear that the instrument is a current assessment, not a vision of ideal conditions or previous experiences. Another panelist stated, "I would like to see the teacher survey. If the principal is really serious about the survey, it would lead to some serious reflection. We can all benefit from reflection."

One structural change was made to the instrument after considering the feedback from the instrument review panel from the cognitive interviews. First, the order of the personal and school components were switched on the first page of the instrument. This suggestion from a panelist improved the continuity of the components and allowed the open-ended question to remain at the bottom of the page, allowing room for a response on a paper and pencil version of the instrument. Other general changes suggested by the

instrument review panel were accomplished through the rewording of items and the reordering of the first two components.

Analysis of the data generated from the face-to-face interviews using the concurrent think-aloud reading of the CARD-P Prototype (Appendix D) with six currently serving principals resulted in many improvements to the instrument. The researcher used feedback from the instrument review panel to improve the clarity and resolve identified comprehension issues. Issues of retrieval, sensitivity, estimation, and judgment were also analyzed and addressed where appropriate. Feedback on each component and the instrument, as a whole, resulted in changes to individual items and the structure of the instrument.

When all revisions were made to the Prototype Instrument, the CARD-P was generated. The CARD-P improved the structure of the instrument, while maintaining the established structure of the CARD-SA instrument (Lambert, McCarthy, & Abbott-Shim, 2001). The content of the CARD-P instrument was improved through rewording and omitting items to clarify the intended measurement theme and factor of the item. Finally, the use of the Construct Matrix (Appendix C) attempted to ensure breadth and depth of each subscale construct was accurately and holistically represented in the CARD-P items. The CARD-P instrument provided an appraisal instrument for principals to assess the differential between perceived demands and resources that attempts to appropriately address the themes identified by principals and factors from literature, while maintaining the content and structure of the CARD model (Lambert, McCarthy, & Abbott-Shim, 2001).

Research Question Summary

The first four research questions were focused on the measurement themes identified by principals in each of the four subscales in the CARD-P. These subscales included school/school system characteristics, personal characteristics or experiences, perceived demands, and perceived resources or support. Within this study, the measurement themes identified by principals were then compared with factors from relevant research to define the depth and breadth of the constructs of each subscale on the Construct Matrix (Appendix C). Items were generated that aligned with each construct and linked with the measurement themes and factors. Principals from the instrument review panel then provided feedback that led to the revision of the items and instrument. While the process led to clear items that reflected the intended construct of each subscale, the research questions were uniquely focused on the principal responses from the questionnaire as compiled on the Collective Review Form (Appendix B).

First research question summary. A practitioner panel of six current principals with a minimum of three years experience identified 26 personal characteristics or experiences perceived to influence the level of principal stress. Of these 26 personal characteristics or experiences identified, only ten were identified by multiple panelists. These ten measurement themes were considered the personal characteristics or experiences principals perceive and influencing the level of principal stress. The ten characteristics and experiences principals identified included:

- experience as a principal, assistant principal, or teacher;
- communication skills;
- having a Type A personality;

- community membership or living in the community you serve;
- the ability to listen;
- personal issues including family, marital, and financial issues;
- being organized and being able to multi-task;
- being overly detail oriented;
- limited personal time; and
- limited family time.

These characteristics and experiences identified by the practitioner panel aligned well with relevant research compiled on the Construct Matrix (Appendix C). Hobfoll (1998) also identified the feeling of being successful, a sense of humor, defined role as a leader, a sense of commitment, and involvement in a faith as personal characteristics or resources. Brimm (2001) added excessively high expectations and lack of progress in the workplace as potential personal characteristics that may lead to stress.

Second research question summary. Responses from practitioner panel on the Practitioner Assessment of Perceived Stress questionnaire identified 28 school or system characteristics, policies, or procedures that may contribute to or limit principal stress. Only five of these responses were identified by multiple principals. These five measurement themes were considered the school or system characteristics principals perceive as influencing the level of principal stress. The characteristics, policies, or procedures indentified by principals consisted of:

- meetings and trainings that keep the principals away from the school;
- rapidly changing policies and initiatives;
- poorly defined local board policies and procedures;

- the large volume of required paperwork; and
- the observation and evaluation process.

These characteristics accurately reflect the relevant research on school and district characteristics, policies, or procedures. Sodoma and Else (2009) identified the process of principal evaluation by the superintendent as potentially contributing to or limiting principal stress. Two of Hobfoll's 74 common resources (1998) were also identified in this area, the feeling of being successful and acknowledgement of accomplishments.

Third research question summary. The principals on the practitioner panel perceived 28 demands, faced within the principalship, as contributing to principal stress. Only 13 perceived demands were identified on multiple questionnaires. Two of these 12 themes, staff morale and buildings and grounds, were identified as having little impact by one panelist and moderate impact by another. These impact levels resulted in a combined impact value of three and these demands were not included as measurement themes for the development of the instrument. However, they are included on the list below. The demands within the principalship perceived by practitioners included:

- personnel issues and accommodating staff personalities;
- limited time available to complete the job, including requirements for evening and weekend activities;
- accountability;
- staff recruitment and maintenance;
- paperwork, including discipline reporting, required reports, and observations/evaluations;

- student issues and concerns;
- community perceptions of the school/school system;
- the volume of discipline issues;
- community concerns and expectations for the principal;
- parent interactions including meetings, concerns, and issues;
- budget issues including a lack of funding;
- the upkeep and maintenance of buildings and grounds; and
- staff morale.

The demands identified as contributing to principal stress paralleled the factors identified in relevant literature and research. While the upkeep and maintenance of buildings and grounds was not initially included in the instrument development due to a low impact value, it was added after being identified as one of the 25 job tasks of principals by Rayfield and Diamantes (2004). Brimm (2001) also identified two demands unique to the principalship: having to make decisions that affect the lives of people and having too little authority to meet assigned responsibilities.

Fourth research question summary. The panel of current principals identified 20 resources or supports, provided by the school or district, which lessen demands or decrease stress in the principalship. Ten of these resources or supports were identified by multiple panelists. Two of these ten themes had impact values below four and were not included in the development of the instrument. They are included on the list below. The resources or support, provided by the school or system, perceived by principals as available to cope with perceived demands include:

- district level support from assistant superintendent, directors, and specialists;

- school staff including teachers and guidance staff;
- assistant principals;
- technology and technology support;
- leadership, school improvement, or site-based decision team;
- support from the board of education and/or the superintendent;
- parent associations or organizations;
- professional development;
- social events coordinated by the principal association; and
- community partnerships.

The school or district provided resources or support identified by the practitioner panel varies from the relevant literature and research in multiple areas. The CARD-SA (Lambert, McCarthy, & Abbott-Shim, 2001) identify adult mentors from the community, materials to support children with specific needs (i.e. learning disabilities, diverse cultural backgrounds, and problem behaviors), and general instructional materials as resources provided by the school or district. Hofoll (1998) identifies the acknowledgement of accomplishments as a potential resource or support provided by the school or district. Sodoma and Else (2009) also identify how well the board of education acknowledges your accomplishments as a motivator available to cope with perceived stress.

Fifth research question summary. The CARD-P instrument was developed to measure the resources and demands perceived by principals in elementary schools. Prior to developing the instrument, efforts were made to identify the relevant themes and factors to define the constructs for the four subscales employed in the CARD model.

The relevant themes were generated from the Practitioner Assessment of Perceived Stress questionnaire given to a panel of practicing principals. The practitioner panel was composed of six current principals with at least three years of experience as a principal. The themes they identified were aligned with factors from relevant literature to generate the Construct Matrix (Appendix C). Utilizing the Construct Matrix, the researcher ensured that each subscale accurately and holistically represented the concept intended to be measured.

The instrument was modeled after the structure and composition of the CARD-SA (Lambert, McCarthy, & Abbott-Shim, 2001). Employing the item creation guidelines outlined by DeVellis (2003) and Netemeyer and colleagues (2003), efforts were made to generate items that were concise, clear, understandable, and unambiguous. Utilizing a concurrent read aloud of the instrument with six additional elementary principals, issues of clarity, readability, comprehension, and instrument structure were analyzed. Data from the interviews were used to further improve the composition and clarity of the CARD-P instrument.

The content of the CARD-P instrument was considered during the creation of the prototype. Each generated item was aligned to one or more measurement themes or factors. Thus, each measurement item reflected a specific intended theme from the practitioner panel and/or a factor from literature. Feedbakc and observations from the instrument review panelists provided insight into the perceived meaning of each item. When the perception of the instrument review panelists differed from the intended meaning, the item was reworded or omitted. The content of the final draft of the

instrument benefited from the feedback from the cognitive interviews with improved alignment with intended construct within each subscale.

Through careful development and testing, the CARD-P instrument was created to assess the differential between perceived demands and resources in the elementary principalship. The use of practicing principals in designing the themes to be measured and current elementary principals in reviewing the instrument helped improve the CARD-P's use for assessing the cognitive-transactional nature of stress within the elementary principalship.

CHAPTER 5: DISCUSSION

The purpose of this study was to develop an instrument for measuring perceived stress in the elementary school principalship. An appraisal-based definition of stress was derived from the literature and used as the theoretical framework for creating the instrument. The instrument was developed to capture the cognitive-transactional nature of stress as the differential between the subjective appraisal of demands and resources within the school/school district environment. To gain a better understanding of the perceived personal, school, and system characteristics, perceived demands, and perceived resources leading to or limiting stress in the principalship, the Construct Matrix (Appendix C) aligned the results from a practitioner panel with relevant measures of perceived resources and demands in literature was created. Findings were used to develop a CARD-P Prototype (Appendix D). The CARD-P Prototype was administered to a panel of current elementary school principals in a cognitive interview to test the psychometric properties of the instrument. Findings from both the practitioner and the instrument review panel, along with a review of relevant literature, will be reported. Conclusions from the research will be shared. The chapter will conclude with the limitations of the instrument and recommendations for future research.

Definition of Cognitive-Transactional Stress

Covering a broad realm of the human experience, many definitions for stress have been proposed in literature. As a basic, scientific definition, stress is a response to internal or external stimuli (Gugliemi & Tatrow, 1998; Lazarus, 1990; Sparks, 1983). Within this definition, three paradigms of stress research can be identified: response-based, stimulus-based, and appraisal-based (Schwarzer, 2001). The response-based and stimulus-based paradigms view individuals as passive participants and do not account for individual differences in either perception or responses to stimuli (Heath, 1995). The appraisal paradigm, however, recognizes individual differences in both the perception of and responses to stimuli (Heath, 1995). Accepted as the standard in the field of psychology today (Schwarzer, 2001; Hobfoll, 1998; Monet & Lazarus, 1991), the appraisal paradigm considers stress to be a cognitive-transactional process of appraising perceived demands against available resources (Monet & Lazarus, 1991; Lazarus, 1966).

Grounded in the cognitive-transactional model, Monat and Lazarus (1991) defined stress as any event in which the demands of the stimuli exceed the individual's adaptive resources to respond. For this study, stress is hypothesized to result from an appraised imbalance between perceived demands and the perceived adequacy of one's resources to cope with those demands (Brack & McCarthy, 1996; Folkman & Lazarus, 1988; Lazarus, 1966). The main goal of this study was the development of an instrument to appraise resources and demands found within the professional environment perceived by elementary school principals.

Summary of Findings

Modeled after the Classroom Appraisal of Resources and Demands (Lambert, Abbott-Shim, & McCarthy, 2001), the Comparative Appraisal of perceived Resources and Demands for Principals (CARD-P) was designed to appraise perceived stress in elementary principals using four sub-scales. The first sub-scale was designed to identify the characteristics or experiences of principals that may contribute to or limit stress. The second sub-scale identified the school or system characteristics, policies, or procedure that may contribute to or limit principal stress. The third sub-scale appraised perceived demands that, when faced within the principalship, may contribute to stress. The final sub-scale appraised perceived resources or support, provided by the school or system, that may lessen demands or decreases stress. These first two subscales were designed to permit a brief assessment of the personal and school characteristics unique to the respondent. The data from these subscales could generate an additional study and a greater understanding of the relationship between individuals and their perception of resources and demands. The last two subscales allow for the calculation of the differential between perceived resources and perceived demands. The differential between these subscales provides an appraised measure of perceived stress within the principalship.

Utilizing the Practitioner Assessment of Perceived Stress questionnaire on the Collective Review Form (Appendix B), a list of characteristics, demands, and resources that contribute to stress was generated by a practitioner panel of six current principals. Each of these principals had a minimum of three years experience. The results of the PAPS identified 26 characteristics of principals that may contribute to or limit stress.

Ten of these characteristics were identified as themes for personal characteristics subscale. Within the school and district characteristic sub-scale, 28 characteristics were identified, of which five emerged as measurement themes. The PAPS data showed 28 perceived demands within the principalship, 11 were themes for the perceived demands sub-scale. Data for the perceived resources sub-scale isolated 20 resources, with eight themes perceived by principals as available to limit stress. The themes identified by principals on the PAPS served as the foundation for generating the CARD-P instrument.

An analysis of the data generated from the PAPS (Appendix B), showed a disparity in the responses between elementary and high school principals. This disparity led to a realignment of the purpose of the CARD-P instrument from serving all principals to focusing on the perceptions of resources and demands in the elementary principalship. While limiting the application of the instrument, the researcher was able to keenly focus the CARD-P on the measurement themes pertinent to elementary school principals.

The measurement themes that emerged from the PAPS were used as the foundation for the Construct Matrix (Appendix C). The Construct Matrix aligned the 34 measurement themes with factors from relevant literature to ensure the depth and breadth of each concept was measured. In particular, six literature sources were aligned with the measurement themes: the CARD-SA instrument (Lambert, McCarthy, & Abbott-Shim, 2001), the 25 job tasks identified in the analysis of administrative duties (Rayfield & Diamantes, 2004), the motivators and hygiene factors for principals (Sodoma & Else, 2009), 74 common resources (Hobfoll, 1998), the 10 most stressful administrative tasks for Tennessee school administrators (Brimm, 2001) and the

Preventive Resources Inventory (McCarthy & Lambert, 2001). This process helped ensure that the 104 items generated for the CARD-P instrument were aligned to the concept measured within each respective sub-scale. The items generated from the Construct Matrix were used to develop the CARD-P Prototype (Appendix D).

The CARD-P Prototype was administered to six current principals utilizing a cognitive interview using the concurrent think-aloud approach for designing effective instruments (Youssefzadeh, 1999; Jobe & Mingay, 1991; 1990; 1989). The cognitive interviews provided insight into the challenges principals' faced in completing the CARD-P and how they interpret and answer survey items. Data from the interviews were collected and analyzed using an Interview Review Form and Collective Review form, respectfully.

Data analysis revealed the thought processes involved in interpreting items, assessing items for clarity and understanding, and choosing the best answer for questions. The data compiled on the Collective Instrument Review Form (Appendix F) evidenced some issues with clarity of language and comprehension. For example, there were concerns from numerous panelists about the use of the word "poor" when asking about "poor attendance." Other issues arising from the interviews were minor retrieval issues ("I would have to look that up"), judgment concerns ("Number 21 should include a choice for Ed. S."), and composition ("Flip personal and school questions on first page"). There were also suggestions for improvement ("Move the question at the end of page 1 up and bold the last page directions").

After identifying suggested changes from the cognitive interviews, the CARD-P Prototype (Appendix D) was revised. Feedback from the cognitive interviews led to the

rewording of 30 items, the deletion of two items, and the restructuring of the first two sub-scales. There were also some minor changes to the order of items to assure continuity and improve understanding. These changes were included in the generation of the CARD-P instrument (Appendix G).

Conclusions from Research

The CARD instruments (McCarthy et al., 2010; Lambert et al., 2008; Lambert, McCarthy, & Abbott-Shim, 2001; and Lambert, Abbot-Shim, & McCarthy, 2001), based on the cognitive-transactional model of stress, have demonstrated reliability and validity in appraising perceived stress in educational professions. These instruments have been utilized with preschool teachers (Lambert, Abbott-Shim, & McCarthy, 2001), elementary school teachers (Lambert, McCarthy, Abbott-Shim, 2001), middle and secondary teachers (Lambert et al., 2008), and school counselors (McCarthy et al., 2010) for over a decade.

Derived from literature and the responses from the practitioner panel, there are specific items that can provide a measure of the subjective appraisal of demands and resources perceived by principals. The differential between these subscales attempts to capture the cognitive-transactional nature of stress within the principalship. These items are aligned into four sub-scales: general characteristics information about the principal, general characteristics about his/her school and school system, an appraisal of perceived demands, and an appraisal of perceived resources available.

This study employed these subscales to provide principals with an instrument, the CARD-P, adapted from previous CARD instruments (McCarthy et al., 2010; Lambert et al., 2008; Lambert, McCarthy, & Abbott-Shim, 2001; and Lambert, Abbot-

Shim, & McCarthy, 2001) that allows for the personal appraisal by principals of the perceived demands resulting from the principalship and perceived resources available to address these demands which are provided by the school or school district. This appraisal is framed by an assessment of their individual characteristics and experiences, as well as the unique characteristics and policies of their school/school district.

While principals continue to experience stress (Moody & Barrett, 2009) and leave the profession (Battle, 2010), there are fewer candidates looking to become principals (Gutterman, 2007). Efforts to retain current principals can be bolstered through the identification of the demands perceived by principals and targeting resources to address those demands. The CARD-P could provide the data needed to support these efforts.

Limitations of the Research

No one instrument can be designed to measure all aspects of stress experienced by individuals in the principalship. The CARD-P instrument is designed to appraise the difference between perceived demands in the school environment and perceived resources or support provided by the school or system to cope with those demands. This instrument is modeled on the cognitive-transactional model of stress. Other paradigms within stress theory may not fit this model and may have different results if applied to the CARD-P data.

When analyzing the data from the practitioner panel, differences in perceived resources and demands between elementary school and high school principals were evident. Instead of increasing the breadth of the instrument to serve all principals, the CARD-P was developed with a focus on the perceived resources and demands of

elementary school principals. As such, although there were common themes among all principals, the use of the CARD-P with middle school and, especially, high school principals is not recommended.

The CARD-P was developed with a limited sample of principals. Only 12 principals served on the practitioner ($N = 6$) and instrument review panel ($N = 6$). A convenience sample was used for both panels, with all principals currently employed in a rural, central North Carolina School System. Although principals may encounter similar experiences from district to district and state to state, it should not be assumed that the perceived demands and resources of these principals represent the perceived demands of principals in other districts or states (Creswell, 2008; Marshall & Rossman, 2006). By using a population from one school district, a full complement of personal and professional demographics may not be represented (Creswell, 2008). In addition, generalizations about principals in schools from suburban or urban schools or school districts should not be assumed.

Implications for Future Research

The results of this study and its limitations suggest several avenues for future research. While it is important to identify conditions that lead to stress within the principalship, there has been limited studies on the perceived resources and demands principals experience (Akiba & Reichardt, 2004). There is a need to determine the demands creating stress in the principalship, and then support principals through limiting these demands or providing coping resources. This support is crucial if an effort is to be made to decrease the number of principals exiting the profession and to encourage more teachers to enter the principalship.

While preliminary data from the instrument review panel were promising with respect to content, comprehension, and ease of use, additional information on the instrument should be collected. A pilot study using the instrument should be administered to principals. This study could elicit additional information from the instrument. With an ample study population, reliability for the resources and demands scales may be determined, as well as the correlation value between the scales. The pilot study would also allow for internal measures of the instrument and comparative measures with existing data on other versions of the CARD.

The initial findings of this research show the CARD-P instrument to have demonstrated promising results for appraising perceived resources and demands in the elementary principalship. Additional research is essential to explore issues of reliability and validity of outcomes from the CARD-P. Additional studies will need to test the psychometric properties of the CARD-P to support the validity of use. The internal structure of the instrument will need to be examined by utilizing a factor analysis as modeled in previous validity studies of the CARD instruments (Lambert et al, 2009; McCarthy & Lambert, 2008). Correlation studies with established instruments (i.e., Preventive Resources Inventory or Maslach Burnout Inventory) could test the validity of the instrument.

Other implications for future research include expanding the model for other principals. Using the measurement themes defined in the PAPS (Appendix B), CARD instruments could be developed for middle and high school principals. These models could be tested using the cognitive interview model employed in this study to assess comprehension, retrieval, estimation/judgment, sensitivity, and structure. This process

could lead to the development of a stratified series of CARD instruments for principals at various school levels.

The need for research in the area of evaluation and intervention is needed. Research findings from the CARD can provide an evaluation of the cognitive-transactional stress principals perceive in their professions. However, this data must lead to the design of interventions. A next step in research would be to explore the outcomes from the administration of the CARD-P to design intervention strategies on the areas perceived as the greatest demand. These interventions would support efforts to limit demands, provide resources, or develop coping strategies. Within the cognitive-transactional model of stress, a decrease in perceived demands and/or an increase in perceived resources or coping strategies will effectively lower the appraisal of stress. This could, in turn, encourage principals to remain in the principalship longer and may encourage teachers to again view the principalship as a viable career option.

Finally, the appraisal paradigm of stress emphasizes the perceptual nature of stress (Folkman & Lazarus, 1988; Matheny et al., 1986). According to the cognitive-tranactional model, stress is hypothesized to result from an appraised imbalance between perceived demands and the perceived inadequacy of one's resources to cope with the deamnds (Brack & McCarthy, 1996; Folkamn & Lazarus, 1988, Lazarus, 1966). Additional research will need to study the relationship between perceived imbalances in resources and demands and the psychological and/or physiological manifestations of stress. Correlation studies between the CARD-P and the actual experiences of threats or frustrations by prinicpals can define the validity of the instrument and the cognitive-transactional model of stress it is based upon .

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APPENDIX A: PRACTITIONER APPRAISAL OF PERCEIVED STRESS

Research has shown that the principalship can be both a satisfying and stressful profession (Battle, 2010). This questionnaire seeks to identify…

- personal characteristics or experiences that may contribute to or limit principal stress;
- school, and district/system characteristics, policies, or procedures that may contribute to or limit principal stress;
- the demands principals face in the principalship that may contribute to stress;
- school or system resources and support that may lessen or limit stress in the principalship.

On each question, please reflect upon your experiences as a principal in your current position and all previous principalships you have held. You will be asked to identify the characteristics, demands, and resources that you perceive to impact principal stress. After identifying the characteristic, demand, or resource, you will be asked to identify the level of impact (low, moderate, or high) it has on stress. Each question should be answered in the form provided. One purpose of this questionnaire is to develop an exhaustive list, so please include all items that you believe impact the question. You may be as specific as you wish.

SAMPLE FORM:
Question: What personal characteristics or experiences of principals may contribute to or limit principal stress?

Characteristics	Impact L – Low M – Moderate H - High
Ex. Distance the principal lives from the school.	*L*

If completing the form electronically, you may use the tab key to add more response boxes to additional pages. If completing a hard copy of the form, please make as many copies of each sheet as necessary.
Should you have any questions about the process of completing this questionnaire, please contact Drew Maerz at (910) 783-6456 or drmaerz@uncc.edu

Thanks for your participation.

Question 1: What personal characteristics or experiences of principals may contribute to or limit principal stress? Characteristics or experiences:	Impact L – Low M – Moderate H - High
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

Question 2: What school or system characteristics, policies, or procedures may contribute to or limit principal stress? Characteristics, policies or procedures:	Impact L – Low M – Moderate H - High
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

Question 3: What demands, faced within the principalship, contribute to principal stress? Demands:	Impact L – Low M – Moderate H - High
1.	
2.	
3.	
4.	
5.	
6.	
7.	
8.	
9.	
10.	
11.	
12.	

Question 4: What resources or support, provided by your school or district, lessen demands or decrease stress in the principalship? Resource or support:	Impact L – Low M – Moderate H - High
1.	
2.	
3.	
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7.	
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10.	
11.	
12.	

This concludes the questionnaire.
Thank you for your participation.

APPENDIX B: COLLECTIVE REVIEW FORM

Collective Review: What personal characteristic or experiences of principals may contribute to or limit principal stress?

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
E1.1 E2.1 M1.1 H1.1 H2.1 H2.1	M H H H H H	Experience as an Assistant Principal Lack of knowledge of the job/position Limited experience Having a wide range of experiences Years of classroom experience Experience at elementary, middle, and high school level in teaching and administration	17	Experience
E2.1 H1.1 H1.1	H H H	Poor communication skills Excellent people skills Being able to speak to groups	9	Communication Skills
E1.1 M1.1 H2.1	M H H	Type A personality Type A personality Being a Workaholic	8	Personality Type
E1.1 H2.1	H H	Having children in other school Alumni, parent, and community stakeholder in the school	6	Community Membership
E2.1 H1.1	H H	Inability/refusal to listen Being able to listen	6	Ability to Listen
E2.1 M1.1 E2.1	M M M	Personal Issues/martial or children Family issues-child responsibilities Financial issues/concerns	6	Personal Issues
H1.1 H2.1	H H	Being organized Being able to multitask	6	Organization
E1.1 M1.1	M M	Being too detailed – not able to see the big picture Overly detailed oriented	6	Detail Oriented
E2.1 M2.1	L H	Limited personal time Schedule personal and family time	4	Personal Time
E2.1 M2.1	L H	Limited family time Schedule personal and family time	4	Family Time

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
E1.1	H	Being overly sensitive	3	
E2.1	H	A know it all attitude	3	
E2.1	H	Failure to continue to learn	3	
M1.1	H	Desire to control every situation and activity	3	
M2.1	H	Consistent system of physical fitness	3	
M2.1	H	Ability to have a closed door policy for planning and reflection.	3	
H1.1	H	Being flexible	3	
H1.1	H	Being able to read people	3	
H1.1	H	Being empathetic	3	
H1.1	H	Being able to talk about “tough topics”	3	
H1.1	H	Being able to prioritize	3	
H1.1	H	Being confident	3	
H1.1	H	Being comfortable with a collaborative decision making model	3	
H2.1	M	Receive personal validation from professional accomplishments	3	
H2.1	M	Strong mothering nature	2	
E2.1	L	Evening activities/programs at school	1	

Collective Review: What school or system characteristics, policies, or procedures may contribute to or limit principal stress?

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
H2.2 H1.2 M1.2 E2.2 E1.2	H H H M M	Requirements to be off campus for meetings and trainings keep the principal away from the school building for a considerable amount of time. Meetings off campus for principals Consistent meeting or training that dilute ability to focus on school Required meetings for the profession Not being on-site due to county committee meetings	13	Off-campus Meetings
H2.2 M1.2 E2.2	H M H	Policies, educational trends and practices are changing so rapidly, it is difficult to begin implementation of one before it is changed or replaced. Focus and direction-moving quickly to a different focus – to many focuses at one time New initiatives, local, county and state	8	Focus on Initiatives
H2.2 M2.2	H H	Clear and concise Board Policy helps immensely New principals need clear procedures	6	LEA Policies and Procedures
M1.2 E2.2 E1.2	M H L	Level of paperwork Amount of paperwork Paperwork	6	Paperwork
M1.2 E2.2 E1.2	M M M	Observation/evaluation process and time required Staff observations Observation/Evaluation Process	6	Evaluation
H2.2	H	Our school serves a diverse population and we have a great deal of socioeconomic hurdles to overcome before we ever get to educating our children	3	
H2.2	H	No true alternative school for our at-risk students.	3	

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
H1.2	H	Meetings off campus for teachers	3	
H1.1	H	Staff development	3	
H1.2	H	Arranging for quality substitutes	3	
H1.2	H	Having an administrative assistant	3	
M2.2	H	Clear understanding of who is responsible for what	3	
M1.2	H	Lack of Central Office understanding of day to day operations of a school	3	
E2.2	H	Learning as you go/on the job training	3	
E2.2	H	EOG performance pressure	3	
E2.2	H	Hiring practices	3	
E2.2	H	Exclusion from Assistant Principal Placements	3	
E2.2	H	Duplicating forms, reports, and other information for persons in the same office	3	
E1.2	H	Dual track schedule	3	
H2.2.	M	Each high school in our county is so different that it is difficult to have one set of “rules, or one “plan”. Each school brings different cards to the table.	2	
H2.2	M	Principal has ultimate accountability for everything and so it is hard to delegate because eventually everything has to go through me	2	
H2.2	M	Locally created barriers which have an adverse effect on at-risk students.	2	
H2.2	M	Misaligned procedures – processes that serve no purpose	2	
H2.2	M	Working with people who lack the “flexibility gene.”	2	

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
H1.2	M	Meetings off campus for Assistant Principals	2	
E2.2	M	Meetings with parents	2	
E2.2	M	Other involvements outside of the profession/clubs, organizations and civic involvement	2	
E2.2	M	High volume of e-mails	2	

Collective Review: What resources or support, provided by your school or district, lessen demands or decrease stress in the principalship?

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
H2.4 H1.4 M2.4 M1.4 E1.4 E1.4	H M H M H M	Continued support from the Assistant Superintendents and the district level directors – open to new ideas and willing to take to the upper level Support staff at District Level It is extremely helpful to have content specialist to support schools Central office support and accessibility CO Staff – XXX being available to answer questions and give opinions Curriculum support staff	15	Administrative Support
H2.4 H1.4 E2.4	H H H	Wonderful guidance department Staff that do their job well Cooperative staff members/team players	9	Staff
H2.4 H1.4 M1.4	H H M	Wonderful assistant principals Staff that do their job well Assistant Principals and staffing assistance	8	Assistant Principals
H1.4 M1.4 E1.4	M H M	Office communicator Technology support (i.e., evaluation to speed up processes) Technology support staff	7	Technology
H2.4 E2.4	H H	SIT (School Improvement Team) Site-based decision making	6	Leadership Team
H2.4 M1.4	H H	Great support from the Board of Education and Superintendent level Central office support and accessibility	6	LEA Support
H2.4 E2.4	M H	PTSA Support and involvement PTA Executive Board	5	Parent Organization
H1.4 E2.4	L H	Good staff development Professional Development opportunities	4	Professional Development

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
H2.4	H	Department chairs	3	
H2.4	H	School Resource Officer	3	
H2.4	H	Parent and community support	3	
H2.4	H	Athletic and Band Boosters support	3	
H2.4	H	Ability to team with other high school principals on projects or to discuss the principalship in general – like a support group	3	
H1.4	H	Secretary	3	
M2.4	H	Limit the number of committees and additional responsibilities	3	
M1.4 E1.4	L M	Social events coordinated by the Principal Association Social events from Principals' Association	3	
M1.4 E1.4	L M	First Health partnership Partnership with First Health	3	
E2.4	H	Efficient and effective/productive office staff (NC WISE, Bookkeeper)	3	
E1.4	M	Maintenance support staff	2	
M1.4	L	Health contests – Biggest Looser	1	

Collective Review: What demands, faced within the principalship, contribute to principal stress?

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
E1.3 E2.3 M1.3 H2.3	M H H H	Personnel issues/challenges Balancing/managing personalities among staff members Personnel issues and challenges High Maintenance teachers and students with drama	11	Personnel Issues
E1.3 M1.3 H2.3	H H H	Time Restraints on Time – 24/7 High school principals spend large amounts of time at evening and weekend activities	9	Limited Time
E1.3 M1.3 H1.3 M2.3	M H H L	Testing Process Testing and benchmark process State testing High Expectations	9	Accountability
E1.3 M1.3 H1.3 H2.3	M M M M	Staffing Staffing Staff Recruitment Teacher evaluation requirements and paperwork	8	Staffing
E2.3 H1.3 H2.3	H H M	Numerous reports Reporting of data – discipline (all the reportable offenses) Teacher evaluation requirements and paperwork	8	Paperwork
E1.3 M1.3	M H	Student issues & concerns Student issues and concerns	5	Students
E1.3 M1.3	M H	Community perceptions Community perceptions and challenges to address	5	Community Perceptions
H1.3 H2.3	H M	Reporting of data – discipline (all of the reportable offenses) Volume of discipline issues	5	Discipline
E1.3 M1.3	M M	Community Concerns Community expectations for principal	4	Community
E1.3 M1.3	M M	Parent meetings/concerns Parent concerns, issues and perception/misperceptions	4	Parents

Coded Responses	Impact	PAPS Questionnaire Responses	Impact Value	Theme
M2.3 H2.3	L H	Low budget Budget issues	4	Budget
E1.3 M1.3	M L	Building & grounds upkeep Building and grounds maintenance	3	
E2.3	H	Directives that the principal cannot control	3	
E2.3	H	Variables the principals cannot control	3	
E2.3	H	The appearance of limited support from the central office level	3	
E2.3	H	Inexperienced assistant principals	3	
E2.3	H	Length of tenure with an assistant principal	3	
M2.3	H	Limit the number of meetings outside of the school building	3	
M2.3	H	Inconsistency of communication from central office	3	
H1.3 H2.3	L M	Staff Morale Staff morale	3	
H2.3	H	Lack of secretary for principal	3	
H2.3	H	Need for more counselors	3	
H2.3	H	High maintenance teachers and students with drama	3	
E2.3	M	Student placements/assignments	2	
E2.3	M	Accommodating observation placements and internships through the university system	2	
M1.3	M	Media presence	2	
E2.3	L	Balancing job requirements	1	
E2.3	L	Getting everything done in a timely manner/meeting deadlines	1	

APPENDIX C: CONSTRUCT MATRIX

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
Personal Characteristics or Experiences						
Experience (Principal, Assistant Principal, Teacher) - 17	Years worked as a teacher? Years worked at current school? Highest degree? Field Currently working on a degree? Field?					
Communication skills - 9			Ability to communicate well.			Publication of newsletters.
Personality type - 8						
Living in school attendance & children attending the school - 6						
Being overly detailed oriented - 6						
Listening skills/ability - 6						
Personal Issues - 6			Good marriage. Family stability. Financial stability.	Time available for activities that put balance in your life.		
Organization/ Being organized - 6	Age Gender Ethnicity	By organizing and planning my day, I am usually able to keep my daily demands under control. I usually don't create stress for myself by putting things off. I am able to reduce my daily demand level by planning ahead. I stay organized.	Ability to organize tasks.			
Limited Time: Personal and Family - 4			Time for adequate sleep. Time with loved ones. Free Time.	Time available for activities that put balance in your life.		
OTHER ISSUES:			Feeling I am successful. Sense of	Your annual salary.	Feeling that the progress on my job is not	

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
			humor. Role as a leader. Sense of commitment. Involvement with church, synagogue, etc.		what it should be. Imposing excessively high expectations on myself.	
School and District Characteristics, Policies or Procedures						
Location and frequency of off campus meetings - 13					Feeling that meetings take up too much time.	
Changing policies, educational trends and initiatives - 8					Complying with sate, federal, rules, and policies.	Enforcement of contract provisions. Compliance with state mandates.
Clear board policies - 6				The consistency of the board in making decisions in the best interest of students.		Enforcement of contract provisions. Compliance with state mandates.
Amount of paperwork - 6						
Evaluation process - 6				The process the superintendent uses to evaluate you.	Evaluating staff members' performance.	Evaluation of instructional staff. Evaluation of supplemental personnel.
Diverse Student Population - 3	Student demographic information: language disabilities AIG homeless or transient attendance behavior/ discipline below grade level					Special Education supervision
OTHER ISSUES:			Feeling I am successful. Acknowledgement of my accomplishments.			
Perceived Demands of the Principalship						
Personnel Issues - 11	Time and effort working protégé teachers (teachers you are mentoring)			Time spent on management tasks, i.e., budgeting, staffing, planning.	Trying to resolve difference between/among staff members.	
Limited time - 9	Number of program or administrative disruptions to	By organizing and planning my day, I am usually able	Time for work.	Extracurricular demands placed on you as a principal.	Bring interrupted frequently by telephone	Attendance at community events. Supervision/At

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
	the daily schedule. Meetings you are required to attend. Time spent performing non-teaching related duties (monitoring bus, cleaning, etc.). Preparing lessons. Setting up the classroom for instructional activities. Preparing classroom materials. Externally imposed changes to the expectation for your job performance.	to keep my daily demands under control. I usually don't create stress for myself by putting things off. I am able to reduce my daily remand level by planning ahead. I stay organized.		Time available for activities that put balance in your life. Time spent on management tasks, i.e., budgeting, staffing, planning.	calls. Feeling that I have to participate in school activities outside the normal working hours. Feeling that I have too heavy a work load to finish during the normal work day. Feeling that meetings take up too much time.	tendance at extra-curricular activities.
Testing and benchmark process - 8	Formal testing and objective assessments Portfolios, performance assessments, or teacher rating of children's achievement Grading student work					Accepting accountability for instructional program.
Staffing - 8				Relations with the teachers of your school. Time spent on management tasks, i.e., budgeting, staffing, and planning.		Selection of teachers. Assignment of faculty to courses. Selection of coaches.
Paperwork/Reports - 8	Paper work requirements				Trying to complete reports and other paperwork on time.	Developing a master schedule.
Community Concerns - 6				Community demands placed on you as a principal.		

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
Student Issues and Concerns - 5	Number of students Children with limited English skills Children from diverse cultural backgrounds Range of Developmental levels Number of children performing below grade level Children with learning disabilities Gifted and talented children Homeless or transient children Children with poor attendance				Trying to resolve differences between/among students.	Dealing with attendance concerns
Community Perceptions - 6				The community's image of school administrators.	Trying to gain public approval for school programs.	Publication of newsletters.
Discipline - 5	Disruptive children. Children who do not follow directions Children with behavior problems Children who require more time and energy than other children				Handling student discipline problems.	Awards recognition programs.
Parent meetings, concerns, and issues - 4	Parent conference and contacts			Relations with the parents of your school.	Trying to resolve parent-school conflicts.	Working with parents relative to student behavior.
Budget issues - 4	Availability of instructional resources Availability of instructional materials Availability of instructional supplies Availability of instructional technology. Instructional materials and resources that			Time spent on management tasks, i.e., budgeting, staffing, planning.	Being involved in the collective bargaining process. Preparing and allocating budget resources.	Budget development. Budget management. Fundraising.

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
	are out-dated					
Building and grounds - 3	Amount of physical classroom space. Classroom environment conditions (heating, cooling, lighting, etc.)					Making school safe. Facilities maintenance personnel supervision.
Staff morale - 3						
OTHER ISSUES:	Overall, how demanding is your classroom?				Having to make decisions that affect the lives of people. Feeling that I have too little authority to carry out responsibilities assigned to me.	Curriculum development or alignment.
Perceived School or District Resource or Support						
Central office support - 15	Administrators at your school.		I ask for help. I am able to communicate my needs to others.	Adequacy of administrative support provided for you. Relations with the administrative team/cabinet.		
Guidance staff - 9	Counselors or family services workers.					
Assistant principals - 8						

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
Staff (in general) - 6	Aides/assistants. Support for: • children with learning disabilities. • children with physical disabilities. • gifted or talented students. • children with limited English skills. • children from diverse cultural backgrounds. • children with problem behaviors. • children performing below grade level. Special area teachers (art, music, PE, etc.). Other teachers. Mentor Teachers.	I have others to call upon when needed.	Support from co-workers. Help with tasks at work.	Adequacy of support services provided for you. Relations with the teachers of your school.		
Technology (communication tools) - 8	Support for computers and instructional technology.			Adequacy of support services provided for you.		
Site-based Decision Making/ School Improvement Team - 6		I know how to delegate to others. I form mutually beneficial relationships with others. I am able to divide up tasks with others in a way that benefits others. I accept the input of others.		Time spend on leadership tasks, i.e., facilitating development of shared vision for the school, etc.	Feeling staff members don't understand my goals and expectations.	Working to develop a cooperative relationship.
Superintendent and Board of Education support - 6			Understanding from my employer or boss.	Relations with the board of education. The consistency of the board in making decisions in the best interest of students.		

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
				How well the board of education acknowledges your accomplishments The quality of your relationship with the superintendent.		
Parent-teacher Association support - 5	Parent volunteers in the classroom. Parent support of school learning activities (field trips, providing materials, etc.) Parent support of learning activities at home.					
Professional Development - 4	Staff development opportunities.			Professional growth opportunities for you.		
Principals Association - 3			Involvement in organizations with others who have similar interests.			
Community partnerships - 3						

Practitioner Panel	CARD	PRI	Hobfoll	Sodoma & Else	Brimm	Rayfield & Diamantes
OTHER ISSUES:	Adult mentors from the community. Materials for • children with learning disabilities. • children with physical disabilities. • gifted or talented students. • children with limited English Skills. • children from diverse cultural backgrounds. • children with problem behaviors. • children performing below grade level. Instructional materials. Instructional supplies. Overall, how would you rate the resources available to help you with the demands of your classroom?		Acknowledgement of my accomplishments.	How well the board of education acknowledges you accomplishments.		

APPENDIX D: CARD-P PROTOTYPE

Comparative Appraisal of Resources and Demands - Principal Version

Based upon the Classroom Appraisal of Resources and Demands developed by Richard G. Lambert, Christopher McCarthy, and Martha Abbott-Shim (2001).

We are interested in learning about the demands of your school and administrative responsibilities, and the resources you have to handle those demands. Your responses will be kept strictly confidential and anonymous. No information about your individual responses will be shared with anyone. We appreciate your time in completing this questionnaire.

Tell us about your school and school district.

1. What grades are taught in your school? ☐ pK ☐ K ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12
2. How many children are in your school? # _____
3. How many children come from homes in which English is not the primary language? # _____
4. How many children have identified special needs? # _____
5. How many children are identified as academically or intellectually gifted? # _____
6. How many children are homeless or transient? # _____
7. How many children have poor attendance? # _____
8. How many children have behavior problems? # _____
9. How many children in your school are performing below grade level? # _____
10. Do you have Assistant Principals in your school? ☐ Yes ☐ No If yes, how many? # _____
11. How many teachers are in your school? # _____
12. Do you have school counselors in your school? ☐ Yes ☐ No If yes, how many? # _____
13. How many staff members are in your school? # _____
14. Who is/are responsible for evaluating staff in your school? ☐ Principal ☐ Assistant Principal(s) ☐ Others
15. How many schools are in your school district? # _____
16. Describe the community your school serves. ☐ Rural ☐ Small Town ☐ Suburban ☐ Urban

Tell us about yourself.

17. How many years have you been a principal? # _____
18. Did you serve as an assistant principal? ☐ Yes ☐ No If yes, how many years? # _____
19. Did you serve as a teacher? ☐ Yes ☐ No If yes, how many years? # _____
20. If yes, what level(s) did you teach? ☐ pK-5 ☐ 6-8 ☐ 9-12
21. What is the degree(s) you have earned? ☐ AS ☐ BA/BS ☐ MS/M.Ed. ☐ Ed.D./Ph.D.
22. What field(s) are your degree(s)?
23. Are you currently working toward a degree? ☐ Yes ☐ No
24. If yes, what degree and field? _____
25. What is your age? _____
26. What is your gender? ☐ Female ☐ Male
27. What is your ethnicity? ☐ European American ☐ African American ☐ Hispanic ☐ Asian/Pacific Islander ☐ American Indian
28. Do you live in the community your school serves? ☐ Yes ☐ No
29. Do you have children? ☐ Yes ☐ No Do they attend your school/district? ☐ Yes ☐ No

Are there any other features of your school that make it unique?

Using the scale below, rate how **demanding** your school or administrative responsibilities are in these areas.

1 = Not Demanding 2 = Occasionally Demanding 3 = Moderately Demanding 4 = Very Demanding 5 = Extremely Demanding						
30. Number of children in your school.	1	2	3	4	5	NA
31. Children with limited English skills.	1	2	3	4	5	NA
32. Children from diverse cultural backgrounds.	1	2	3	4	5	NA
33. Children from diverse economic backgrounds.	1	2	3	4	5	NA
34. Number of children performing below grade level.	1	2	3	4	5	NA
35. Children with Individualized Educational Programs.	1	2	3	4	5	NA
36. Academically or intellectually gifted children.	1	2	3	4	5	NA
37. Homeless or transient children.	1	2	3	4	5	NA
38. Children with poor attendance.	1	2	3	4	5	NA
39. Discipline issues.	1	2	3	4	5	NA
40. Student conflict resolution.	1	2	3	4	5	NA
41. Communication with stakeholders.	1	2	3	4	5	NA
42. Parent-school conflicts.	1	2	3	4	5	NA
43. Disruptions during the day.	1	2	3	4	5	NA
44. Evening and weekend meetings.	1	2	3	4	5	NA
45. Participation and or supervision of extracurricular activities.	1	2	3	4	5	NA
46. Paperwork requirements.	1	2	3	4	5	NA
47. Hiring and placement of teachers and staff.	1	2	3	4	5	NA
48. Teacher evaluation.	1	2	3	4	5	NA
49. Teacher issues/needs.	1	2	3	4	5	NA
50. Staff (non-teacher) evaluation.	1	2	3	4	5	NA
51. Staff (non-teacher) issues/needs.	1	2	3	4	5	NA
52. On campus meetings you are required to attend.	1	2	3	4	5	NA
53. Off campus meetings you are required to attend.	1	2	3	4	5	NA
54. Parent contacts and conferences.	1	2	3	4	5	NA
55. Formative and benchmark assessments.	1	2	3	4	5	NA
56. State and federal summative testing.	1	2	3	4	5	NA
57. Adequate Yearly Progress and *No Child Left Behind* Legislation.	1	2	3	4	5	NA
58. Changes in district, state, and federal policies and procedures.	1	2	3	4	5	NA
59. New or modified educational initiatives.	1	2	3	4	5	NA
60. Preparing and allocating budget resources.	1	2	3	4	5	NA
61. Developing a master schedule.	1	2	3	4	5	NA
62. Community expectations.	1	2	3	4	5	NA
63. School facilities and grounds.	1	2	3	4	5	NA
64. Student and staff safety.	1	2	3	4	5	NA
65. Overall, how demanding is your principalship?	1	2	3	4	5	NA

Using the scale below, rate how **helpful** each of these resources is with your school and administrative responsibilities.

1 = Very Unhelpful **2 = Unhelpful** **3 = Neutral** **4 = Moderately Helpful** **5 = Very Helpful**						
66. Assistant principal(s) at your school.	1	2	3	4	5	NA
67. School counselor(s) and/or social workers at your school.	1	2	3	4	5	NA
68. Office staff at your school.	1	2	3	4	5	NA
69. Teachers at your school.	1	2	3	4	5	NA
70. School Improvement Team/Faculty Council/Leadership Team.	1	2	3	4	5	NA
71. Parent support of school learning activities.	1	2	3	4	5	NA
72. Parent and teacher organization or association.	1	2	3	4	5	NA
73. Community partnerships.	1	2	3	4	5	NA
74. Principal mentors, peers, or organization within the school system.	1	2	3	4	5	NA
75. Administrative support from the system/district level.	1	2	3	4	5	NA
76. Support from your local school board.	1	2	3	4	5	NA
77. Local school board policies and procedures.	1	2	3	4	5	NA
78. District support personnel for children requiring Individualized Education Programs.	1	2	3	4	5	NA
79. Materials for children requiring Individualized Education Programs.	1	2	3	4	5	NA
80. District support personnel for children identified as academically or intellectually gifted.	1	2	3	4	5	NA
81. Materials for children identified as academically or intellectually gifted.	1	2	3	4	5	NA
82. District support personnel for children with limited English skills.	1	2	3	4	5	NA
83. Materials for children with limited English skills.	1	2	3	4	5	NA
84. District support personnel for children from diverse cultural backgrounds.	1	2	3	4	5	NA
85. Materials for children from diverse cultural backgrounds.	1	2	3	4	5	NA
86. District support personnel for children from economically disadvantaged families.	1	2	3	4	5	NA
87. Materials for children from economically disadvantaged families.	1	2	3	4	5	NA
88. District support personnel for children performing below grade level.	1	2	3	4	5	NA
89. Materials for children performing below grade level.	1	2	3	4	5	NA
90. District support personnel for facilities and grounds.	1	2	3	4	5	NA
91. District support personnel for computers and instructional technology.	1	2	3	4	5	NA
92. District support personnel for curriculum and instruction.	1	2	3	4	5	NA
93. District support personnel for human resources.	1	2	3	4	5	NA
94. Instructional resources provided for your school.	1	2	3	4	5	NA
95. Professional development opportunities for you.	1	2	3	4	5	NA
96. Professional development opportunities for teachers and staff.	1	2	3	4	5	NA
97. Evaluation and professional feedback from supervisors.	1	2	3	4	5	NA
98. Your annual salary.	1	2	3	4	5	NA
99. Recognition of your achievements and accomplishments.	1	2	3	4	5	NA
100. Overall, how would you rate the resources available to help with the demands of your school and principalship?	1	2	3	4	5	NA

Help us to understand your plans for next year. This information will not be shared with anyone.

I intend to continue to serve as a principal at my current school. ☐ Yes ☐ No

If you answered no, please check the primary reason for your decision.

- ☐ Retirement
- ☐ Assuming a principalship at a different school
- ☐ Promotion
- ☐ Returning to the classroom/previous position
- ☐ Personal reasons (family move, spend more time with children, health, etc.)
- ☐ Professional reasons (pursuing another career, no longer like being a principal, stress, low pay, lack of recognition, etc.)
- ☐ Other (please specify) _____

If the demands of your school were fewer, and resources were more abundant, how would your principalship be different?

Do you have additional comments about the demands of your principalship?

Do you have any additional comments about resources that are helpful to your dealing with the demands of your principalship?

Thank you for your time.

APPENDIX E: INSTRUMENT REVIEW FORM

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
Example: How many miles do you drive to school each day?	-	+	*Δ*	Panelist drives child to day care each morning and did not know if this mileage should be counted.
1.1				
1.2				
1.3				
1.4				

Section Questions:

Question	Response
Can you identify any items in this section that where unclear to you?	
Can you identify any terms or language requiring clarification?	
Did you understand the intent of each question? If no, which item(s) did you not understand.	
Where there questions you feel did not belong in this section?	
Where there any questions you would be reluctant or would choose not to answer? Why?	
Where your answer choices acceptable for the questions? If no, which questions and why?	
Other from the cognitive process:	

Instrument Questions:

Question	Response
Was this instrument easy to use? Why or why not?	
What the format of the instrument easy to follow? Do you have recommendations for improvement?	
Was the font and font size easy to read?	
Would you prefer taking this instrument with paper and pencil or online? Why?	
Do you have any suggestions for improving this instrument?	
Other from the cognitive process:	

APPENDIX F: COLLECTIVE INSTRUMENT REVIEW FORM

Tell us about your school and school district.

Item	Clarity [Δ -]	Readability [Δ -]	Understand [Δ -]	Panelist comment or observation data
1. What grades are taught in your school?				
2. How many children are in your school?				2 – Are prekindergarten students included in this number?
3. How many children come from homes in which English is not the primary language?	2 Δ 6 Δ	6 Δ		2 – This is tough to determine, especially exact numbers. 3 – I would have to look up this information. 6 – Should "not" be bolded or removed?
4. How many children have identified special needs?			5 Δ	2 – I do not have access to the prekindergarten numbers for this. 5 – Is this to include 504, IEP, and speech/language?
5. How many children are identified as academically or intellectually gifted?				
6. How many children are homeless or transient?				1 – I could only give an approximation without looking up the data 3 – I would have to look up this information too.
7. How many children have poor attendance?	2 – 3 -		2 – 3 Δ 6 Δ	1 – I could only give an approximation without looking up the data 2 – What is "poor"? I define "poor" as more than 10 absences, but the state defines it as more than 20. 3 – What is "poor attendance"? The letter we send with the policy is 20 or more days. I would say 10 or more days. I would also view this as consistent poor attendance over the years. 6 - Clarify what is poor? More than 10 days?

Item	Clarity [Δ -]	Readability [Δ -]	Understand [Δ -]	Panelist comment or observation data
8. How many children have behavior problems?	2 – 3 -		3 Δ 4 Δ 5 Δ	2 – What is a behavior problem? 3 – Do you mean referrals or number of referrals? 4 – All behavior problems or just major problems or office referrals? 5 – Behavior with officer referrals? Do you mean ED/BD or kids sitting in the office?
9. How many children in your school are performing below grade level?				1 – I might need data handy to answer this. 6 – Might take some research.
10. Do you have Assistant Principals in your school?				
11. How many teachers are in your school?	1 – 2 – 5 Δ		1 – 2 – 5 Δ 6 Δ	1 – Do you mean certified, classroom only, or all types of teacher? If you mean certified, then say certified. 2 – Do you mean classroom teachers or certified? 5 – Is this teachers assigned to your school? Do you mean "certified"? 6 – Certified?
12. Do you have school counselors in your school?				
13. How many staff members are in your school?	6 -		1 Δ 2 Δ 5 Δ 6 -	1 – I am thinking this means everybody. 2 – What is the meaning of staff? 5 – Do you mean all staff? 6 – Does that include teachers?
14. Who is/are responsible for evaluating staff in your school?			1 Δ 5 Δ	1 – Can you choose all that apply? 5 – Does this mean summative evaluations?
15. How many schools are in your district?				
16. Describe the community your school serves.				

Section Questions: Tell us about your school and school district.

Question	Response
Can you identify any items in this section that where unclear to you?	1- We talked about all the items I was unclear about. 2- I am not sure what was meant by "poor attendance", "teachers", and "staff". 3- As mentioned, numbers 7 and 8. 4- No, just number 8. 5- Numbers 4, 8, 11, 13, and 14, as we discussed. 6- Numbers 11, 13, and 7, as we discussed.
Can you identify any terms or language requiring clarification?	1- No 2- "Poor" in poor attendance, "staff", and "behavior". 3- "What is meant by "poor" attendance? Does "behavior" mean office referrals? 4- What is behavior? 5- Staff in number 13, certified in number 11, and number 4. 6- Poor in number 7, staff in number 13, and teachers in number 11.
Did you understand the intent of each question? If no, which item(s) did you not understand?	1- Yes 2- Unclear of the meaning of "staff". 3- Yes 4- Yes, I did. 5- Yes 6- 6 – Yes, I did.
Were there questions you feel did not belong in this section?	1- No 2- No 3- No, they all address the school or district. They paint a picture. 4- No 5- No 6- No
Were there any questions you would be reluctant or would choose not to answer? Why?	1- No 2- I would need time to look up attendance information. 3- No 4- No 5- No 6- No
Were your answer choices acceptable for the questions? If no, which questions and why?	1- The addition to number 14 to clarify that you can choose all answers that are appropriate. 2- No 3- Yes 4- Yes 5- Yes 6- Yes, most needed a number.
Other from the cognitive process:	

Tell us about yourself.

Item	Clarity [Δ -]	Readability [Δ -]	Understand [Δ -]	Panelist comment or observation data
17. How many years have you been a principal?				
18. Did you serve as an assistant principal?				
19. Did you serve as a teacher?				
20. If yes, what level(s) did you teach?	1 Δ 4 Δ		1 Δ	1 – Include "check all that apply" in your question. 4 – Can you choose more than one?
21. What is the degree(s) your have earned?	1 Δ 2 Δ		6 Δ	1 – Again, include "Check all that apply" 2 – How many can be checked? What about an Ed. S.? 6 - Check as many as you choose?
22. What field(s) are your degree(s)?	1 Δ 3 Δ		1 Δ 3 Δ	1 – What is a field? Do you mean major and/or minor? Use "major" instead of "fields." 3 – Using the term 'major" would be better.
23. Are you currently working toward a degree?				
24. If yes, what degree and field?			1 Δ	1 - Again, use "major" instead of "Field".
25. What is your age?				
26. What is your gender?				
27. What is your ethnicity?				5 – Choices are good.
28. Do you live in the community your school serves?			2 -	2 – This is vague. Are you asking if I live in my school's attendance zone?
29. Do you have children? Do they attend your school/district?	2 Δ 3 Δ		2 Δ 4 Δ	2 – I would reword this to ask, "If school age, do they attend…" 3 – Break out school and district. 4 – Add "If they are school age, …"
Are there any other features of your school that make it unique?	5 Δ			4 – Make the self section first. 5 - What makes the "population" of the school unique?

Section Questions: Tell us about yourself.

Question	Response
Can you identify any items in this section that where unclear to you?	1- No 2- Number 24 should clarify what "field" you are looking for. Number 28 should define the community. Number 29 should add "School Age". Number 21 should include a choice for Ed. S. 3- No, just "field" 4- No 5- No 6- No
Can you identify any terms or language requiring clarification?	1- Just clarify field by using the term "major" 2- Clarify the term field and community as discussed above. 3- Number 22, change field to major. 4- No 5- No 6- No
Did you understand the intent of each question? If no, which item(s) did you not understand?	1- Yes 2- Yes 3- Yes 4- Yes 5- Yes 6- Yes
Were there questions you feel did not belong in this section?	1- No 2- I would put the general question about the school with the first section. 3- No 4- Move the open ended question. 5- Move the one (question) at the bottom to the top. 6- No
Were there any questions you would be reluctant or would choose not to answer? Why?	1- No 2- No 3- No 4- No 5- No 6- Questioned whether some would not give their age.
Were your answer choices acceptable for the questions? If no, which questions and why?	1- Yes 2- No, you forgot to include Ed. S. 3- Yes, but provide choices for school and district. 4- Yes 5- Yes 6- Yes
Other from the cognitive process:	

Rate how demanding you school or administrative responsibilities are in these areas.

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
30. Number of children in your school.				
31. Children with limited English Skills.				
32. Children from diverse cultural backgrounds.				4 – Huge Stress
33. Children from diverse economic backgrounds.				
34. Number of children performing below grade level.				
35. Children with Individualized Educational Programs.			1 -	1 – 504 plans needs its own line or reword the statement as, "Students served under IDEA."
36. Academically or intellectually gifted children.	2 Δ			2 – This could be demanding because I have so few.
37. Homeless or transient students.				
38. Children with poor attendance.	2 Δ 6 Δ		2 -	2 - What does "poor" mean? 6 – Clarify "poor".
39. Discipline issues.	4 Δ		4 Δ	4 – Do you mean referrals?
40. Student conflict resolution.	1 – 4 Δ 5 – 6 -		1 – 4 Δ 5 – 6 Δ	1 – I thought this was teaching conflict resolution. If it is about resolving student conflict, it may fall under discipline. If you mean resolving conflict, you may want to ass resolving or mediating to the statement. 4 – Should read "Resolving…" 5 – Resolving student conflict? 6 – Resolving should be first.
41. Communication with stakeholders.	2 Δ			2 – I would split this up by staff, parents, and community.
42. Parent-school conflicts.	3 Δ		4 Δ	3 – I had to think about this one. 4 – Question – show that is any or all. 5 - Hesitant

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
43. Disruptions during the day.	2 Δ		2 -	2 – What is a "disruption"? Add the schedule aspect if this is your intent.
44. Evening and weekend meetings.				1 – 44 and 45 could be combined. 2 – This might be combined with the next question.
45. Participation and/or supervision of extracurricular activities.				1 – 44 and 45 could be combined. 2 – This might be combined with the previous question. 6 – Minor at elementary school.
46. Paperwork requirements.				
47. Hiring and placement of teachers and staff.				
48. Teacher Evaluations.				
49. Teacher issues and/or needs.				
50. Staff (non-teacher) evaluations.				2 – I like the use of staff (non-teachers), it is much clearer.
51. Staff (non-teacher) issues or needs.				
52. On-campus meetings you are required to attend.	2 Δ			2 – Could you remove "required to attend"?
53. Off-campus meetings you are required to attend.	2 Δ			2 – Could you remove "required to attend"?
54. Parent contacts and conferences.				
55. Formative and benchmark assessments.				
56. State and federal summative testing.				2 – Should federal be capitalized?
57. Adequately Yearly Progress and No Child left Behind Legislation.				
58. Changes in district, state, and federal policies and procedures.				

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
59. New or modified educational initiatives.	1 – 2 Δ 4 Δ		1 – 4 – 5 Δ	1 – This should say "in your system" and the term "educational" may be restated as "curricular or instructional". 2 – Do you mean "educational reform initiatives"? 4 – Clarify "educational" as "curriculum and instructional". 5 – Curriculum and Instruction instead of educational
60. Preparing and allocating budget resources.				
61. Developing a master schedule.				
62. Community expectations.	1 Δ 4 Δ			1 – Community expectations of what? You may want to add "of the school" or "of the principal". 4 – Clarify if it is for the school and principal.
63. School facilities and grounds.	5 Δ		5 Δ	5 – Add "maintaining…"
64. Student and staff safety.				
65. Overall, how demanding is your principalship?				

Section Questions: Rate how demanding you school or administrative responsibilities are.

Question	Response
Can you identify any items in this section that where unclear to you?	1- None that we have not already discussed. 2- Federal mandates were missing from the choices. 3- No, only "Parent-school conflict". 4- No 5- No 6- No, just the ones we talked about. Community expectations depend on the size of the community.
Can you identify any terms or language requiring clarification?	1- In number 40, clarify "student conflict resolution". In number 59, I was unsure of what you meant by "educational initiatives." In number 62, clarify what or who the expectations are for. 2- Just what we talked about. 3- I don't think so. 4- Just ones that we talked about. 5- No 6- "Poor" attendance.
Did you understand the intent of each question? If no, which item(s) did you not understand?	1- Yes, but number 40 could be clarified. Also, number 59 and 58 could be the same question. 2- Numbers 59 and 43. 3- I do. 4- Again, just the ones we talked about. 5- Yes, I did. 6- Yes
Were there questions you feel did not belong in this section?	1- No 2- No 3- No 4- No 5- No 6- No
Were there any questions you would be reluctant or would choose not to answer? Why?	1- No 2- No 3- No 4- No 5- No 6- No
Were your answer choices acceptable for the questions? If no, which questions and why?	1- Yes 2- I like the odd number choices. I like having a middle or neutral choice available. 3- Yes 4- Yes 5- Yes! Oh yeah. 6- Yes
Other from the cognitive process:	3 – Felt parent contact was too broad. He thought the clarification of dealing with emails and phone calls should be included. 4 – Is there a place for emails and calls?

Rate how helpful each of these resources is.

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
66. Assistant principal(s) at your school.				
67. School counselor(s) and/or social workers at your school.	2 – 3 – 6 Δ		5 Δ 6 Δ	2 – Because of their duties, it is hard to evaluate these two together. I would separate them into two questions. 3 – Separate the two into two questions. 5 – What if one is and one is not? Try to breakout the two. 6 – Separate the two.
68. Office staff at your school.				
69. Teachers at your school.				5 – With any group you will have personnel issues.
70. School Improvement Team/Faculty Council/ Leadership Team.	2 Δ			2 – Spacing in question
71. Parent support of school learning activities.			6 Δ	6 - Activities? Events – help it be clear what is meant.
72. Parent and teacher organization or association.				
73. Community partnerships.				
74. Principal mentors/peers/ organization within the school system.	2 Δ 3 Δ 6 Δ			2 – Spacing and should it read "professional" organization? 3 – Add "principal" to organization. 6 – "Principal" organization
75. Administrative support from the system/district level.				
76. Support from your local school board.				
77. Local school board policies and procedures.				
78. District support personnel for children requiring Individualized Education Programs.	1 Δ		1 -	1 – Wording is not clear.
79. Materials for children requiring Individualized Education Programs.	3 Δ		3 Δ	3 – Can you provide examples?

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
80. District support personnel for children identified as academically or intellectually gifted.				
81. Materials for children identified as academically or intellectually gifted.	3 Δ		3 Δ	3 – Again, can you provide examples?
82. District support personnel for children with limited English skills.				
83. Materials for children with limited English skills.			3 Δ	3 – Again, examples?
84. District support personnel for children from diverse cultural backgrounds.				
85. Materials for children from diverse cultural backgrounds.			3 Δ	3 – Examples?
86. District support personnel for children from economically disadvantaged families.			4 Δ	4 - Maybe remove "personnel".
87. Materials for children from economically disadvantaged families.			3 Δ	3 - Examples
88. District support personnel for children performing below grade level.				
89. Materials for children performing below grade level.				
90. District support personnel for facilities and grounds.	2 Δ			2 – Remove personnel or break it down to two questions.
91. District support personnel for computers and instructional technology.	2 Δ			2 – Remove personnel or break it down to two items.
92. District support personnel for curriculum and instruction.				
93. District support personnel for human resources.				

Item	Clarity [+ Δ -]	Readability [+ Δ -]	Understand [+ Δ -]	Panelist comment or observation data
94. Instructional resources provided for your school.			4 Δ	4 – Curriculum and … 6 – Wide range of materials.
95. Professional development opportunities for your school.				
96. Professional development opportunities for you.				
97. Evaluation and professional feedback from supervisors.				
98. Your annual salary.			1 – 5 Δ	1 – This does not seem to fit and I do not see this as a resource. 5 – Should be under demands. Can see why is it there and it shouldn't be there.
99. Recognition of your achievement and accomplishments.	1 Δ		1 -	1 – How is this a resource?
100. Overall, how would you rate the resources available to help with the demands of your school and principalship?				
I intend to serve as a principal at my current school.	2 Δ			2 – I would bold the directions to clarify from the question. 4 – Clear choices.
If the demands of your school were fewer, and resources were more abundant, how would your principalship be different?				
Do you have additional comments about the demands of your principalship?				
Do you have any additional comments about resources that are helpful to your dealing with the demands of your principalship?				

Section Questions: Rate how helpful each of these resources is.

Question	Response

Can you identify any items in this section that where unclear to you?	1- Only the items we spoke about. 2- Just those mentioned. 3- No 4- No 5- No 6- Nope
Can you identify any terms or language requiring clarification?	1- No 2- What we talked about. 3- "Materials", try to provide examples. 4- No 5- No 6- No
Did you understand the intent of each question? If no, which item(s) did you not understand?	1- Yes 2- Yes 3- Yes 4- Yes 5- Yes 6- Yes
Were there questions you feel did not belong in this section?	1- Numbers 98 and 99, definitely number 98. 2- No 3- No 4- No 5- Salary, not sure where? 6- No
Were there any questions you would be reluctant or would choose not to answer? Why?	1- No 2- No 3- No 4- No 5- No 6- No
Were your answer choices acceptable for the questions? If no, which questions and why?	1- Yes 2- Yes 3- Yes 4- Yes 5- Yes 6- Yes
Other from the cognitive process:	6 – Clarify directions do not need a response.

Instrument Questions:

Question	Response
Was this instrument easy to use? Why or why not?	1- Yes, the language was simplistic enough to understand. There was not a lot of educational jargon. The questions were clear and concise. It could be completed in a fair amount of time. 2- Yes, I like the layout. Not a lot of writing. 3- Yes, not a problem in reading or answering. 4- Yes, it is clear and specific. 5- Yes. Questions were direct. Easily answered, I know the answers. Scales are easy. Language is easy to understand. I want to say, "Short and Sweet", but I would complete it. I would not click out of this because I could answer it pretty readily. 6- Yes, I think it is because the questions are clear. It is something you need to think about. Some require thought and you need to reflect.
Was the format of the instrument easy to follow? Do you have recommendations for improvement?	1- Yes, it was easy to follow. 2- Move the question at the end of page 1 up and bold the last page directions. 3- Yes, no changes. 4- Flip personal and school questions on first page. 5- Yes, very easy to follow. The scales are a good graduation and the open-ended questions are good and give people the opportunity to give more feedback. Top section is easy. 6- It was very easy to follow.
Was the font and font size easy to read?	1- It could be bigger; the font size was small for old eyes. 2- Yes 3- Fine 4- Yes, with glasses. 5- Yes 6- With glasses, I can read anything. The font was fine. I like the color alternating all the way across. Easy to follow.

Question	Response
Would you prefer taking this instrument with paper and pencil or online? Why?	1- I would prefer this online. I am used to doing surveys on line and it would be less time consuming. 2- I would prefer online. I would not lose it and mailing it back would be easier. 3- Online, it is more convenient. 4- I like to go back and see the big scope, so I prefer paper and pencil. 5- Prefer online, because it would be easier. 6- I am an online survey person. But I think about the paper and pencil. I would not lose the online survey. I would prefer online. I would pull it up when I had time to complete it.
Do you have any suggestions for improving this instrument?	1- I would like to see the teacher survey. If the principal is really serious about the survey, it would lead to some serious reflection. We can all benefit from reflection. 2- You should write on the directions how long it should take to complete it. 3- None 4- No 5- No, not the beginning, what we talked about. 6- No, this is great
Other from the cognitive process:	2 – Clarify that this instrument measures present circumstances, not ideal conditions or previous experiences.

APPENDIX G: COMPARATIVE APPRAISAL OF PERCEIVED RESOURCES AND DEMANDS – ELEMENTARY PRINCIPAL VERSION

Comparative Appraisal of Resources and Demands – Elementary Principal Version

Based upon the Classroom Appraisal of Resources and Demands developed by R. G. Lambert, C. J. McCarthy, and M. Abbott-Shim (2001).
Drew R. Maerz

We are interested in learning about the demands of your school and administrative responsibilities, and the resources you have to handle those demands. Your responses will be kept strictly confidential and anonymous. No information about your individual responses will be shared with anyone. We appreciate your time in completing this questionnaire.

Tell us about yourself.

1. How many years have you been a principal? # _____
2. Did you serve as an assistant principal? ☐ Yes ☐ No If yes, how many years? # _____
3. Did you serve as a teacher? ☐ Yes ☐ No If yes, how many years? # _____
4. If yes, what level(s) did you teach? (Choose all that apply) ☐ pK-5 ☐ 6-8 ☐ 9-12
5. What degree(s) you have earned? (Choose all that apply) ☐ AS ☐ BA/BS ☐ MS/MEd ☐ EdS ☐ EdD/PhD
6. What major(s) or field(s) are your degree(s)? _____
7. Are you currently working toward a degree? ☐ Yes ☐ No
8. If yes, what degree and field? _____
9. What is your age? _____
10. What is your gender? ☐ Female ☐ Male
11. What is your ethnicity? ☐ European American ☐ African American ☐ Hispanic ☐ Asian/Pacific Islander ☐ American Indian
12. Do you live in the community your school district serves? ☐ Yes ☐ No
13. Do you have school-aged children? ☐ Yes ☐ No Do they attend your school district? ☐ Yes ☐ No

Tell us about your school and school district. For questions with a student count, provide your best estimate.

14. What grades are taught in your school? ☐ pK ☐ K ☐ 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐ 6 ☐ 7 ☐ 8 ☐ 9 ☐ 10 ☐ 11 ☐ 12
15. How many children are in your school? # _____
16. How many children come from homes primary language other than English? # _____
17. How many children have identified special needs requiring an IEP or 504 Plan? # _____
18. How many children are identified as academically or intellectually gifted? # _____
19. How many children are homeless or transient? # _____
20. How many children have poor attendance (10 or more annual absences)? # _____
21. How many children have behavior problems resulting in frequent office referrals? # _____
22. How many children in your school are performing below grade level? # _____
23. Do you have Assistant Principals in your school? ☐ Yes ☐ No If yes, how many? # _____
24. How many certified or licensed teachers are in your school? # _____
25. Do you have school counselors in your school? ☐ Yes ☐ No If yes, how many? # _____
26. How many staff (non –teachers) members are in your school? # _____
27. Who evaluates the staff in your school? (Choose all that apply) ☐ Principal ☐ Assistant Principal(s) ☐ Others
28. How many schools are in your school district? # _____
29. Describe the community your school serves. ☐ Rural ☐ Small Town ☐ Suburban ☐ Urban
30. **Are there any other features of your school that make it unique?**

Using the scale below, rate how **demanding** your school or administrative responsibilities are in these areas.

1=Not Demanding 2=Occasionally Demanding 3=Moderately Demanding 4=Very Demanding 5=Extremely Demanding						
31. Number of children in your school.	1	2	3	4	5	NA
32. Children with limited English skills.	1	2	3	4	5	NA
33. Children from diverse cultural backgrounds.	1	2	3	4	5	NA
34. Children from diverse economic backgrounds.	1	2	3	4	5	NA
35. Number of children performing below grade level.	1	2	3	4	5	NA
36. Children with Individualized Educational Programs or 504 Plans.	1	2	3	4	5	NA
37. Academically or intellectually gifted children.	1	2	3	4	5	NA
38. Homeless or transient children.	1	2	3	4	5	NA
39. Children with poor attendance (10 or more annual absences).	1	2	3	4	5	NA
40. Discipline issues or frequent office referrals.	1	2	3	4	5	NA
41. Resolving student conflict.	1	2	3	4	5	NA
42. Communication with stakeholders, including email and telephone.	1	2	3	4	5	NA
43. Conflicts between parent and the school.	1	2	3	4	5	NA
44. Disruptions during the day.	1	2	3	4	5	NA
45. Evening and weekend meetings.	1	2	3	4	5	NA
46. Participation and or supervision of extracurricular activities.	1	2	3	4	5	NA
47. Paperwork requirements.	1	2	3	4	5	NA
48. Hiring and placement of teachers and staff.	1	2	3	4	5	NA
49. Teacher evaluation.	1	2	3	4	5	NA
50. Teacher issues/needs.	1	2	3	4	5	NA
51. Staff (non-teacher) evaluation.	1	2	3	4	5	NA
52. Staff (non-teacher) issues/needs.	1	2	3	4	5	NA
53. On campus meetings you are required to attend.	1	2	3	4	5	NA
54. Off campus meetings you are required to attend.	1	2	3	4	5	NA
55. Parent contacts and conferences.	1	2	3	4	5	NA
56. Formative and benchmark assessments.	1	2	3	4	5	NA
57. State and federal summative testing.	1	2	3	4	5	NA
58. Adequate Yearly Progress and *No Child Left Behind* Legislation.	1	2	3	4	5	NA
59. Changes in district, state, and federal policies and procedures.	1	2	3	4	5	NA
60. New or modified curricular or instructional initiatives in your district or state.	1	2	3	4	5	NA
61. Preparing and allocating budget resources.	1	2	3	4	5	NA
62. Developing a master schedule.	1	2	3	4	5	NA
63. Community expectations of your school.	1	2	3	4	5	NA
64. Maintaining school facilities and grounds.	1	2	3	4	5	NA
65. Student and staff safety.	1	2	3	4	5	NA
66. Overall, how demanding is your principalship?	1	2	3	4	5	NA

Using the scale below, rate how **helpful** each of these resources is with your school and administrative responsibilities.

1 = Very Unhelpful	**2 = Unhelpful**	**3 = Neutral**	**4 = Moderately Helpful**	**5 = Very Helpful**	
67. Assistant principal(s) at your school.	1	2	3	4	5	NA
68. School counselor(s) at your school.	1	2	3	4	5	NA
69. School social worker(s) working with your school.	1	2	3	4	5	NA
70. Office staff at your school.	1	2	3	4	5	NA
71. Teachers at your school.	1	2	3	4	5	NA
72. School Improvement Team/Faculty Council/Leadership Team.	1	2	3	4	5	NA
73. Parent support of school learning activities and/or events.	1	2	3	4	5	NA
74. Parent and teacher organization or association.	1	2	3	4	5	NA
75. Community partnerships.	1	2	3	4	5	NA
76. Principal mentors, peers, or a principal organization within the school system.	1	2	3	4	5	NA
77. Administrative support from the system/district level.	1	2	3	4	5	NA
78. Support from your local school board.	1	2	3	4	5	NA
79. Local school board policies and procedures.	1	2	3	4	5	NA
80. District support personnel for children requiring Individualized Education Programs.	1	2	3	4	5	NA
81. Materials for children requiring Individualized Education Programs.	1	2	3	4	5	NA
82. District support personnel for children identified as academically or intellectually gifted.	1	2	3	4	5	NA
83. Materials for children identified as academically or intellectually gifted.	1	2	3	4	5	NA
84. District support personnel for children with limited English skills.	1	2	3	4	5	NA
85. Materials for children with limited English skills.	1	2	3	4	5	NA
86. District support personnel for children performing below grade level.	1	2	3	4	5	NA
87. Materials for children performing below grade level.	1	2	3	4	5	NA
88. District support for children from diverse cultural backgrounds.	1	2	3	4	5	NA
89. District support for children from economically disadvantaged families.	1	2	3	4	5	NA
90. District support for facilities and grounds.	1	2	3	4	5	NA
91. District support for computers and instructional technology.	1	2	3	4	5	NA
92. District support personnel for curriculum and instruction.	1	2	3	4	5	NA
93. District support personnel for human resources.	1	2	3	4	5	NA
94. Curriculum and instructional resources provided for your school.	1	2	3	4	5	NA
95. Professional development opportunities for you.	1	2	3	4	5	NA
96. Professional development opportunities for teachers and staff.	1	2	3	4	5	NA
97. Evaluation and professional feedback from supervisors.	1	2	3	4	5	NA
98. Your annual salary.	1	2	3	4	5	NA
99. Recognition of your achievements and accomplishments.	1	2	3	4	5	NA
100. Overall, how would you rate the resources available to help with the demands of your school and principalship?	1	2	3	4	5	NA

Help us to understand your plans for next year. This information will not be shared with anyone.

I intend to continue to serve as a principal at my current school. ☐ Yes ☐ No

If you answered no, please check the primary reason for your decision.

- ☐ Retirement
- ☐ Assuming a principalship at a different school
- ☐ Promotion
- ☐ Returning to the classroom/previous position
- ☐ Personal reasons (family move, spend more time with children, health, etc.)
- ☐ Professional reasons (pursuing another career, no longer like being a principal, stress, low pay, lack of recognition, etc.)
- ☐ Other (please specify) _____

If the demands of your school were fewer, and resources were more abundant, how would your principalship be different?

Do you have additional comments about the demands of your principalship?

Do you have any additional comments about resources that are helpful to your in dealing with the demands of your principalship?

Thank you for your time.